

Volume II - Guide to Designing Curriculum

Honoring Tribal Legacies: An Epic Journey of Healing



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Front Cover art: Nez Perce Village at Ahsahka (where the North Fork of the Clearwater meets the Clearwater) circa 1805. Image courtesy of the National Park Service, Nez Perce National Historical Park. Nakia Williamson-Cloud, artist.

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INTRODUCTION



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Introduction

The purpose of Volume II is to serve as a guide to designing teachings (curriculum units) Honoring Tribal Legacies as an Epic Journey of Healing. It was born out of a process involving eight featured curriculum designers who are listed below, along with the titles of their curriculum units and grade levels:

- 🌱 Dr. Rose E. Honey, *Discovering Our Relationship with Water*, Early Childhood
- 🌱 Dr. Ella Inglebret, *Honoring Tribal Legacies in Telling the Lewis and Clark Story*, Elementary/Intermediate
- 🌱 Shana Brown, *A Thousand Celilos: Tribal Place Names and History Along the Lewis and Clark Trail*, Intermediate
- 🌱 Carol Anne Buswell, *Exploring Your Community*, Intermediate
- 🌱 Drs. Shane and Megkian Doyle, *Apsáalooke Basawua Iichia Shoope Aalahputtua Koowiikooluk (Living Within the Four Base Tipi Poles of the Apsáalooke Homeland)*, Secondary
- 🌱 Julie Cajune, *Sx^wiwis (The Journey)*, Secondary
- 🌱 Dr. Carmelita Lamb, *Tribal Legacies of Pathfinding*, Secondary

The featured curriculum designers worked closely with each other and representatives from the National Park Service’s Lewis and Clark National Historic Trail to develop techniques and strategies to design teachings (curriculum units) Honoring Tribal Legacies. Their interactions were motivated by the desire to provide guidelines for additional teachers and curriculum designers to approach the creation of lessons for their classrooms in new ways, following the featured curriculum designs. The collection of chapters in Volume II might also serve as reading material for graduate students who are preparing to become pre-K-12 teachers or who are becoming scholars (and possibly professors) of education studies. We present portraits of the teachings (curriculum units) in the next section. This is followed by chapter summaries, with many of the chapters being highly influenced by the work of the curriculum designers.

Portraits of the Teachings (Curriculum Units)

We continue our introduction to Honoring Tribal Legacies by providing a brief portrait of each of the seven featured teachings (curriculum units). The Circle of Tribal Advisors (COTA, 2009) envisioned that K-12 curriculum focused on inclusion of Tribal perspectives would grow out of the 2003–2006 Lewis and Clark Bicentennial. These seven teachings represent our humble efforts to build on momentum gained in bringing Native voices to the forefront of educational efforts during the Bicentennial commemoration. These teachings illustrate application of the guidelines, concepts, and structures presented in the six chapters of Volume II. Both the seven teachings and the six guiding chapters are grounded in a desire to be true to the spirit of our ancestors. We follow in the footsteps of *Enough Good People* (COTA, 2009), who built bridges across cultures in telling the story of Tribal Nations across time, in telling the story of the Corps of Discovery, and in telling the story of our nation in a more balanced and accurate way.

Discovering Our Relationship with Water (Designer: Dr. Rose E. Honey with help from various people—Early Childhood). Water is fundamental not only to our survival, but it is essential to our personal health, the food we eat, the industries that we engage with, the traveling that we do, and almost every activity in which we participate. The relationship that we have with water will determine our lifestyles and possibly our survival into the future. Through the following six weeklong episodes, students will be guided to discover and build their own relationship with water by learning to connect to the water in their community and understand how water is related to everything we do:

- 🌱 Connections – Water in our Community
- 🌱 Balance – Sinking and Floating
- 🌱 Transformation – Gas, Liquid, and Solid
- 🌱 Cycles – The Movement of Water
- 🌱 Reciprocity – Happy and Healthy Water
- 🌱 Relationships – Plants, Animals, and Water

The curriculum utilizes maps and information from Lewis and Clark and the Corps of Discovery's search for a waterway to the Pacific Ocean. While students learn about beliefs and practices related to water held by Tribal peoples along the Trail, they participate in activities that connect scientific concepts with resources that offer different perspectives on relationships with water. Teaching children to appreciate and build a personal relationship with water in a way that Honors Tribal Legacies provides an understanding that water is a sacred and living entity. Looking at water in this way will allow children to recognize that it is important to take care of our water, just as water is always taking care of us. Engagement in these teachings will inspire and initiate a journey of play and inquiry that is designed to promote understandings, discoveries, and relationships related not only to water, but also to the world around us.

Honoring Tribal Legacies in Telling the Lewis and Clark Story (Designer: Dr. Ella Inglebret—Elementary/Intermediate). The commemoration of the Lewis and Clark Bicentennial held from 2003-2006 changed the way the story of the Lewis and Clark journey was being told. Tribal and non-Tribal peoples came together in partnership to plan for and participate in the Bicentennial. As a result, Tribal peoples from along the Lewis and Clark National Historic Trail spoke with pride about their traditional cultures, histories, impressions of Lewis and Clark passed down through the oral tradition, their cultures today, and their plans for the future. Tribal peoples added their perspectives to the story of the Lewis and Clark expedition and its impacts.

This six-week teaching (curriculum unit) takes students on a journey through five thematic episodes centered on materials that grew out of the Lewis and Clark Bicentennial:

- 🌱 “Perspective: Changing the Way the Story is Told” introduces the concept of perspective and provides students with opportunities to compare and contrast perspectives communicated through symbols and written texts associated with the Lewis and Clark expedition.
- 🌱 “Place: Lewis and Clark National Historic Trail” involves students in exploring various ways in which the Trail, as a place, can be experienced.
- 🌱 “Multiliteracies: A New Way of Thinking about the Story” introduces students to diverse

forms of literacy and involves them in applying a multiliteracies framework to materials associated with the Lewis and Clark story.

🌐 “Place-Based Multiliteracies: Experiencing the Story in Multiple Ways” brings students together in small research teams to examine the Lewis and Clark story through a variety of text forms made available in learning centers. In addition, a field trip to a nearby Tribal museum, center, or park is arranged.

🌐 “Culminating Project: Becoming Part of the Story” provides student teams with the opportunity to design a new symbol for the Lewis and Clark National Historic Trail that is inclusive of both Tribal and non-Tribal perspectives. As a final step, student teams compose an informational text and a persuasive letter that advocate for the adoption of their new symbol.

A Thousand Celilos: Tribal Place Names and History along the Lewis and Clark Trail (Designer: Shana Brown—Intermediate). Outwardly, one would presume that this is a social studies curriculum, and it is. This five-week unit, however, uses the local Tribal history and legends as a vehicle to teach targeted reading and research skills. The unit elevates local Tribal literature, experience, and oral history to mentor text status, worthy of the rigor that the Common Core requires. One cannot merely dismiss the literature with a patronizing pat on the head as the “nice little folklore of a once proud people.” The literary and informational merits of the selections stand on their own.

In Episode One, students discover the history of Celilo and its place names. They listen to—and teach others—the Ichiskiin pronunciations of these place names. They understand and explain the importance of connecting past to present to future. Episode Two delves into narrative nonfiction and students practice the skill of comparing traditions, jobs, practices, and views of people living in the 1950s to today as well as Indian and non-Indian values. This episode is important early on, because it also tackles issues as complex as “what to call a Native American” and “why Indian costumes might be offensive to many Tribal people.” Episode Three continues by examining how to tackle complex text and, most importantly, how to infer bias with the differing points of view

of Tribal people and Lewis and Clark’s description of the landscape and Celilo Falls, what they called “The Great Mart.” Group research into community places begins. Students develop their own essential questions about their communities. Synthesis of research and drawing conclusions are the goals of Episode Four, with each student research team analyzing and evaluating their resources. Finally, Episode Five allows student research teams the time required to determine how they display their findings and answers to their essential questions. Teachers determine how best to exhibit the students’ discoveries: a school-wide “museum exhibit,” a classroom gallery walk, or small group presentations.

Exploring Your Community (Designer: Carol Anne Buswell—Intermediate). Developed by utilizing the resources of the National Park Service’s Tribal Legacy Project, the National Archives, the National Museum of the American Indian, and the Library of Congress, this teaching unit provides specific tools and activities for intermediate grade students, as well as their teachers, parents and/or caregivers to help them discover the sacred beauty, strength, and diversity of their own communities. It can be used effectively for most other age groups as well.

In this curriculum, Native American methods of gathering and distributing information, as well as the more typical methods used by Lewis and Clark, serve as models for learning the first, most basic differences between primary and secondary sources and their uses. Learning these principles and methods is reinforced by creating, caring for, storing, and using primary and secondary sources about the student and his/her own community. It can be presented as a complete, 10-episode unit over a two-week period or broken up and introduced sequentially as individual lessons over a longer period of time. Areas of focus for the ten episodes are:

- 🌿 Episode One – Starting with You!
- 🌿 Episode Two – Recording Your Own Community Experience
- 🌿 Episode Three – Creating a Classroom Library and Archives
- 🌿 Episode Four – Listening to Oral Histories, Creating Relevant Questions,
Recording Answers
- 🌿 Episode Five – Dealing with Conflicting Ideas

- ❁ Episode Six – Looking at Primary Sources from a Variety of Creators
- ❁ Episode Seven – Comparing Existing Secondary Sources
- ❁ Episode Eight – Looking at Artifacts and Related Materials
- ❁ Episode Nine – Is My Research Balanced?
- ❁ Episode Ten – Creating Secondary Sources of Your Own

Apsáalooke Bawaawua Iichia Shoope Aalahputtua Koowiikooluk (Living within the Four Base Tipi Poles of the Apsáalooke Homeland) (Designers: Dr. Shane Doyle and Dr. Megkian Doyle—Secondary). This unit is comprised of seven learning episodes varying in length from one to five 50-minute lessons. They span the history of the Apsáalooke (Crow) people and examine ideas, values, and historical and contemporary perspectives that are directly tied to students’ daily lives and experiences. They are interdisciplinary, covering such topics as history, art, music, archaeology, ethnography, literature, and oration. Each lesson is designed to reach James Bank’s (2013) social action level, the highest level of multicultural integration, so that students have the opportunity to apply their understanding to real world situations in ways that have significant and lasting impact. The lessons rely heavily upon classroom discussion and interaction, seeking to establish a collaborative environment that gives students voice and agency in addition to an opportunity to acquire a sense of dedication to and within a learning community. The educational journey into the homeland of the Apsáalooke people is divided into four segments, to represent the four directions and a full circle of understanding.

- ❁ “Medicine Wheel Country” focuses on the ancient cultural history of the Northern Great Plains explored through analysis of maps and other multi-media that provide information and context for Tribal oral histories and significant archaeological discoveries in the region.
- ❁ “Awaxaawakússawishe – Mountain of the Future” utilizes multimedia to access Tribal oral histories, which are also supported by archaeological data, to retrace how the Apsáalooke people came to occupy their homeland hundreds of years ago and how the identity of the Apsáalooke Tribe is inseparable from their homeland.
- ❁ “Apsáalooke Life, 1805–2014” picks up the story in 1805, the year before William Clark’s

Corps of Discovery group enters into the heart of “Crow Country.” The past 200 years have brought untold upheavals to the land and people of the Yellowstone region, yet the Apsáalooke people continue to survive and forge their nation into the future. The sources of familial strength and communal perseverance of the Apsáalooke people are highlighted and placed into a historical context that also considers the long-term impact of historic trauma.

🌍 “Apsáalooke People in 2014 and Beyond” uses the lens of modern “Crow” people to examine and appreciate the special legacy that all modern Montanans have inherited. Students come to understand that no matter what skin color or what cultural background we carry, everyone who loves and lives in Big Sky Country understands that the enduring spirit of the land is what heals and propels us into the future.

Sx^wiwis—The Journey (Designer: Julie Cajune—Secondary). This teaching (curriculum unit) is about a journey, the journey of the Lewis and Clark expedition. It is also about a journey of a young country evolving through history. Underlying both of these is the journey of the Salish people through time. Four episodic themes of study explore this multi-layered journey.

“The Salish World” examines the cultural geography of Salish homelands through written text, film, photographs, place names, and maps. Students get a glimpse into an intimate and old Tribal world where land was home. Details of relationship and dependence between the Salish and their territory chronicle that land was their church, store, hospital, and refuge – land was everything. Many of the place names and related stories are part of the Salish Creation story, what are commonly referred to today as “Coyote Stories.” Students are reminded that it is the Salish and Pend d’Oreille tradition of taking these stories out after the first snowfall and then putting them away with the first thunder. In following this cultural protocol for winter storytelling, the Salish and Pend d’Oreille people and their history are honored. Place names are recognized as part of the Salish people’s collective memory that has been lovingly saved by Salish community members and shared generously and graciously for the generations to come.

“Our World” invites students to explore personal relationships with place through essays, poems, personal memoir, and field trips to a specific site. Individual and Tribal narratives of affection and attachment to place are utilized as anchor texts and inspiration for personal reflection.

“Two Worlds Meet” analyzes accounts of the Lewis and Clark expedition entering Salish homelands through film and primary source materials. Cultural protocols of Salish hospitality are explored through the Salish response to the expedition. This example is utilized as a springboard for students to examine cultural protocols of hospitality within their family, school, and country. “Selling the Salish World” looks at intent and consequences of events 200 years ago and into the present. Diverse perspectives of this history are juxtaposed for student analysis. Concluding activities involve contemporary Tribal thoughts and feelings about the Lewis and Clark expedition and the continuing legacy of American Indians.

Tribal Legacies of Pathfinding (Designer: Dr. Carmelita Lamb—Secondary). The Tribal Legacies of Pathfinding curriculum is designed to bring the richness of the American Indian experience to the Corps of Discovery mainstream story that has been widely recounted over the generations. Critical pieces of information and support were shared by American Indian people with Lewis and Clark which enabled them to successfully traverse the North American continent in 1804–1806. In terms of actual resources, the Tribes along the Trail furnished information regarding the terrain to be crossed, guides that were knowledgeable on many levels (geography, language, Tribal associations), medicines derived from Native plants, alternate sources of food that were plant-based when hunting was unsuccessful, multiple means of transportation (horses, canoes), and extended shelter from the harsh environmental elements. Without the contributions of these vital resources from the Tribes they encountered along the journey, the explorers would have faced extreme hardship and possible failure in their mission to reach the Pacific Ocean. American Indian traditions and contributions to the Lewis and Clark journey are explored through four teachings focused on:

- 🌿 Cartography
- 🌿 Geological Formations along the Trail
- 🌿 Ethnobotany
- 🌿 Human Adaptive Physiology

As a culminating project, students integrate what they have learned from these four areas into one of the following: (a) a final digital piece using a presentation application of choice (EdCanvas, Prezi, Symbaloo), (b) a three-dimensional project, or (c) a digital or analog journal incorporating multi-media, such as songs, art, prose, interview, and film.

In addition to Volumes I and II, the curricula we have just summarized will be found on the Honoring Tribal Legacies website (www.HonoringTribalLegacies.com) that will serve as a virtual Handbook. We anticipate curricula here to highlight how we are consciously connecting the essays in this Volume II with the teachings advanced by the featured curriculum designers. The chapters, which we summarize below, are meant to raise methodological and theoretical issues of relevance for curriculum design, whether of the exemplary type presented by our contributors or of the new curricular design work that may follow in the near future, as additional educators carry the torch forward.

Volume II Chapter Summaries

Chapter 1, *Curricular Schema and Curriculum Expressions*, begins by laying a foundation for a transformative learning experience recognizing that all students can move forward and that we can confront certain myths—education as a way to gain a life, education as an individual endeavor, and learning as an objective experience—that inhibit our creativity when drafting curricula. The authors eventually acknowledge that curriculum is not enough and recognize that the key to student success is embedded in the student-teacher relationships formed in Honoring Tribal Legacies together.

Central to Chapter 1 is a description of a curricular schema listing suggested curriculum components common to the educational community, drawn from an Indigenous perspective, and that have emerged organically. One purpose of the curricular schema is to provide a structure that will result in some symmetry among the featured curricula (found at HonoringTribalLegacies.com) to offer a consistent scaffolding for integration of educational theories that support the purpose of Honoring Tribal Legacies. This is complemented with additional details—described as *curriculum expressions*—that draw upon four levels of multicultural integration advanced by Banks (2013) as

well as Wiggins and McTighe's (2005, 2011) *Understanding by Design*, the Big Idea, Enduring Understandings, Essential Questions, and Entry Questions. These details provide the context for learning about Tribes before, during, and after the Lewis and Clark expedition, as well as along the Lewis and Clark National Historic Trail today and into the future.

Chapter 2, *Place-Based Multiliteracies Framework*, is designed to connect students with their natural, historic, and cultural surroundings in a way that embraces diversity while attending to the rapid changes in technology that alter the way communication occurs. The framework encourages teachers to value multiple perspectives and diverse forms of literacy while learners design their own ways of knowing, being, and doing by creating learning communities actively working together to arrive at creative responses to challenges faced in real world contexts. As such, the place-based multiliteracies framework promotes a deep and balanced understanding of a place, such as the Lewis and Clark National Historic Trail. The classroom, where a place-based multiliteracies framework is being used to Honor Tribal Legacies, articulates educational intentions, emphasizes the importance of partnering with Tribes, brings historic balance, promotes listening to each other with respect, bustles with activity, and offers a range of resources to engage with multiple perspectives, learning modalities, and text types. To further explain the place-based multiliteracies framework, Chapter 2 explores the concept of design supported by an illustrated version of a place-based multiliteracies learning spiral, its connections to the Common Core State Standards, and a demonstration of its application using materials from *Lewis and Clark: The National Bicentennial Exhibition*.

Chapter 3, *Differentiated Instruction*, highlights the importance of building the capacity of each student through genuine engagement in learning. A differentiated approach values the strengths, gifts, and preferences of students, while also accounting for variations in their prior knowledge and skills, areas of interest, and learning needs. The authors for this chapter emphasize the importance of creating an environment where every student feels a sense of accomplishment, contribution, power, purpose, and challenge. They draw parallels with an evidence-based conceptualization of Native American student success in education. Through the use of a blanket weaving story, they illustrate interconnections between the content, process, and products of learning experiences.

The featured Honoring Tribal Legacies teachings (curriculum units) are analyzed and attributes of each are presented in Chapter 3 through a series of matrices to illustrate strategies for differentiating pathways to curricular content. Moreover, these matrices show ways to diversify and adapt the instructional process, as well as provide opportunities for student-creation of a range of products to demonstrate what they have learned. These directions help us pay more attention to the earth around us, be more inclusive in our classrooms, increase our attention to diverse student needs, accommodate and develop more approaches to learning, and be open to adjusting our methods of assessment.

Chapter 4, *Primary Sources for American Indian Research*, shows us that primary sources are the life-blood of good educational and historical research and practice; however identifying, searching, retrieving, analyzing, using and citing such sources are sometimes confusing and most certainly time-consuming. Native American research is further complicated by the large numbers of individual Tribal communities and their varied relationships with (and forms of) governments and institutions, to say nothing of the cultural elements that must be considered when analyzing the resulting materials. This chapter seeks to alleviate at least some of this confusion and attempts to simplify basic principles of research and analysis that can be used in archives, library special collections, museums, historical societies, and other public venues holding records related to Native American Tribal communities.

Chapter 5, *The Art of Learning: Cradle to College and Beyond*, provides us with a useful guide through the voluminous, sometimes confusing, potential minefield of Common Core State Standards (CCSS), suggesting ways to help make sure the standards are sensitive to diversity in children, paying attention to Native American student learners and really all learners. Throughout the chapter we gain insights about how we can work to perfect the art of learning, replacing “schooling” with “educating,” employing love, respect, and enthusiasm, and making learning relevant by emphasizing the “why” and encouraging students’ personal connections to content. We are reminded of the importance of seeing the whole student, connected to communities reverberating out from the classroom to the family, neighborhood, city, state, nation, and globe, nurturing learning

that allows for an inter-connectedness with each child's culture and across cultures. Suggestions describe ways to help students take ownership over their learning while practicing self-monitoring and devising for themselves ways to apply their learning to situations outside the classroom. Finally, attention is given to scientific methods, recognizing recent brain research that suggests how we can take all our students through learning progressions that enhance their cognitive development and bring dynamic achievement in meeting standards. As educators, we can Honor Tribal Legacies by embracing these thoughtful guidelines.

Chapter 6, *Collecting More than Evidence: Graduating from High School in Washington State Using Culturally Responsive Tasks to Show Reading, Writing, and Mathematical Skills*, attends to the issue of assessment. Research regarding instruction for Indigenous students is addressed throughout the chapter in order to verify the use of a culturally-relevant alterNative assessment as appropriate for high school graduation. The use of this research by Native American educators is an acknowledgement on the authors' part that, as non-Native authors, they observe and comment on assessment from a non-Indigenous view. The expert perspective for Indigenous students found throughout the selected research is evident. It endorses the importance of Indigenous student success with recognition that these students have one foot in the world of the "mother" culture and the other foot in the world of the "mainstream." The authors conclude that valid and reliable alterNative assessments based in cultural relevance can be a viable method of showing proficiency on state standards.

Launching the Sacred Journey

As it is time to transition to the following chapters, we are reminded that Honoring Tribal Legacies is a sacred endeavor appropriately embraced as an *epic journey of healing*. Healing takes us to a state of wholeness, harmony, and balance. Like the fibers woven into a blanket, healing attends to the strength and functioning of each strand as it contributes to the whole. During the 2003–2006 Lewis and Clark Bicentennial, Native peoples wove blankets of healing along the Trail as their voices were heard through stories, dancing, drumming, singing, creation of Tribal flags, speeches,

presentations, artwork, books, posters, public service announcements, and much more. As Native and non-Native curriculum designers and authors working together to Honor Tribal Legacies, we have carried forward the cross-cultural bridge-building and healing work of the Bicentennial Commemoration. Our ongoing, in-depth, and heartfelt dialogue over the past two years has taken us forward on this sacred journey as we have been linked spiritually, intellectually, physically, and emotionally in a common vision of Honoring Tribal Legacies.

Lying at the core of our efforts was the intent to interject healing into the learning experiences of K-12 students. We envisioned a process of healing as students and teachers came to understand themselves as part of a place, be it a local community, Tribal homelands, and/or the Lewis and Clark National Historic Trail. The “Foundation Document of the Lewis and Clark National Historic Trail” highlights the importance of weaving “contemporary Tribal cultures, languages, cultural landscapes, place names, sacred sites, [and] communities” (2012, p.19) into interpretation and education that is inclusive of multiple perspectives of the Corps of Discovery. This sets a foundation for healing as students and educators learn together, open themselves up to new possibilities, and then take action toward protecting, appreciating, and restoring these invaluable elements of the Trail so that they will be accessible for the next seven generations. We see students and educators building caring relationships with each other, with our first teachers—the plant and animal peoples and with the natural environment—across time and space, as we seek to heal each other, ourselves, and our communities. “Honoring Tribal Legacies is one way—an intensely personal, powerful way—to teach . . . our students to love, know they are beloved, and know we are connected by time, place, and responsible to everyone and everything around us” (Brown, 2014).

References

- Banks, J. (2013). *An introduction to multicultural education* (5th edit.). Boston, MA: Pearson.
- Brown, S. (2014). *A thousand Celilos: Tribal place names and history along the Lewis and Clark Trail*.
See: www.HonoringTribalLegacies.com
- Circle of Tribal Advisors, Lewis & Clark Bicentennial. (2009). *Enough good people: Reflections on Tribal involvement and inter-cultural collaboration 2003-2006*. Gunnison, CO: Enough Good People. See: <http://www.lc-Triballegacy.org>
- Lewis and Clark National Historic Trail. (2012). *Foundation document*. See: http://www.nps.gov/lecl/parkmgmt/upload/LECL_Foundation_Document_LowRes_September2012.pdf
- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (expanded 2nd edit.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Wiggins, G., & McTighe, J. (2011). *The understanding by design guide to creating high quality units*. Alexandria, VA: Association for Supervision and Curriculum Development.

CHAPTER 1

Curricular Schema and Curriculum Expressions



Photo by and courtesy of Patti Baldus (Arapaho).

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Crow Agency Boarding School, 1920. Doyle family archives, with their permission.

Introduction

This chapter presents a curricular schema and curriculum expressions that we found helpful to design curriculum Honoring Tribal Legacies. The schema and expressions were born out of a process involving eight featured curriculum designers:

- 🌸 Dr. Rose E. Honey, *Discovering Our Relationship with Water*, Early Childhood
- 🌸 Dr. Ella Inglebret, *Honoring Tribal Legacies in Telling the Lewis and Clark Story*, Elementary/Intermediate
- 🌸 Shana Brown, *A Thousand Celilos: Tribal Place Names and History Along the Lewis and Clark Trail*, Intermediate
- 🌸 Carol Anne Buswell, *Exploring Your Community*, Intermediate
- 🌸 Drs. Shane and Megkian Doyle, *Apsáalooke Basawua Iichia Shoope Aalahputtua Koowiikooluk (Living Within the Four Base Tipi Poles of the Apsáalooke Homeland)*, Secondary
- 🌸 Julie Cajune, *Sx^wiwis (The Journey)*, Secondary
- 🌸 Dr. Carmelita Lamb, *Tribal Legacies of Pathfinding*, Secondary

Over the course of nearly two years, these curriculum designers worked closely with representatives from the National Park Service’s Lewis and Clark National Historic Trail. Through myriad dialogues and creative sessions, curriculum designers demonstrated a wide array of techniques and strategies that inspired them to Honor Tribal Legacies. This chapter describes the thoughts and insights gained from the collective intelligence that is still ongoing among all the participants.

Attention is first given to important topics and perspectives that can influence the approach and mindset of curriculum designers. The first section lays the **Foundation for a Transformative Learning Experience** that all students can enjoy when engaged with Honoring Tribal Legacies curriculum. The process begins by recognizing that all students can move forward, doing more . . . better. There are also myths—education as a way to gain a life, education as an individual endeavor, and learning as an objective experience—that inhibit our creativity when drafting curricula. New found freedom gained from dispelling such myths fosters the desire and capacity to achieve higher levels of critical understanding realized through a thoughtful space where students consider the lives and influence of other peoples. We eventually arrive at a point where we know curriculum alone is not enough and recognize that the key to student success is the student–teacher relationship within the execution of an excellent curriculum Honoring Tribal Legacies.

The second section, **Honoring Tribal Legacies Curricular Schema**, presents a list of curriculum components and explains each to arrive at a layout facilitating a sense of ongoing symmetry. Most of the components of the schema are common to the educational community (i.e., standards, lesson plans, learning objectives, etc.) but several components are described from an Indigenous perspective (i.e., teachings, episodes, etc.). We have added some components that are specific to designing curriculum Honoring Tribal Legacies (i.e., Dear Teacher and Student letter, My Story reflection, Honoring Tribal Legacies Standard, etc.). The schema also provides consistent scaffolding for integration of educational theories that support the purpose of Honoring Tribal Legacies.

The third section introduces **Honoring Tribal Legacies Curriculum Expressions** by drawing upon Wiggins and McTighe's (2005, 2011) Big Idea, Enduring Understandings, Essential Questions, and Entry Questions in the context of learning about Tribes before, during, and after the Lewis and Clark expedition, as well as along the Lewis and Clark National Historic Trail today and into the future. We use the phrase “curriculum expressions” to embody the belief that we can merge the best new ideas from the broad field of education with the best traditional approaches from Indigenous education. From a creative perspective, it means to draw from anything ranging from the conceptual to real-world examples to ensure that teachers and students benefit from the sagacity of Honoring Tribal Legacies. From a pragmatic perspective it is about seeing curriculum expressions as communicating ideas and conveying thoughts or feelings through a work of art that engages students in a transformative experience.

We continue to critique our use of Wiggins and McTighe with added reference to Banks (2014) in the fourth section, **What is Understanding by Design (UbD)?** where we make the connection between Indigenous ways of teaching and knowing with prevailing views in the field of education (i.e., four levels of multicultural integration advanced by Banks and the six facets of understanding advocated by Wiggins & McTighe, 2011, and add our 7th facet—Sense of Place). Banks is considered the father of multicultural education. His four levels of multicultural integration (contributions, additive, transformation, and social action approaches) are significant and work in tandem with the seven facets of understanding (explanation, interpretation, application, perspective, empathy, self-knowledge, and sense of place), because these levels clarify whether superficial or valuable learning is taking place. We pair a view of understanding that recognizes that there are a number of important types of understanding that students need to be proficient and capable in a broad range of skills and abilities (Wiggins & McTighe) with the idea that learning about cultures must not be merely superficial, but must also happen at levels with sufficient sophistication (Banks), then we gain a truly authentic learning episode that honors the human experience, rather than trivializing it. Additionally, the Common Core State Standards call for students to grapple with complex subjects across the disciplines in a deeper and more developed way, a goal shared by

Banks and Wiggins and McTighe. This can be achieved by developing students' understandings in the presence of curriculum that allows them to feel a sense of mastery and accomplishment brought about by teaching lessons that are transformational to the student and allow them to act in socially relevant and empowered ways.

The fifth section introduces the **Big Idea** as *Honoring Tribal Legacies along the Lewis and Clark National Historic Trail*. The Big Idea gives all American children a chance to know more about the Indigenous peoples before, during, and after the Lewis and Clark expedition, as well as today and into the future. Our children, and indeed our society, may understand that scientific, political, social, and environmental developments resulting from the Lewis and Clark expedition had an enormous negative impact on Indigenous peoples. Understanding the implications may come from stories demonstrating a continuum of Indigenous history and subsequent relations among many cultures. Recognizing historical relations can connect the public with the past and present to illuminate the changes that have taken place over diverse landscapes and environments of plant, animal, and human peoples. The Indigenous peoples have profound stories of the past about what life was like before Lewis and Clark were on the scene, what happened during their journey, and opportunities to build unity by examining Indigenous history. In recognizing Tribes and Tribal Cultures as a central resource, the National Park Service acknowledges a vast array of talent, knowledge, and wisdom that can benefit schools and society all along the Trail and beyond.

In like manner, the sixth section, **Enduring Understanding**, explains how curriculum designers can sustain teaching and learning about Honoring Tribal Legacies by ensuring that students understand Indigenous peoples were the original inhabitants and made significant contributions to North America, history can be viewed from different perspectives, knowledge affects how we make sense of a particular place, places are affected by events, and that decisions about a place will affect the status of that place for years to come.

The seventh section presents **Essential Questions** that align with the Lewis and Clark National Historic Trail and Circle of Tribal Advisory themes (i.e., What are the creation stories of this place?, How did American Indian people describe encounters with members of the

Lewis and Clark expedition?, and What cultural attributes of this place would be protected and restored?). Some **Entry Questions** advanced by the curriculum designers are presented in the eighth section. These entry questions are intended to help teachers guide students into new and possibly challenging ideas about the history they know. Entry questions are also intended to help teachers provide students with a background and a platform upon which to ground the exploration occurring within each episode. The ultimate goal is to have entry questions ease students into new understanding within a supportive classroom environment.

The ninth and final section, **Summary and Conclusion**, allows us yet another opportunity to reinforce some of the prevailing views presented. At the risk of being redundant, it bodes well to remind ourselves that repeated calls for Honoring Tribal Legacies are necessary to permeate the consciousness of American society. In conclusion, we do so judiciously and compassionately, because Honoring Tribal Legacies is not just about embracing what we like about ourselves, it is as much about what we like and appreciate about other people.



A modern rider on the banks of the Little Big Horn River. Photo by Kristine Johnson, with permission.

Foundation for a Transformative Learning Experience

Moving student thinking forward—doing more, better. Honoring Tribal Legacies curriculum is grounded in respect for Indigenous knowledge and a foundational belief in the importance of the lessons that can be gained from Indigenous perspectives. Associated episodes or lessons are valuable to the current lives of students and serve to provide engaging experiences at the highest levels of cognitive and affective domains.

James Banks' levels of multicultural integration offer a means of evaluating the depth and intent of learning episodes by looking at our treatment of information about minorities within the cannon of traditional American educational subjects. His levels of multicultural integration are arranged in a hierarchy so that at the lowest level, the contributions approach, as it is applied to this curriculum, traditional Eurocentric narratives are maintained and students gain small amounts of inserted information about Indigenous people, but they understand little in relation to the value and meaning of this information to the people represented. At the next level, the additive approach, Indigenous content, concepts, and themes are added to the standard curriculum, but the traditional curricular platform is maintained. At the third level, the transformation approach, the traditional curriculum is exchanged for one that continues to teach and achieve important grade level standards, but the goals, structure, and basic assumptions of the material are changed to reflect Indigenous perspectives on issues, concepts, themes, and events. Finally, at the highest level, the social action approach, the curriculum empowers students with the knowledge, values, skills, and perspectives needed to actively participate in social change that takes into account the depth and breadth of human perspectives and experiences.

Learning episodes that reach the social action level arrive at a point where students can make their own decisions about important social issues and take their own forms of action to solve these issues. Curriculum that implements Place-Based Multiliteracies (PBM, discussed at length in Chapter 2) contains learning episodes that encourage transformational experiences for students by engaging them at Banks' 3rd and 4th levels, using the transformation and social action approaches. By combining Place-Based Multiliteracies, Banks' Levels of Multicultural Integration,

and Wiggins' and McTighe's Six Facets plus our 7th Facet of Understanding (discussed further beginning on page 42) we are able to achieve what Shor (1992) called "educational empowerment." An empowered education is characterized by individual growth achieved in a critical democratic community where students engage in cooperative social processes and is based on the belief that self and society create each other. Empowered students are not inclined to pursue self-promotion at the expense of or without consideration for the welfare of the community. Together students seek self and social change through the goals of the pedagogy which are,

... to relate personal growth to public life, to develop strong skills, academic knowledge, habits of inquiry, and critical curiosity about society, power, inequality, and change... The learning process is negotiated, requiring leadership by the teacher, and mutual teacher-student authority. (pp. 15–16)

An empowered curriculum such as Honoring Tribal Legacies is essential because often when curricula attempt to integrate Indigenous perspectives into their standing resources, what students learn unintentionally contributes to the further marginalization of American Indians, Alaska Natives, Native Hawaiians, and other Indigenous peoples. Honoring Tribal Legacies is about giving credence to the role Indigenous people have fulfilled in our nation's past, present, and future. The additive and/or contributions levels of multicultural integration (Banks, 2014) become the primary types of lessons used to introduce students to Indigenous perspectives. The traditional curriculum with its heavy Euro-American emphasis remains unchanged and information about Indigenous people is added to this base in small, often fragmented pieces. For example, we teach about Indigenous people through—at best—clothing and food featured in small boxes found in the margins of our texts, a literal marginalization, or—at worst—in short sentences that do not change or challenge the common message. This fails to communicate models of integrity and respect for humanity that we seek to teach students growing up in a complex and conflicted world.

While it may be acceptable to begin learning about Indigenous perspectives by connecting with knowledge presented in the mainstream of which students may already be aware, that would

entail designing curriculum at lower levels of integration that never ask students to move outside of their current selves, to expand beyond youthful egocentrism, or to face conflicts in information with a clear mind. The information taught at the additive and contributions levels becomes facts for information sake rather than a true exploration of Indigenous views and knowledge. While additive and contributions lessons may be a good place to start, it is important to move on in our pedagogy to a place where students can confront a number of myths about Indigenous peoples in addition to myths about education itself that are supported by our current trends in curricula.

Teachers can lead students into more complex, challenging, and engaging understanding by resolving to consistently implement learning episodes that employ transformation and social action approaches and by critically evaluating the position curriculum affords marginalized peoples, discarding curriculum that allows students to remain static and egocentric in their current understanding of Indigenous peoples. By removing trivial learning about Indigenous peoples and replacing it with transformational learning we can both streamline and improve the learning happening in our classrooms, thereby moving student thinking forward and doing more, better.



Elementary students celebrate Native America Heritage Day with their peers. Photo courtesy of the National Park Service.

Myths we can dispel through intentional drafting of curricula. There are a number of myths supported by our educational dialogue that do a disservice to the strengths of our students and our communities and that distance students from our more standard curricula. First, we often see education as a way to gain a life rather than recognizing that each of us is in fact spending life to gain an education. Within the Honoring Tribal Legacies curriculum, in contrast, we strive to maintain a focus on providing a worthy experience for both teachers and students. We seek to stimulate the mind AND engage the inner person, the heart. In American Sign Language the sign for “know” is a hand gesture beginning away from the body and pointing inwards toward the head. In Plains Indian Sign Language, the sign for “know” is made with a hand gesture beginning at the heart and extending outward. Because Honoring Tribal Legacies is rooted in Indigenous perspectives, our curriculum is based on the belief that if knowing originates in the heart, then learning must also originate in the heart. Western science is often preoccupied with organizing information into disciplines, but as Cajete (2000) has explained, seeking life (rather than seeking discipline-related knowledge) was the “all-encompassing task” (p.2) for Native peoples. While Native peoples did not need words for science, art, philosophy, etc., the knowledge contained within these fields was still of great importance. Because their perspective on knowledge was to gain it for their lives, it became a soulful discipline rather than a purely mental one. Deep learning was also meant for each individual heart and not only for specialized minds.

While there were Tribal specialists with particular knowledge of technologies and ritual, each member of the Tribe in his or her own capacity was a scientist, an artist, a storyteller, and a participant in the great web of life. (Cajete, 2000, p. 2)

Similarly, we honor the voice of young people in our place-based multiliteracies approach to designing curriculum by creating lessons and sharing teachings that allow students to construct their own sense of meaning and value within the daily work on which they spend their lives.

The second myth of institutionalized curricula is that our educational experience is an individual endeavor. It tries to suggest that even when students are engaged in group work, the

individual must support himself adequately so that he can move on from the group experience, which is often seen as an inconvenience, to new-found individual success gained from learning to work with others. Thus, working with others is presented primarily as a means to an individual goal. Students often hear the message, “You must learn to work in a group so that you will have good people skills when you go on to your profession.” And this message is often laced with undertones of control and domination.

The Honoring Tribal Legacies curriculum is based on a comprehensive worldview that embraces the connections between people, between places, between experiences, and between the lives of all. We recognize and honor teachers as orchestrators of community and value their abilities to bring students together to generate not compromise, but exponentially better, higher ideals resulting from their combined thoughts, concerns, and efforts. It is a truly transformational experience for students working in a supported environment who are encouraged to work together in envisioning, voicing, and acting on their visions for the future. This is not superficial “group work;” this process involves intelligent, aware students in crafting strategy and awakening direction and passion for their future lives.

The third myth promoted by institutionalized curricula is that teaching and learning are objective experiences. What we often fail to encompass in our educational plans is that each individual learner absorbs, processes, constructs and reconstructs what is presented in a unique way based on their past experiences not only in the classroom, but in the wider arena of life. We present a skewed vision of the world when our educational methods communicate that everyone will learn a set number of concepts in a set way and will be able to reproduce them in a common manner. In the adult world, when we are presented with new information we have a choice in how we let that information influence us; we are free to accept or reject it, use it or not. A view that what teachers provide students can be purely objectified negates the necessity to teach critical thinking and denies the fact that students have a right to a thinking voice within their education. Education becomes exciting when we blend the concepts, themes, and ideas we want our students to carry with them when they leave our classrooms with authentic educational experiences and the breadth

of assets each student brings to the learning episode. When we acknowledge that learning is not objective, we are able to value the subjective part of each student, their identity, their voice, their beliefs, and thereby make the material meaningful to them and to us.



Native child enjoying the swing of life.

Moving on to higher levels of critical understanding. As adults we are attracted to events and experiences that touch us at the level of our souls. We may feel that they happen much too infrequently, and most of us can probably say that when we have those impactful moments, we feel that they were uniquely made for us and leave us wanting more. While transformational experiences can be positive or negative, the positive experiences are those that affirm our value as human beings. They are rewarding because of the indelible mark they leave on our timelines providing evidence that something significant has happened.

In designing our Honoring Tribal Legacies curriculum, care has been given to creating episodes that afford students and teachers transformational experiences. Banks' (2014) two highest forms of multicultural learning occur at the transformational and social action levels. These levels are unique because they focus specifically on enduring ideas. Leaving the traditional platform



Plenty Coups with his granddaughter.
“Going to school should be like going to your grandma’s house.”—Darrell Kipp, Blackfeet Educator, Filmmaker, and Historian, 1944–2013.

of learning behind, these levels begin with a minority perspective and progress by asking students to leave their positions of ethno- and egocentrism and enter into a new thoughtful space where they consider the lives and influences of others. They can empathize and think critically and reflectively about new ideas and ways of viewing the world around them. They can experience multiple paradigms and evaluate them in personally meaningful ways while simultaneously considering the larger community around them. They recognize their agency and at the social action level students act to create positive change. Thus, the reward of school work becomes not only mastering concepts, but using these concepts to illuminate the actual lives of the students enabling them to capture the hope necessary to believe “that life exists, and identity; that the powerful play goes on and you may contribute a verse” (Walt Whitman, 1855).

Curriculum alone is not enough. As we make method and design decisions related to the Honoring Tribal Legacies curriculum, we are not merely choosing transformational forms of learning because they are entertaining or even engaging. We have chosen our methods because research (Bransford, Brown, & Cocking, 2001; Zirkel, 2006) says they work and also because they affirm the positive relational models that have existed in Indigenous communities for a long time. When we study student responses to curriculum, what we find is that curriculum in and of itself is only a part of the equation of student success (Doyle, 2012). The most significant indicator of student success in education is directly dependent upon the student-teacher relationship within the execution of an excellent curriculum. In the teaching-learning patterns of Native cultures, relationship precedes learning, and learning is the shared fruit of the relationship. While this is

important for all students, it is especially vital for students who are perceived to be outside of the norm—gifted students, minorities, and students with special needs, among others.

When teachers are supportive in their nature and caring in their demeanor, students are better able to mediate the stressors that biologically sabotage their abilities to learn and engage in new and challenging material because their brains are able to operate consistently in the prefrontal cortex (Goleman, 2006). When classrooms are boring or stressful while also lacking supportive relationships, students spend more time utilizing portions of their brains that do not facilitate efficient learning (the amygdala). While schools may research and find the best learning resources available, it is essential that they also have teachers with excellent social intelligence who can carefully arrange supportive learning communities.

The capacity to create community begins with teachers. Therefore, curricular lessons are drafted to require discussion and interaction at the relational level. We ask that both students and teachers broach the isolation of individualism and work together to forge outcomes that are valuable and meaningful to all. The Honoring Tribal Legacies curriculum is based on the expectation that our lessons will be enacted in a classroom community, where students and teachers share the power of the learning experience in authentic and supportive environments.



Linwood Tall Bull teaches traditional stories about the healing power of native plants.

Honoring Tribal Legacies Curricular Schema

Having laid the foundation for a transformative learning experience, we can now introduce the Honoring Tribal Legacies Curricular Schema. As shown in Table 1, the curricular schema lists various components of and the process for designing curriculum Honoring Tribal Legacies.

Table 1. Honoring Tribal Legacies Curricular Schema	
* Dear Teacher and Students Letter	
* Title Page with:	* Visual, Title of Teachings (Curriculum) in Native language translated into English if possible, Grade Band (i.e., early childhood, primary, intermediate, high school, or postsecondary syllabi), Subject, and Authorship
* Abstract (concise summation of entire teachings or curriculum)	
* Table of Contents	
* My Story (a reflection written by each of the curriculum designers of the Honoring Tribal Legacies project)	
* Title of Teachings (e.g., Curriculum)	
* Introduction to Specific Topic of the Teachings (longer description of entire teachings or curriculum)	
* Curriculum Design Approach	* Place-Based Multiliteracies (PBM)
* Honoring Tribal Legacies Standard (i.e. The Eleventh Standard):	* <i>Demonstrate environmental stewardship and a sense of service achieved through acknowledgement of the interconnectedness of humanity in historical, cultural, scientific, and spiritual contexts.</i>
* Common Core State Standards for the Teachings (e.g., Curriculum). Each standard is included in its entirety.	
* Curriculum Expressions	* Big Idea(s) * Enduring Understanding(s) * Essential Question(s) Aligned with the Lewis and Clark National Historic Trail and/or Tribal Themes

Table 1. Honoring Tribal Legacies Curricular Schema

<ul style="list-style-type: none"> ☼ Episodes (e.g., Lesson Plans) ☼ Applicable Common Core State Standards. Only need to include reference number of standard here. 	
<ul style="list-style-type: none"> ☼ Entry Questions(s) ☼ Learning Objectives aligned with appropriate Common Core State Standards (grade level and content area). ☼ Materials and Resources ☼ Differentiated Instruction (for advanced and emerging learners) (Optional) ☼ Formative Assessment of Learning Outcomes 	
<ul style="list-style-type: none"> ☼ Summative Assessment of Learning Outcomes 	
<ul style="list-style-type: none"> ☼ Bibliography and Additional Resources 	
<ul style="list-style-type: none"> ☼ Using Primary Sources 	<ul style="list-style-type: none"> ☼ Curriculum designers share general advice drawn from personal stories about collaborating with tribal communities, particularly with elders and traditional cultural bearers often sought out to present in classes. (Optional)

Many of the components and the process should be quite familiar to the educational community. We do use various words throughout the schema that have unique meaning to Indigenous peoples. For example, “Teachings” is used interchangeably with “curriculum” because it is a term commonly preferred among Indigenous peoples when sharing ancestral knowledge. We are comfortable using either teachings or curriculum to encourage the merging of wisdom that meet the needs of all our children (and who knows . . . maybe Teachings, instead of Curriculum, will be the more prevalent term in the future). Some of the curriculum designers have found added value in providing a *Dear Teacher & Students Letter*. When advancing this component, Julie Cajune, one of the featured curriculum designers, explains that such a letter is a proper Indigenous opening and in her words, a “way to convey a traditional greeting—like the greeting we give to visitors.” She goes on to say

that, “it is both a welcome and an invitation. It creates the beginning of a personal relationship. A letter is intimate in that way.” We all find Julie Cajune to be wise like that as well.

The *Title Page* provides an: (a) aesthetically pleasing visual, (b) informative title in Native Language and/or English, (c) applicable grade band (level), (d) subject area(s), and (e) authorship(s) because these components give a unique identity to the curriculum. A visual enables the curriculum designer to encapsulate a message in a way that words just cannot achieve. The *Title of Teachings (Curriculum)* is paramount and each designer was encouraged to come up with a title in an Indigenous language to proclaim an identity. Such a title would be translated to English, if possible. The identity is important as it defines the most familiar characteristics of being associated with place-based reality. The next components of the schema are: *Abstract*, *Table of Contents*, and *My Story*. We believe that an *Abstract* plays a crucial role by providing a concise summary of what is to be expected, covered, and addressed for the value of the reader or listener. It allows the busy teacher to quickly assess the curriculum’s purpose and serves as a point-of-entry to delve deeper into the teachings. In like manner, the *Table of Contents* lists the sections paired with the page number on which each one starts, or with a hyperlink to that section in online versions, all with the intention to assist the reader in grasping the overall content, organization of content, and to find specific sections.

We do not see the next component *My Story* often enough. It is a curriculum designer’s personal story of experiencing the opportunity to design curriculum Honoring Tribal Legacies. Here the story is brought to life through personal reflection and generosity to share intimate experiences that can motivate a teacher to design high quality place-based multiliteracies teachings that Honor Tribal Legacies. The decision to include the *My Story* component in the curricular schema was informed by the desire to embrace a strategy to encourage all teachers, young and old, to share their life experiences, beliefs, and challenges. The reflective process of writing and/or reading the *My Story* component further supports the notion that storytelling is a natural phenomenon indicative of what Honoring Tribal Legacies is fundamentally all about.

The *Curriculum Design Approach: Place-Based Multiliteracies (PBM)* is described in more detail in the accompany chapter of this monograph (Inglebret & CHiXapkaid, 2014). The PBM approach is illustrated through a learning spiral, cultural symbols, and further described through various matrices that allow the curriculum designer to tailor the teachings to certain learning standards through various learning modalities.

Most of the states along the Lewis and Clark National Historic Trail have adopted the Common Core State Standards (CCSS), and in response we created an Honoring Tribal Legacies Standard (i.e., *The Eleventh Standard*). Shana Brown, in her Letter to Teachers, explains that,

The core, and I believe in the common core, leaves out the most important thing we teach: we teach the human, we teach students the value of humanity and the responsibilities that all of humankind share. The core omits it simply because it is not testable or measurable. It is, nonetheless, essential and once present in several state learning goals that are quickly being abandoned in favor of the common core. We should not and cannot deny its rightful place in academia. We suggest, then, an Eleventh Standard: Demonstrate environmental stewardship and a sense of service achieved through acknowledgement of the interconnectedness of humanity in historical, cultural, scientific, and spiritual contexts.

Shana, on behalf of all of us, invited teachers to value the *Eleventh Standard* not just as part of Honoring Tribal Legacies, but as an essential piece of our own planning and teaching. With the *Eleventh Standard* as shared interest, each curriculum designer has tailored curriculum to specific Common Core State Standards (CCSS) for their *Teachings* (i.e., Curriculum). In addition, each of the curriculum designers demonstrates the alignment of CCSS standards that apply to his or her curriculum by providing a reference number and whole stated standard (later only referred to by reference number in *Episodes* [i.e., Lesson Plans]).

Curriculum Expressions like Big Idea(s), Enduring Understanding(s), and Essential Question(s), as well as Entry Level questions that align with Lewis and Clark National Historic Trail and/or Tribal Themes are explained in greater detail in the next section. These are the core

elements of the curricular schema. Here, it is good to share that we begin to use Episodes in the same context as Lesson Plans. Our feeling was that “*Episodes*” is a better term than “*Lesson Plans*” to characterize how stories can be defined by particular foci.

It is always good to recognize the foci first (i.e., what is important to feature about the Big Idea of Honoring Tribal Legacies) and see if Common Core State Standards fit. Of those standards selected, this component of the curriculum should include only the reference listing for selected standard. This is further defined by our *Entry Questions(s)* and *Learning Objective(s)* aligned with appropriate Common Core State Standards (grade level and content area). The Entry Level questions, arrived at with strategic intent by using the previous curriculum expressions, result in the learning objectives. This is followed by a list of *Materials and Resources* (along with quantity) that will be needed for each *Episode*.

Although optional in each *Episode* or *Lesson Plan*, Honoring Tribal Legacies curriculum benefits from an effort to articulate *Differentiated Instruction* (for advanced and emerging learners). There is something compassionate and attractive about serving multiple learning modes within a learning community. It is helpful to use both *Formative and Summative Assessment of Learning Outcomes* to establish a baseline, monitor progress, and inform decision-making about the sustainability of the curriculum.

In providing sufficient supporting material, often overlooked is the value of a *Bibliography* with typical citation information along with hyperlinks in electronic versions. The description of the processing necessary for *Using Primary Resources*, although optional, will provide some curriculum designers with an opportunity to offer insights about their own experiences in collaborating with Tribal community members or finding and using primary resources within archives. Together these and other materials provide essential information for future curriculum designers who may wish to seek their own resources.

In summary, the curriculum schema presents suggested components of curriculum for inclusion in the project Honoring Tribal Legacies. The schema arose out of starting with common components known to the education community and then deriving additional components from

curriculum designers selected to design demonstration curriculum. Within the schema are core elements that are identified as curriculum expressions.



Tipi on Camp Mort.

Honoring Tribal Legacies Curriculum Expressions

This section conveys the Honoring Tribal Legacies curriculum expressions that include the Big Idea(s), Enduring Understandings, Essential Questions, and Entry Questions. We draw upon Wiggins and McTighe's (2005) definition of these key terms to design curriculum for Honoring Tribal Legacies. The Big Ideas are the core concepts, principles, theories, and processes that should serve as the focal point of curricula, instruction, and assessment. By definition, big ideas are important and enduring. Big ideas are transferable beyond the scope of a particular unit and this makes learning them meaningful for teachers and students. Such ideas go beyond discrete facts or skills to focus on larger concepts, principles, or processes. These are applicable to new situations

within or beyond the subject. For example, students study the Lewis and Clark expedition as a specific historical event because of its significance to a larger idea, such as Manifest Destiny, which rationalized the United States oversight of the aboriginal inhabitants. This big idea transcends its roots in nineteenth-century America and is a cornerstone of westward expansion. Without grasping the distinction between the Indigenous presence and U.S. westward colonization, students cannot understand the full spectrum of American history—even if they are highly knowledgeable and articulate about certain facts of history.

The Enduring Understandings are the specific inferences, based on big ideas, which have lasting value beyond the classroom. In thinking about the enduring understandings for a unit or course, teachers are encouraged to ask, “What do we want students to understand and be able to use for several years from now, after they have forgotten the details?” Enduring understandings are central to a discipline and are transferable to new situations. For example, when Honoring Tribal Legacies, students come to understand that the territory Lewis and Clark traveled through was already occupied and had been since time immemorial. This inference from facts, based on “Tribal sovereignty” and “colonization,” provides a conceptual unifying lens through which to recognize the significance of Manifest Destiny as well as to learning about Tribes before, during, and after the Lewis and Clark, as well as today and into the future. This means that Honoring Tribal Legacies encompasses the entire time spectrum (i.e., past, present, and future).

The Essential Question(s) would include any question that lies at the heart of a subject or curriculum (as opposed to being either trivial or leading) and promotes inquiry and analysis of a subject. (Uncoverage suggests that teachers use the curriculum not to merely cover the required material, but to help students uncover the knowledge hidden below a superficial understanding of basic concepts.) Essential questions thus do not yield a single straightforward answer (as a leading question does) but produce different plausible responses, about which thoughtful and knowledgeable people may disagree. An essential question can be either overarching or topical (unit-specific) in scope.

In comparison, an Entry Question represents a simple, thought-provoking question that opens a lesson or unit. It often introduces a key idea or understanding in an accessible way. Effective entry questions spark discussion about a common experience, provocative issue, or perplexing problem, as a lead-in to the unit and essential questions. Entry questions should be framed for maximal simplicity, be worded in student-friendly language, have provocation value, and point toward the larger unit and essential questions. The design challenge is to enable essential and unit questions to arise naturally from the entry questions, problems, and activities.

As the essential questions have been drafted and their value and impact assessed, curriculum designers have also contemplated how we will know that students have gained the full measure of understanding that was intended. In designing each episode care has been taken to ensure a consistent link between objectives and outcomes. To strengthen this methodology, designers have used backward design, also known as Understanding by Design or UbD (Wiggins & McTighe, 1998), and carefully considered the range of different ways in which students may demonstrate their understanding. We found that the six facets of understanding fit well with Indigenous thought and after adding our own seventh facet we believe they create a unified model that honors both common core principles and Tribal legacies. In both their 2005 second edition of Understanding by Design and their 2011 publication, Understanding by Design Guide to Creating High Quality Units, Wiggins and McTighe explain the six facets of understandings. In the discussion below we will refer to Wiggins and McTighe's work in the 2005 UbD guide, but teachers may wish to examine the applications illustrated by Wiggins and McTighe that are found in the 2011 guide for creating high quality units.



Choose your path.

What is Understanding by Design (UbD)?

According to Wiggins and McTighe (2005), pre-K-12 curriculum needs to address ideas and concepts that have lasting importance to people over time and across cultures. In Understanding by Design (UbD), they present alternative strategies of planning and organization that challenge linear models of curriculum planning. What we have provided here is a description of the ways in which this Western educational model may fit within Indigenous educational paradigms.

Curriculum designers (specialists and/or teachers) use UbD to create opportunities for understanding through effective use of curriculum and assessment design. As a matter of practice, UbD is not a prescribed curriculum that teachers and schools should implement indiscriminately; instead it is a methodology for designing or redesigning curriculum so that teachers can be more certain that true understanding is being developed in students through the content of the curriculum and the manner in which it is presented. In Montana specifically, the Montana Office of Public Instruction has adopted the UbD format as a template for lesson plan design, particularly as it relates to work done on behalf of the Indian Education for All initiative, an endeavor to increase culturally responsive teaching and learning strategies in Montana's public schools.

The principle philosophy of UbD centers around two primary terms that are essentially the jargon of lesson planning. "Curriculum" and "assessment" are often thrown into educational discussions in both appropriate and inappropriate ways making it necessary to define clearly what Wiggins and McTighe mean when ideas about curriculum and assessment design are discussed with respect to UbD. For this discourse it can be assumed that "curriculum" refers to Wiggins' and McTighe's description of a designed plan for learning that comes out of content standards and performance expectations. The plan design is focused on shaping content so that effective teaching and learning occur in each and every learning episode.

[Curriculum] is a map for how to achieve the "outputs" of desired student performance, in which appropriate learning activities and assessments are suggested to make it more likely that students achieve the desired results. (Wiggins & McTighe, 2005, pp. 5–6)

In addition it should be clear that, unlike traditional curriculum, UbD curricula define what the learner will do, rather than what the teacher will do, and are also written from a perspective that considers both the student's point of view and the achievements that are desired.

When Wiggins and McTighe apply the term "assessment" to their approach, they mean,

. . . the act of determining the extent to which the desired results are on the way to being achieved and to what extent they have been achieved. (2005, p. 6)

It can also be seen as,

the deliberate use of many methods of gathering evidence of meeting desired results, whether those results are state content standards or local curricular objectives. (2005, p. 6)

UbD supports the belief that multiple methods of assessment must be applied throughout the course of the lesson in order to develop proper understanding, because an acceptable amount of "evidence of understanding" can only be amassed through a varied compiling of information from both formal and informal assessments.

Since the goal of both curriculum and assessment design is to produce and measure understanding, understanding what it means to understand (no pun intended) according to the six facets of understanding is the focal point of UbD. Understanding is not a single concept as we may often view it. Instead understanding is a series of six interrelated abilities or "facets" that should be developed as a result of good curriculum and assessment design. Thus, curriculum should be developed to explore and deepen understanding with respect to all six facets by actively engaging the student in the content. Assessment's primary function should be to reveal the extent of understanding in all six areas as it is developed through each lesson's experience.

Because understanding according to the six facets (which we will discuss at length later) is the desired result of teaching and learning, a backward design curriculum model is employed which requires the educator to decide first what the desired result of learning will be (What is worth understanding? What is the big or enduring idea, the essential question?). Second, the curriculum designer must decide what is acceptable evidence (in amount and type) of this understanding

(i.e., What forms of evidence of understanding are reliable, valid, authentic, and accessible to the student?). Then, and only then, can the third step lay out the learning experiences and related instruction (asking, What experiences and instruction will foster interest, intrinsically motivated and engaged work, and understanding?).

Traditionally, curriculum design has promoted an emphasis on what the teacher will do instructionally to get students to achieve learning objectives. While this method may get us through the day or the test (“coverage”), it causes teachers to focus on the best way to cover the material rather than on how students will come to understand the content. While backward design is not a new concept—given that it was explored by Ralph Tyler (1949) and actually proceeds in a way most people see as logical and straightforward—it is considered backwards because it proceeds in a direction opposite from conventional habit.

UbD was developed to further clarify the benefits of using a backward design process focused on student understanding to elevate the teachers’ uses of curriculum in the classroom. It is essential to discuss and define what real understanding is because so many of our educational methods and processes (rote learning, high-stakes testing, grading, etc.) are appeased by signs of apparent understanding (being able to produce the right word, definition, or formula) rather than real understanding. In order to help teachers conceptualize what understanding as a learner outcome should look like, these six facets are presented as a means of evaluating what comprises mature understanding. While each facet will be discussed as a separate entity, it is important to keep in mind that these facets are not demonstrated independent of one another; they often overlap and occur simultaneously. Likewise, there are many different ways of teaching to engender these facets. It is a strength of this model that each individual teacher’s style and approach can be honed in a customized way as they work to ensure that mastery is gained by focusing on these facets.

As the six facets of understanding are discussed in the section below, an explanation will be given of each facet, followed by an analysis of how this facet is applied to Honoring Tribal Legacies, curriculum ultimately intended to honor Indigenous ways of teaching and knowing. It should be noted that the use of the term “Indigenous curriculum” differs from the concepts related to “culturally

responsive curriculum” in that an Indigenous curriculum refers specifically to a curriculum created from a foundation of Indigenous values, epistemology, and pedagogy, whereas culturally responsive curriculum maintains a Euro-American premise while making accommodations for culture within the learning of what is considered content pertinent to American standards. This, however, does not imply that an Indigenous curriculum cannot or does not teach standards required according to mainstream education. In fact Lipka and Ilutsik (1995) maintained that in a Yup’ik Indigenous curriculum, “The elders’ storytelling through dance, storyknifing and drumming is intimately related to Western forms of literacy, and elders’ environmental knowledge is directly related to Western science and mathematics” (p. 199). In the following discussion of Wiggins and McTighe’s six facets of understanding, application of these facets will be made specifically to the construction of model Indigenous curriculum, such as we have in the Honoring Tribal Legacies curriculum.



A Native scientist in training.

Facet 1. Explanation – “sophisticated and apt explanations and theories, which provide knowledgeable and justified accounts of events, actions, and ideas” (p. 85). According to Wiggins and McTighe, we know that a student has gained understanding in relation to Facet 1 when she is able to explain the right or wrongness of an answer, make an argument with appropriate evidence to support a particular view, provide defense of a view, or “show her work.” Therefore, if we are to design a lesson that achieves this kind of understanding, we must construct our lessons around essential questions, issues, or problems that require a student to construct independent explanations or theories. Obviously, if lessons are constructed to produce this type of understanding in relation to a specific essential question, assessments must ask students to explain and not just reform. Students should be able to link the facts they observe to larger principles of knowledge and provide justification for a variety of connections they are able to make. At the simplest level students should always be able to show their work and not be allowed simply to give an answer.

It is interesting that the best phrases in most Indigenous languages for the term “education” are either “coming to understand” or “coming to know.” Indigenous languages do not contain words for education or science or art or any of the compartmentalized disciplines over which Western education has spent a great deal of time and effort defining, arguing, and philosophizing. Instead all things are learned through the process of “coming to know” that is pursued as a journey or a path on which a student may progress through any means available (Cajete, 2000).

As a side note, even though traditional Indigenous knowledge is not divided according to disciplines, coming to know within a Indigenous system does require the involvement of teachers or elders who have the same responsibilities as mainstream scientists – to develop specialized knowledge (Deloria, 1995). Traditionally, rather than finding a formula or a theory or an answer, students are taught to seek an explanation or find a balance by using culturally available concepts such as “harmony, compassion, hunting, planting, technology, spirit, song, dance, color, number, cycle, balance, death, and renewal” (Deloria, 1995, p. 80).

Even though understanding is gained by Indigenous people in a very different manner, their coming to know process is still very systematic. As an example from science, Cajete (2000)

suggests that Indigenous coming to know requires systematically ordered steps, much as a Western experiment would; however, coming to know is the goal in Indigenous learning whereas Western science has a different goal. Furthermore, the psychologies of thinking and related learning approaches are different. From a Western perspective, arriving at Point B after leaving Point A is a linear process, while Indigenous patterns of discovery cause the arrival at Point B to be the result of establishing a sense of meaning and relationship, a sense of territory or domain, and a sense of the contextual breadth of the issue (Cajete, 2000).

In light of this, Facet 1- Explanation, is very compatible with the forms of understanding sought by Indigenous people. As an example consider a lesson about calculating the area of a variety of one-dimensional shapes (i.e., circle, square, triangle). Our traditional Western approach is to introduce students to geometrical formulas which allow students to compare the areas of different shapes by comparing the answers obtained through metric measurement of a shape with a subsequent application of these numbers to the appropriate, and memorized, geometrical formula. Wiggins and McTighe argue that this form of learning does not allow students to come to a real understanding that would make them more able to explain the relationships between shapes, numbers, and theories. Similarly, when this lesson is constructed from an Indigenous foundation, understanding is gained differently than it is in the Western example, and yet in a way that would appeal to the strategies suggested by Wiggins and McTighe. Cajete praises,

As we enter the first decade of a new millennium, Native and Western cultures and their seemingly irreconcilably different ways of knowing and relating to the natural world are finding common ground . . . (Cajete in Waters, 2004, p. 45)

To select an example of a lesson of which both Wiggins and McTighe and Cajete would approve, consider if students wanted to understand the relationship of a shape's area to circumference and to other shapes. The lesson might begin with the manner in which the dimensions of a tipi ring are obtained. Students could physically construct the ring, recognize its shape as a circle, and estimate the area by seeing how many people the tipi could sleep. If the circumference of the ring is measured with a string, students might then turn the ring into a square shape and then

observe how the area of the square changes as shape changes. Now fewer people can fit in the shape. Finally students use the same string to form a triangle shape and then observe that even fewer people are accommodated by this shape. Through this lesson, students are able to work cooperatively to understand the mathematical theory that even when circumference stays the same, area changes with shape and the number of sides of the shape predicts the directional change in the area of the shape.

While students have not yet even considered a formula that would illustrate this point, they have discovered the very core of the principles of geometry related to area and can explain the changes that shape produces with regard to circumference and area, a task very few of the students educated in the Western example would be able to do. In addition students taught in this manner can apply this understanding in fields outside of Western limits. Students educated with Western methods will arrive at a single answer that is dependent upon a base-10 system and will believe that this answer is an absolute. However, they will not recognize their inability to work within other systems. Students who have been taught according to an Indigenous curriculum will be able to apply their theoretical understanding of principles not only to their traditional designs and the Western system, but also to other systems such as the Yup'ik system of numerology which is a base-20 rather than a base-10 system (Lipka & Ilutsk, 1995). They will understand and be able to explain that changing the system does not change the principle.

This example illustrates Jarrett-Week's (2003) explanation of why Western and Indigenous math and science perspectives are inherently different.

While measuring is Western science's most powerful method, recognizing relationships is Native science's. Rather than using measurement to predict and control, the priority of Native science is to make meaningful relationships and to understand one's responsibility within them. (p. 4)

In addition to being a valid way to understand, allowing Indigenous students to discover that their culture is as scientifically and mathematically able as Western culture is very empowering.

While many Indigenous scholars have shown this to be true (Cajete, 2000; Kawagley, 2006; Lipka & Ilutsk, 1995; Peat, 2002), our dominant educational methods often fail to acknowledge this important observation.

In considering how best to construct an Indigenous curriculum that supports Indian ways of knowing, the above example illustrates how structuring lessons around an enduring idea and an essential question, can fulfill the goals of educational standards while allowing for a teaching foundation rooted in Indigenous ways of coming to know. Students should be given problems that arise from their everyday cultural lives. At the same time, they should be allowed to pursue understanding by manipulating the physical environment in the construction of understanding that is evidenced by an ability to explain, justify, support, and see the validity of conclusions made on their own terms, in their own languages, and from their own perspectives.



A Native classroom.

Facet 2. Interpretation – “interpretations, narratives, and translations that provide meaning” (p. 88). According to Wiggins and McTighe, the way we know that students have gained the second facet of understanding is by their abilities to show why or how an event is significant or an idea is important. They should also be able to provide an interpretation that causes common recognition or resonates with others. Understanding of this type requires the implementation of skills in both interpretation and translation because it expects students to construct meaning from what has been given to them. This means that teachers will need to assess student learning by asking them to take a story, translate it, interpret it, make sense of it, show how it is significant, and make it meaningful.

It is important within this process that teachers recognize that because this process asks students to move between the text and their own experiences and because all interpretations are determined by personal, cultural, social and historical context, teachers cannot expect to test a single interpretation or try to advocate a single point of view as being “the right answer.” It serves no purpose for students to be “given” a story’s significance to analyze; instead they need to think through the problem so that they can find interpretations that their own intellectualism will support as valid and that become the answer to “Why is this story important to me?”

An example of this form of understanding is demonstrated in the leaders logs used in Dr. Shane Doyle’s learning episode on Dr. Joseph Medicine Crow in his Honoring Tribal Legacies curriculum unit. In this episode students read the text, *Counting Coups—Becoming a Crow chief on the reservation and beyond*. The text illuminates the life story of one of the most influential men in contemporary Apsáalooke life. While this story is powerful in and of itself, it achieves enduring value when students take the lessons Dr. Medicine Crow learns about leadership and apply them to their own lives and experiences. Students must interpret the lessons found in the stories told because the text does not do this for them. Each student’s interpretation will be impacted by his/her own life history and context. The log assignments provided by the leader will guide students through reflective processes that help them to evaluate their strengths and encourage them to utilize skills they have (and the ones they hope to gain) in leadership capacities. Thus the lesson

requires students to demonstrate their understanding of the text not through a regurgitation of facts about the story, but by demonstrating that they can interpret the details of the story to extract specific values and lessons, which they can then use to make meaning in their own lives.

In general Wiggins and McTighe consider literature and textbook materials to be the source of stories or narratives that can be implemented in gaining this facet of knowledge; however, the premise of using stories or narratives to achieve this facet of understanding is very compatible with Indigenous methods of teaching and knowing, despite the fact that their sources are for the most part oral rather than written. A great deal of emphasis and respect is committed to the art of storytelling in Indigenous communities and children are raised with the understanding that a story is never just a story. Instead of getting chastised, your grandmother tells you a story and you know what she means even more clearly than if she had given you a scolding. You can interpret the story and you know its connotation and implications for your own life. If you are an Indigenous child, you may also understand that there may be several different versions of the same story, each told from a particular perspective, and for a specific reason.

These different versions do not invoke the need to call one, some or all competing versions fraudulent, they merely illustrate that life holds a great deal of mystery and each individual is given the gift of perceiving this mystery from a different vantage point; this is acceptable. This is an understanding according to the second facet and it grows up from the very roots of Indian patterns of communication, of teaching, and of knowing. Cajete (2000) says, "Ultimately, science is storytelling for understanding of the natural world. . . . The purpose of ritual, myth, and story is to tell of important aspects of the continuity and flow of life, that is, a particular people's life and history" (p. 80).

As an example of how understanding gained through stories can be incorporated in an Indigenous curriculum, consider this event that occurred among Yup'ik elders and preschool children, as observed by Lipka and Ilutsik (1995). A group of Yup'ik women, representing several generations, demonstrated the art of making Suguuq (dolls) and then proceeded to use the dolls to improvise a story to tell the children. The story communicated Yup'ik values and customs. Lipka and

Ilutsik observed that it immediately became a lively way for the women to use role play to tease and teach children about Yup'ik values and customs. In mainstream schools we spend a fair amount of classroom time and effort leading children to improve upon their emotional intelligences. We tell them, “this is nice to say, but that is not,” “this is the behavior you should show,” and so on. While this might be one way to learn about correct social relationships, it does not produce the type of understanding addressed in Facet 2 because children, especially young ones, are limited in how far they can contextualize the instruction when it is only based on a prescribed list of appropriate and inappropriate behaviors.

The use of story can help children to gain understanding because a story requires students to translate, interpret, and make their own meaning within a context. The emotionality of the experience of the story stays connected to its meaning so that understanding is rooted outside of the abstract. This is what stories have done for centuries for Indigenous people. HeavyRunner and Morris (2006) explain,

Our stories can be told over and over; they are developmental. At every step we learn something new. In essence we grow up with our stories. They are protective factors that convey culturally specific high expectations, caring, support, and opportunities for participation. (p. 2)

Teaching students to understand through interpretation reinforces Indigenous foundations and validates the culture for the community. Accessing their oral tradition

skills develops students’ resilience and identity. Consistent with mainstream standards, telling stories is an acceptable way to gain true understanding of essential content. To this end Lipka and Ilutsik (1995) state, “Not only do we want the elders to share their knowledge with us, but we



Toys can be found anywhere.

want to show the larger community—particularly the next generation—that the elders’ knowledge ‘counts,’ that their language holds wisdom, and that their stories teach values, science and literacy” (p. 201).

Facet 3. Application – “ability to use knowledge effectively in new situations and realistic contexts” (p. 92). Wiggins and McTighe derived the third facet of understanding, application, directly from Gardner’s (1991) definition of understanding:

By understanding I mean simply a sufficient grasp of concepts, principles, or skills so that one can bring them to bear on new problems and situations, deciding which ways one’s present competencies can suffice and in which ways one may require new skills or knowledge. (p. 18)

According to this facet students should be able to show their understanding by using, adapting, and customizing the content to fit new contexts with new boundaries, purposes, and people. Manipulating the content in this way shows performance-based understanding and competency. Thus, teachers must provide students with new problems and new situations in order to assess this understanding.

One way that Indigenous curriculum has encouraged application as a form of understanding is by immersing young Indigenous people in their external community environment(s). Lessons practiced in a classroom tend to prescribe for students an environment that can only produce a limited number of new situations and problems. Therefore, care should be taken in designing an Indigenous curriculum to link the internal classroom environment to challenging exterior environments. Other activities such as role playing and improvisational stories may also hone students’ abilities to apply knowledge to new and varied experiences. Basso (2000) adds that according to the Apache, a prerequisite for something to qualify as knowledge is that it must be useful and knowledge is useful to the extent that it can be swiftly recalled and turned effortlessly to a practical end, or to the extent that it can be applied. Thus, Indigenous conceptions of wisdom align with Wiggins and McTighe’s third facet by asserting that knowledge that cannot be applied does not generate real or important understanding.



Big Sky Country.

Facet 4. Perspective – “critical and insightful points of view” (p. 95). According to Wiggins and McTighe, understanding gained with respect to Facet 4, perspective, is important because it means that students have the ability to consider problems in multiple ways and also to approach these problems from a variety of perspectives. This leads to greater likelihood that they will understand the content in a broader and deeper context, which may lead to new insight in the area studied or in new areas. Therefore, curriculum should be designed to include opportunities for student to confront alterNative world views and diverse thoughts.

From an Indigenous perspective, a manner of designing curriculum that favors teaching multiple perspectives encourages a discourse of inclusion and acceptance that provides “space and place in which Indigenous teachers can explore the politics of schooling, the adverse effects of colonial education, and obstacles to including local knowledge and instruction” (Lipka & Ilutsk, 1995, p. 199). The promotion of understanding through perspective allows the school—once a place where only the dominant view was represented—to become a place where revisionist histories can give voice to other significant competing forces in the formation of our nation, namely the influence of Indigenous peoples on the historical and contemporary issues.

Teaching for understanding through multiple perspectives also allows educational institutions to fulfill the current mandate of the state of Montana and the Indian Education for All Act to ensure that every student learns about the distinct and unique cultural heritage and contemporary contributions of American Indians. Lipka and Ilutsk (1995) also recognize that education for this facet of understanding is important to the Yup'ik community because it demonstrates to the community, itself, that their history, their culture, and their language “count.” After a long history of being subjugated by dominant education and Euro-American lessons, educating for perspective has at last afforded Indigenous people a place in coming to know.

In applying the facet of perspective to the design of Indigenous curriculum such as Honoring Tribal Legacies, it is appropriate to expect that content should begin with an Indigenous perspective on various events or concepts. This communicates that Indigenous world views are as valid as the dominant perspective and allows students to progress from a point of identity connection to other orientations involving other perspectives. Having said this, after helping students to see and know their own cultural positions in relation to a specific concept, it is very important to then move on to helping students learn methods for processing alternate views that have historically not favored the image of the Indian in America. Students need to be taught to combat hurtful alterNative views with insight, circumventing the need to engage in protective or coping strategies that interrupt the learning process. Teaching in this way allows students to learn from their own points of resiliency because it helps to establish who they are in relationship to the content.



The Medicine Wheel.

Facet 5. Empathy – “the ability to get inside another person’s feelings and worldview” (p. 98). Wiggins and McTighe make their argument for the importance of empathy as a facet of education by beginning on the premise that the ability to empathize with others is learned and not innate. They also explain that empathy differs from perspective because empathy occurs in close quarters without allowing students to distance themselves and view content critically from a more objective standpoint. Empathy essentially requires students to take their thinking beyond what might seem odd or strange about what others believe and to come to understand the meaning others find in a particular idea. Therefore, teachers must design curriculum that allows students to encounter experiences where opinions and beliefs differ and must then follow up with assessment that illustrates whether or not students are overcoming their egocentrism, ethnocentrism, and/or pre-centered orientation.

One way that Indigenous cultures are oriented toward understanding through empathy is through their inclusion of the spiritual in the whole learning process. While Western education tends to view content of a spiritual nature as outside the realm of educational disciplines, except perhaps theology, Indigenous cultures believe that the spiritual nature of everything cannot be denied or separated from life’s learning experiences. Because of this, the ceremonial life of Indigenous people is embraced by those who are considered elders or teachers, and the lessons learned through ceremony teach empathy almost without its qualities ever being directly defined. Instead, ceremony offers an opportunity for empathy to be modeled consistently, and the effects of this modeling have immediate and far-reaching effects giving credence to the importance of this facet of understanding in Indigenous culture.

As examples, consider the effect of prayers said in school, or a trip to understand the history and science of the Medicine Wheel, or a sweat held for basketball players before a big game. It is common practice in Indian schools to say a prayer at assemblies or other important events. School staff and administrators show little concern about the denomination of the person praying and generally a wide variety of backgrounds and beliefs are reflected in the prayers. What matters is that the person praying is an elder who has had some experience in life and who is able to apply

wisdom in prayer for the benefit of others. This act of asking an elder to pray and then showing the elder's words appropriate respect exposes students to an experience where empathy is expected and understood.

Similar experiences are exhibited during sweats, a much more intimate experience where students voluntarily enter into a situation that requires suffering in common with others. In the midst of the sweat experience, which is physically, mentally, and emotionally challenging, students share in their empathy for one another by recognizing their own weakness, praying from this state of weakness, and accepting the humility brought about by the challenging and spiritual nature of the sweat.

As a third example, a group of high school-aged students took a field trip to a Medicine Wheel in Montana. The site contains both historical and scientific lessons about the innovation of Indian people, but it is also profoundly spiritual. As a point of archaeological interest, the site contains evidence of a very long history of use by a number of Tribes, and it holds scientific value as an example of one of the first analog computers ever invented (Giese, 1996). While leaving for the trip, teachers were annoyed by the students' rowdy and ungrateful behavior. They complained about the bus, they complained about the food, and there was a feeling that not one appreciated the opportunity. Upon arrival to the Medicine Wheel, an elder escorted the students down the trail to the cliffs on which the wheel had been made. The elder then said a prayer to initiate the experience as is customarily expected and the teachers observed an instant transformation in the students, one they believe was initiated through the modeling of empathy in prayer.

Students quieted themselves, they became sincere about immersing themselves in the experience, and they began to show appreciation and respect where they had failed to do so before. Upon returning to school and engaging in further discussion and work on the subject, assessment of what students produced in relation to their learning was profound and did show that they had overcome their egocentrism and present-centered orientations. If it had not been for the Indigenous acceptance of the spiritual within the academic, the teachers did not believe understanding through empathy would have been achieved to the degree that it was that day.

Outside of ceremony, Indigenous cultures also teach and learn empathetically by grounding their approaches in culturally mediated relationships and community and ecological orientations. Because the self is defined by one's relationship to others around, the nature of defining one's self necessitates understanding the positions of those in the environment. This is true in both the community and the ecological sense. The American Indian world view is rooted in the survival of the community rather than the success of the individual and the survival of the community is also recognized to be contingent upon the health of the surrounding ecological system. This world view results in students seeing mountains as grandmothers, and cousins as sisters or brothers, in addition to other connections that bring the individual much closer to other people and the ecology (Basso, 2000). Therefore the need to possess an empathetic understanding of the world is even more essential to Indigenous cultures than it may be to mainstream culture.

Because students may not be able to gain the objectivity needed for a less intimate evaluation of relationship and circumstance, Indian students need to be exceptionally versed in understanding through empathy. These cultural orientations make it clear that a model Indigenous curriculum, such as Honoring Tribal Legacies, should provide opportunities for students to navigate within a multigenerational community context on a consistent basis. In addition, the content should make room for ceremony and also for a connection to seeing the spiritual aspects within the academic content. Finally, the community and ecological nature of Indigenous beliefs should be assessed as essential learning within the content.



Shane Doyle with his daughter Ruby with a picture of her great-great-great grandmother.

Facet 6. Self-Knowledge – “the wisdom to know one’s ignorance and how one’s patterns of thought and action inform as well as prejudice understanding” (p. 100). To Indigenous cultures an awareness of one’s self in the midst of living is a skill that requires a great deal of consistent development. High esteem is afforded to those who have a consistent command over the self in all situations. Individuals who show a mastery of this skill are highly regarded as elders, thus illustrating that acquiring this skill requires a substantial period of time and reflexive effort. Individuals who exhibit pride, egocentrism, selfishness, or foolish haste are seen as people who have not yet mastered a firm and centered sense of self or a type of understanding called “steadiness of mind” (Basso, 2000, p. 133). Basso references the Apache’s use of a narrative to illustrate the importance of the sixth facet of understanding, or wisdom, as they would call it. While it is a prime illustration of how wisdom with respect to knowing one’s self produces specific results, the story is also another example of a teaching method that promotes understanding, given that a story that must be translated, interpreted, and applied, a practice also implemented to achieve Wiggins and McTighe’s second facet—interpretation.

Paraphrasing the story, the Apache say that a long time ago just before the corn came up, a huge black cloud of grasshoppers was seen by an old man. The grasshoppers began to eat all of the corn shoots and the old man became worried that the grasshoppers would eat all of the corn and the people would starve. He was a wise old man with a “smooth” mind and he understood the danger, so he decided that the community’s medicine men should work together to solve the problem. He sent someone to tell the one medicine man, and that medicine man decided he could take care of the problem on his own without involving the other medicine men. He planned to bring a great rain to get rid of the grasshoppers, but after two days of dancing and praying he could not make it rain. One of the other medicine men offered to work with him, but the first medicine man wanted to continue working alone since the people had come to him first. He spent two more days trying to bring rain and was still unsuccessful, and all the while the corn was being consumed by the grasshoppers.

Finally, four other medicine men, realizing that the old man was right about the need to work together, decided that the first medicine man was too proud and that his mind was not “smooth” because he thought only of himself. So they got together and sang and prayed all night. By morning it was raining hard and it continued to rain for four days and nights. When the rain finally stopped, an old woman went out and looked around and there was a long pile of dead grasshoppers that went from one side of the fields to the other. She said the grasshoppers where “piled up across.” The old woman went back and told the people that the four medicine men had worked together well, but that the grasshoppers had eaten almost everything so it would still be a hard season and they would all suffer because of the pride of one man. Now they call that place “Grasshoppers Piled up Across” (Basso, 2000, p. 136–138). Self-knowledge is essential understanding within an Indigenous curriculum because it is highly correlated to strong identity formation which has been documented as vital to the enduring success of Indian students (Mainor, 2001). Stories like the one told above are considered catalysts for self-reflexive activities that the Apache call “working on one’s mind.” This type of reflexivity helps, first, to establish Indian identity from within the culture, and then helps students to navigate outside of familiar constructs, specifically experiences in mainstream education. In addition to illustrating how Indian people teach to achieve the sixth facet, self- knowledge, the grasshopper story illustrates another Indigenous form of understand we can combine with Wiggins and McTighe’s six facets of understanding. This component is what we choose to call “a sense of place.”



The Tree People are our teachers.

Facet 7. A Sense of Place – the ability to see one’s self as a part of the larger ecology and to think and act in ways that demonstrate consideration for responsibility and learning within the context of a place-based community. In the story above, a place is given a name as a reminder of wisdom associated with it. There are innumerable narratives from Indigenous cultures that contain vast amounts of wisdom communicated in the few words of a place name. Once the story above is told and understood by its listeners, one need only invoke the name “Grasshoppers Piled up Across” and others will recall the story, understand its significance, and engage in self-reflexive activities. In addition, just the act of being in proximity to this place or recalling the area can bring to the forefront of one’s mind the importance of the lesson learned and cause one to again engage in the act of “working on one’s mind” (Basso, 2000). Because of the importance of this facet of understanding when teaching from an Indigenous world view, we have added “sense of place” as a seventh facet of understanding.

It is essential that Indigenous curriculum assess this component of understanding because a sense of place provides so much in the way of cultural context and parameter, which is vital for students to respond to the advice of elders and to continue communicating the cultural constructs of their Tribes. A sense of place is an intriguing construct within the Indigenous world view because, beyond communicating the physical location of an individual, it affects a person’s spiritual and mental states as well. This is because physical place carries with it an association to prescribed action and culturally appropriate developmental expectations. A model Indigenous curriculum, such as Honoring Tribal Legacies, includes specific learning about the land and the names given to the land by Indigenous people because herein lies the foundation of healthy culture guided by the wisdom of those who were before.

While the contemporary place names given to most places reflect the names of people, such as Bridger



Beautiful rainbow.

Ridge (named for Jim Bridger) or Lewistown (named for Captain Merriweather Lewis), the original names Tribes gave these places reflect events that explain where learning happened and where it can continue to happen. By choosing to teach about these places and their original names, we also teach the lessons associated with them in a powerful, connected, and reflexive way that invites students to revisit lessons again and again until they have gained their own senses of mastery. Thus lessons about place that began outside the student become internal initiations of learning to refine understanding through explanation, interpretation, application, perspective, empathy, and self-knowledge.

Big Idea

The big idea for this work is *Honoring Tribal Legacies* along the Lewis and Clark National Historic Trail as substantiated within the Trail's Foundation Document (September, 2012). Gerard Baker (Mandan and Hidatsa), former Superintendent of the Trail explains that it is an invitation:

... to offer America and our children an opportunity to learn who they are—an opportunity to learn about the Lewis & Clark Trail and the people of the Lewis & Clark Trail . . . the people who were there when Lewis & Clark went through or whose territory Lewis & Clark went through . . . listening to the elders, [and] listening to the people tell their stories. We offer this opportunity today for you to listen and to learn.

The stories of Lewis and Clark span significant scientific knowledge and profound political, social, economic, cultural, and environmental changes to the lands. The stories of Indigenous peoples span millennia that go back to creation. Both Tribal and non-Tribal perspectives are needed to best understand the continuum of human history and relationships developed, connect the public to Indigenous peoples past and present, and appreciate the diverse landscapes, climates, and peoples.

The Tribal themes Honoring Tribal Legacies, as Gerard Baker says, are about better understanding: (a) what life was like before Lewis and Clark were on the scene, (b) what happened during the Lewis and Clark journey, (c) what happened during the last two hundred years, and (d) what we are going to do in the future. Three of the five Lewis and Clark National Historic Trail's

primary interpretive themes deal with Tribal themes explicitly (U.S. National Park Service, 2012, p. 9-11):

- Traces of the Past Observed Today—What life was like before Lewis and Clark?
- Encountering Indigenous Peoples—What happened during the Lewis and Clark journey?
- Unity through History—What happened during the last two hundred years?

Moreover, the Trail recognizes Tribes and Tribal Cultural Resources as fundamental resources and values that warrant primary consideration during planning and management:

Any loss of these fundamental resources and values could have a negative impact on the Trail and severely jeopardize its ability to achieve its purpose or maintain its significance. (p. 13)



A nightscape.

As shown in Appendix A, the National Park Service (2012) has placed great importance upon the preservation and promotion of American Indian perspectives. The values stated above, as being relevant to experiences of the Lewis and Clark expedition, justify a curriculum of big ideas surrounding these vital topics.

Enduring Understandings

Upon selecting appropriate big ideas for each learning episode, Honoring Tribal Legacies curriculum designers have embedded enduring understandings within each episode. Enduring understandings ensure the sustainability of the work invested in these learning episodes because the enduring understandings are carried forward through the students who experience and act upon them in consistent ways, both in and out of the classroom. We envision that children who experience this curriculum will have understandings planted within them that will be retained and passed on when they engage their own children with materials regarding the Lewis and Clark period in history and see American Indian people lending longevity to the impacts of the curriculum. Within each episode designers have worked to ensure students will understand that:

- 🌱 A diversity of American Indian peoples were the original inhabitants of North America and have made significant contributions to the U.S. over time and continue to do so today.
- 🌱 History can be described and interpreted in various ways and from different perspectives.
- 🌱 Knowledge of cultural, environmental, political, social, and economic factors affects how we make sense of a particular place.
- 🌱 Specific places are affected by past, present, and future events occurring locally, regionally, nationally, and globally.
- 🌱 Decisions that are made about a place at a particular time will affect the status of that place for years to come.

Essential Questions Aligned with Trail/Tribal Themes

Finally, this curriculum crafts essential questions for each learning episode after careful consideration is given to important trail/Tribal themes. Many of the essential questions found in the learning episodes fall into the following four categories:

1. Traces of the Past Observed Today—What was life like before Lewis and Clark?

- 🌱 How does the concept of “since time immemorial” relate to the world in the past, present, and future?

- ❁ What are the creation stories of this place? How are these stories pertinent to understanding the world today?
- ❁ What are the ancestral sites and scope of territory of American Indian Tribes who have inhabited this place?
- ❁ How have relationships between people and the natural and built environment of this place been viewed?
- ❁ How have American Indian peoples traditionally:
 - ❁ named, described and interpreted this place?
 - ❁ interacted with and contributed to the natural environment of this place?
 - ❁ built relationships and communicated with each other in this place?
 - ❁ created and organized a built environment in this place?
 - ❁ transported themselves and goods through this place?
- ❁ Why did other groups of people come to this place?

2. Encountering Indigenous Peoples—What happened during the Lewis and Clark journey?

- ❁ What political, economic, social, environmental, and cultural conditions led to Lewis and Clark visiting this place?
- ❁ How did members of the Lewis and Clark expedition describe and interpret this place?
- ❁ How have the perspectives of the Lewis and Clark expedition been passed down through time?
- ❁ How did American Indian peoples describe encounters with members of the Lewis and Clark expedition?
- ❁ How did Tribal peoples contribute to the Lewis and Clark expedition at this place?
- ❁ How have Tribal perspectives of the Lewis and Clark expedition been passed down through time?

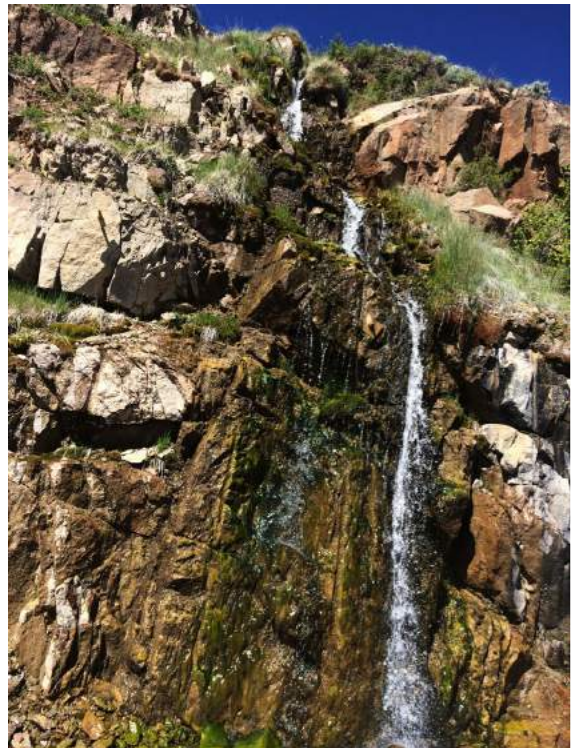
3. Unity through History—What happened during the last two hundred years?

- ❁ Since the time of the Lewis and Clark expedition:
 - ❁ Why did various groups of people come to this place?
 - ❁ What political changes have occurred in this place?

- ❁ What changes in the natural environment have occurred in this place?
- ❁ What changes in lifeways, social interaction, and communication among peoples have occurred in this place?
- ❁ What changes in the traditional cultures and languages have occurred in this place?
- ❁ What economic changes have occurred in this place?
- ❁ How has the health and wellbeing of Tribal peoples been affected?
- ❁ Why was the Lewis and Clark National Historic Trail established?
- ❁ How did the Bicentennial commemoration affect relationships between Tribes and other stakeholder groups?
- ❁ What lessons can be learned from the Bicentennial commemoration?
- ❁ What purposes are served by the Trail today to honor Tribal legacies?
- ❁ How is understanding of the Trail enhanced through contemporary Tribal cultures, languages, cultural landscapes, place names, sacred sites, and communities?
- ❁ What cultural resources are in danger of being lost?
- ❁ What conditions and trends pose threats to cultural resources?
- ❁ What cultural attributes of this place should be protected and restored?

4. What are we going to do in the future?

- ❁ What does the future hold for this place?
- ❁ How might Tribal cultures, languages, cultural landscapes, place names, sacred sites, and communities of this place be preserved and sustained?
- ❁ How might the natural environment of this place be preserved and sustained?



A waterfall.

- ⊗ How can Tribal peoples draw upon the perspectives of their ancestors to forge their future?
- ⊗ How can Tribal peoples and other stakeholder groups work together to forge their future?

Entry Questions(s)

Once curriculum designers have decided upon the enduring understandings and essential questions each episode will address, their next task is to draft entry questions that will prepare students for the coming experience. Entry questions are meant to pique the curiosity of the students, to activate their knowledge base as they take in new concepts and make new and more diverse connections, and to initiate the self-reflexive processes that will be necessary for students to make adjustments and corrections to their current philosophies. Entry questions establish the environment that will facilitate discussion and collaborative inquiry into new and uncharted knowledge. Therefore, it is essential that teachers take care to establish a supportive climate that encourages students to share openly and to take risks. This allows entry questions to usher students into a space where deeply meaningful learning episodes are the norm and not the exception.

Within the curriculum each designer has listed important entry questions for each learning episode. Some of these questions are very simple, but have the potential to develop into diverse classroom conversations. *Where am I? How do we know where we are? How do we understand a place?* Others are personal and tie the new material directly to the inner life of the students. *How can we have a relationship with a place? What place is important to me? How do I define “home”?* Others are complex and they begin a process for students that will stimulate involved thought in complicated areas. *Yesterday we learned to deepen our thinking when reading expository nonfiction. Now, where did that deeper thinking get us? What do you think the “big idea” of “The First World Trade Center” is?*

Whether the entry questions are simple, personal, complex or a combination of these qualities, the overarching message that entry questions send from teacher to student is that we are here to engage with this new material by thinking, feeling, talking, handling, and immersing

ourselves in the ideas. No one is allowed to sit back and passively take it all in or just put a toe in the water. The expectation has been set that each student will in a sense, get in and swim around, so that they come into direct contact with the concepts and ideas and emerge from the experience new in some way.

Summary and Conclusion

The Honoring Tribal Legacies curricular schema and curriculum expressions was conceptualized according to a shared format that gives voice to eight distinct curriculum designers, each with a unique perspective. The schema is based upon common curriculum elements and existing Indigenous thinking that can move us forward while also grounding the curriculum in effective practice for Native and non-Native students. We have integrated Wiggins and McTighe's Big Ideas, Enduring Understandings, and Essential Questions, in addition to their six facets of understanding and we have added a seventh facet to ensure the best possible fit between traditional and Indigenous ways of knowing. We have endeavored to create lessons that meet Bank's transformational and social action levels of multicultural integration to ensure that each episode is engaging and transformative for both teachers and students. Our learning episodes are crafted to meet Common Core State Standards, including the Eleventh Standard created to honor Tribal legacies, and also have strong formative and summative assessments to ensure that the curriculum uses classroom time judiciously and contributes to the efforts teachers will expend to meet state and local expectations. Entry questions have been included in each episode to help guide students and teachers into an invested and satisfying learning experience, and care has been taken to include meaningful applications for struggling and advanced learners (see Chapter 3 on differentiated instruction).

It is our sincere hope that the efforts expended in forming this model Indigenous curricular schema will allow others to find a clear path to Honoring Tribal Legacies through curriculum, through classrooms, and through an ever-expanding community of learners. We look forward to a future where we are all more connected to one another, more aware of the gifts each of us brings to life and to education, and more respectful of our shared history and our common humanity. Aho.



Photo by Patti Baldus (Arapaho), beadwork by Birdie Real Bird (Apsaalooke), drum by Conrad Fisher (Northern Cheyenne).

References

- Banks, J. (2014). *An Introduction to multicultural education* (5th edit.). Boston: Peason Education, Inc.
- Basso, K. H. (1996). *Wisdom sits in places*. Albuquerque, NM: University of New Mexico Press.
- Bransford, J., Brown, A., & Cocking, R. (Eds.). (2001). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Research Council.
- Cajete, G. (2000). *Native science: Natural laws of interdependence*. Santa Fe, NM: Clear Light Publishers.
- Deloria, Jr. V. (1995). *Red earth, white lies: Native Americans and the myth of scientific fact*. New York: Scribner.
- Doyle, M. A. (2012). *Baleiichiwee (The story of understanding): The conscientization processes of effective teachers of American Indian students*. Unpublished doctoral dissertation, Montana State University, Bozeman. <http://scholarworks.montana.edu/xmlui/bitstream/handle/1/1196/DoyleM0812.pdf?sequence=1>
- Gardner, H. (1991). *The unschooled mind: How children think and how schools should teach*. New York: Basic Books.
- Giese, P. (1996). *Stone wheels as analog star computers*. Retrieved March 20, 2008 from www.kstrom.net
- Goleman, D. (2006). *Social intelligence: Beyond IQ, beyond emotional intelligence*. New York: Bantam Books.
- Heavy Runner, I., & Morris, J.S. (2006). Traditional Native culture and resilience. *University of Minnesota Research and Practice Newsletter*, 5(1), 2.
- Jarrett-Weeks, D. (Winter, 2003). Native and western knowledge where minds meet. *Northwest Teacher*, 4(2), 2–5.

- Kawagley, A.O. (2006). *A Yupiac worldview: A pathway to ecology and spirit*. Long Grove, IL: Waveland Press, Inc.
- Lipka, J., & Ilutsik, E. (1995). Negotiated change: Yup'ik perspectives on Indigenous schooling. *The Bilingual Research Journal*, 19(1), 195–207.
- Mainor, P. (2001). Family matters. *Tribal College Journal*, 12(4), 10–13.
- Passmore, J. (1982). *The philosophy of teaching*. Cambridge, MA: Harvard University Press.
- Peat, D. F. (2002). *Blackfoot physics: A journey into the Native American worldview*. Grand Rapids, MI: Phanes Press.
- Shor, I. (1992). *Empowering education: Critical teaching for social change*. Chicago: University of Chicago Press.
- Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.
- U. S. National Park Service. (2012). *Foundation document: Lewis and Clark National Historic Trail*. Omaha, NE: Author.
www.nps.gov/lecl/parkmgmt/upload/LECL_Foundation_Document_LowRes_September2012.pdf
- Waters, A. (2004). *American Indian thought*. Malden: Blackwell Publishers.
- Whitman, W. (1855). *Leaves of grass*. Self-Published.
- Wiggins, G. & McTighe, J. (2005). *Understanding by design (Expanded 2nd edit.)*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Wigging, G & McTighe, J. (2011). *The Understanding by design guide to creating high quality units*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Zirkel, S. (2008). The influence of multicultural educational practices on student outcomes and intergroup relations. *Teachers College Record* 110(6), 1147–1181.

Appendix A

American Indian Tribes and Tribal Cultural Resources along the Lewis and Clark National Historic Trail

(U.S. National Park Service, *Foundation document: Lewis and Clark National Historic Trail*, 2012)

Components	<ul style="list-style-type: none"> • Tribal Homelands • Tribal and Nontribal Organizations • Individuals • Tribal Agencies • Tribal Enterprises • Tribal Educational Institutions
Related Significance Statement(s)	<ul style="list-style-type: none"> • Lewis and Clark National Historic Trail commemorates the 1804 to 1806 Lewis and Clark Expedition that explored the lands of the Louisiana Purchase and beyond. This epic journey contributed to significant scientific knowledge and profound political, social, economic, cultural, and environmental changes to the lands and the peoples of the North American continent. • Lewis and Clark National Historic Trail identifies and marks the historic route and sites where this journey took place and provides context for preservation of the route, and further understanding of the expedition and its subsequent outcomes. • Lewis and Clark National Historic Trail links contemporary communities (including Tribes whose historic connections span generations) to the places associated with the 1804 to 1806 expedition. The trail provides an opportunity to demonstrate the continuum of human history in these same locations and the subsequent relationships that developed among multiple cultures.

American Indian Tribes and Tribal Cultural Resources along the Lewis and Clark National Historic Trail

(U.S. National Park Service, *Foundation document: Lewis and Clark National Historic Trail*, 2012)

Related Significance Statement(s)	<ul style="list-style-type: none"> ☼ Segments of Lewis and Clark National Historic Trail retain characteristics and a sense of place as seen and experienced by the expedition. Today, they provide visitors with connections to the historic event through recreational, interpretive, and educational opportunities. ☼ The Corps of Discovery recorded a vast amount of information about landscapes, resources, and the people encountered during the journey. The observations of the corps and the full record they left are used today to connect the public with the past and illuminate the changes that have taken place over time.
Importance	<p>The trail route passes through numerous tribal homelands where initial contact was made among tribal peoples and the Corps of Discovery. Important to understanding the trail are:</p> <ul style="list-style-type: none"> ☼ contemporary tribal cultures ☼ languages ☼ cultural landscapes ☼ place names ☼ sacred sites ☼ communities <p>Tribal oral histories and detailed descriptions contained in journals of the Corps of Discovery substantiate, validate, and enrich knowledge and understanding of the Tribes encountered on the expedition.</p>

American Indian Tribes and Tribal Cultural Resources along the Lewis and Clark National Historic Trail

(U.S. National Park Service, *Foundation document: Lewis and Clark National Historic Trail*, 2012)

Current Conditions - Trends and Threats

Trends:

- ☼ The American Indian perspective is increasingly being infused into trail interpretation.
- ☼ Nationwide, American Indian languages are being revitalized.
- ☼ Tribal tourism is increasing along the trail. American Indians are increasingly telling their own stories.
- ☼ Tribal Education – Understanding of Tribal cultures is increasingly available to all populations.
- ☼ Tribal self-determination is increasing and Tribal initiatives in the following areas have emerged:
 - ☼ schools
 - ☼ museums
 - ☼ cultural resources
 - ☼ colleges
 - ☼ elder care
 - ☼ natural resources
 - ☼ fisheries
 - ☼ tourism departments
 - ☼ Increasing instances of tribal inclusion in all activities is visible along the trail.

American Indian Tribes and Tribal Cultural Resources along the Lewis and Clark National Historic Trail

(U.S. National Park Service, *Foundation document: Lewis and Clark National Historic Trail*, 2012)

<p>Current Conditions - Trends and Threats</p>	<p><u>Threats:</u></p> <ul style="list-style-type: none"> ☼ These cultural resources are in danger of being lost to American Indian communities due to a variety of reasons, both internal and external: <ul style="list-style-type: none"> ☼ tribal traditions ☼ stories ☼ sacred sites ☼ language ☼ ceremonies ☼ material culture
<p>Desired Conditions (within law and policy)</p>	<ul style="list-style-type: none"> ☼ Resource Identification – All tribal cultural resources are classified; information is available regarding conditions of tribal cultural resources; real time feedback on current resource conditions is readily available; partners initiate and provide information and there is a mechanism to input and synthesize that information. ☼ Protection and Restoration of Cultural Resources – All resources are protected and restored; threats are proactively addressed. ☼ Protection Strategies on Tribal Lands – Lewis and Clark National Historic Trail is recognized in Tribal Historic Preservation Office (THPO) databases; regulations are in place at a local level to protect trail resources.

American Indian Tribes and Tribal Cultural Resources along the Lewis and Clark National Historic Trail

(U.S. National Park Service, *Foundation document: Lewis and Clark National Historic Trail*, 2012)

Desired Conditions (within law and policy)

- ☼ User Capacity – User capacity issues are identified and managed to protect resources and visitor experience.
- ☼ Interpretation – Lewis and Clark National Historic Trail provides multiple perspectives and accurate interpretation services and serves as a model across the nation.
- ☼ Education – Multiple perspectives of the Lewis and Clark story are reflected accurately in curricula at various education levels and institutions.
- ☼ Tribes are involved in Lewis and Clark National Historic Trail information-sharing relationships with trail visitors, interpretation, resources, and maintenance managers and staff.
- ☼ Collaborative working relationships between Lewis and Clark National Historic Trail staff and American Indian Tribes continue to be cultivated and maintained.
- ☼ American Indian perspective is infused into programming, curriculum, and planning.
- ☼ American Indians are invited and have the opportunity to tell their own stories.
- ☼ All trail actions take into account Tribal views both on-site (within reservation boundaries) and off-site (outside reservation boundaries).

American Indian Tribes and Tribal Cultural Resources along the Lewis and Clark National Historic Trail

(U.S. National Park Service, *Foundation document: Lewis and Clark National Historic Trail*, 2012)

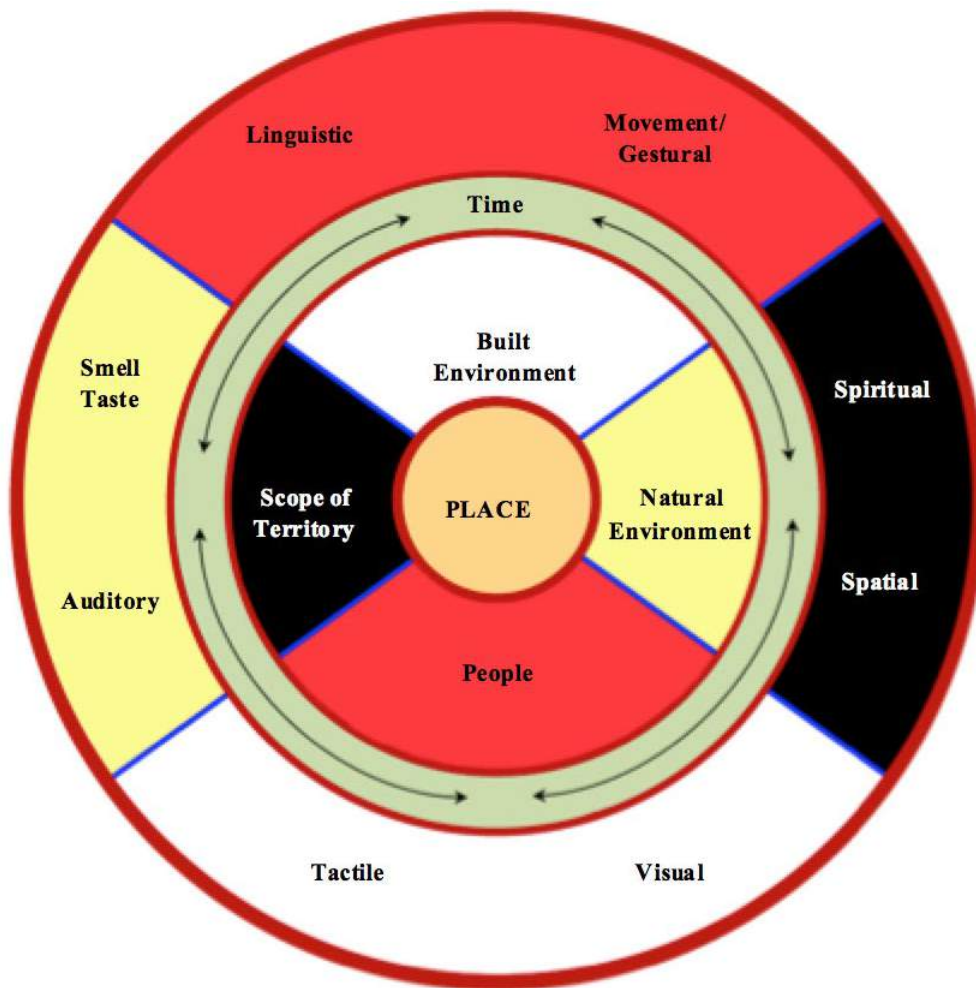
Trail-Specific Law and Policy Guidance	<ul style="list-style-type: none"> ☼ NPS <i>Management Policies 2006</i>, 1.11.1 (Government-to-Government Consultation) ☼ 5.2.1 Consultation ☼ 7.5.6 Consultation ☼ The etiquette and protocol unique to each Tribe ☼ Native American Graves Protection and Repatriation Act ☼ National Historic Preservation Act, Section 106 ☼ National Environmental Policy Act
Resources	<ul style="list-style-type: none"> ☼ Cultural resource centers ☼ Oral histories ☼ Tribal elders ☼ Journals of the Corps of Discovery ☼ American Indian Alaska Native Tourism Association ☼ Tribal websites and directories ☼ American Indian academic journals, periodicals, and news and information websites ☼ National Museum of the American Indian ☼ Tribal Colleges and Universities ☼ Tribal Historic Preservation Officers



CHAPTER 2



Place-Based Multiliteracies Framework



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CHiXapkaid
Tuwaduq Cultural & Research Institute

Everything the Power of the World does is done in a circle. The sky is round, and I have heard that the Earth is round like a ball, and so are all the stars. The wind in its greatest powers whirls. Birds make their nests in circles, for theirs is the same religion as ours. The sun comes forth and goes down again in a circle. The moon does the same, and both are round. Even the seasons form a great circle in their changing, and always come back again to where they were. The life of a man is a circle from childhood to childhood, and so it is in everything where power moves.

Black Elk, Oglala Lakota (1932)

The place-based multiliteracies (PBM) figure on the cover is circular in nature. The PBM circle allows us to orient ourselves to the complexity of a particular place in a variety of ways—literally, metaphorically, philosophically, intellectually, emotionally, and physically. The circle can literally represent entities, such as the sun and the moon, or it can metaphorically represent the stages of life, the seasons, and the cycles of giving and receiving. It can communicate a free-flowing, organic, and dynamic philosophy of our world. The circle can illustrate the interconnectedness of all things. It can serve as the Sacred Hoop of health and healing and be used to embody the Four Directions. Within the circle we integrate four sacred colors which carry different meanings for various Tribes. One interpretation of the colors might be—*yellow* to represent energy from the sun and new beginnings, *red* to represent warmth, generosity, and youth, *black* to represent the purity of water, growth following rain, and adulthood, and *white* to represent wisdom and Honoring of elders in the winter of life. Envision the outer circle as spinning to align the various multiliteracies with any element of a place. The colors of the quadrants might match or combine in different ways. Underlying all of this is a sense of mystery. Western worldviews imply that we have to have things literally spelled out. The circle and its colors allow us to go beyond the literal. Honoring Tribal Legacies is about mystery. We strive for teachers and students to be comfortable with the mystery of the unknown, as they realize there is something to be discovered in the array of perspectives embodied by a circle.

At the core of the PBM figure, lies the circle of place. We integrate diagonal lines to represent the paths we each take on our sacred journey of life. In Honoring Tribal Legacies, we

journey through the elements of a place—the natural and built environments, peoples, and scope of territory. We experience time multi-directionally as a circle that rotates to portray the connections between past, present, and future. We use the multiliteracies identified in the outer circle to arrive at an understanding of the many facets of a place. We could literally say, “Do this, learn this,” but, instead, Honoring Tribal Legacies is about exploring connections, while grasping and appreciating what we don’t know. As we explore the relationships among various aspects of the PBM circle, we embrace new ways of thinking. We want students to arrive at epiphanies, as they experience meaningful, authentic learning. We want to see them grow intellectually, emotionally, physically, and spiritually as they explore elements of the PBM circles. That is what Honoring Tribal Legacies is about – experiencing a place holistically in all of its complexity. The PBM circle illustrates our attempt to establish a reference point as students and teachers together continue the journey of Tribal Legacies.

Sources:

Black Elk Speaks, John G. Neihardt, William Morrow & Co., 1932

Four Directions Teachings www.fourdirectionsteachings.com

Lakota Medicine Wheel – Atka Lakota Museum & Cultural Center

<http://aktalakota.stjo.org/site/News2?page=NewsArticle&id=8592>



Rainbow along Sweetwater Road.

A SHIFT OF MIND

From viewing learning as a process that primarily occurs in a classroom

To viewing learning as a process that connects to a particular place

From viewing teachers and textbooks as the authorities

To viewing both teachers and students as bringing valuable knowledge and skills to the learning and teaching processes

From viewing books and print media as the primary vehicle of education

To viewing an array of design modalities (auditory, linguistic, movement/gestural, smell/taste, spatial, spiritual, tactile, visual) as contributing to the educational process and its products

From viewing learning as an individual enterprise

To viewing learning as a collaborative process that brings together teachers, students, community members, elders, and other stakeholders

From viewing learning as divided into genres or subject areas

To viewing learning as a holistic endeavor that integrates knowledge from an array of areas

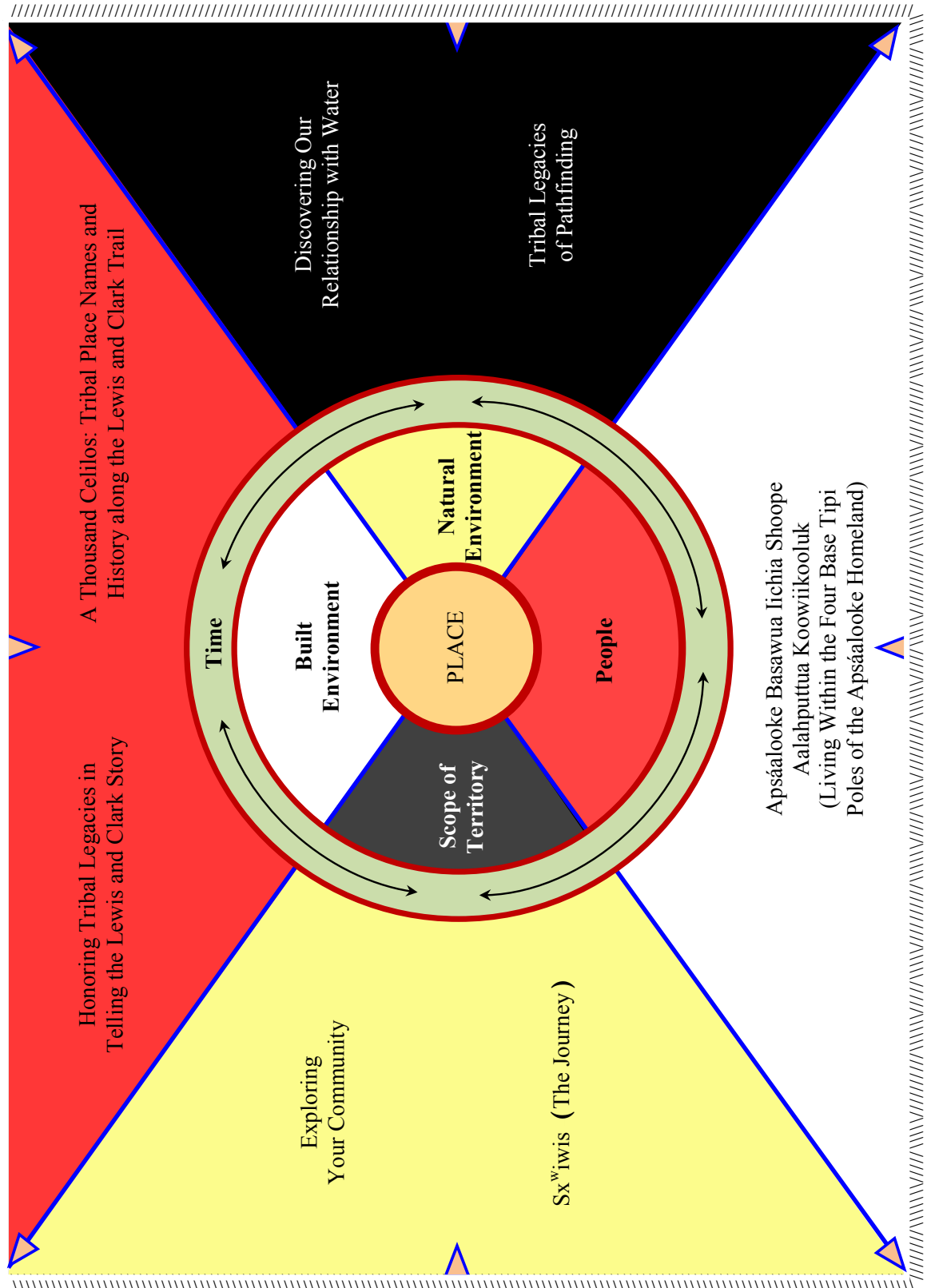
Based on Healy (2008)

Introduction

A place-based framework connects students with their natural, historic, and cultural surroundings, in addition to promoting civic engagement and a sense of responsibility for sustaining the resources of our world (Gruenewald & Smith, 2008; Singleton, 2012). Through place-based learning, students participate in hands-on, real-world learning that contributes to the health and wellbeing of specific communities or “places” (Knapp, 2005; Sobel, 2005). At the same time, a multiliteracies framework has been growing out of a need to address two trends: (a) a student population that is increasing in its cultural and linguistic diversity and (b) rapid changes in technology that are dramatically altering the way communication occurs locally and globally (Healy, 2008; Kalantzis & Cope, 2012; New London Group, 1996; Westby, 2010). Together, these two frameworks provide a means for designing curriculum Honoring Tribal Legacies.

A place-based multiliteracies framework conveys learning holistically and in a manner that is centered on the elements of a particular place. Using the framework, teachers design a learning environment that values multiple perspectives and diverse forms of literacy. Learners take on roles as designers of their own knowledge systems or, in other words, their own ways of knowing, ways of being, and ways of doing (Martin, 2008). As members of learning communities, teachers and learners actively work together in using, combining, and transforming various design modes to construct meaning related to the past, present, and future. Through this process, students build knowledge, skills, and mindsets that serve as a foundation for designing creative responses to challenges faced in real world contexts. As such, the place-based multiliteracies framework promotes a deep and balanced understanding of a place, such as the Lewis and Clark National Historic Trail (hereafter referred to as the Trail). The seven teachings (curriculum units) implementing the place-based multiliteracies framework included in *Honoring Tribal Legacies: An Epic Journey of Healing* are represented in Figure 1.

Figure 1. HONORING TRIBAL LEGACIES: Place-Based Teachings (Curriculum Units)



PLACE-BASED TEACHINGS BLANKET DESIGN

The Place-Based Teachings design draws from the Four Directions of the Earth. As the cycle of time surrounds us like a blanket, our character is constructed from past experiences, community involvement, and the natural environment in preparation for the journey that awaits us. Participation in revitalizing rich heritages, that have never left us, continually needs to be shared so that they grow and flourish among the diverse cultures that inhabit this home we call Earth.

Hope is a powerful force; it encourages us and helps us look forward in good faith toward tomorrow. From my youth I learned an acronym for hope as being Helping Other People Excel. Working to build a community brings change and, with change, hope is woven into the blanket. Hope gives us the courage and strength to depend on each other to make tomorrow great, or even just a little bit better than today. Nobody can do everything, but all of us can do something to continue the circle of hope as we discover what the next day brings.

Doug Stephens, Designer of the Place-Based Teachings Blanket

What might the classroom look like when a place-based multiliteracies framework is being used to Honor Tribal Legacies? The Big Idea, Enduring Understandings, and Essential Questions aligned with Trail/Tribe Themes, as described in the *Curricular Schema and Curriculum Expressions* chapter, would articulate educational intentions. Learning activities would align with the Trail Foundation Document that emphasizes the importance of partnering with Tribes to protect and restore the unique cultural resources along the Trail. The chapter, *With Utmost Good Faith: Cultivating Sustainable Relationships between Tribes and other Stakeholders*, would serve as a guide in building these partnerships. Learning would bring balance to the way the story of Lewis and Clark is portrayed, as advocated in the chapter, *Honoring Native Memory: Potent and Vital in the Past, Present, and Future*, recognizing that “some call it an epic event leading to prosperous growth of a young nation while others characterize it as having huge disruptive impacts on the viable and rich Indigenous cultures” (Trail Foundation Document, 2012, p. 11). Learning would involve “listening to each other with respect” to promote unity “through an understanding of multiple perspectives of the collective history of the United States” (p. 11).

WE WILL ALWAYS BE HERE

We are proud peoples. We are proud of our traditions, languages, arts and histories. We are proud of our achievements and contributions to American society-at-large, including those to the Lewis & Clark Expedition. We are part of this great American landscape. We come from these lands and we will always be here.

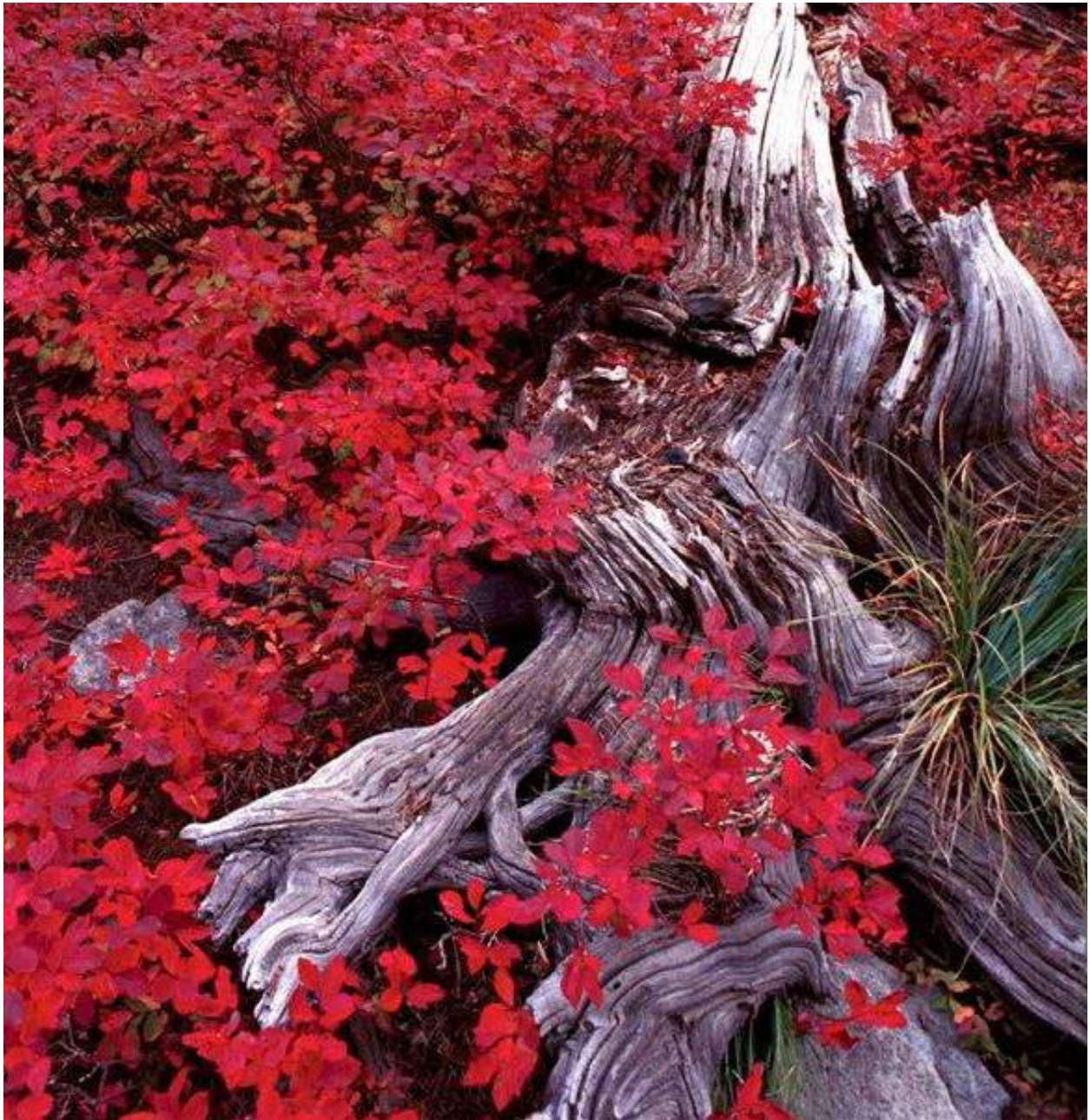
Circle of Tribal Advisors, Lewis & Clark Bicentennial (2005)

An observer would see a classroom busy with activity as students worked in small groups around tables interacting to learn about and address concerns of importance to their local community. Through the curriculum unit, *Discovering Our Relationship with Water*, young students may be conducting experiments with water as they learn about its significance to a healthy planet. They would be coming to understand that water is sacred and a living entity so as to develop strategies to ensure that clean water is available to peoples for the next seven generations. As part of the *Tribal Legacies of Pathfinding* curriculum unit, students may be exploring records of plant life before, during, and after the Lewis and Clark expedition. They would be learning how traditional plant knowledge contributed to the survival of the expedition members and might be exploring its implications for promoting health and wellbeing today.

TAKING CARE OF THE GIFTS: LAND AND WATER

Native lives and cultures are inextricably connected to the land, water and sky, and our ancestral union with them. The Creator bestowed these gifts upon us and we have the responsibility to ensure that they are protected. We come from these lands. Our children and seven generations to come will inherit healthy ecosystems and abundant natural resources if we make intelligent decisions today.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2005)



Students would be equipped with a range of resources that allowed them to engage with multiple perspectives, learning modalities, and text types, such as place names, oral records, illustrations, websites, videos, maps, photographs, audiotapes, online learning tools, books, art project supplies, music, or writing and data-recording journals. Through the curriculum unit, *Exploring Your Community*, students might be unearthing a rich array of historical records while investigating the unique attributes of the place in which they live. In association with the curriculum unit, *A*

Thousand Celilos: Tribal Place Names and History along the Lewis and Clark Trail, they would be using local Tribal literature, experience, and oral histories that have been elevated to the status of mentor texts. Learning activities would be aligned with the Common Core State Standards that provide guidance in promoting college and career readiness through language arts and literacy in history/social studies, science, and technical subjects as described in the chapter, *The Art of Learning: Cradle to College and Beyond*. All students would be participating through modalities that matched their varying ability levels, strengths, and gifts, as discussed in the *Differentiated Instruction* chapter, while the teacher moved around to interact with each student learning team.

LANGUAGE OF THE EARTH

Our Native languages directly reflect the intimate knowledge of the ecosystems that have sustained us for millennia. But throughout the 19th and early 20th centuries, the United States government implemented aggressive policies to eradicate our languages and cultural practices in efforts to “civilize” and assimilate Tribal people. In the few generations since, Tribes nationwide have struggled to keep ancient languages alive. Today, Tribal languages—and the Indigenous ecosystems from which they came—are severely endangered and we are working to save them. Many Tribes have language instruction and preservation programs. These revitalization efforts are urgent races against time.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2005)

On another day, an observer would see students Honoring multiple perspectives by listening to presentations given by community members, as they sought out viewpoints related to the real-life concerns they were investigating. Students might be learning from videotaped presentations given by Tribal elders through the curriculum unit, *Sax^wiwis (The Journey)*. Tribal and individual narratives would communicate affection and attachment to place and reflect the loving care that has gone into preserving place names and the stories associated with particular places. In conjunction with the curriculum unit, *Apsáalooke Basawua Ichia Shoope Aalahputtua Koorwiikooluk (Living Within the Four Base Tipi Poles of the Apsáalooke Homeland)*, students would access Tribal oral histories to retrace the movement of the Apsáalooke people over time.

RHYTHMS OF THE EARTH

Our elders knew the curves of the hillsides and the lines of the trails as intimately as they knew the curves and lines of their mother's faces. Today, our grandparents lament that children born on the reservations are like buffalo born behind a fence. Along with our many rights and privileges we bear responsibilities for teaching our children about their birthright.

Germaine White, Salish, in Circle of Tribal Advisors (2009)

On a day later in the month, an observer might see an empty classroom as students were out learning from the place where they live. Students and teachers might travel to a particular site, as part of the curriculum unit, *Sx^wiwis (The Journey)*. In the selected site, students would have the opportunity to reflect on their knowledge, thoughts, and feelings toward that particular place. As part of the *Honoring Tribal Legacies in Telling the Lewis and Clark Story* curriculum unit, students might visit a Tribal museum, center, or park located in their vicinity. Through this trip insights would be gained that could be integrated into the design of a new road sign symbol for the Trail that is inclusive of both Tribal and non-Tribal perspectives. While the classroom is empty on this day, students are present, actively engaged, and are learning about how they might take action to promote cross-cultural understanding in their communities.

OUR PLACE IN THE UNIVERSE

We understand our place in the universe. Visitors to our lands, including the Corps of Discovery, have had difficulty understanding the protocols and systems we honor. Our natural laws reflected our relationship to the Creator. Commonly held values prescribed how we lived with the earth and each other. All deeds revolved upon these considerations. Decisions and actions affected each member of our village and neighboring ones. Though social order varied from Tribe to Tribe—family, clan, village, band, society—in each structure it was necessary to act together to advance the welfare of the entire group. Observation of this natural order permeated every aspect of our lives—in our ceremonies, commerce, decision making, art, and in the important but differing role of elders, men and women, and children. These natural laws and considerations continue.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2009)

To further explain the place-based multiliteracies framework, the following sections of this chapter begin with a discussion of the concept of design and then go on to describe various components of design, including design resources and the processes of designing and redesigning. This is followed by a description and illustration of the process associated with a place-based multiliteracies learning spiral, its connections to the Common Core State Standards, and a demonstration of its application using materials from *Lewis and Clark: The National Bicentennial Exhibition*. This application focuses on the intent of the *Exhibition* to present “More Than One Narrative” in association with the Lewis and Clark expedition and describes a process for applying the four multiliteracies phases of situated practice, overt instruction, critical framing, and transformed practice. The final section describes an example of relationship-building between curriculum designers and members of a specific Tribe in designing a place-based multiliteracies text set.



Designs in Nature.

The Concept of Design

A concept central to the place-based multiliteracies framework is design. While the process of development is often associated with curriculum, design was selected for use in this context as it represents a more complex and multi-faceted entity that will be elaborated here. The *Merriam-Webster Online Dictionary* (2013) provides one means to explore how “design” has been defined. Definitions and examples of related words provided by this dictionary are as follows:

Verb: (1) to create, fashion, execute, or construct according to plan; (2a) to conceive and plan out in the mind, (2b) to have as a purpose, (2c) to devise for a specific function or end; (3) archaic: to indicate with a distinctive mark, sign, or name; (4a) to make a drawing, pattern, or sketch of, (4b) to draw the plans for.

Examples of related words include: accomplish, achieve, aim, aspire, contemplate, dream, hope, effort, endeavor, meditate, perform, plan, ponder, propose, purpose, strive, struggle, and try.

Noun: (1a) a particular purpose held in view by an individual or group, (1b) deliberate purposive planning; (2) a mental project or scheme in which means to an end are laid down; (3) a deliberate undercover project or scheme; (4) a preliminary sketch or outline showing the main features of something to be executed; (5a) an underlying scheme that governs functioning, developing, or unfolding, (5b) a plan or protocol for carrying out or accomplishing something (as a scientific experiment); (6) the arrangement of elements or details in a product or work of art; (7) a decorative pattern; (8) the creative art of executing aesthetic or functional design.

Examples of related words include: arrangement, conception, idea, layout, maneuver, map, means, method, pattern, platform, policy, program, project, recipe, setup, strategy, and system.

It can be seen that “design,” as described by the *Merriam-Webster Online Dictionary* (2013), provides a rich terrain of concepts and viewpoints that can be woven together in the learning process. For example, design can simultaneously describe an action (verb) and a product (noun). It reflects both art and the scientific process. It involves a plan to align with an underlying purpose and pattern. Design is related to a process of contemplation, to hopes and dreams, aims and aspirations, and striving and struggling. Design carries implications for mapping and conceptualizing, methods and strategies, as well as the development of programs and policies. Design provides a dynamic entity with potential for illuminating a diverse array of worldviews, literacies, and interconnections across elements of a place, such as the Trail.

WE ARE STILL HERE

We are the physical manifestations of the dreams and prayers of our ancestors. This connection is alive and strong and it is the foundation of our existence today and for the future. Not every Tribe is the same and there is no such thing as a “typical” Tribe. We have different languages, traditions, stories, and songs. We even have different governments and histories. The Circle of Tribal Advisors consists of 40 contemporary Tribes who represent most of the 100+ Indian nations whose homelands were traversed by Lewis & Clark. Today, after all that has happened in American history, we are still here.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2005)

Components of Design

Designs are all around us. They permeate every aspect of our lives—ranging from the patterns of the natural world to the designs that are developed by humans. As we form relationships with the world around us, we create designs that determine who we are as people and that guide how interactions occur across elements of the natural and built environments. We design means to pass on knowledge through time using a myriad of textual forms, such as stories told through artwork, through the oral tradition, through tools of survival and daily life, and through written symbols. More recent technological advances have spawned a proliferation of media types for sharing knowledge that range from social networking tools to Geographic Information Systems (GIS) and

Google Earth. In its original conceptualization of multiliteracies, the New London Group (1996) identified three components of learning through design: (a) design resources, (b) designing, and (c) redesigning. These components are seen as interacting in a cyclical and interconnected manner. In the place-based multiliteracies framework, these original designations have been expanded to include elements of “place.” Detailed descriptions follow.



Patterns of Nature (geese flying).

Design Resources

Well, this is our teaching. We were taught that the two-leggeds came last. Everything else was here first. Everything: the mountains, the trees, the hills, the rivers—everything—and all those animals, all the birds, all the reptiles. And so, if it was here first, don't you think it might be a good idea to watch and see how they survived? Do you think that'd be wise? It's a pretty smart idea. And everything that Indian people did—we can go into everything from the canoes to the teepee, everything is a mimic of nature.

Diane Mallickan, Nez Perce, Tent of Many Voices, 2005

The process of learning by design begins with identification of resources or structures available to teachers and students as they make meaning of the world around them (Cope & Kalantzis, 2009; New London Group, 1996). Since the place-based multiliteracies framework is grounded in a “sense of place,” elements of place serve as resources central to its implementation. Vine Deloria, Jr. (2001) conceptualizes place as a holistic and dynamic entity that involves the interactions and relationships among many elements. Place can be viewed as composed of five basic elements: (a) the natural environment, (b) peoples, (c) the built environment, (d) time, and (e) scope of territory. Each of these five elements is associated with structures that students and teachers can use as resources in the learning process. For example, exploration of the natural environment might involve structures, such as the physical and biological features of the earth, air, water, sky, plants, animals, and humans, as part of an inter-connected ecosystem. Scope of territory of a “place” might range from considering structures of a specific site or local community to those of a broader scope, such as the entire Trail. More detailed information regarding each of the elements and associated structures of “place” are presented in Table 1.

Table 1 – Sense of Place Elements

Element	Structures
Natural Environment	<p><u>Physical and Biological Features</u>: earth, air, water, fire, sky, landscape, terrain, climate, soil, geologic features, ecosystems, plants, animals, humans, medicine, sacred sites, energy.</p>
People (can be plant, animal, and/or human)	<p><u>Senses</u>: visual, auditory, tactile, spatial, smell/taste, gestural/movement, linguistic, spiritual.</p> <p><u>Deep Culture</u>: identity, beliefs, values, meanings, stories, homelands, families, Tribes, communities, elders, intergenerational learning, leaders, heroes, weather forecasting, outdoor survival, observation, navigation, and exploration skills, etiquette and protocol.</p> <p><u>Surface Culture</u>: clothing, foods, subsistence, weapons, games.</p> <p><u>Communication</u>: languages, symbols, images, analogies/metaphors, stories, oral traditions, drama, poetry, speeches, art, music, dance, photographs, videos, historical, scientific, technological, and economic documents, essays, maps, context, demonstration of hospitality.</p>

Element	Structures
<p>Built Environment (can be plant, animal, and/or human ... structures listed are primarily human)</p>	<p><u>Ancestral and Current Sites of Tribes</u>: sacred sites, homelands, networks of trails, inter-Tribal trade systems.</p> <p><u>Structures</u>: dams, buildings, industrial, manufacturing, and resource extraction sites, educational institutions, health care centers, communication and energy-related constructions.</p> <p><u>Tools/Technology</u>: fishing, hunting, trapping, gathering, farming.</p> <p><u>Transportation</u>: trails (foot, horse), boats (canoes, barges, ships), roads/highways, bridges, railroads, cars, trucks.</p> <p><u>History</u>: museums, interpretative centers, parks, sites, statues, artifacts, signage, displays.</p>
<p>Time</p>	<p><u>Concepts</u>: seasons, cycles, since time immemorial.</p> <p><u>Interconnectedness</u> of past, present, and future.</p> <p><u>Lewis and Clark</u>: before, during, and after contact, commemoration, future.</p>
<p>Scope of Territory</p>	<p><u>Tribal</u>: sovereignty, historic lands, treaty rights, reservations, contemporary, self-determination, inter-Tribal relations, federally-recognized & non-recognized Tribes.</p> <p><u>Lewis and Clark National Historic Trail</u></p> <p><u>Regional</u>: Columbia, Intermountain & Upper Missouri, Dakotas, Lower Missouri.</p> <p><u>Local, State, or National</u>: laws, policies, standards, agencies, organizations, boundaries, borders.</p>

Based on Vine Deloria, Jr.'s (2001) conceptualization of place as a holistic and dynamic entity that involves the interactions and relationships among many elements.

Understanding the many elements of a “place” requires a multilayered framework, such as that presented by multiliteracies. A multiliteracies framework Honors Tribal Legacies through exploration of place using a range of modalities or “design modes.” The New London Group (1996) originally identified five design modes, including linguistic, visual, audio, gestural, and spatial. Merging multiliteracies with a place-based approach requires additional design modes. Thus, the design modes have been expanded to include those of a tactile, smell/taste, and spiritual nature. In addition, the gestural mode was extended to include movement. Further information regarding the design modes and associated structures (text types) along with examples of learning activities are presented in Table 2.

Table 2 – Design Modes Associated with the Multiliteracies Framework

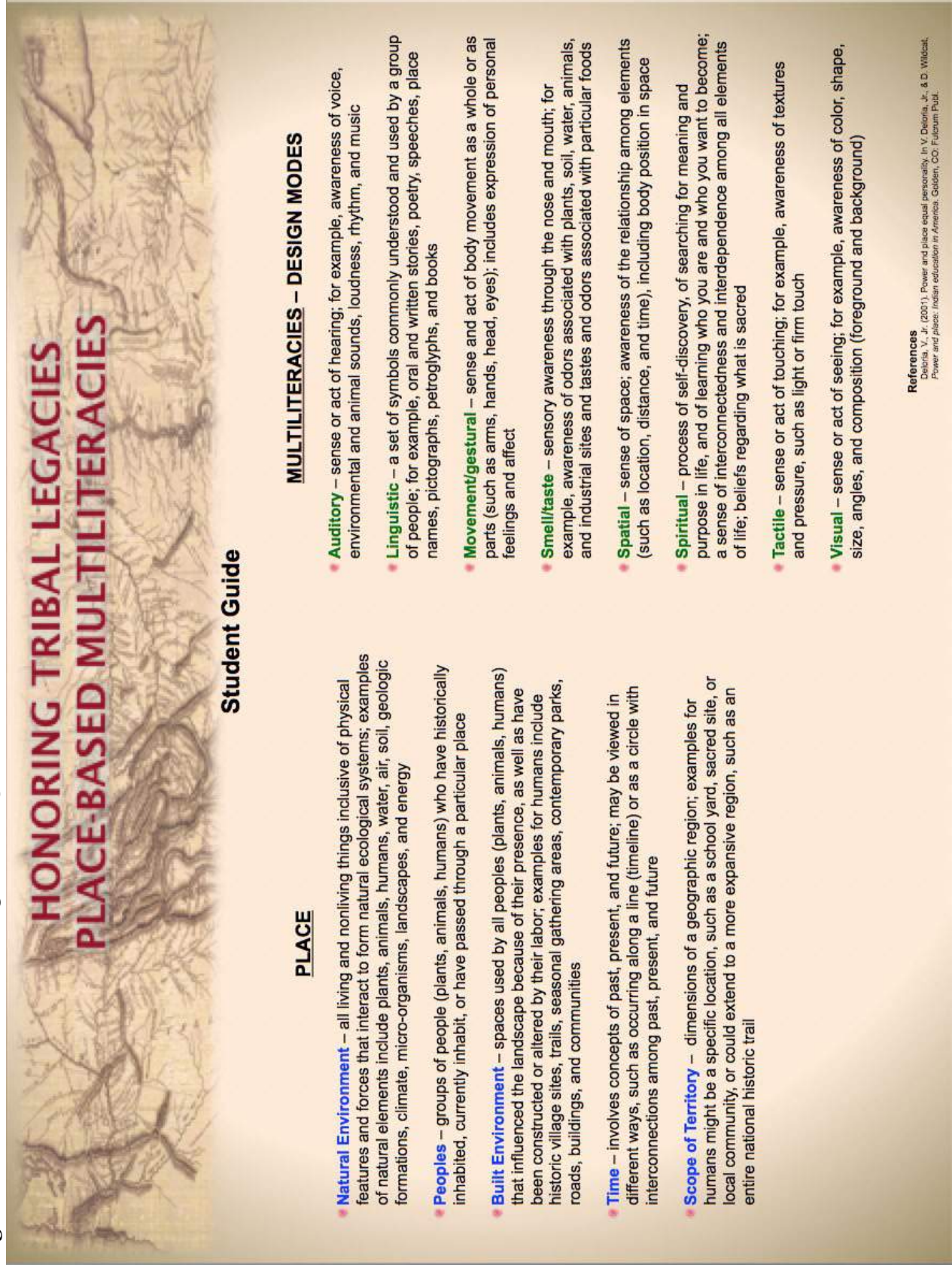
Design Mode	Structures/Text Types	Examples of Learning Activities
Visual	Color, shape, size, texture, angles, still & moving images, composition (foreground & background), scope (zooming in & out), relationship among elements, viewscape.	Shoot, analyze, & edit photographs & videotapes, draw, sculpt, weave, paint, & carve, create a Power Point presentation or website, construct interpretive signs.
Auditory	Environmental & animal sounds, human voice, loudness, rhythm, music.	Audio-record voice & environmental sounds (wind, water), play a musical instrument.
Tactile	Touch, textures, pressure.	Describe how the earth feels under your feet, handle natural elements (e.g., plants, rocks, soil), construct objects composed of various textures.
Spatial	Ecosystems (habitats, landscapes, waterways, & features of the natural environment), Tribal homelands, historic trails, built environments, interpersonal distance.	Take field notes regarding a place, create, use, & analyze maps, explore sites through Google Earth & Geographic Information Systems (GIS), track animals.
Smell/Taste	Odors associated with plants, land/soil, water, animals, humans, food, and industrial or manufacturing sites, taste of foods.	Take field notes regarding smells associated with a place, cook & eat traditional foods.
Movement/Gestural	Body placement & control, gait, arm/hand movements, facial expression, emotional expression, clothing, rhythm.	Act out a story, dance, use sign language, participate in games & sports, represent feelings, interact with animals.

Design Mode	Structures/Text Types	Examples of Learning Activities
Linguistic	Oral tradition, heritage languages, stories, poetry, metaphors/analogies, symbols, place names, written text.	Learn through traditional stories, interview Tribal members, explore place names & symbols (petroglyphs, pictographs), analyze written documents.
Spiritual	Holistic worldview, creation stories, sacred sites, ceremonies, covenants with the Creator.	Learn from elders & from patterns of the natural environment, understand the concept of Mother Earth.
Multimodal	Integration of various design modes.	Create multi-media productions.

Adapted From: Cope & Kalantzis (2009); Inglebret, CHiXapkaid, & Pavel (2011); Kress (2003); New London Group (1996); Westby & Inglebret (2012)

Honoring Tribal Legacies through a place-based multiliteracies framework involves teachers and students in an educational process addressing real life situations that are likely to be complex. Rather than relying on a single design mode, it is likely that a multimodal approach will be necessary to address this higher level of complexity. For example, a digital multimedia production might involve integration of information using visual, auditory, linguistic, gestural/movement, and spatial modalities. In addition, the need to develop new tools may arise as students and teachers think creatively about the audience they want to reach and the goals they want to achieve. Thus, the design modes and associated structures (text types) are viewed as dynamic tools that evolve and potentially interact, overlap, and build upon each other. Figure 2 presents a description of each of the elements of place and of the multiliteracies design modes. This figure can be used as a student guide to Honoring Tribal Legacies through Place-Based Multiliteracies.

Figure 2. Student Guide to Honoring Tribal Legacies Place-Based Multiliteracies



HONORING TRIBAL LEGACIES PLACE-BASED MULTILITERACIES

Student Guide

PLACE

- **Natural Environment** – all living and nonliving things inclusive of physical features and forces that interact to form natural ecological systems; examples of natural elements include plants, animals, humans, water, air, soil, geologic formations, climate, micro-organisms, landscapes, and energy
- **Peoples** – groups of people (plants, animals, humans) who have historically inhabited, currently inhabit, or have passed through a particular place
- **Built Environment** – spaces used by all peoples (plants, animals, humans) that influenced the landscape because of their presence, as well as have been constructed or altered by their labor; examples for humans include historic village sites, trails, seasonal gathering areas, contemporary parks, roads, buildings, and communities
- **Time** – involves concepts of past, present, and future; may be viewed in different ways, such as occurring along a line (timeline) or as a circle with interconnections among past, present, and future
- **Scope of Territory** – dimensions of a geographic region; examples for humans might be a specific location, such as a school yard, sacred site, or local community, or could extend to a more expansive region, such as an entire national historic trail

MULTILITERACIES – DESIGN MODES

- **Auditory** – sense or act of hearing; for example, awareness of voice, environmental and animal sounds, loudness, rhythm, and music
- **Linguistic** – a set of symbols commonly understood and used by a group of people; for example, oral and written stories, poetry, speeches, place names, pictographs, petroglyphs, and books
- **Movement/gestural** – sense and act of body movement as a whole or as parts (such as arms, hands, head, eyes); includes expression of personal feelings and affect
- **Smell/taste** – sensory awareness through the nose and mouth; for example, awareness of odors associated with plants, soil, water, animals, and industrial sites and tastes and odors associated with particular foods
- **Spatial** – sense of space; awareness of the relationship among elements (such as location, distance, and time), including body position in space
- **Spiritual** – process of self-discovery, of searching for meaning and purpose in life, and of learning who you are and who you want to become; a sense of interconnectedness and interdependence among all elements of life; beliefs regarding what is sacred
- **Tactile** – sense or act of touching; for example, awareness of textures and pressure, such as light or firm touch
- **Visual** – sense or act of seeing; for example, awareness of color, shape, size, angles, and composition (foreground and background)

References
Debrin, V. Jr. (2011). Power and place equal personality. In V. Debrin, Jr., & D. Wilczak, Power and place: modern education in America. Golden, CO: Fulcrum Publ.

Designing

Taken together, the elements and structures of “place” and the multiliteracies design modes become part of a toolkit that teachers and students use in the work of *designing*, or in other words, in making meaning of their worlds (Cope & Kalantzis, 2009; Kalantzis & Cope, 2012; New London Group, 1996). Designing involves the processes of comprehending, explaining, and interpreting information, as well as seeing relationships among concepts and experiences that students bring from their homes and communities to the concepts and experiences associated with school (Martin, 2008; Westby & Inglebret, 2012). Comprehension might occur through acts, such as listening, thinking, watching, or reading. Explanation and interpretation might occur through acts, such as speaking, drawing, writing, or creating a work of art. Both teachers and students are involved in reflection as they strive to understand and express relationships between the “known or familiar” and the “unknown or unfamiliar” (Martin, 2008). To be able to participate in the work of designing, students must gain awareness of the system of designs that underlie the designing process so they can consciously control what they are learning (Westby, 2010). This is facilitated by learning a “meta-language” which the New London Group (1996) has defined as “a language for talking about language, images, texts, and meaning-making interactions” (p. 77). The elements and structures of place and multiliteracies design modes serve as the “meta-language” to guide the process of designing.

THE CONCEPT OF DESIGN

It can be seen that “design,” as described by the *Merriam-Webster Online Dictionary* (2013), provides a rich terrain of concepts and viewpoints that can be woven together in the learning process. For example, design can simultaneously describe an action (verb) and a product (noun). It reflects both art and the scientific process. It involves a plan to align with an underlying purpose and pattern. Design is related to a process of contemplation, to hopes and dreams, aims and aspirations, and striving and struggling. Design carries implications for mapping and conceptualizing, methods and strategies, as well as the development of programs and policies. Design provides a dynamic entity with potential for illuminating a diverse array of worldviews, literacies, and interconnections across elements of a place, such as the Trail.

We refer back to the “The Concept of Design” as an example. Learning begins with reading and thinking about the definition of “design” provided in the *Merriam-Webster Online Dictionary* (2013). This is followed by drawing on known or familiar experiences in the process of “designing” a new paragraph to portray the concept of “design.” The linguistic design mode is used as the words are reorganized within sentences to emphasize particular meanings and selected grammatical structures are identified (i.e., noun, verb). A linguistic metaphor linked to “place” comes into play as the term, “terrain,” is used to connect “concepts and viewpoints.” This metaphor also potentially involves the visual, tactile, and spatial design modes, as “terrain” activates an image of how a terrain might look and feel, as well as a sense of space. The visual design mode is further represented in word usage, such as “It can be seen that . . .” and “illuminating.” The auditory design mode is tapped into as words are grouped and punctuation is used to denote pauses and particular rhythmic patterns. The spiritual design mode might underlie communication of concepts, such as “a process of contemplation,” “hopes and dreams” and “interconnections across elements of a place.” Through use of the design modes as tools for viewing this paragraph, its multimodal character and level of complexity rise to the surface.



Eagle.

Place – A Poem

By A. Noelle Miller

Through prairie dust and flowers
Oak and lodgepole and crackling scrub brush, dry basalt
Rivulets of rain and thick snow
and drought
Large and small and laughing and determined and desperate
Paths traced
We leave a story
Everywhere we touch feels toes, breath, bones, purpose
And if the memories are dim they are not forgotten
Sink knuckle deep into sphagnum moss and stop
smell
life, its feathers bright with dew and greening
Quick! Salmon slip so fast, themselves silver water
a pause, a struggle, a sockeye
still in two hands
ten fingers
a net
Such a quick drumbeat, this life
May I suggest a poem:
Travel gently and consider those before
And those near you
And those coming
What will they know?
The past has a way of whispering in the future.

To provide another example, we use the “meta-language” of place-based multiliteracies to elucidate the design of “Place – A Poem”. We see use of the linguistic mode as words are organized to emphasize particular attributes of the natural environment along the Lewis and Clark National Historic Trail. In the first section, students might close their eyes and imagine the experience of walking on “prairie dust” and how their footsteps might kick up dust so that it flies against their skin and into their nostrils (tactile mode). They might envision the “flowers, oak, and lodgepole” (visual mode) and imagine hearing the “crackling scrub brush” (auditory mode) as they walked along the Trail, while wondering why the scrub brush would be “crackling.” They might contrast the temperatures and sensations (tactile mode) represented by “dry basalt, rivulets of rain and thick snow and drought.” They might imagine who or what was described with the words “large and small and laughing and determined and desperate” using multiple modes, such as visual, auditory, movement/gestural, and spatial. Do these words refer to the animal people, the human people, or maybe even the plant people? We don’t know for sure but can explore possibilities and value the mystery underlying these words. “Paths traced” would encompass a structure of the built environment and might lead to discussion of who made the paths and why. After imagining the meaning underlying the words of the subsequent sections of “Place – A Poem”, students might go on to contemplate the meaning of the last sentence, “The past has a way of whispering in the future,” as a representation of the interconnectedness of time across the past, present, and future. What does this mean for the Trail? And what does this mean for their personal lives? This example illustrates one type of design exploration that is represented in the Honoring Tribal Legacies curriculum unit models.

IMAGINATION

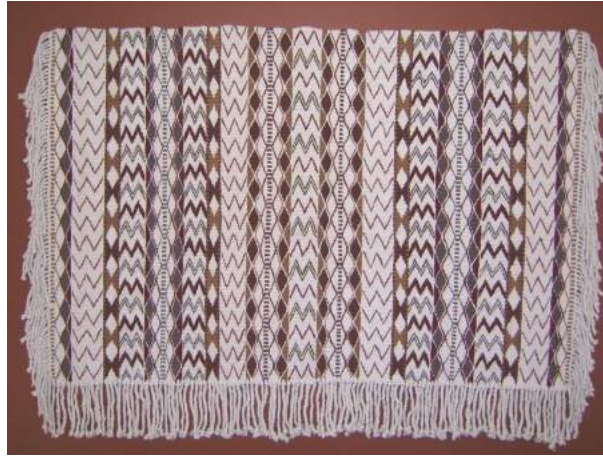
Imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world, and all there ever will be to know and understand.

Albert Einstein

It is important to emphasize that the role of the teacher undergoes a shift in the process of designing—from acting as an authority figure to being one member of a learning community (Healy, 2008). This shift necessitates ongoing reflection by each teacher about the cultural values and historical background that he/she brings to being an educator which, in turn, shapes the way relationships are formed with students (Doyle, 2012; Martin, 2008). The teacher plays a key role in creating a safe space in which students feel comfortable sharing their knowledge and taking risks as they think creatively about designing responses to real world dilemmas (Cleary & Peacock, 1998; Lomawaima & McCarty, 2006). It is expected that a teacher’s increased self-awareness contributes to deep understanding of nuances of the “meta-language” that then serve as a foundation for learning from and validating the life experiences, literacies, and knowledge of design modes that students bring to the classroom.

Redesigning

As students and teachers gain familiarity with design resources, the “meta-language” of design, and the designing process associated with a place-based multiliteracies framework, they move into the realm of transformational learning (Singleton, 2010) or *redesigning*. In redesigning, students use design resources appropriately and in new ways to address a real purpose and a real audience (Healy, 2008; Kalantzis & Cope, 2012; Westby, 2010). The extent of creativity demonstrated will depend on the design resources they can access. Thus, it is important to expose students to a wide breadth of possibilities representing diverse perspectives and based on patterns of meaning that encompass the past, present, and future. The story of [du’kWXaXa’?t3w3l](#) provides an example of the designing and redesigning processes as they interconnect with multiple elements of “place” and integrate multiple modalities.



du'kWXaXa'?t3w3l

(Sacred Change for Each Other)

du'kWXaXa'?t3w3l came forth to this world to bring a message of hope and inspiration to Native and non-Native people alike. It is a message to respect the sacred change that has been occurring and will continue to occur in our life time. That sacred change is the resurrection and revitalization of Salish traditional culture that has come about so that the aboriginal inhabitants of this land can once again experience the pleasure of living in honor of the Creator's teachings.

Basic are these teachings, as basic as the designs you see bringing life to du'kWXaXa'?t3w3l. The vertical wavy lines coupled with the horizontal zigzag lines represent the energy that emanates from all that exists; the life force of everything. Love everything. The repeating yet differing design elements represent the seasons of life, whether these seasons be environmental or biological. Enjoy every experience. The four dash elements in between sets of wavy lines represent the spine or backbone and remind us to be strong against challenges we face in life. Be resilient. The colors are beautiful colors of nature for we are all beautiful children of the elemental air, earth, fire, and water giving life to that natural world. Recognize your beauty. The fringe is spun and ends tied to tell us again and again to not live our lives in a way that things were left undone and unfulfilled. Do something great. These brief design explanations pale in comparison to the life force speaking to your inner soul. Pray to each other for each other. Help one another to become something more than any of you would be alone or within your own little community. Look at your diversity in society as something to embrace and create a society that embodies the ideal that your life, our lives are intertwined and woven together to experience sacred change for each other. Close your eyes and let du'kWXaXa'?t3w3l touch your future. A blanket woven by sa' hLa mitSa (Dr. Susan Pavel), du'kWXaXa'?t3w3l, is the first of its kind to be woven in more than a century. It is on permanent display at the Seattle Art Museum.

Place-Based Multiliteracies Learning Spiral

The place-based multiliteracies learning spiral is based on the premise that we are designers of our lives. As such, it represents a journey of self-discovery, of searching for meaning and purpose in life, and of answering questions, such as “Who am I?” and “What do I want to become?” It is centered on the elements of a particular place. As was previously mentioned, place is viewed as a holistic and dynamic entity that involves interactions and relationships among many elements (Deloria, 2001), including the natural environment, peoples, and the built environment, as viewed through time. The character of the spiral ensures that participants view and experience a particular place over and over again from a diverse array of vantage points. The multiliteracies framework builds capacity to comprehend, explain, interpret, and use diverse forms of literacy from these various perspectives. When students and teachers position themselves as part of a place, following the spiral path leads to a deeper sense of interconnectedness, belonging, and responsibility to that place.



Amy as Sacagawea II.

Figure 3. Honoring Tribal Legacies Place-Based Multiliteracies Learning Spiral

HONORING TRIBAL LEGACIES PLACE-BASED, MULTILITERACIES LEARNING SPIRAL

Ella Inglebret, Washington State University
ChiXapkaid, University of Oregon

FRAMEWORK

A place-based, multiliteracies framework approaches learning holistically in a manner that is centered on the elements of a particular place. Using the framework, teachers and students work together to design a learning environment that values multiple ways of knowing and diverse forms of literacy. Understanding and respecting multiple viewpoints serves as a foundation for generating creative responses to challenges faced in real world contexts. In the following, the underlying concept of place and of multiliteracies is described along with the associated place-based, multiliteracies process.

PLACE - a holistic and dynamic entity that involves interactions and relationships among many elements (Vine Deloria, Jr., 2001), including the natural environment, peoples, and the built environment, as viewed through time

• **Natural Environment** - all living and nonliving things inclusive of physical features and forces that interact to form natural ecological systems; examples of natural elements include plants, animals, humans, water, air, soil, geologic formations, climate, micro-organisms, landscapes, and energy

• **Peoples** - groups of people (plants, animals, humans) who have historically inhabited, currently inhabit, or have passed through a particular place

• **Built Environment** - spaces used by all peoples (plants, animals, humans) that influenced the landscape because of their presence, as well as have been constructed or altered by their labor; examples for humans include historic village sites, trails, seasonal gathering areas, contemporary parks, roads, buildings, and communities

• **Time** - involves concepts of past, present, and future; may be viewed in different ways, such as occurring along a line (timeline) or as a circle with interconnections among past, present, and future

• **Scope of Territory** - dimensions of a geographic region; examples for humans might be a specific location, such as a school yard, sacred site, or local community, or could extend to a more expansive region, such as an entire national historic trail

PROCESS

Situated Practice

- Begins with knowledge, skills, and sense of self that students bring to learning
- Prior knowledge is used as a foundation for new knowledge
- **Defining Place:** Students and teachers are positioned as part of a place and each identifies his/her perceptions of and experiences of a particular place

Overt Instruction

- Design modes and factors associated with their use are explicitly taught
- **Defining Place:** Various design modes that might be used to learn about a place are explored and reasons for selecting each are identified

Critical Framing

- The learning process and design modes are examined from various stakeholder perspectives
- Assumptions underlying various perspectives are explicitly analyzed
- **Defining Place:** Various stakeholder groups associated with a place are identified and their perspectives are explored

Transformed Practices

- Selected design modes are used to address real life concerns for a real purpose and for a real audience
- Learning is connected to individual lives, communities, and society
- **Defining Place:** Multiple ways of understanding a place and associated concerns are recognized, valued, and acted upon



MULTILITERACIES - systems for perceiving and making meaning of (interpreting) our world through one or a combination of the following design modes (modalities)

- **Auditory** - sense or act of hearing; for example, awareness of voice, environmental and animal sounds, loudness, rhythm, and music
- **Linguistic** - a set of symbols commonly understood and used by a group of people; for example, oral and written stories, poetry, speeches, place names, pictographs, petroglyphs, and books
- **Movement/gestural** - sense and act of body movement as a whole or as parts (such as arms, hands, head, eyes); includes expression of personal feelings and affect
- **Smell/taste** - sensory awareness through the nose and mouth; for example, awareness of odors associated with plants, soil, water, animals, and industrial sites and tastes and odors associated with particular foods
- **Spatial** - sense of space; awareness of the relationship among elements (such as location, distance, and time), including body position in space
- **Spiritual** - process of self-discovery, of searching for meaning and purpose in life, and of learning who you are and who you want to become; a sense of interconnectedness and interdependence among all elements of life; beliefs regarding what is sacred
- **Tactile** - sense or act of touching; for example, awareness of textures and pressure, such as light or firm touch

• **Visual** - sense or act of seeing; for example, awareness of color, shape, size, angles, and composition (foreground and background)

References

Deloria, V. Jr. (2001). *Power and place equal personality*. In V. Deloria, Jr., & D. Wilson. *Power and place: indier education in America*. Golden, CO: Fulcrum Publ.

As is depicted in Figure 3 and further explained in Table 3, the learning process represented by the place-based multiliteracies spiral is implemented through four phases:

1. situated practice,
2. overt instruction,
3. critical framing, and
4. transformed practice.

Situated practice highlights the knowledge and skills, sense of self, and sense of place that students bring to learning. These then provide the foundation for new learning. Overt instruction involves explicit teaching of elements and structures of place and design modes associated with multiliteracies which then become the “meta-language” students use to construct meanings associated with a place. In critical framing, students and teachers examine various stakeholder perspectives regarding a place. Diverse worldviews and underlying assumptions are brought to the surface. In transformed practice, selected design modes are used to address real life concerns for a real purpose and a real audience.

Table 3. Exploring Sense of Place through Multiliteracies

Situated Practice	Overt Instruction	Critical Framing	Transformed Practice
Prior knowledge used as a foundation for new knowledge.	Explicit teaching of various design modes & how they might be used in addressing particular situations.	Identify stakeholders associated with the place & explore issues from various stakeholder perspectives.	Address real life concerns.
Defining Place: Describe your feelings about this place & how this place affects your relationships to other people & other places.	Defining Place: Explore various design modes that might be used for data collection about this place & discuss reasons for selecting each (e.g., written journal entries, photographs, video-recordings, audio-recordings, interviews, stories, maps, documents, art work, field work).	Defining Place: Examine perspectives of various stakeholders associated with this place (e.g., Tribes, scientists, Lewis & Clark expedition members, local community members, tourists, natural resource managers, local industry, government, agriculture).	Defining Place: Conduct field studies (e.g., observe plants, animals, geologic formations, built environment, such as roads & structures) to determine the current status of this place.

Situated Practice	Overt Instruction	Critical Framing	Transformed Practice
Changes Over Time: Describe changes you and/or your family members have observed.	Changes Over Time: Identify design modes that might be used to learn about the status of this place since time immemorial, through traditional Tribal cultures, before, during, & after the Lewis & Clark expedition, as well as in the future.	Changes Over Time: Examine perspectives of stakeholders associated with this place at various time periods, including members of area Tribes, of the Lewis & Clark expedition, and other community members.	Changes Over Time: Identify and implement one or more strategies that might be implemented to protect & sustain this place into the future (e.g., create an educational website, develop a presentation that might be given to a local community group).

Adapted From: Cope & Kalantzis (2009); Inglebret, CHiXapkaid, & Pavel (2011); Kress (2003); New London Group (1996); Westby & Inglebret (2012)

Place-Based Multiliteracies and the Common Core State Standards

Further insight into the place-based multiliteracies (PBM) learning spiral can be gained by identifying intersections with the *Common Core State Standards (CCSS) for English Language Arts & Literacy in History/Social Studies, Sciences, and Technical Subjects*. Overall, both provide holistic learning experiences that simultaneously integrate reading, writing, speaking, and listening in association with a myriad of text forms, including both literature and informational texts. Teachers prepare for implementation of the CCSS by compiling high-quality, increasingly-complex text sets that are consistent with the knowledge, motivation, and experiences of individual students. (See Appendix A of the CCSS). This is consistent with the PBM phase of situated practice that begins by considering students’ prior knowledge and interests as the teacher designs learning experiences. The CCSS emphasize the importance of teaching the craft and structure of language used in specific texts. This parallels the PBM phase of overt instruction with its focus on direct teaching

of a “meta-language” that can be used to explore existing texts and in designing new text forms. Through the CCSS, students consider differing points of view and gain experience with diverse media and formats used to communicate information for divergent purposes. This aligns with the PBM phase of critical framing, where texts are viewed from multiple perspectives and underlying contextual influences and assumptions are considered. And finally, the CCSS are structured to facilitate integration of knowledge and ideas, as students apply what they have learned within both short and sustained projects designed to answer specific questions. This corresponds to the PBM phase of transformed practice, where students integrate existing knowledge and experience with new learning, as they design authentic responses to real world concerns.

As can be seen, the process of implementing the PBM framework holds potential for intersecting with the CCSS through each of the four phases. However, one primary difference can be found in how the concept of text is viewed. The CCSS focuses on texts involving the linguistic mode. Texts are categorized into two broad types—literature and informational text. Literature encompasses stories, dramas, and poetry, while informational texts include literary nonfiction and historical, scientific, and technical texts presented in both print and digital formats. In contrast, PBM conceptualizes text as any verbal, recorded, constructed, or observed item that represents a meaning (Healy, 2008). Examples of texts include patterns of nature, stories told through artwork, music, the oral tradition, tools of survival and daily life, written symbols, and various forms of digital media. As can be seen, the PBM conceptualization goes beyond that of the CCSS. Further difference exists in the manner in which texts are categorized. While the CCSS distinguish literature from informational texts, in PBM we find texts that incorporate dimensions of both of these categories. Therefore, we have added a category of “synthetic text”, where a traditional story, or a form of literature, simultaneously provides information about the natural world and its peoples, as described in the curriculum unit, *A Thousand Celilos: Tribal Place Names and History along the Lewis and Clark Trail*.

Through PBM we advocate a broad view of the concept of text, as we strive to validate the worldviews, sense of self, and sense of place that students bring to learning. At the same

time, we can demonstrate the linkages among various design modes, such as we have done with du'kWXaXa't3w3l. Through interaction with du'kWXaXa't3w3l, students can experience the visual, tactile, spatial, gestural (emotional), smell, and spiritual modes. These can be connected to the linguistic mode through an accompanying narrative, such as the written description expressing the designer's perspectives of du'kWXaXa't3w3l. Thus, differences in the conceptualization of text do not preclude alignment with the CCSS. We can acknowledge and show respect for both a wide range of text types and a need for connecting to the linguistic mode, in response to expectations of today's world. To further elucidate connections between the PBM and the CCSS, Table 4 presents selected College and Career Readiness (CCR) Anchor Standards that are targeted by the CCSS throughout K-12 education and their alignment with the phases of the PBM learning spiral. Following this, we will demonstrate how the place-based multiliteracies learning spiral can be applied to guide the process of designing curriculum Honoring Tribal Legacies.

Table 4. Connections between the Phases of the Place-Based Multiliteracies Learning Spiral and College & Career Readiness Anchor Standards

Place-Based Multiliteracies	College & Career Readiness (CCR) Anchor Standards: Examples of Associated Activities and Standards
Situated Practice	Make high-quality, increasingly complex text sets available to students; consider individual student's knowledge, motivation, and experiences.
Overt Instruction	<p><u>Reading</u></p> <ul style="list-style-type: none"> ☀ Interpret words & phrases as they are used in a text and analyze how specific word choices shape meaning or tone. (CCR-R4) ☀ Analyze the structure of texts, including how specific sentences, paragraphs, & larger portions of the text relate to each other & the whole. (CCR-R5) <p><u>Speaking & Listening</u></p> <ul style="list-style-type: none"> ☀ Integrate & evaluate information presented in diverse media and formats. (CCR-SL2) <p><u>Language</u></p> <ul style="list-style-type: none"> ☀ Demonstrate understanding of figurative language, word relationships, & nuances in word meanings. (CCR-L5)

Place-Based Multiliteracies	College & Career Readiness (CCR) Anchor Standards: Examples of Associated Activities and Standards
Critical Framing	<p><u>Reading</u></p> <ul style="list-style-type: none"> Assess how point of view or purpose shapes the content and style of a text. (CCR-R6) <p><u>Writing</u></p> <ul style="list-style-type: none"> Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. (CCR-W8) <p><u>Speaking and Listening</u></p> <ul style="list-style-type: none"> Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric. (CCR-SL3) <p><u>Language</u></p> <ul style="list-style-type: none"> Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. (CCR-L3)
Transformed Practice	<p><u>Reading</u></p> <ul style="list-style-type: none"> Integrate & evaluate content presented in diverse media & formats. (CCR-R7) <p><u>Writing</u></p> <ul style="list-style-type: none"> Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. (CCR-W7) <p><u>Speaking & Listening</u></p> <ul style="list-style-type: none"> Make strategic use of digital media & visual displays of data to express information and enhance understanding of presentations. (CCR-SL5)

Place-Based Multiliteracies: Demonstrating Its Application

Here we briefly demonstrate how the place-based multiliteracies framework can be applied using design resources available through *Lewis and Clark: The National Bicentennial Exhibition* as a starting point. This exhibition is currently available online at

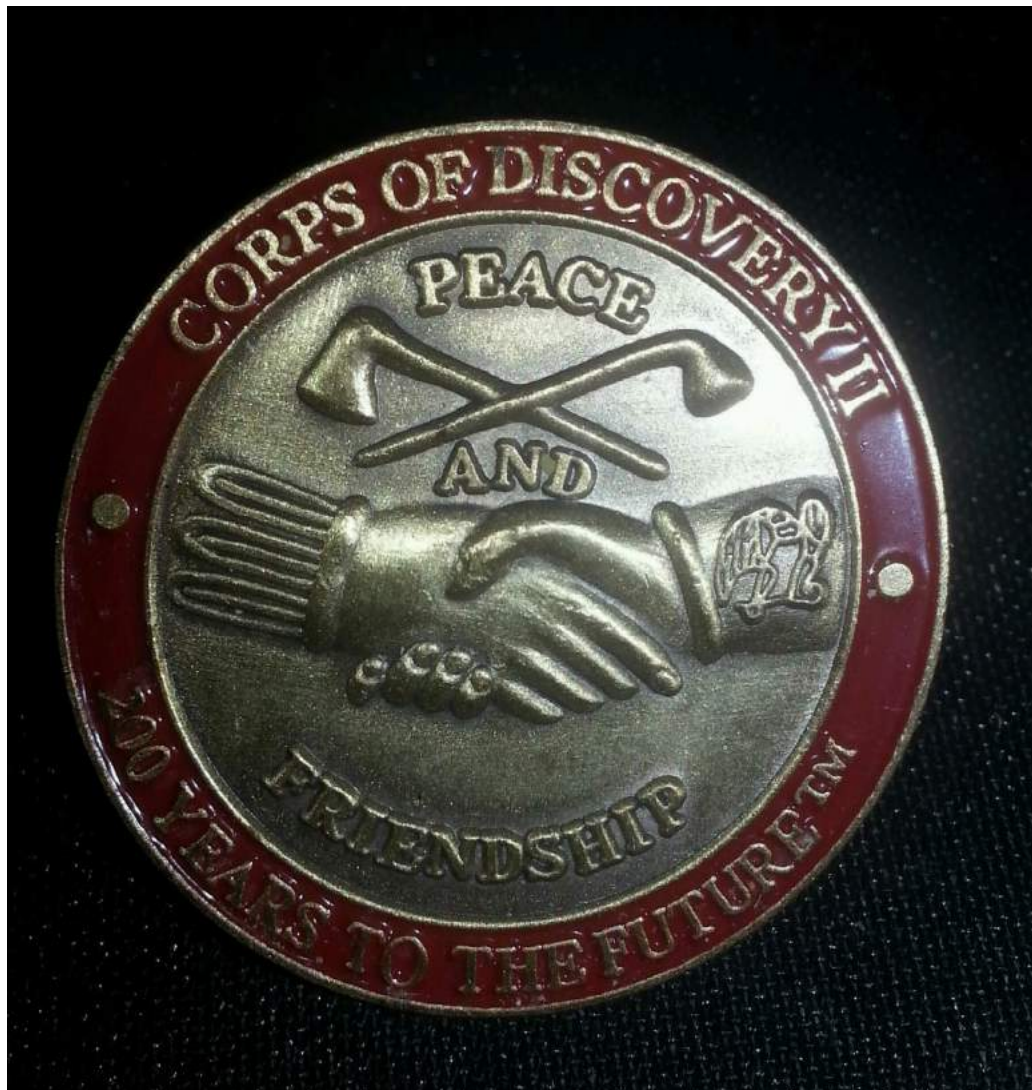
🌐 <http://www.lewisandclarkexhibit.org/400/index.html>

For this demonstration, an introduction to the *Bicentennial Exhibition* and its focus on providing more than one narrative pertaining to the Lewis and Clark journey will first be provided. This will be followed by a description of how the designing processes of situated practice, overt instruction, critical framing, and transformed practice can be implemented.

MISSION

It is the mission of the Circle of Tribal Advisors to commemorate and acclaim the contributions and goodwill of our ancestors and to plan for the wellbeing of future generations.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2009)



Red Pin Logo, Richard Basch.

Lewis and Clark: The National Bicentennial Exhibition

Lewis and Clark: The National Bicentennial Exhibition, curated by Carolyn Gilman of the Missouri Historical Society, was designed in close consultation with advisors from several Tribal communities (Circle of Tribal Advisors, 2009). The exhibition was on display in St. Louis, Philadelphia, Denver, Portland, and Washington, D.C. between January 2004 and September 2006. The exhibition is described as exploring the “cultural landscape encountered by Lewis and Clark,” while asking questions, such as

- 🌱 What did they see?
- 🌱 Who did they meet?
- 🌱 What didn't they see?
- 🌱 What was the view from the riverbank?
- 🌱 What did the expedition look like to Indian eyes?

The exhibition begins with a multimedia introduction and then provides options to explore the site: (a) as a Journey (following Lewis and Clark's route using an interactive, multimedia map), (b) through a Gallery of selected artifacts and images, or (c) by Themes. Themes include: the imaginary west, discovering diplomacy, a world of women, the measure of the country, animals: species and spirits, discovering language, dressed in courage, trade and property, curing and plants, and discovering each other. A book, *Lewis and Clark: Across the Divide* (Gilman, 2003), was published to accompany the exhibition.

HEALING

The Circle of Tribal Advisors supports reconciliation that results in sustained healing and meaningful dialogue with Sovereign Nations, creates commemorative infrastructure and establishes lasting Tribal Legacies to continue after the years of the bicentennial.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2009)

The *Bicentennial Exhibition* depicts a journey that begins in Washington, D.C. as expedition preparations are made. The story moves westward to connect with what is today's Lewis and Clark National Historic Trail. The interactive, multimedia map presents content for 29 sites on the westward journey and 10 sites on the journey back to St. Louis. Videotaped interviews with Tribal participants along the route represent the Dakota region (Lakota, Dakota-Sioux, Hidatsa, Mandan-Hidatsa), Intermountain and Upper Missouri region (A'aninin Gros Ventre, Blackfeet, Shoshone-Bannock), and the Columbia region (Chinook, Cayuse-Nez Perce, Nez Perce, Yakama). Under the theme, politics and diplomacy, descriptions of encounters between the Lewis and Clark expedition and Indian Tribes (Teton Sioux, Mandan/Hidatsa, Shoshone, and Clatsop/Chinook) are examined. Most other themes focus on the expedition's interactions with a specific Tribe but diverse Tribal perspectives are represented throughout the exhibition.

STORIES

It is a story, or rather a series of stories, told by many actors and narrators. Human beings are storytellers. We explain our lives to ourselves and to others in story form. We do that as individuals, in families and communities, and as a nation.

James P. Ronda (2007)

More Than One Narrative

Consistent with the intention of the National Council of the Lewis and Clark Bicentennial and the National Park Service (see *Enough Good People* at <http://cms.lc-triballegacy.org/book>), the *Bicentennial Exhibition* was designed to present more than one narrative describing the Lewis and Clark expedition. The online introduction sets the tone of differing perspectives through the use of various design modes. Appearing first is the image of a human form carved by the Wishram people (near the Columbia River) followed by the Wishram prophecy: "One old man . . . dreamt: he saw strange people, they spoke to him, and showed him everything. He said, "Soon all sorts of strange things will come. No longer [will things be] as before. White people with mustaches on their faces will come from the east. Do you people be careful." This is accompanied by the ominous sounds

of a thunderstorm and what appears to be an empty dark background space. The bust of Thomas Jefferson then appears followed by an excerpt from his first inaugural address: “Possessing a chosen country, with room enough for our descendants to the hundredth and thousandth generation . . . what is more necessary to make us a happy and prosperous people?” In stark contrast to the initial thunderstorm and darkness, Jefferson’s words are accompanied by music followed by a sunny, colorful landscape. An array of design modes (i.e., visual, spatial, linguistic, auditory, movement/gestural, and spiritual) are used to emphasize differing viewpoints on what is to come.

The exhibition goes on to compare Euro-American and Native narratives on diplomacy, women, mapping, animals, language, dress, trade and property, and plants. This example of application of the place-based multiliteracies framework focuses on the theme, “the measure of the country,” which highlights differences in worldviews on what represents a “place.” In mapping, Clark used measurement instruments, such as a sextant, to collect information that was then analyzed and transferred to a chart of grid lines denoting longitude and latitude. For American Indians, mapping was part of a narrative tradition that reflected relationships among human, animal, and plant peoples, the land, and significant events and memories associated with “places.” A series of maps created by Indian leaders is provided as part of the exhibition. One map created by Mandan chief, Shehek-Shote, is described as “a journey chart—a graph created to illustrate a story.” Clark is described as having made the mistake of “thinking that the visual components stood alone” and not recording the verbal narrative that went with the “map.” Other maps illustrate variations in information recorded, such as time and size dimensions, spatial orientations, and place names. Viewers can listen to audio-recordings of stories associated with places on a map created by Sitting Rabbit (Mandan) and a video-recording of George Horse Capture (A’aninin Gros Ventre) who discusses the orientation that “the world around us was our book.” In addition, a parallel is drawn between a current day mass transit map for Washington, D.C. and American Indian mapping traditions. Contemporary mapping practices, such as Geographic Information Systems (GIS), are presented through a section, “connections to today”. Thus, this theme-based section provides a rich design resource for exploring diverse perspectives on mapping of a place.

NATURE

What I see in Nature is a magnificent structure that we can comprehend only very imperfectly, and that must fill a thinking person with a feeling of humility.

Albert Einstein

Situated Practice

The situated practice phase begins with the knowledge, skills, and sense of self that students bring to the learning experience. Students and teachers are positioned as part of a place and each identifies his/her perceptions and experiences of a particular place. Thus, entry questions, such as “Where am I?” and “How do I know where I am?” can stimulate prior knowledge through a process of verbal brainstorming. A copy of the “map of rivers” (with no written words or boundary lines) can provide each student with a visual means to respond to these questions. As students and teachers set out to Honor Tribal Legacies, they might answer additional questions, such as “Where is our nearest neighboring Tribe?” and “Where is our nearest neighboring Tribe that had encounters with the Lewis and Clark expedition?” The geographic territory covered might be expanded by determining the location of other Tribes that had encounters with the expedition. The design resources available through the online *Bicentennial Exhibition* provide a starting point for validating “the view from the riverbank”, as well as the view “from the river.” As indicated previously, the exhibition provides opportunities for students to interact with maps created by Tribal leaders and to hear Tribal members tell stories associated with these maps. The rich array of text types represented in the exhibition is consistent with the intent of the CCSS to expose students to diverse media and formats.



Map of Rivers, Noel Sanyal.

Overt Instruction

In the overt instruction phase, students are explicitly taught the meta-language of multiliteracies design modes and factors associated with their use. The design resources available for the *Bicentennial Exhibition* theme, “the measure of the country,” can be analyzed to heighten awareness of the structures that represent particular design modes. To do so, each student would be provided a copy of the Student Guide to Honoring Tribal Legacies: Place-Based Multiliteracies, which provides a description and examples of each of the design modes. In addition, they would be provided a copy of a design matrix to complete (see example below). Based on “the measurement of the country” multimedia design resources, an analysis might look like this:

Design Mode	Examples of Structures Observed
Visual	Straight and curved lines; angles; size relative to importance; size relative to unit of measure; diagrammatic; journey chart; grid markings for longitude and latitude; pictographs; color.
Spatial	Orientation from above; orientation from within the landscape; north is at the top; directions (north, south) may vary within a map to provide clarity; rivers and other natural features are marked; actual routes taken are marked; distance reflects travel time; distance reflects measured space (miles).
Linguistic	Place names; oral tradition; written words; stories, events, memories, and great men are associated with particular sites; accepted practices regarding who can tell stories associated with maps may limit what landmarks are named.
Spirituality	Sacred sites and geography.

A similar analysis of place-based elements might look like this:

Element of Place	Examples of Structures Observed
Natural Environment	Rivers, bays, ocean, land.
Peoples	Human settlements, stories, events, diverse worldviews, interconnections among human, animal, and plant peoples and the land.
Built Environment	Trails, ancestral sites of Tribes and homelands, mapping tools, modes of transportation.
Time	Before, during, and after Lewis and Clark; contemporary practices; looking to the future.

In addition, students might invite mapping experts to serve as guest speakers in class. These speakers might represent Tribal and state government perspectives. Guest presentations would provide an opportunity to gain knowledge about possible design modes to use in mapping and to examine different modes used by the speakers to communicate information about mapping. The presentations could be videotaped so that students can look for various ways in which design modes and structures are represented, such as visual (e.g., illustrations or photographs), audio (e.g., use of vocal loudness and intonation), gestural (e.g., body movements and emotional expressions), spatial (e.g., use of GIS or maps), spiritual (e.g. focus on interconnections between humans, animals, plants, and the land), and linguistic (e.g., word choice, literal and figurative language, relationship between parts of the narrative to the whole). In this way, students directly explore various modes for sharing information and the knowledge they bring from their communities is validated. In alignment with the College & Career Readiness Anchor Standards identified in Table 4 under Overt Instruction, students examine how word relationships and language shape the meaning or tone of the messages of the presentations and associated materials of the *Bicentennial Exhibition*.



Beaverhead Rock, Richard Basch.

Critical Framing

Design resources associated with the *Bicentennial Exhibition* theme of “the measure of the country” can serve as a catalyst to illuminate differing worldviews and bring critical framing into the learning and teaching processes. Additional resources available through the online *Bicentennial Exhibition*, such as the 39-site virtual journey, can be used to expand understanding of the Lewis and Clark expedition’s orientation to place and the mapping process that they used. At selected sites students would hear videotaped interviews with Tribal members. These include: (a) “Encounter with the Teton” - LaDonna “Brave Bull” Allard (Lakota) and Jeanne Eder (Dakota-Sioux) at site 13; (b) “A Mandan Winter” - Calvin Grinnell (Hidatsa) and Amy Mossett (Mandan-Hidatsa) at site 15; (c) “Do Them No Hurt” - Allen Pinkham (Nez Perce) at site 25; (d) “To the Columbia” – Bobbie Conner (Cayuse-Nez Perce) at site 26; and (e) “Through the Gorge” – Tony A. Johnson (Chinook) at site 28.

These interviews and information presented all along the journey would provide further insight into variations in “sense of place” that served as a foundation for diverse mapping strategies. As was previously mentioned, guest speakers also can serve as a means to extend student learning as they consider factors associated with mapping practices from broader community and regional perspectives. In addition, students may directly experience “sense of place” through field trips to specific sites. During this phase, assumptions underlying various perspectives are explicitly analyzed. In alignment with the College & Career Readiness Anchor Standards, students explore content from varying points of view using diverse sources, while assessing the credibility and accuracy of each as indicated in Table 4 under Critical Framing.

Atx kem kaa papaayno nuunim weetespe

Our people come from this land. Our languages and cultures are reflections of its beauty.

This land is a gift to all beings. It is the home we live in together. Always have respect.

Join us in taking care of the land.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2009)

Transformed Practice

In the transformed practice phase, students and teachers work together in selecting design modes for use in addressing real life concerns for a real purpose and for a real audience. For example, students might build on their new knowledge and skills by further investigating contemporary mapping strategies using various forms of technology, such as Google Earth, and use it to mark and describe sites of importance to Tribes along an interactive map of the Lewis and Clark National Historic Trail. This could serve as a learning resource for other classrooms. Students might create a multimedia Power Point presentation that compares and contrasts portrayal of mapping practices used by Tribal members and those used by William Clark as presented through various websites, such as *Lewis and Clark: The National Bicentennial Exhibition* and other bicentennial exhibitions, such as *Rivers, Edens, and Empires: Lewis and Clark and the Revealing of America* available at

<http://www.loc.gov/exhibits/lewisandclark/lewisandclark.html>

or *Lewis and Clark and the Indian Country: 200 Years of American History* available at

<http://publications.newberry.org/lewisandclark/>

This Power Point could be presented for parents and community members.

Students might examine maps currently provided by the Trail and critique them based on design modes and underlying worldviews represented. They might then write a letter to the Trail administration summarizing their observations and making recommendations for changes that would further Honor Tribal Legacies. Older students, such as an 8th grade class, might create a presentation for younger students, such as a 4th grade class, on differing perspectives of place and associated mapping practices related to the Lewis and Clark expedition and Tribes along the route. These types of projects involve integration, evaluation, and strategic use of content gathered from diverse media and formats, which aligns with the College & Career Readiness Anchor Standards presented in Table 4 under Transformed Practice. Throughout the learning process, multiple ways of understanding a place and associated concerns are recognized, valued, and acted upon. In this way, learning makes meaningful connections to the lives of students and teachers, as well as a broader community.

NATIVE STORIES

Native people have important stories to tell, stories about the past, the present, and the future. Catching the public's ear with Lewis and Clark is a good way to begin to talk about other stories—stories about land and water, endangered languages and threatened sacred sites.

James P. Ronda (2007)



Corps of Discovery II: Lewis & Clark Bicentennial.

Designing a Text Set

Availability of high-quality, increasingly complex text sets representing an array of formats is central to both the place-based multiliteracies framework, as well as the *Common Core State Standards for English Language Arts and Literacy*. Using the *Lewis and Clark National Bicentennial Exhibition* as a focal point allows students to explore an online and primarily informational text set involving a variety of written narratives, videotaped interviews, audio-recordings, sound effects, music, maps, photographs, illustrations, a gallery of selected artifacts and images, and an interactive, multimedia map. In demonstrating application of the place-based multiliteracies learning spiral we suggested adding supplemental texts, such as oral presentations by guest speakers, the Lewis and

Clark National Historic Trail interactive map, additional on-line Lewis and Clark Bicentennial exhibitions, and field trips to places of interest. Honoring Tribal Legacies curriculum designers have compiled further examples of text sets that cover the scope of the Trail. These can be found in the following Teachings (curriculum units): (a) *Discovering Our Relationship with Water*, (b) *Honoring Tribal Legacies in Telling the Lewis & Clark Story*, and (c) *Tribal Legacies of Pathfinding*.

WORK TOGETHER

The Tribal Nations herein wish to work together with others to improve the future well being of our Earth so that 200 years from now, all people may experience the natural and cultural resources the expedition encountered and documented 200 years ago. Our Sovereign Nations seek collaboration with federal, state, and local governments, private companies and agencies, educators, and all stewards of our mutual landscape to:

- Ensure accuracy and completeness in the histories of these events;
- Educate the general public, relevant officials, and decision-makers about the meaning and importance of these events for Tribal people;
- Promote respect for and understanding of Tribal sovereignty;
- Promote respect for and understanding of Tribal traditional cultures and languages, and the urgent need to take action to ensure their survival;
- Promote protection and restoration of the natural environment within aboriginal territories, to ensure the future survival of all aspects of the rich natural heritage known by the Tribes and members of the expedition; and
- Facilitate the return of remains and cultural properties held in private and public collections.

Circle of Tribal Advisors, Lewis & Clark Bicentennial (2009)

Students and teachers may also focus their attention on learning about a specific place, such as the homelands of a particular Tribe along the Trail. In our research at both the state level (CHiXapkaid, Banks-Joseph, Inglebret, et al., 2008) and the national level (CHiXapkaid, Inglebret, & Krebill-Prather, 2011), Tribal members have repeatedly emphasized the importance of building relationships with Tribal peoples, as part of the curriculum design process and the associated building of text sets. As was previously stated, the Trail Foundation Document further emphasizes the necessity of partnering with Tribes to protect and restore unique cultural resources, such as various forms of text. We present an example of a text set in Table 5 that has grown out of a relationship with members of the Clatsop-Nehalem Confederated Tribes.

Table 5. Honoring Tribal Legacies Clatsop-Nehalem Text Set – Intermediate Grades

Text Type	Examples of Materials
Literary	<p><u>Historical Fiction</u> <i>Blue Beads: A Story of Friendship</i> (Christine Carpenter & Kathryn Aya)</p>
Informational	<p><u>Informational Books</u> * <i>Going Along with Lewis and Clark</i> (Barbara Fifer) <u>Read Aloud Informational Books/Articles (Advanced)</u> * <i>The Journey of the Clatsop-Nehalem Canoe</i> (Roberta Basch) * <i>Pride in Her People: Charlotte Basch '14 Helps Revitalize the Clatsop-Nehalem Tribe</i> (Wanda Laukkanen) www.pacificu.edu/magazine Spring 2012, or www.pacificu.edu/magazine/content/pride-her-people</p>
Synthetic	<p><u>Read Aloud Traditional Stories (Advanced)</u> * <i>Nehalem Tillamook Tales</i> (Clara Pearson)</p>
Art, Music, & Media	<p><u>Websites</u> * <i>Clatsop Nehalem Confederated Tribes</i> www.clatsop-nehalem.com * <i>Lower Chinook & Clatsop-Nehalem</i> http://www.trailtribes.org/fortclatsop/home.htm * <i>Lewis & Clark: From Expedition to Exposition, 1803-1905</i> www.ohs.org/education/oregonhistory/narratives/histories.cfm “An Inhabited Land” http://oregonhistoryproject.org/narratives/lewis-and-clark-from-expedition-to-exposition-1803-1905/exploring-a-foreign-place-the-lewis-and-clark-expedition-in-oregon-country/an-inhabited-land/#.VGPhAMINcYk “Stealing a Canoe” http://oregonhistoryproject.org/narratives/lewis-and-clark-from-expedition-to-exposition-1803-1905/exploring-a-foreign-place-the-lewis-and-clark-expedition-in-oregon-country/stealing-a-canoe/#.VGPhWclNcYk * <i>Lewis and Clark Trail: Tribal Legacy Project</i> www.lc-Triballegacy.org (Oral Presentations with Written Transcripts: Jeff Painter, Doug Deur, Richard Basch, Roberta Basch)</p>

Text Type	Examples of Materials
Art, Music, & Media	<p><u>Websites</u></p> <ul style="list-style-type: none"> 🌐 Lewis & Clark Today, Adventures Served Daily (September 1, 1805 to June 30, 1806) http://lewisandclarktoday.net/about.html (See November 1805 to March 1806) <p><u>Photographs</u></p> <ul style="list-style-type: none"> 🌐 <i>Seaside, Oregon: Clatsop ancestry photos</i> (Seaside Historical Society Museum) http://www.seasidemuseum.org/clatsop_photos.cfm 🌐 <i>The Columbia River: A Photographic Journey – Lewis & Clark’s Columbia River: 200 Years Later</i> “Chief Comcomly & Chief Cobaway” http://columbiariverimages.com/Regions/Places/chief_com-comly.html “Seaside, Oregon and Clatsop Beach” www.columbiariverimages.com/Regions/Places/seaside.html <p><u>Videos</u></p> <ul style="list-style-type: none"> 🌐 <i>A Clatsop Winter Story</i> (Camera One) www.archaeologychannel.org/video-guide/video-guide-menu/video-guide-summary/225-a-clatsop-winter-story <p><u>Traveling Trunk</u></p> <ul style="list-style-type: none"> 🌐 <i>Clatsop Trunk</i> (Lewis and Clark National Historical Park) www.nps.gov/lewi/forteachers/clatsoptrunk.htm
Field Trips	<ul style="list-style-type: none"> 🌐 Lewis and Clark National Historical Park (Fort Stevens State Park, Fort-to-Sea-Trail, Clatsop Loop Trail) 🌐 Ne-ah-coxie (Seaside Gateway)
Teacher & Student Reference Materials	<p><u>Books/Chapters</u></p> <ul style="list-style-type: none"> 🌐 “The Ceremony at Ne-ah-coxie” (Roberta & Richard Basch), in <i>Lewis and Clark through Indian Eyes</i> (Alvin M. Josephy, Jr., Editor) 🌐 “The Clatsop Winter” in <i>Lewis and Clark Among the Indians</i> (James P. Ronda) 🌐 <i>Lewis and Clark Lexicon of Discovery</i> (Alan H. Hartley) 🌐 <i>The Lewis and Clark Companion: An Encyclopedic Guide to the Voyage of Discovery</i> (Stephanie Ambrose Tubbs with Clay Strass Jenkinson) 🌐 <i>Lewis and Clark for Dummies</i> (Sammye J. Meadows & Jana Sawyer Prewitt) <p><u>Website</u></p> <ul style="list-style-type: none"> 🌐 <i>Journals of the Lewis and Clark Expedition</i> http://lewisandclarkjournals.unl.edu/

How did we go about building a relationship with the Clatsop-Nehalem peoples to design this text set? We sat together with Dick Basch, Vice President of the Clatsop-Nehalem Confederated Tribes and Tribal Liaison for the Lewis & Clark National Historic Trail, at several gatherings over a period of two years, as he told stories of his people and shared related materials. We visited the historically and spiritually significant traditional Clatsop fishing grounds at Ne-ah-coxie, now referred to as the Seaside Gateway (Basch & Basch, 2006). At this sacred place we sat along the shoreline surrounded by the sounds of nature—the water, the wind, the birds—while we heard more stories of the Clatsop-Nehalem peoples from Roberta and Charlotte Basch. Charlotte shared her shock at hearing, as a 12-year old, that her people were extinct. This statement, made as part of a National Park Service video, made no sense to her. She was still here. Her family and community were still here. Then, we heard how a 12-year old can make a difference. Her questions catalyzed the Lewis & Clark National Historic Park to produce a new video, *The Clatsop Winter Story* (Warriner, 2005). At the park we viewed the new video that portrayed the Clatsop people as vibrant at the time of Lewis & Clark and as alive today and actively engaged in revitalizing their culture. We were gifted with copies of the book, *The Journey of the Clatsop-Nehalem Canoe* (Basch, 2011) produced by the Clatsop-Nehalem Confederated Tribes. The book came alive as we traveled to a nearby body of water and took Dragonfly, the Clatsop-Nehalem canoe described in the story, out on the water. Tribal leaders were there on shore to greet and share the experience with us. Throughout this process we experienced the generosity and kindness of the Clatsop peoples over and over again just as they had treated members of the Lewis & Clark expedition with “extrodeanary friendship.” We had shown respect and sincerity in our efforts as we formed a relationship on which to build a curriculum text set. Additional Tribe-specific text sets can be found in the Honoring Tribal Legacies teachings: *Sx^wiɿwis (The Journey)* and *Apsáalooke Basawua Iichia Shoope Aalahputtua Koorwiikooluk (Living Within the Four Base Tipi Poles of the Apsáalooke Homeland)*. Two teachings allow students to explore a particular place along the Trail and hold potential for relationship-building with local Tribes, *Exploring Your Community* and *A Thousand Celilos: Tribal Place Names and History along the Lewis and Clark Trail*.



Eagle Feather Dance Club (New Town School, North Dakota), as visitors join them in a Round Dance, August 18, 2006.

Summary and Conclusions

Using the place-based multiliteracies framework, teachers and students work together to design a learning environment that values multiple ways of knowing and diverse forms of literacy. In *Honoring Tribal Legacies*, we see teachers and students journeying through the elements of a place—the natural and built environments, peoples, and scope of territory across time. Through a four-phase process (i.e., situated practice, overt instruction, critical framing, and transformed practice), students build their capacities to comprehend, explain, interpret, use, and evaluate various forms of literacy. Consistent with diverse ways of viewing the world, we have expressed place-based multiliteracies using an array of designs—as a circle, as a spiral pathway, through literal and metaphorical language, through matrices, through sensory experiences, and through a holistic philosophy that interconnects all aspects of life. Of course, there are many more possibilities, as we strive for teachers and students to be comfortable with the mystery of the unknown and the process of remembering who we are and where we came from, while seeing interconnections across the past, the present, and the possibilities for futures we design.

What can be learned in Honoring Tribal Legacies associated with the story of Lewis and Clark journey through the place-based multiliteracies framework? We can build cross-cultural understanding of how we got where we are. We can carry forward the “bridge building” among Tribal and non-Tribal peoples that occurred during the Bicentennial. We can see a more accurate, broad, and balanced picture of our history as a nation. As we take students through the journey of Lewis and Clark from the viewpoints of Tribal peoples, we enlarge their worldviews. To borrow the words of historian, James Ronda, “Journeys should change us. Whether we are Natives or newcomers, this journey—those voices—these stories should expand and enrich us. All of this should enlarge us, bring us face to face with wonder and strangeness” (Moody, 2003, p. 4). As we bring an enlarged range of perspectives together—both Tribal and non-Tribal—we have a greater pool of options available to find long-term solutions to challenges, such as protection and wise use of our natural resources, sustainable health care, and education that meets the needs of a diverse student population. Our current students will be the problem-solvers of the future—broadening their perspectives holds potential for their futures, as well as for the futures of the next seven generations.



Superintendent Gerard Baker (L) joins Tribal Chairman Tex Hall (Three Affiliated Tribes) during the Grand Entry of the PowWow honoring the Lewis and Clark “Home of Sakakawea” Signature Event, New Town, North Dakota, August, 2006.

References

- Basch, R. (2011). *The journey of the Clatsop–Nehalem canoe*. Seaside, OR: Clatsop–Nehalem Confederated Tribes.
- Basch, R., & Basch, R. (2006). The ceremony at Ne-ah-coxie. In A. M. Josephy, Jr. (Ed.), *Lewis and Clark through Indian eyes: Nine Indian writers on the legacy of the expedition* (pp. 163–182). New York, NY: Vintage Books.
- Carpenter, C., & Aya, K. (2004). *Blue beads: A story of friendship*. Seaside, OR: Blue Beads Productions.
- CHiXapkaid, Banks-Joseph, S. R., Inglebret, E., McCubbin, L., Sievers, J., Bruna, L., Galaviz, S., Anderson, A., Egan, E., Brownfield, S., Lockhart, M., Grogan, G., & Sanyal, N. (2008). *From where the sun rises: Addressing the educational achievement of Native Americans in Washington State* (309 pp., plus an Executive Summary, 24 pp.). Delivered to the Washington State Legislature via the Washington Governor’s Office of Indian Affairs, December 30, 2008. Available at <http://www.goia.wa.gov/Links-Resources/NativeAmericanAchievementReport.pdf>
- CHiXapkaid, Inglebret, E., & Krebill-Prather, R. (2011). *Views and perspectives of Native educational success: A national survey of American Indians, Alaska Natives, Native Hawaiians and Others Associated with Indian education*. Washington, DC: National Indian Education Association.
- Circle of Tribal Advisors, Lewis & Clark Bicentennial. (2005). *A guide to visiting the lands of many Nations & to the Lewis & Clark Bicentennial*. Omaha, NE: Author. <http://lewisandclarktrail.com/eventdate/visitingIndianCountry.pdf>
- Circle of Tribal Advisors, Lewis & Clark Bicentennial. (2009). *Enough good people: Reflections on Tribal involvement and inter-cultural collaboration 2003–2006*. Gunnison, CO: Enough Good People. <http://www.lc-Triballegacy.org>
- Cleary, L. M., & Peacock, T. D. (1998). *Collected wisdom: American Indian education*. Boston: Allyn and Bacon.

- Common Core State Standards Initiative. (2010a). *Common core state standards for English language arts and literacy in history/social studies, science, and technical subjects*.
www.corestandards.org/ELA-literacy/
- Common Core State Standards Initiative. (2010b). *Common core state standards for English language arts and literacy in history/social studies, science, and technical subjects, Appendix A: Research supporting key elements of the standards, glossary of key terms*.
www.corestandards.org/ELA-literacy/
- Cope, B., & Kalantzis, M. (2009). Multiliteracies: New literacies, new learning. *Pedagogies: An International Journal*, 4, 164–195.
- Deloria, V., Jr. (2001). Power and place equal personality. In V. Deloria, Jr., & D. Wildcat, *Power and place: Indian education in America* (pp. 21–28). Golden, CO: Fulcrum.
- Doyle, M. A. (2012). *Baleiichiwee (the story of understanding): The conscientization processes of effective teachers of American Indian students*. Unpublished doctoral dissertation, Montana State University, Bozeman.
- Fifer, B. (2000). *Going along with Lewis & Clark*. Helena, MT: Farcountry Press.
- Gilman, C. (2003). *Lewis & Clark: Across the great divide*. Washington, DC: Smithsonian.
- Gruenewald, D. A., & Smith, G. A. (2008). *Place-based education in the global age: Local diversity*. New York, NY: Lawrence Erlbaum Associates.
- Hartley, A. H. (2004). *Lewis and Clark lexicon of discovery*. Pullman, WA: Washington State University Press.
- Healy, A. (2008). *Multiliteracies and diversity in education: New pedagogies for expanding landscapes*. South Melbourne, Victoria, Australia: Oxford University Press.
- Inglebret, E., CHiXapkaid, & Pavel, K. (2011). Multiliteracies: An approach for framing service delivery for Indigenous children. *Perspectives on Communication Disorders and Sciences in Culturally and Linguistically Diverse Populations, American Speech-Language-Hearing Association Division 14*, 8(2), 48–53.
- Kalantzis, M., & Cope, B. (2012). *New learning: Elements of a science of education*. Cambridge University Press.

- Knapp, C. E. (2005). The “I-thou” relationship, place-based education, and Aldo Leopold. *Journal of Experiential Education*, 27(3), 277–285.
- Kress, G. (2003). *Literacy in a new media age*. London: Routledge.
- Lomawaima, K. T., & McCarty, T. L. (2006). *To remain an Indian: Lessons in democracy from a century of Native American education*. New York, NY: Teachers College Press.
- Martin, K. (2008). The intersection of Aboriginal knowledges, Aboriginal literacies, and new learning pedagogy for Aboriginal students. In A. Healy (Ed.), *Multiliteracies and diversity in education: New pedagogies for expanding landscapes* (pp. 58–81). South Melbourne, Victoria, Australia: Oxford University Press.
- Meadows, S. J., & Prewitt, J. S. (2003). *Lewis & Clark for dummies*. Indianapolis, IN: Wiley Publ., Inc.
- Merriam-Webster Online. (2013). *Merriam-Webster online: Dictionary and thesaurus*. www.merriam-webster.com
- Moody, J. (2003). We proceeded on: The Bicentennial hits the road. *People, Land & Water Special Issue, Lewis & Clark Bicentennial 2003–2006*, 9(6), 3–4.
- Neihardt, J. G. (1972). *Black Elk speaks*. Albany, NY: State University of New York Press.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–93.
- Pearson, C. (1959). *Nehalem Tillamook tales*. Eugene, OR: University of Oregon Books.
- Ronda, J. P. (2002). *Lewis and Clark among the Indians*. Lincoln, NE: University of Nebraska Press.
- Ronda, J. P. (2007). Lewis and Clark reconsidered: Some sober second thoughts. In F. E. Hoxie & J. T. Nelson (Eds.), *Lewis and Clark and the Indian Country: The Native American perspective* (pp. 343–352). Urbana: University of Illinois Press.
- Singleton, J. (2012). *Head, heart, and hands in place-based learning: Transformational learning experiences in nature for sustainability values*. Saarbrücken, Germany: LAP Lambert Academic Publishing.

- Sobel, D. (2005). *Place-based education: Connecting classrooms and communities*. Great Barrington, MA: The Orion Society.
- Tubbs, S. A., & Jenkinson, C. S. (2003). *The Lewis & Clark companion: Encyclopedic guide to the voyage of discovery*. New York, NY: Henry Holt & Co.
- U. S. National Park Service. (2012, Sept.). *Foundation document: Lewis and Clark National Historic Trail*. Omaha, NE: Author.
www.nps.gov/lecl/parkmgmt/upload/LECL_Foundation_Document_LowRes_September2012.pdf
- Warriner, G. (2005). *A Clatsop winter story*. Astoria, OR: Lewis and Clark National Historic Park & Camera One. www.archaeologychannel.org/video-guide/video-guide-menu/video-guide-summary/225-a-clatsop-winter-story
- Westby, C. (2010). Multiliteracies: The changing world of communication. *Topics in Language Disorders*, 30(1), 64–71.
- Westby, C., & Inglebret, E. (2012). Native American and worldwide Indigenous cultures. In D. E. Battle (Ed.), *Communication disorders in multicultural and international populations* (pp. 76–101). St. Louis, MO: Elsevier.

CHAPTER 3

Differentiated Instruction



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Differentiation advocates teaching each student as an individual worthy and capable of handling a meaning-rich curriculum. It also advocates an environment in which each student comes to understand, own, and value his or her capacity as a learner. (Tomlinson & Imbeau, 2010, p. 77)

Introduction

A differentiated instructional approach builds the capacity of each student through genuine engagement in holistic learning that encompasses intellectual and emotional development (Tomlinson & Imbeau, 2010). The unique strengths, abilities, and needs of each student are considered as educators from various realms, including general, special, and gifted education, unite to achieve a common goal of creating equity in access to high-quality instruction and intervention (Ernest, Thompson, Heckaman, Hull, & Yates, 2011; Jones, Yssel, & Grant, 2012; Tomlinson & McTighe, 2006). Members of the educational team are proactive in designing environments that provide multiple pathways for learning (Huebner, 2010; Sousa & Tomlinson, 2011). Of particular importance, learning extends beyond the classroom walls to connect students with the identities, values, worldviews, interests, and life experiences they bring from their home communities (Silvers & Shorey, 2012; Tomlinson, 2008). Educators implementing differentiated instruction recognize their potential to impact each student's life as they design learning opportunities that mirror the complexity of real world issues students will grapple with as they become adults.

How does differentiated instruction move us forward in Honoring Tribal Legacies? First, it is important to recognize that differentiated instruction is not a new idea. It has existed in Native communities since time immemorial. The tenets of differentiated instruction were reflected in findings of a national study (CHiXapkaid, Inglebret, & Krebill-Prather, 2011) that resulted in the conceptualization of Native American student success as:

a process that takes place across all of the contexts of daily life – home, community, and school. Educational success is reflected when the unique talents and gifts that EVERY student brings to the educational process serve as a foundation for learning. As part of the learning process, Native students build their knowledge of Native culture, history, and

language. Fostering the development of Indigenous knowledge, talents, and gifts then enhances the capacity to ‘give back’ to their communities. As students give back, a real purpose frames their learning and connects them to their families and communities. A sense of accomplishment and interconnectedness leads to a state of health and wellbeing reflected in all areas—mental, physical, spiritual, and emotional. (p. 7)

In the following discussion, we draw parallels between differentiated instruction and this evidence-based conceptualization of Native American student success.

Differentiated instruction (Tomlinson & Imbeau, 2010) and Native educational success (CHiXapkaid, Inglebret, & Krebill-Prather, 2011) are grounded in a systemic view of education. Teaching is approached as a holistic, multidimensional process that builds upon the strengths, talents, and gifts that each student possesses. Differentiated instruction and Native educational success hold equity in access to high-quality instruction as a priority. Thus, student needs are met through the coordinated efforts of educational team members who create learning opportunities that can be experienced through diverse pathways. A rigorous differentiated instructional approach connects to the personal experiences, interests, and worldviews of students, thereby extending logically to the inclusion of Native culture, history, and language. The conceptualization of Native student success holds promise for enhancing differentiated instruction through its focus on fostering health and wellbeing in a holistic manner, while adding physical and spiritual dimensions to enhance intellectual and emotional growth. In addition, students are interconnected with their communities, as they learn about who they are, where they have come from, and the capacities they have to “give back” locally and to society at large.

Differentiated instruction (Tomlinson & Imbeau, 2010) and the conceptualization of Native American student success (CHiXapkaid, Inglebret, & Krebill-Prather, 2011) also clearly align with the place-based multiliteracies (PBM) framework, described in detail in the *Place-Based Multiliteracies Framework* chapter. PBM conveys learning holistically and in a manner that is centered on the elements of a particular place. The knowledge, skills, sense of self, and sense of place that students bring to learning from their homes and communities serve as the foundation for new

learning to occur through differentiated channels. Students are guided on a journey of discovery as they explore complex relationships among the elements of a particular place. They do this through engagement with a wide array of high quality texts accessed through multiple senses and differentiated pathways that intertwine with their strengths, talents, gifts, and needs. As learners construct meaning related to the health and wellbeing of a particular place, they gain insight into their own mental, physical, spiritual, and emotional health. Synergy is catalyzed as differentiated forms of literacy are combined to spark the generation of potential solutions to real-world challenges. Out of this grows appreciation and respect for differentiated ways of knowing, ways of being, and ways of doing (Martin, 2008). As members of learning communities, students gain a sense of accomplishment, belonging, and “giving back” as they Honor Tribal Legacies in the context of a particular place. Through the overlapping frameworks of PBM, differentiated instruction, and the conceptualization of Native American student success, learning is meaningfully connected to individual lives, communities, and society.

This chapter explores various dimensions of differentiated instruction as they relate to Honoring Tribal Legacies. As a starting point, a metaphor of a teacher and students weaving a story blanket is used to illustrate the overall system of differentiated instruction. Considerations in creating a learning environment conducive to meeting the basic and differentiated needs of students are then presented. This is followed by discussion of the primary elements of differentiated instruction. These involve: (a) content—what students are expected to learn, (b) process—how they are expected to learn it, and (c) product—how they will show what they have learned (Tomlinson & Imbeau, 2010). Examples of how each element can be enacted in Honoring Tribal Legacies are provided.



Bald Eagles in Rocky Mountains.



Beaver's Purdy Creek Weaving by sa' hLa mitSa (Dr. Susan Pavel). Photograph by Shelly Hanks.
Materials: Beaver fur, sheep's wool.

Purdy Creek flows into the Skokomish River. The beavers make their home along Purdy Creek where you can find purple iris and yellow skunk cabbages. The colors of this unique blanket are an acknowledgement of Purdy Creek, which is one of my favorite drives near the Hood Canal. The blue waves represent the flow of water, the purple triangles showcase the Indigenous iris, the yellow and white squares portray the skunk cabbage, and the green spaces are indicative of the lush vegetation that grows along Purdy Creek. The beaver fur is a very traditional material used to embellish the blankets of old and used in a contemporary way to acknowledge that source.

sa' hLa mitSa (Dr. Susan Pavel)

Weaving the Story of Differentiated Instruction

Differentiated instruction unites general educators from a variety of disciplines, special and gifted educators, speech-language pathologists and other allied professionals, school administrators, students, families, and community members in pursuit of a common goal fostering access and

achievement for all students. In parallel, the Honoring Tribal Legacies project represents a collaborative endeavor coalescing the world knowledge, talents, gifts, and perspectives of team members from a diverse array of backgrounds—educators from preK-12, higher education, and the National Park Service, Tribal elders, librarians, archive specialists, a historian, a videographer, cultural specialists, mapping experts, and artists. To build relationships and promote collaboration and synergy among the team members, we have had opportunities to meet face-to-face at various points during the Honoring Tribal Legacies project.

One of our gatherings brought team members together to contribute to the weaving of a story blanket. We were led by sa' hLa mitSa (Dr. Susan Pavel), a Coast Salish master weaver, who initiated us into the process by explaining the significance of what we were about to do. She shared the following. Weaving grew out of ancestral knowledge encompassing the natural and spiritual worlds. The traditional weaver drew from scientific knowledge of chemistry and ethno-botany, as he or she identified, selected, and prepared materials, such as the dyes and fibers. At the same time, the weaver recognized these materials as spiritual gifts provided through the generosity of the plant and animal peoples. As we opened ourselves to the experience, we would be able to feel rhythms of the earth, such as waves repeatedly tapping the shore or the day emerging with the sun rising high in the sky and then the darkness enveloping us as the sun slid behind the hillside. Weaving would immerse us in the patterns of life, showing us the interconnections among all things and bringing us into the rhythmic flow of time from the past to the present to the future. As such, weaving was viewed as going beyond being an activity to constituting a lens for viewing the world.

After a pause for reflection on our role in Honoring Tribal Legacies, it was time to participate actively in the weaving of the story blanket. In preparation for us, as she set up the loom, Susan had considered the context for our learning experience. To facilitate the weaving process for novices, Susan had threaded yarns on the loom in a vertical direction. These were referred to as the warp. In addition, she placed a bench in front of the loom so that each of us, in our role as learners, could sit next to her and receive differentiated instruction through verbal cues, physical assistance, or encouragement as needed. We took turns weaving in the horizontal yarns, called the weft or

filling, as we told personal stories that would become part of the blanket. As we co-constructed the blanket, we absorbed its teachings. We could see the weakness of individual strands of yarn that became stronger as they were woven together from different directions. We understood that the blanket, as a whole, was dependent on the strength of each of our unique contributions, just as our families and communities, were strengthened by individuals coming together to achieve a common, unified purpose.

Metaphors are commonly used as teaching tools in Indigenous communities (Bergstrom, Cleary, & Peacock, 2003; LaFrance & Nichols, 2008). In this case, we use the metaphor of weaving to illustrate the differentiated instruction approach (Tomlinson & Imbeau, 2010). First, we prepare for the weaving process by creating physical and affective environments that facilitate learning. Then, we consider the prior knowledge and skills, strengths, preferences, needs, and interests that students bring to the learning situation. We understand that we need to be flexible, as we do not know for sure what is to come. Each student brings in his or her own yarn—nubby or smooth, thick or thin, tight or loose, bright or muted, solid or mixed colors, as well as many unique combinations that we have not even imagined. Next, we weave together the key elements of *content* and *process*. We initiate weaving by threading the warp yarn vertically as we provide access to meaningful curricular content. Next, instructional processes that integrate diverse ways of knowing, doing, and being (Martin, 2008) are woven horizontally to serve as the weft. Extended engagement in the weaving together of content (warp) and processes (weft) results in a multidimensional *product* built on a unified whole.

When a learning experience results in “an emotional ‘Aha!’ chemicals are released that stimulate the brain’s reward system and keep us motivated to keep learning. However, racing through an overpacked curriculum ... to take a high-stakes test raises anxiety and releases chemicals that shut down the brain’s higher-order processing. (Sousa & Tomlinson, 2011, p. 14)

Creating a Learning Environment Conducive to Differentiated Instruction

Just as with the act of weaving, differentiated instruction goes beyond the use of particular strategies to serve as a lens for seeing the world. Through this lens we see all students achieving educational success. Creating a learning environment for this to occur involves educational team members in examining their own beliefs regarding the purpose of education and understanding how these beliefs provide the foundation for viewing both the basic and uniquely differentiated needs of students.

Basic Student Needs. Learning is a multi-faceted process that encompasses more than cognitive growth and development to involve social, emotional, physical, and spiritual dimensions. Sousa and Tomlinson (2011) make reference to Maslow's hierarchy (1943) in emphasizing that student needs for safety and for physical health and wellbeing must be met before they are ready to learn. For example, it is important for the teacher to know if a student has come to school hungry or excessively tired and to have a means for addressing these concerns. The school environment should also promote safety by protecting students from bullying or teasing. When these fundamental needs are met, the next level of Maslow's hierarchy dominates behavior—the need for establishing a sense of belonging based on positive relationships with peers, teachers, and other adults in the learning environment. Research (CHiXapkaid, Inglebret, & Krebill-Prather, 2011; Doyle, 2012) involving Native students has identified relationships with teachers as a primary factor contributing to student academic achievement. When a student feels a sense of belonging in the school environment, Maslow's hierarchical framework moves each student toward fulfilling a need for self-esteem and to feel respected and valued by others. This then sets the foundation for the highest level of the hierarchy—the pursuit of self-actualization as students strive to meet their full potential.

In elaborating the worldview represented by differentiated instruction, Tomlinson (2003) highlights the need to go beyond a focus on intellectual growth to be responsive to the basic needs of students in a manner consistent with Maslow's hierarchy (1943). Tomlinson asserts that all

students need to feel a sense of: (a) affirmation, (b) contribution, (c) power, (d) purpose, and (e) challenge. *Affirmation* occurs when students feel accepted, when their worldviews and values are represented in the curriculum, their strengths and gifts are recognized, and they feel physically and emotionally safe. *Contribution* refers to each student’s understanding that he or she has the capacity to “give back” by using individual strengths and gifts to make a real difference in the local community and the broader world. *Power* involves comprehension of school expectations and the means for achieving these expectations. This then serves as a foundation for each student gaining a sense of control over his or her life. *Purpose* reflects the meaning underlying a learning experience and its authentic connection to daily life. *Challenge* takes students to new levels of learning that involve risk-taking, stretching their thinking, and seeking ways to make their dreams become reality. These five elements together combine to lead students to a sense of safety, self-esteem, confidence, and toward the highest level of Maslow’s (1945) hierarchy—self-actualization—and they provide the basic foundation for differentiated instruction.

Teachers should continually ask, “What does this student need at this moment in order to be able to progress with this key content, and what do I need to do to make this happen?” (Tomlinson & Imbeau, 2010, p. 14)

Differentiated Student Needs. Students come to today’s classrooms with a wide array of learning and life experiences. This diversity necessitates that the educational team members take time in getting to know students as individuals who bring variations in: (a) prior knowledge and skills; (b) strengths, preferences, and needs; and, (c) areas of interest (Tomlinson & Imbeau, 2010). The creation of learning opportunities that realistically challenge students requires team members to be aware of the proximity of each student’s *prior knowledge and skills* related to key content (Vygotsky, 1962). Proactively planning for multi-directional movement along a continuum for advanced and emerging learners stretches the capacity of each, while ensuring learning goals are attainable. Recognizing and valuing each student’s unique *strengths, talents, gifts, and preferences* affirms his or her self-worth, while tapping into the capacity of each to make positive and authentic

contributions to learning in the classroom environment, as well as to “giving back” to the broader community. Understanding and being responsive to the individual needs of students requires educational team members to design systems of support that ensure educational expectations are clearly communicated and a learning environment exists where desired outcomes can be realistically achieved. At the same time systems for extending expectations are developed so that students have the opportunity to seek out learning challenges, to explore possibilities for making their dreams become reality, and to achieve increasingly greater levels of self-awareness and independence. Incorporating students’ *areas of interest* holds potential for enhancing their motivation, as they see the underlying purpose and relevance of what they are learning in their daily lives.



Painting by Monica Sanyal.

Ponderosa Pine

The painting shows the sun rising to unveil the grandeur of the Ponderosa Pine. Mystery lies in the shadows waiting to be revealed by the morning light.

Content

Now that we have explored the worldview and learning environment that serve as a foundation for differentiated instruction, it is time to address the element of content or what we expect students to learn. The following discussion highlights the importance of making content relevant to students' daily lives, as well as how we communicate value (or lack of value) through what we choose to include in curricular content. This is followed by a presentation of the enduring and essential content designed for the Honoring Tribal Legacies project. We connect to the analogy of weaving as students' prior knowledge and skills, strengths, preferences, and needs, and areas of interest become part of the vertical "warp" yarn of content.

A Question of Curricular Relevance. As was previously stated, differentiated instruction is responsive to the background, worldviews, and interests of students (Tomlinson & Imbeau, 2010; Tomlinson & McTighe, 2006). The Washington State Legislature (2005) has taken the position that:

. . . Indian students may not find the school curriculum, especially Washington state history curriculum, relevant to their lives or experiences. In addition, many [non-Indian] students may remain uninformed about the experiences, contributions, and perspectives of their Tribal neighbors, fellow citizens, and classmates. The legislature further finds that the lack of accurate and complete curricula may contribute to the persistent achievement gap between Indian and other students. (RCW 28A.345.070, p. 2)

Results of a national study of Native student success (CHiXapkaid, Inglebret, & Krebill-Prather, 2011) indicated that 70% of participants associated with Indian education felt that K-12 school systems were not meeting the educational needs of Native students. An identified priority was to prepare Native students for living in both Native and non-Native worlds. This reflects a need for students to be engaged in learning that represents multiple viewpoints of history and contemporary life, such as the story of Lewis and Clark and their expedition's long-term effects on Tribal communities.

Communicating Value. The omission of particular content from educational curriculum and instruction communicates that it is not valued. While accounts of the Lewis and Clark journey have been represented in K-12 curricula on a broad scale for years, associated stories have primarily been articulated through the perspectives of William Clark, Meriwether Lewis, and other members of the expedition. As stated by Germaine White (2002), a Salish leader, “Early accounts of the Lewis and Clark story largely excluded or dismissed the Native peoples encountered by the explorers—people who had been here for millennia” (p. 44). As a result, students were sent the message that Tribal perspectives and contributions to the journey were not valued. The Lewis and Clark Bicentennial (2003–2006) changed that message. Through the advocacy of the Circle of Tribal Advisors, involvement of Tribal peoples became the number one priority of the National Council of the Lewis and Clark Bicentennial Commemoration (Circle of Tribal Advisors, 2009). As a consequence, we now have a plethora of materials presenting Tribal perspectives on the Lewis and Clark expedition available for infusion into curricula and instruction. These materials include a wide range of videotaped presentations, books, articles, websites, illustrations, artwork, photographs, audiotapes, music and sound recordings, live and virtual exhibitions, maps, road signs and displays, interpretive centers, place names, stories, artifacts, symbols, and much more. Integrating these resources into differentiated instruction holds promise for promoting a more balanced portrayal of the Lewis and Clark expedition, as well as for affirming the contributions that Native Americans have made to our society.

Enduring and Essential Content. Our intention in guiding the design of curriculum and instruction Honoring Tribal Legacies is to engage both Native and non-Native students with high-quality, rigorous *content* that is relevant to their daily lives and local communities. At the same time, we want students to see the relationships between what is happening locally to the complexity of regional, national, and global concerns and decision-making through time. To accomplish this, we asked the question, “What content is enduring and essential for students to learn in Honoring Tribal Legacies?” In response we designed Enduring Understandings and Essential Questions that serve as the “warp” yarns of curriculum content in the differentiated instruction approach, which is

in alignment with the Big Idea of Honoring Tribal Legacies along the Lewis and Clark National Historic Trail. These are summarized below and presented fully in the chapter, *Curricular Schema and Curriculum Expressions*.

Enduring Understandings

- ⊗ A diversity of American Indian peoples were the original inhabitants of North America and have made significant contributions to the U.S. over time and continue to do so today.
- ⊗ History can be described and interpreted in various ways and from different perspectives.
- ⊗ Knowledge of cultural, environmental, political, social, and economic factors affects how we make sense of a particular place.
- ⊗ Specific places are affected by past, present, and future events occurring locally, regionally, nationally, and globally.
- ⊗ Decisions that are made about a place at a particular time will affect the status of that place for years to come.

Essential Questions Aligned with Trail/Tribal Themes

- ⊗ Traces of the Past Observed Today—What was life like before Lewis and Clark?
- ⊗ Encountering Indigenous Peoples—What happened during the Lewis and Clark journey?
- ⊗ Unity through History—What happened during the last two hundred years?
- ⊗ What are we going to do in the future?

In differentiated instruction, the content associated with the Enduring Understandings and Essential Questions for each teaching (curriculum unit) generally remains the same across students. Some exceptions may occur, such as those for emerging learners who need to go back to previous content before moving forward or for advanced learners who move forward prior to their classmates. Some students may have Individualized Education Plans (IEPs) that require changes to the actual content (Tomlinson & Imbeau, 2010).

Differentiated instruction involves proactive planning so that students can access content associated with Enduring Understandings and Essential Questions through multiple pathways.

The key word here is proactive, as educators anticipate a range of student strengths and needs and assemble materials ahead of time in preparation for learning (Tomlinson & McTighe, 2006). During this process, consideration is given to student differences in prior knowledge and skills, strengths, preferences, and needs, as well as their areas of interest. The underlying goal is to hold high expectations for all students, while at the same time ensuring that the content is comprehensible for each. Various strategies can be used to achieve this.

Prior Knowledge and Skills. To address variations in prior knowledge and skills, text sets of written materials representing diverse readability levels can be compiled. Readability is associated with multiple dimensions of written text complexity, including quantitative and qualitative attributes, as well as reader and task considerations (Common Core State Standards Initiative, CCSSI, 2010). Several different computer programs can be used to determine quantitative text complexity through measures, such as word frequency, sentence length, and cohesion (Council of Chief State School Officers & National Governors Association, 2010). Qualitative measures involve human judgments of attributes, such as levels of meaning, structure, language conventionality, and knowledge demands based on life experiences and familiarity with specific literary genres and academic disciplines (CCSSI, 2010). Quantitative and qualitative dimensions of text complexity can be determined ahead of time, based on an analysis of the text itself. Within particular learning situations, educators go further in matching a text to the characteristics of a specific reader and task requirements. (While it is beyond the scope of this chapter to describe the methods for determining text complexity, more detailed information regarding this process can be found in the Common Core State Standards, Appendix A, CCSSI, 2010).

As a part of differentiated instruction, educators often compile a text set of graduated readability levels so that learners can move along a continuum to either easier texts or to more difficult texts that provide access to key content. An example of a graduated text set (Inglebret, 2014; Inglebret, Banks-Joseph, & Matson, 2014) derived from storybooks associated with the Northwest Native American Reading Curriculum (Constantino & Hurtado, 2006; Office of the Superintendent of Public Instruction, Washington State, 2002) is presented in Table 1.

Table 1. Example of a Graduated Text Set Focused on a Specific Content Area

Content Area	Grades K-1	Grades 2-3	Grades 4-5
Canoe Traditions	<i>Shovel-Nose Canoe</i> by Pascua	<i>Look What I Found!</i> by Jainga	<i>A Message from the Cedar Tree</i> by Egawa
	<i>Ocean-Going “Fishing” Canoe</i> by Pascua	<i>Herbie and Slim Nellie’s First Journey</i> by Egawa	<i>The Building of a Canoe</i> by the Tulalip Tribe
	<i>In Our Canoe</i> by Jainga	<i>The Life Cycle of a Canoe</i> by Culpepper	<i>The Challenge of the Paddle to Seattle</i> by Marich and Bragg
	<i>Canoe, Canoe, What Can You Do?</i> by Jainga	<i>Sand Flea in the Side of a Canoe</i> by Pascua	

These storybooks might be integrated into Honoring Tribal Legacies teachings. It can be seen that students are provided access to content regarding canoe traditions through a set of topic-focused reading materials representing a range of readability levels. Students should be encouraged to seek content within their zone of proximal development (Vygotsky, 1962) as they strive to meet high expectations for their learning and to promote continued growth in their reading skills.

Strengths, Preferences, and Needs. The place-based multiliteracies (PBM) framework, presented in detail in the chapter, *Place-Based Multiliteracies Framework*, provides a means to match learner strengths, preferences, and needs with various text types underlying specific learning opportunities. The PBM approach goes beyond written text to encompass a broad range of texts—inclusive of verbal, recorded, constructed, or observed items—that represents a meaning (Healy, 2008). Examples of texts include patterns of nature, stories told through artwork, music, the oral tradition, tools of survival and daily life, written symbols, logos, and various forms of digital media. As teachers and students work together to grapple with real-world issues, text sets are constructed that represent a wide array of text types. Students are then provided opportunities to explore content through a diverse text set using an array of modes, including visual, auditory, tactile, spatial, smell/taste, movement/gesture, linguistic, and spiritual. Use of particular modes is guided

by the underlying purpose of a specific learning episode, while individual preferences, strengths, and needs can be simultaneously considered. Preferred or familiar modes may provide a starting point but it is also important to stretch learners to explore less preferred or unfamiliar modes to increase breadth of understanding and skills.

An example of a text set that grew out of a relationship with Clatsop Tribal members and experiences of a particular “place” is included in the *Place-Based Multiliteracies Framework* chapter. This text set includes written literary, informational, and synthetic texts (combining attributes of both literary and informational texts), as well as websites, photographs, videotaped presentations and stories told through the oral tradition, hands-on materials available in a traveling trunk, and suggested field trips that provide opportunities to interact with elements of the natural and built environments. An additional text set involving learning materials pertaining more broadly to the Lewis and Clark National Historic Trail can be found in the teaching, *Honoring Tribal Legacies in Telling the Lewis and Clark Story*. Both of these text sets are designed to integrate a full range of modes for student exploration. Thus, they hold potential for being responsive to individual learner strengths, preferences, and needs. Further examples of text sets represented in featured Honoring Tribal Legacies teachings (curriculum units) are provided in Table 2. More detailed descriptions of the specific texts are included in each of the identified teachings.

Table 2. Text Sets Represented in Each of the Featured Honoring Tribal Legacies Teachings

Teaching (Curriculum Unit)	Grade Level	Text Sets Representing a Range of Place-Based Multiliteracies
<i>Discovering Our Relationship with Water</i>	Pre-K	Tribal homelands, video of flowing water, songs, place names and words for water spoken in Indigenous languages, water in various forms, discovery journals, Lewis and Clark journal quotes, maps, winter counts, calendars, websites, video and audio-recordings about water, outdoor sites, float and sink objects with a chart, illustrations, photographs, outdoor materials for building boats, sand or clay for building a landscape, quote from an Indigenous leader, diagram of water cycle, pH testing chart, read-aloud stories and books, Indigenous sign language and symbols.

Teaching (Curriculum Unit)	Grade Level	Text Sets Representing a Range of Place-Based Multiliteracies
<i>Honoring Tribal Legacies in Telling the Lewis and Clark Story</i>	Intermediate (Grade 4)	Tribal homelands, written literary, informational, and synthetic texts, maps, road sign symbols, logos, journals, online exhibitions, videos, various forms of graphic organizers, dictionaries, photographs, circular and linear timelines, poetry, websites, music and environmental sound recordings, hands-on materials, instruments, and artifacts in traveling trunks, artwork, natural outdoor sites, Tribal museums, interpretive centers, or parks.
<i>A Thousand Celilos</i>	Intermediate (Grades 4-5)	Tribal homelands, local Tribal literature, experience, and oral history elevated to mentor text status, Indigenous place names, videotapes, photographs, websites, Prezi presentations, maps, original interviews with community members, journals, community observation records, illustrations, graphic organizers, slideshow.
<i>Exploring Your Community</i>	Intermediate (Grades 4-5)	Tribal homelands, journals, maps, posters, websites, voice recordings, photographs, petroglyphs, pictographs, primary documents (from The National Archives), secondary sources, videotapes, illustrations, paintings, Library of Congress and Dewey Decimal Systems, classroom archives, books, pamphlets, oral histories and interviews, artifacts, timeline of community people, buildings, and events, outdoor space.
<i>Sx^wiwis (The Journey)</i>	Secondary	Salish homelands, maps, readings, video-clips, legislative documents, Salish place names text, video-clips of elders speaking, images of plants, Salish Seasonal Round, Salish calendar, audio-files, quotes from interviews with Tribal members, meeting minutes, photographs, Tribal cultural department narrative, books, poems, coffee table books on landscapes, thesaurus, Lewis and Clark journal entries about the Salish, Salish oral histories, website presenting how American Indian artists responded to the Lewis and Clark Bicentennial through art, dramatic readings from journals and oral histories.

Teaching (Curriculum Unit)	Grade Level	Text Sets Representing a Range of Place-Based Multiliteracies
<p><i>Apsáalooke Basawua</i> <i>Iichia Shoope Aalaputtua</i> <i>Koorwiikooluk</i></p>	<p>Secondary</p>	<p>Apsáalooke homelands, Medicine Wheel, oral histories, Indigenous place names and naming systems, maps, photographs, archaeological data, community discussions, journals, creative art pieces, presentations, video and audio files, graphic organizers, websites, books, articles, recipes, medicines, ethnographies, ethno-poetry, interview transcripts, speeches, artifacts, dancing, music with transcribed lyrics.</p>
<p><i>Tribal Legacies of Pathfinding</i></p>	<p>Secondary Postsecondary</p>	<p>Tribal homelands, maps, application of software, such as Stellarium, digital presentations using Prezi or EdCanvas, readings, videotapes, websites, timelines, 3-D dioramas, Lewis and Clark journal entries, Indigenous place names, videotaped interviews with Tribal members, a skit, artwork, photographs, artifacts.</p>

Areas of Interest. Consideration of students’ areas of interest can facilitate their active engagement in learning experiences. Sousa and Tomlinson (2011) describe interest as “a feeling or emotion that causes an individual to focus on or attend to something because it matters to that individual. Topics, events, or instances that are interesting to a person draw and hold that person’s attention. They evoke curiosity or result in fascination” (p. 112). The featured Honoring Tribal Legacies teachings (curriculum units) are designed to be relevant to students’ daily lives and local communities and, thus, hold potential for connecting with student interests. For example, through the teaching, *Discovering Our Relationship with Water*, the topic of water is explored through inquiry and hands-on activities that connect children in early learning programs with their immediate physical environment. In addition to this teaching, Appendix A contains a water education resource, *Waterways Connect Us*, that identifies ways for older students to connect with water resources, such as through volunteer ecological restoration projects and water quality monitoring in their geographic areas.

An early iteration of an Honoring Tribal Legacies teaching that can tap into student interests involves the exploration of flags. A *Flag Curriculum* is included in Appendix B. This curriculum explores the evolution of flags and their designs starting with the U.S. flag and then focusing on a state and a Tribal flag that are of interest to students. Students create their own flag as they explore the concept that flags represent the identities and values of their designers. The *Flag Curriculum* links to the border design of the opening page of the Tribal Legacies website at www.lc-Triballegacy.org, and the 65 Tribal flags that are featured there can be explored further through the Tribal flags webpage. This website allows students to select particular Tribal flags and examine the designs that are of interest to them.

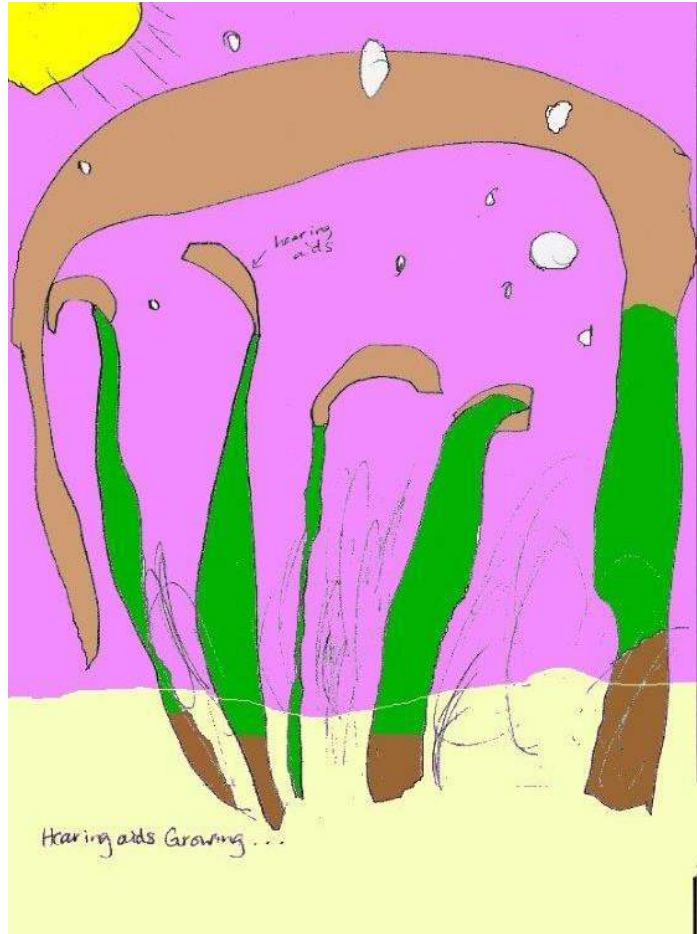
Process

We refer back to the analogy of weaving to elucidate *process* in the differentiated instruction approach. We have woven the content or vertical (warp) yarns that provide students with access to content via a variety of pathways. Now, we are prepared to weave in the horizontal (weft) yarns of process that represent how we expect students to learn. In this phase, educators provide opportunities for students to make meaning of content by using, applying, analyzing, and interpreting it in different ways. Through differentiated instruction students have the opportunity to tap into their varying ways of knowing, ways of doing, and ways of being (Martin, 2008), as they work toward mastery of key content.

There are a myriad of ways to differentiate the instructional process. As illustrated in Table 3, featured Honoring Tribal Legacies curriculum designers varied the context of learning from groupings involving the whole class, small teams, or pairs of students to assignments that are completed individually. Tomlinson and Imbeau (2010) highlight the importance of using all of these types of learning contexts. At the same time they join other authors (Owocki, 2012; Tharp, 2006) in emphasizing the role of small collaborative groups in building on student strengths, while supporting students who need extra interaction with content materials. Flexible groupings can allow for variations in membership depending on the task and individual student needs. Students

can also be provided opportunities to self-select the group they join for particular learning experiences.

Another feature noted in the student response patterns of the featured Honoring Tribal Legacies teachings is the interweaving of various types of language and literacy. We see examples of various forms of talking, reading, writing, using gestures, creating visuals, using graphic organizers, handling manipulatives, such as artifacts, and interacting with multimedia. This is consistent with the standards of effective pedagogy developed by the Center for Research on Education, Diversity, and



Hearing Aids Growing by Kaid' dub Pavel, age 5.

Excellence (Tharp, 2006) that emphasize the need to promote development of language and literacy across the curriculum. Furthermore, Pinnell and Fountas (2011) explain that “learning is different but interrelated across different kinds of language and literacy activities; one kind of learning enhances and reinforces the others” (p. 2). Thus, students can be engaged with forms of language and literacy that align with their strengths in certain activities and this will help build skills that can be transferred to areas of need for other activities.

Table 3. Examples of Learning Contexts and Student Response Types in Featured Honoring Tribal Legacies Teachings

Teaching	Grade Level	Examples of Contexts and Student Response Types
<p><i>Discovering Our Relationship with Water</i></p>	<p>Pre-K</p>	<p><u>Contexts</u>: large group, individual, indoor and outdoor <u>Talk</u>: answer and ask questions, describe, repeat words in Native languages, predict, chant, mimic sounds <u>Read</u>: patterns of nature <u>Write</u>: copy or write words <u>Gesture</u>: point, move to a location, act out, use sign language <u>Hands-on, manipulation</u>: touch/feel, create a 3-D model, handle objects in water and balloons filled with air, water, and ice, build a boat and a water landscape, cut and paste, test solutions, absorb water with a sponge <u>Visual</u>: draw <u>Graphic organizers</u>: charts <u>Music</u>: sing <u>Field trips</u>: visit a location on a map, find items in nature, collect samples of water from nature</p>
<p><i>Honoring Tribal Legacies in Telling the Lewis and Clark Story</i></p>	<p>Intermediate (Grade 4)</p>	<p><u>Contexts</u>: large group, small group, pairs, individual, indoor and outdoor <u>Talk</u>: discuss, describe, answer questions, present, analyze perspective and purpose <u>Read</u>: close, aloud, silently <u>Write</u>: journal entries (notes, sketches), observations, reflections, answer questions (full sentences or bulleted lists), compare and contrast, respond on sticky notes and posters with evidence to support main points and to summarize, project planning, research, design, and evaluation guides, thank you letter, persuasive letter <u>Gesture</u>: express emotions, point <u>Hands-on, manipulatives</u>: traveling trunks containing cultural artifacts <u>Visuals</u>: draw, create road sign symbol <u>Graphic organizers</u>: Venn diagram, concept map, KWL chart <u>Music</u>: handle and play instruments (traveling trunk)</p>

Teaching	Grade Level	Examples of Contexts and Student Response Types
<i>Honoring Tribal Legacies in Telling the Lewis and Clark Story (Cont.)</i>	Intermediate (Grade 4)	<p><u>Multimedia</u>: brochure, PowerPoint presentation, or videotaped dramatic presentation</p> <p><u>Field trip</u>: Tribal park, center, or museum</p> <p><u>Portfolio</u>: compile project materials</p>
<i>A Thousand Celilos</i>	Intermediate (Grades 4–5)	<p><u>Contexts</u>: large group, small group, pairs, individual, community</p> <p><u>Talk</u>: discuss, describe, answer questions, interview community members, share stories, infer, predict, compare and contrast, pronounce Tribal place names, analyze point of view, identify loaded words, present, panel discussion</p> <p><u>Read</u>: close, aloud, silently, envision</p> <p><u>Write</u>: journal entries (summarize and draw), summarize on a chart or Post-It notes (select the proudest Post-It note), community observation chart, exit slips, quiz, write a play, homework</p> <p><u>Gesture</u>: express emotions</p> <p><u>Hands-on, manipulatives</u>: foldables</p> <p><u>Visuals</u>: draw, exhibit</p> <p><u>Graphic organizers</u>: T-chart, Venn diagram, Then and Now chart</p> <p><u>Multimedia</u>: Prezi, Museum Box, PreZentit, VoiceThread, Glogster</p>
<i>Exploring Your Community</i>	Intermediate (Grades 4–5)	<p><u>Contexts</u>: large group, small group, pairs, individual, community</p> <p><u>Talk</u>: answer and ask questions, speak with expression, record responses on audio or videotape, interview, discuss, analyze point of view, compare and contrast, analyze</p> <p><u>Read</u>: aloud, silent</p> <p><u>Write</u>: journal entries (observe and draw), create and analyze primary and secondary sources, analyze photographs, write a play</p> <p><u>Gesture</u>: point to locations, mark maps, pantomime</p> <p><u>Hands-on, manipulatives</u>: handle artifacts and items from nature, sort objects, organize materials into file folders, create a booklet</p> <p><u>Visuals</u>: take photographs using a camera, cell phone, or tablet, draw illustrations and a map, create a display</p>

Teaching	Grade Level	Examples of Contexts and Student Response Types
<i>Exploring Your Community</i> (Cont.)	Intermediate (Grades 4–5)	<u>Graphic organizer:</u> timeline <u>Multimedia:</u> research websites, school culture fair
<i>Sx^wiwis (The Journey)</i>	Secondary	<p><u>Contexts:</u> large group, small group, individual, indoor and outdoor</p> <p><u>Talk:</u> discuss, answer and ask questions, analyze use of language, composition, writing style, and descriptive techniques (metaphor or simile), compare and contrast, define, follow cultural protocols, imagine and describe emotions, teach younger students, identify story genre, reflect, Socratic Circle, analyze for viewpoint and bias</p> <p><u>Read:</u> silent and mark potent passages</p> <p><u>Write:</u> place names, summarize, answer questions, identify tasks to be completed, student-generated rubric, respond to a passage, story, essay, poem, or statement, write an essay identifying and organizing knowledge, thoughts, and feelings about a place, journal entries, Four Square</p> <p><u>Gesture:</u> place sticky notes on significant portions of text, mark maps with arrow flags, find locations on a map, identify and express emotions, dramatic interpretation</p> <p><u>Hands-on, manipulatives:</u> host an event</p> <p><u>Visuals:</u> create a cultural map (serve as a source of knowledge and work of art), create illustration evoked by an oral story, add illustrations, photographs, or graphic design elements to an essay, analyze art and photographs</p> <p><u>Field trip:</u> visit, cleanup, reflect upon, and write about a significant place</p> <p><u>Graphic organizer:</u> semantic map, outline</p>
<i>Apsáalooke</i> <i>Basawua Iichia</i> <i>Shoope Aalaputtua</i> <i>Koorwiikooluk</i>	Secondary	<p><u>Contexts:</u> large group, small group, pairs, individual, community</p> <p><u>Talk:</u> discuss, answer questions, analyze, categorize, define, present, interview, analyze point of view, audio-recordings via cell phone</p> <p><u>Read:</u> silent, independent, aloud</p> <p><u>Write:</u> draft a research project, note-taking, similarities and differences, ethnopoetry, artist's statement, Leader's Log</p>

Teaching	Grade Level	Examples of Contexts and Student Response Types
<p><i>Apsáalooke Basawua</i> <i>Iichia Shoope Aalaputtua</i> <i>Koorwiikooluk</i> (Cont.)</p>	<p>Secondary</p>	<p><u>Hands-on, manipulatives</u>: mount photographs <u>Visuals</u>: take photographs with disposable camera or cell phone, analyze photographs <u>Music</u>: compose and critique lyrics <u>Multimedia</u>: research websites</p>
<p><i>Tribal Legacies of Pathfinding</i></p>	<p>Secondary Postsecondary</p>	<p><u>Contexts</u>: large group, small group, individual <u>Talk</u>: answer questions, explain, discuss, describe, compare and contrast, present, choral response <u>Read</u>: independent silent, cooperative research <u>Write</u>: journal entries, document analysis, reflection, short skit, Native and scientific nomenclature <u>Gesture</u>: Inside-Outside Circle, navigate National Park Service mapping program <u>Hands-on, manipulatives</u>: 3-dimensional project (timeline with dioramas) <u>Visuals</u>: draw maps, screen capture using Stellarium <u>Graphic organizer</u>: concept maps, flow maps <u>Multimedia</u>: EdCanvas, Prezi, Sumbaloo, PowerPoint, journal entries incorporating songs, art, mixed media, prose, interview, and film.</p>

Various strategies can also be used to promote learning for many students during the differentiated instruction process. Table 4 lists examples that relate to nine areas of instruction and skill-building and include the following: (a) building vocabulary, (b) drawing attention to key content and relationships, (c) maintaining attention in class, (d) supporting reading, (e) building student strengths, (f) self-monitoring of performance, (g) teacher-monitoring of performance, (h) targeted instruction and practice, and (i) connecting with community. Each area is followed by a description of specific strategies that can be used to facilitate learning for many students. It is beyond the scope of this chapter to provide a comprehensive list of strategies. An array of books available on this topic is cited at the end of the table.

Table 4. Strategies to Facilitate Learning for Many Students

Area	Strategy	Description
Building Vocabulary	Pre-teaching	Introduce key vocabulary words found in an episode prior to their use by providing a definition or description, model how the word might be used in a sentence, and ask students to make up a description in their own words.
	Word wall	Post key words on a wall along with definitions and illustrations; encourage students to refer back to these words regularly and incorporate them into classroom discussions and writing.
	Word bank	Have students write key words on a chart along with a definition and illustration (may also include related examples, non-examples, and use in a sentence).
	Illustration	Provide a sketch, photograph, or graphic in association with a word's meaning.
	Word part chart	Break words into prefixes, roots, and suffixes, identify the meaning of each part, and reassemble word-part meanings to determine the meaning of the full word.
	Contextual clues	Use surrounding words and sentences to determine the meaning of a word.

Area	Strategy	Description
Building Vocabulary (Cont.)	Music	Make up a simple musical jingle to sing the word and its meaning.
	Glossary/Dictionary	Refer to a glossary or dictionary to find word meanings (some online dictionaries provide illustrations along with a written definition).
	Review	After an episode, review the definition and description of key vocabulary and construct new sentences using the vocabulary in ways that relate to the episode's content.
	Extensions	Provide more difficult vocabulary lists for advanced students and facilitate use of a thesaurus to identify additional words that relate to the key vocabulary.
Drawing Attention to Key Content and Relationships	Advance and post organizers	Present what is to be learned prior to an episode in a way that shows the overarching content and structure and return to this at the end of the episode; this can serve as a whole-part-whole presentation (the "big picture" is presented first, followed by the parts, then go back to the "big picture").
	Analogies	Present key ideas using analogies, such as describing the finished "product" of a learning experience as a "weaving" with the warp serving as "content" and the weft serving as "process" to communicate the interconnectedness of the components of differentiated instruction.
	Concept maps	Use a diagram to show relationships among ideas, information, and concepts; typically, the core concept is located in the center and is connected to additional levels of circles by lines.
	Venn diagrams	Use intersecting ovals or circles to show similarities and differences between a small number of sets; the overlapping area represents similarities and outside areas represent differences.

Area	Strategy	Description
Drawing Attention to Key Content and Relationships (Cont.)	T-charts	Use a T-shaped, graphic organizer to examine and compare and contrast two aspects of a topic.
	Flow charts	Use a diagram to represent a process showing steps in boxes or circles and their order via arrows.
Maintaining Attention in Class	Think-pair-share	Have students think individually about a question, share thoughts with a partner, then share a response with the larger group.
	Language experience	Write student responses to prompts about a topic on a whiteboard, chart, or computer projection screen; read each response after writing it, and ask for further information or clarification, as appropriate.
	Multiple modes of teacher presentation	Use various modes to accompany verbal presentations, such as demonstrations, examples, photographs, illustrations, graphic organizers, music, and hands-on, and multisensory materials.
	Choice of design modes for learning experiences	Provide students with a range of design modes from which they can select, including visual, auditory, tactile, spatial, smell/taste, movement/gestural, linguistic, spiritual, and multimodal, as a focus for learning activities; see <i>Place-Based Multiliteracies Framework</i> for detailed suggestions.
	Choice of task	Provide various tasks that can be selected by students and completed in daily routines to learn specific content.
Supporting Reading	Interactive read-alouds	Read aloud complex texts and engage students in discussion prior to reading, at key points throughout the reading, and after the reading.

Area	Strategy	Description
Supporting Reading (Cont.)	Reading buddies	Pair older students with younger students for one-to-one reading time.
	Reading volunteers	Invite family and community members to participate in one-to-one reading experiences with students.
	Audio-recordings	Make audio-recordings of complex written texts and/or obtain audio-recordings of books through library resources and make them available for students to augment written texts; class notes may also be audio-taped to allow for repeated listening.
	Text-to-self connections	Have students think of and describe connections between the current text and previous textual forms they have read, such as stories told through words, artwork, music, the oral tradition, or digital media.
	Text-to-text connections	Write student responses to prompts about a topic on a whiteboard, chart, or computer projection screen; read each response after writing it, and ask for further information or clarification, as appropriate.
	Text-to-world connections	Have students think of and describe connections between the current text and the world around them, such as through stories told in the patterns of nature, tools of survival and daily life, across time linking past, present, and future, and in various contexts ranging from local to global.
	Shared readings	Have partners or a group of students read aloud simultaneously.
	Performance readings	Have students assume roles in reading while communicating meaning by varying their voices, such as through readers' theater.
	Post-it note markers	Have students place post-it notes on main points and supporting details of a text; post-it notes can be moved around as students reformulate their thinking.

Area	Strategy	Description
Supporting Reading (Cont.)	Think alouds	Have students describe their thoughts and strategies used while reading.
Building Student Strengths	Expert group jigsaw	Students are assigned to a cooperative group to learn about a topic then: (1) each member is assigned a part of the topic to research individually, (2) individual research is conducted on the subtopic, (3) students meet with another small group that has researched the same part of the topic to share ideas and plan for teaching the subtopic, (4) students return to their original group to teach the subtopic to their peers.
	Interest groups	Provide opportunities for students to select topics of particular interest to them and form a small group to examine that topic in-depth.
	Learning centers or work stations	Set up hands-on learning centers or work stations with materials focused on key content that can be accessed through diverse text types, such as reading and visual arts, writing and drawing, music and sounds, manipulatives and multimedia.
	Advanced materials	Bookmark highly complex texts and learning experiences, such as those provided on the docsteach.org website or on a university website; students may also select more challenging materials from a library or a range of other website resources.
	Learning contracts	Allow students to create a project proposal and learning goals that will be attained through the project; after receiving teacher approval, the student follows guidelines and criteria that are established jointly by the student and teacher.
	Teaching younger students	Provide older students with opportunities to teach the content they have learned to younger students.

Area	Strategy	Description
Building Student Strengths (Cont.)	Tiering	Allow students to work with common content through tasks representing various levels of difficulty; continua of difficulty might range from concrete to abstract, simple to complex, more to less structure, and more to less familiarity.
	Pacing	Adjust the timeframe for completion of assignments to optimize student performance.
Self-Monitoring of Performance	Self-identification of preferred learning strategies	Provide students with opportunities to experience various learning strategies and have them identify which of these work best for them.
	Student assignment charts	Post large charts listing assignments with due dates, criteria for success, and potential resources.
	Agendas	Provide a checklist of tasks designed for various knowledge and skill levels to be completed during independent work periods.
	Student project guides	Provide students with written checklists that can be used during each of the phases of a project, including planning, research, action, and evaluation.
	Rubrics	Use a set of criteria to guide and self-evaluate learning performance; specific descriptions of performance levels are typically embedded within a grid and are used to determine the extent to which learning objectives have been achieved.
	Metacognitive strategies	Provide explicit instruction in procedures that can be used to remember steps involved in performing specific tasks; mnemonics are often used to aid remembering the sequence of steps.
Teacher-Monitoring of Performance	Pre-assessment	Gather data at the beginning of the school year to determine the knowledge, skills, and mindsets that students bring to learning.

Area	Strategy	Description
Teacher-Monitoring of Performance (Cont.)	Formative assessments	Regularly measure student progress in meeting learning objectives.
	Observation notebook	Take notes while circulating through the classroom to identify students who may need to be supported or further challenged.
	Check-in schedule	Provide students with a regular schedule for reporting their progress toward meeting learning expectations.
Targeted Instruction and Practice	Guided reading	Provide explicit reading instruction for a small group with similar skill levels.
	Talk through	Talk through an assignment or idea with a student, breaking it down into doable steps.
	Mini-lessons	Provide brief lessons to address learning gaps observed during daily instruction; for example, a lesson involving further explanation or examples of the visual or spatial modes might be offered.
	Homework assignments targeting student needs	Tailor homework assignments to learning needs observed through student performance during daily instruction and routines.
Connecting with Community	Learn about students' backgrounds	Participate in community events; ask community members and/or a Tribal liaison to suggest accurate and authentic materials that can be used to learn about a particular community or Tribe, such as those presenting history, culture, and language.
	Classroom guests	Invite guest speakers from the community; involve students in interviewing community members.

Area	Strategy	Description
Connecting with Community (Cont.)	Intergenerational learning	Involve multiple generations in learning experiences ranging from elders to early learning (pre-K); for example, through a community garden project elders might share their knowledge of traditional plants, K-12 students might share what they have learned with children in Head Start, and all might be involved in planting and caring for the garden.
	Field trips	Visit sites in a community that contribute to learning about that “place;” examples might include trips to natural sites of significance or to Tribal museums, interpretive centers, or museums.
	Project-based learning	Organize essential content and skills so that they can be accessed through projects involving real-world issues; students can approach the topic in different ways but follow a shared timeline and assignment guidelines.

Sources: Bender (2012); Chapman & King (2011); Pinnell & Fountas (2011); Silvers & Shorey (2012); Sousa & Tomlinson (2011); Sprenger (2013); Tharp (2006); Thousand, Villa, & Nevin (2007); Tomlinson & Imbeau (2010); Tomlinson & McTighe (2006).

Product

As we consider the products generated by students in differentiated instruction, we again refer back to the analogy of weaving. We began with the vertical warp yarns (content), wove in the horizontal weft yarns (process), and now expect a multidimensional, interwoven product representing a unified whole. Tomlinson and Imbeau (2010) define the product of differentiated instruction as “how students demonstrate what they have come to know, understand, and are able to do after an extended period of learning” (p. 15). Implementation of the place-based multiliteracies framework, as described in the *Place-Based Multiliteracies Framework* chapter, results in a student-generated product that addresses real-life concerns for a real purpose and a real audience. The conceptualization of Native American student success (CHiXapkaid, Inglebret, & Krebill-Prather, 2011) focuses on building the capacity of learners to design products that allow them to “give

back” to their community and society at large. All involve an outcome that grows out of sustained engagement in the exploration of a complex and challenging problem in a manner that allows students to demonstrate their comprehension of enduring and essential content as they apply targeted skills.

As we consider the prior knowledge, skills, areas of interest, strengths, abilities, and needs of students, we can vary expectations regarding the products of differentiated instruction. The featured Honoring Tribal Legacies teachings represented in Table 5 demonstrate the diverse array of products that might be designed. A Discovery Journal or portfolio might be used to document learning progress over the duration of a teaching (curriculum unit). A new road sign symbol for the Lewis and Clark National Historic Trail might be designed. Students might create records modeled after those produced by Lewis and Clark and by Native peoples living along the Trail. A cultural map that is both a work of art and a source of knowledge can be constructed for use as a teaching tool for younger students. A social action project might be conducted that requires students to recognize injustice, explain its impact, devise an action plan, and document the outcomes of actions taken. As a final example, a three-dimensional product that integrates knowledge and skills associated with cartography, geology, ethnobotany, and human adaptive physiology might be constructed. Many other possibilities are presented in Table 5.



Bad River at LaFramboise Island, Pierre, South Dakota.

Table 5. Examples of Student Products Designed using the Featured Honoring Tribal Legacies Teachings

Teaching	Grade Level	Examples of Potential Student Products
<i>Discovering Our Relationship with Water</i>	Pre-K	A “Discovery Journal” documenting learning in each episode—responding to questions, such as “What has been your relationship with water today?” and to prompts, such as “Name some things that you see when you go to the lake/river/ocean.” Students draw maps, pictures of water in different states, and a water cycle, as well as record their conclusions about an experiment.
<i>Honoring Tribal Legacies in Telling the Lewis and Clark Story</i>	Intermediate (Grade 4)	A new symbol for the Lewis and Clark National Historic Trail that is inclusive of both Tribal and non-Tribal perspectives accompanied by a letter attempting to persuade Trail administrators to adopt the symbol.
<i>A Thousand Celilos</i>	Intermediate (Grades 4–5)	An oral presentation, a classroom gallery walk, a student-authored play, a panel discussion with community representation, a school hallway “Street Fair” with student displays, or a school-wide “museum” exhibition based on findings of a research project focused on a local “place.”
<i>Exploring Your Community</i>	Intermediate (Grades 4–5)	Student-led creation of records, modeled after those produced by Lewis and Clark expedition members and Native people living along the Lewis and Clark National Historic Trail, along with creation of a classroom library and archives incorporating various primary and secondary resource types representing a range of viewpoints. A booklet, play, documentary, webpage, visual display (e.g., diorama or exhibit), or a school culture fair.

Teaching	Grade Level	Examples of Potential Student Products
<p><i>Sx^wiwis (The Journey)</i></p>	<p>Secondary</p>	<p>A cultural map of a small part of “Salish territory,” the Bitterroot Valley, that is a work of art, as well as a source of knowledge, suitable for use as a teaching tool for younger students.</p> <p>An illustration evoked by an elder’s story of relationship to a place.</p> <p>Clean up of a particular place followed by composition of an essay with illustrations or photographs that identifies and organizes knowledge, thoughts, and feelings evoked by the place.</p> <p>Dramatic interpretations of perspectives represented in Salish oral histories regarding the Lewis and Clark expedition and in Lewis and Clark journal entries about the Salish people.</p> <p>An essay on what traditions of hospitality communicate about us in association with a student-planned and hosted event that enacts hospitality protocols with invited guests.</p>
<p><i>Apsáalooke Basawua Iichia Shoope Aalaputtua Koowiikooluk</i></p>	<p>Secondary</p>	<p>A social action project requiring students to recognize injustice, explain its impact, devise an action plan and document the results of actions taken.</p> <p>A naming performance demonstrating understanding of a name’s meaning and its cultural and personal significance, as shared through the oral tradition in a public context and through writing.</p> <p>An ethnographic research presentation discussing how the ethnographic procedures helped a student team to better understand a group of people, how the study may have changed or improved their thinking, in addition to incorporating a translation of a verbal recording into an ethnopoetic interpretation.</p> <p>A historical-photograph research presentation involving examination of a specific photo, the photographer’s background, the time period and contextual influences, the purpose of the photo, and the public’s reaction to it.</p> <p>A cultural-photograph poster presentation analyzing a group of photos to capture the essence of a specific cultural group.</p>

Teaching	Grade Level	Examples of Potential Student Products
<p><i>Apsáalooke</i> <i>Basawua Iichia</i> <i>Shoope Aalaputtua</i> <i>Koowiiikooluk</i> (Cont.)</p>	<p>Secondary</p>	<p>Performance of a student-composed poem or song lyrics that communicate a social commentary.</p> <p>A special leadership event planned, organized, and hosted by students where each student gives a brief leadership speech, receives a leadership award, and presents a gift to an honored guest who has contributed to his/her success.</p>
<p><i>Tribal Legacies of Pathfinding</i></p>	<p>Secondary, Postsecondary</p>	<p>A digital piece using a presentation application of choice (EdCanvas, Prezi, Symbaloo) focused on the examination of primary documents (journal entries, archived letters, literary accounts (non-fiction), and Web-based scientifically-acclaimed research.</p> <p>A final 3-dimensional project that reflects understanding of the Lewis and Clark expedition based upon the study of cartography, geology, ethnobotany, and human adaptive physiology.</p> <p>A student journal interpreting each key component of the Honoring Tribal Legacies curriculum (cartography, geology, ethnobotany, and human adaptive physiology) using either a digital or analog format that may incorporate songs, art, mixed media, prose, interview, and film.</p>



Sun and Moons Weaving by sa' hLa mitSa (Dr. Susan Pavel).

Materials: Blanket board—red and yellow cedar, acrylic paint; Weaving—wool; Blanket pin—elk ivory, yew wood, acrylic paint.

This piece is a wonderful example of collaboration. Shaunte Bernal (Taos Pueblo) carved and painted the blanket board with the intent of sharing some of his insight about the moon's many faces and sun's centrality to our lives. His desire is for the viewer to ponder the title without being given further description. The weaving serves to complement and highlight the sky's colors. The collaboration thus shows the sky's movement and the solar system's activity.

sa' hLa mitSa (Dr. Susan Pavel)

Summary and Conclusion

We have used the analogy of weaving to portray the system of differentiated instruction. Weaving serves as a lens to see students as having a common need for: (a) affirmation, (b) contribution, (c) power, (d) purpose, and (e) challenge in their learning experiences (Tomlinson, 2003). At the same time, each student brings his or her own unique yarns—of varied colors, textures, density, and fibers—in the form of variations in prior knowledge and skills, strengths, preferences, needs, and interests (Tomlinson & McTighe, 2006). As educators, we work proactively to consider both the common and unique learning needs of each student as we prepare an environment that promotes growth in all areas—mental, physical, emotional, and spiritual—and leads to a state of health and wellbeing. As students arrive at our doorway, we provide them with diverse pathways to access high-quality *content* that will serve as the warp yarns of our weaving. The instructional *process* integrates diverse ways of knowing, ways of being, and ways of doing (Martin, 2008), as students make meaning of the content by analyzing, explaining, applying, and interpreting it through their weaving of the weft yarns. Extended engagement in the weaving together of content (warp) and processes (weft) results in an array of multidimensional *products* that demonstrate what each student has learned.

The differentiated instructional approach is not new; it has existed in Native American communities since time immemorial. Thus, it readily aligns with featured Honoring Tribal Legacies teachings. These teachings communicate a more balanced picture of the Lewis and Clark expedition as Native voices are brought into the storytelling. As Native ways of knowing, being, and doing are integrated into Honoring Tribal Legacies instruction, we see a plethora of pathways toward content, a wide array of instructional processes, and a range of examples of potential products that can be constructed to serve authentic purposes in real world contexts. Through differentiated instruction we see students maximizing their creative and critical thinking skills, a sense of belonging and accomplishment, and a capacity to “give back” as they grapple with issues that hold relevance in their own lives, while understanding the linkage of these issues to the broader world and their capacity to be leaders and agents of change.

References

- Bender, W. N. (2012). *Differentiating instruction for students with learning disabilities: New best practices for general and special education teachers*. Thousand Oaks, CA: Corwin Press.
- Bergstrom, A., Cleary, L. M., & Peacock, T. D. (2003). *The seventh generation: Native students speak about finding the good path*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.
- Chapman, C., & King, R. (2011). Differentiated models and strategies of reading. In S. Laud (ed.), *Differentiated instruction in literacy, math, and science* (pp. 3–22). Thousand Oaks, CA: Corwin Press.
- CHiXapkaid, Inglebret, E., & Krebill-Prather, R. L. (2011). *Views and perspectives of Native educational success: A national survey of American Indians, Alaska Natives, Native Hawaiians and Others Associated with Indian education*. Washington, DC: National Indian Education Association.
- Circle of Tribal Advisors, Lewis and Clark Bicentennial. (2009). *Enough good people: Reflections on Tribal involvement and inter-cultural collaboration 2003–2006*. Gunnison, CO: Enough Good People. <http://www.lc-Triballegacy.org>
- Cleary, L. M., & Peacock, T. D. (1998). *Collected wisdom: American Indian education*. Boston: Allyn and Bacon.
- Common Core State Standards Initiative. (2010). *Common core state standards for English language arts and literacy in history/social studies, science, and technical subjects*. <http://www.corestandards.org/ELA-literacy/>
- Constantino, M., & Hurtado, D. S. (2006). Northwest Native American Reading Curriculum. *Journal of American Indian Education*, 45(2), 45–49.
- Council of Chief State School Officers, & National Governors Association. (2010). *Supplemental information for Appendix A of the Common Core State Standards for English Language Arts and Literacy: New research on text complexity*. <http://www.corestandards.org/ELA-literacy/>

- Doyle, M. A. (2012). *Baleiichiwee (the story of understanding): The conscientization processes of effective teachers of American Indian students*. Unpublished doctoral dissertation, Montana State University, Bozeman.
- Ernest, J. M., Thompson, S. E., Heckaman, K. A., Hull, K., & Yates, J. (2011). Effects and social validity of differentiated instruction on student outcomes for special educators. *The Journal of International Association of Special Education*, 12(1), 33–41.
- Healy, A. (2008). *Multiliteracies and diversity in education: New pedagogies for expanding landscapes*. South Melbourne, Victoria, Australia: Oxford University Press.
- Huebner, T. A. (2010, February). What research says about differentiated instruction. *Educational Leadership*, 79–81.
- Inglebret, E. (2014). Preparing university students to implement the common core: Native American focus. Presentation for the Annual Convention of the American Speech-Language-Hearing Association, Orlando, FL.
- Inglebret, E., Banks-Joseph, S. R., & Matson, S. (2014). Connecting the Northwest Native American Reading Curriculum to the Common Core State Standards. Presentation for the Annual Conference of the Washington State Indian Education Association, Spokane, WA.
- Jones, R. E., Yssel, N., & Grant, C. (2012). Reading instruction in tier 1: Bridging the gaps by nesting evidence-based interventions with differentiated instruction. *Psychology in the Schools*, 49(3), 210–218.
- LaFrance, J., & Nichols, R. (2008). *Indigenous evaluation framework: Telling our story in our place and time*. Alexandria, VA: American Indian Higher Education Consortium.
- Martin, K. (2008). The intersection of Aboriginal knowledges, Aboriginal literacies, and new learning pedagogy for Aboriginal students. In A. Healy (Ed.), *Multiliteracies and diversity in education: New pedagogies for expanding landscapes* (pp. 58–81). South Melbourne, Victoria, Australia: Oxford University Press.

- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50, 370–396.
- Office of the Superintendent of Public Instruction, Washington State. (2002). *Northwest Native American Reading Curriculum* [Curriculum Guide, Storybooks, CD].
Olympia, WA: OSPI Office of Native Education.
- Owocki, G. (2012). *The common core lesson book, K–5: Working with increasingly complex literature, informational text, and foundational reading skills*. Portsmouth, NH: Heinemann.
- Pinnell, G. S., & Fountas, I. C. (2011). *The continuum of literacy learning, grades 3–8: A guide to teaching*. Portsmouth, NH: Heinemann.
- Silvers, P., & Shorey, M. C. (2012). *Many texts, many voices: Teaching literacy and social justice to young learners in the digital age*. Portland, ME: Stenhouse Publishers.
- Sousa, D. A., & Tomlinson, C. A. (2011). *Differentiation and the brain: How neuroscience supports the learner-friendly classroom*. Bloomington, IN: Solution Tree Press.
- Sprenger, M. (2013). *Teaching the critical vocabulary of the common core*. Alexandria, VA: ASCD.
- Tharp, R. G. (2006). Four hundred years of evidence: Culture, pedagogy, and Native America. *Journal of American Indian Education*, 45(2), 6–25.
- Thousand, J. S., Villa, R. A., & Nevin, A. I. (2007). *Differentiated instruction: Collaborative planning and teaching for universally designed learning*. Thousand Oaks, CA: Corwin Press.
- Tomlinson, C. A. (2003). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. Alexandria, VA: ASCD.
- Tomlinson, C. A. (2008). The goals of differentiated instruction. *Educational Leadership*, 26–30.
- Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom*. Alexandria, VA: ASCD.
- Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design*. Alexandria, VA: ASCD.
- Vygotsky, L. V. (1962). *Thought and language*. Cambridge, MA: MIT Press.
- White, G. (2002). Sharing the vision: How the L & C Bicentennial can build trust between Tribal and nonTribal cultures. *We Proceeded On*, 28(3), 43–44.

APPENDIX A

“WATERWAYS CONNECT US”

WATER EDUCATION RESOURCES IN STATES

ALONG THE LEWIS AND CLARK NATIONAL HISTORIC TRAIL



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Introduction

In the era of Lewis and Clark, the importance of water quality and availability was always in the forefront. For all peoples, waterways were arteries of commerce and provided focal points for hunting, fishing, and other sustenance activities. The quality of surface water mattered, as it was the only available drinking water, but aside from early east-coast industrial impoundments and textile dye spills, anthropogenic negative impacts were almost unheard of, especially in what would be the western states. Lewis and Clark's expedition traveled on the rivers; the Tribes were knowledgeable about the tributaries and often their distant sources. People knew where to find good drinking water, and they named these places. They also knew where not to drink. English names for unpalatable springs or streams include "Badwater" or "Stink Creek." Indian names include the Cree, "askaw sipi saka hikan" ("Bad Stream Lake"), or "askow sipi Waska hikan kapasiwin" ("bad stream house camping place") (Fromhold, 2010). People inherently knew much about the water they all depended upon, because they were intimately involved in its use.

Fast forward to today, and many people just assume that water comes from a faucet. Many people do not know that the local creek is connected to larger and larger creeks and rivers and lakes, and that the very water they rely on is impacted by human activities and "natural" processes that may be happening locally or miles away. Transportation is primarily land-based, and commercial jets can get 33 members of an expedition across the country in six hours, flying in smooth air over the mountains, rapids, snow, heat, and river currents. Life has been made easier and more predictable through these technologies, but it has also resulted in disengagement with the natural world with negative human (Louv, 2008) and societal (Bookchin, 2007) health implications.

Educators and students can work together to re-build those connections, even in a technologically-driven world. But it often takes some extra effort and requires seeking out communities of interest with the right values, expectations, and objectives to suit the style and needs of each individual. Various ways to get reconnected with water resources, ranging from recreation to formal and non-formal learning opportunities focused on ecological restoration and water quality monitoring, are identified below. Educators are also encouraged to connect with Native American Tribes whose historic homelands were crossed by members of the Lewis and Clark expedition. Taking care of water resources is of utmost importance to Tribes and many have ongoing water projects. Visit the Tribal Legacy Project website, www.lc-Triballegacy.org to identify Tribes in your area and link to their websites.

Ways to Get Reconnected with Water Resources

🌿 **Recreation:** local canoe and kayak clubs exist in many cities, and some community colleges and universities have outdoor programs that cater to providing programs about recreating on local waterways. Sailing, canoeing, swimming, fishing, and other similar activities promote leadership skills development and encourage Leave No Trace Principles

(<https://Int.org/learn/7-principles>). For scholarly work in this field, refer to the *Journal of Outdoor Recreation, Education, and Leadership* (<http://digitalcommons.wku.edu/jorel/>).

🌿 **Formal Learning:** field experiences are one way to provide a direct connection between students and natural systems such as rivers and lakes. However, there are negative aspects of field trips to match every positive aspect

(<http://712educators.about.com/od/teachingstrategies/fl/Field-Trips-Pros-and-Cons.htm>).

Classroom and schoolyard experiences are essential as well, and can enhance the connection with the natural world.

Programs such as Trout in the Classroom (<http://www.tu.org/connect/groups/trout-salmon-in-the-classroom-ticsic>) and US Environmental Protection Agency's Water Science program

(<http://water.epa.gov/learn/resources/>) are examples of in-class hands-on water-based projects.

Project WET, Water Education for Teachers, has multiple resources available for a fee, and provides robust educator training in a wide range of water-based hands-on activities

(<http://store.projectwet.org/downloadable-water-activities/native-waters-kids-activity-book-let-download.html>).

🌱 Non-formal learning:

Volunteerism: Numerous volunteer opportunities are available to help protect water quality. Local communities often have stream cleanup days, and streamside or riparian restoration projects often need volunteers to help plant willows and shrubs to stop erosion. Local parks often have volunteer programs, as do area conservation organizations. Find volunteer organizations that also have an emphasis on education to provide the best learning environments.

Volunteers are the backbone of national historic trails. The National Trails System Act encourages volunteers to take part in trail planning, to build and maintain trails, to conduct research, to map and promote the trails, to monitor and protect resources, to raise money for the trails—and they do. Many groups that support historic trails are divided into chapters so that local groups can respond to local issues. (National Trails Training Partnership)

Citizen Science: Students and adults alike can participate in numerous citizen science initiatives, where ordinary people, with a little training, can collect highly valuable scientific data, and make observations about the world around them. Citizen science programs can run the gamut from bird- to galaxy-watching. A list of volunteer, citizen science water quality monitoring programs can be found through EPA's National Directory of Volunteer Monitoring Programs

(<http://yosemite.epa.gov/water/volmon.nsf/Home?readform>).

Ecological Restoration: restoring ecosystem services, or the benefits that all living things (including humans) gain from robust intact natural systems, is important to reverse effects of unsustainable, damaging activities. Many wetland, streamside, estuarine, lacustrine, and habitat restoration projects are underway throughout the Lewis and Clark Trail states,

and indeed, around the world. The Society for Ecological Restoration (SER) is one of many organizations that provide support and disseminate knowledge about functioning ecosystems and the restoration of injured systems; the SER Mission Statement is, “To promote ecological restoration as a means of sustaining the diversity of life on Earth and re-establishing an ecologically healthy relationship between nature and culture.” The Society for Ecological Restoration, Northwest Chapter (SERNW) organizes Restoration Walks to introduce the public to notable restoration efforts:

<http://chapter.ser.org/northwest/>. In addition, the Global Restoration Network hosts a list of volunteer opportunities worldwide:

<http://www.globalrestorationnetwork.org/volunteer/>.

Other ecological restoration volunteer opportunities can be found below, listed by state. It is not a comprehensive list, so be on the lookout for additional opportunities.

Idaho

PCEI Restoration Project Volunteer Opportunities:

<http://www.pcei.org/restoring/projects/>.

Selway-Bitterroot Frank Church Foundation Volunteer Opportunities:

<http://www.selwaybitterroot.org/volunteer-now/>.

Illinois

The Field Museum Ecological Restoration:

<http://www.fieldmuseum.org/science/research/area/science-action/communities/ecological-restoration>.

Emiquon Floodplain Restoration:

<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/illinois/placesweprotect/emiquon.xml>.

Lake County Forest Preserves Volunteer Opportunities:

<http://www.lcfpd.org/involved/index.cfm?fuseaction=volunteer.view>.

Iowa

Iowa Department of Natural Resources Volunteer opportunities:

<http://www.iowadnr.gov/InsideDNR/VolunteerOpportunities.aspx>.

Kansas

Kansas City WildLands Ecological Restoration:

<https://www.bridgingthegap.org/event/kansas-city-wildlands-ecological-restoration/>.

Missouri

Mid Missouri Volunteer Ecological Restoration Network:

<http://horthell.weebly.com/>.

Montana

University of Montana Society for Ecological Restoration:

<http://www.cfc.umt.edu/UMSER/>.

Nebraska

The Prairie Ecologist Volunteer Opportunities, Platte River Prairies:

<http://prairieecologist.com/2011/12/22/volunteer-opportunities-platte-river-prairies-nebraska/>.

North Dakota

North Dakota Parks and Recreation Department Volunteer Opportunities:

<http://www.parkrec.nd.gov/information/parks/volunteering.html#vip>.

Oregon

Institute for Applied Ecology:

<http://appliedeco.org/>.

City of Portland Parks and Recreation Friends of Natural Areas:

<http://www.portlandoregon.gov/parks/article/146080>.

Lomakatsi Restoration Project:

<http://lomakatsi.org/full-circle-schools-restoration-ecology/>.

South Dakota

South Dakota Game, Fish, and Parks Volunteer Opportunities:

<http://gfp.sd.gov/state-parks/volunteer/default.aspx>.

Washington

University of Washington Restoration Ecology Network Volunteer project list:

<http://depts.washington.edu/uwren/volunteer.html>.

Washington Department of Ecology Volunteer Opportunities:

<http://www.ecy.wa.gov/services/ee/vol.html>.

Water Quality Monitoring: While water- and natural-resources agencies hire professionals to do water quality monitoring, these programs are usually insufficient to collect data on areas of known hotspots, large rivers, and big lakes. Volunteers pick up the smaller creeks and rivers through volunteer water quality monitoring programs, and become stewards of these areas. Each state along the Lewis and Clark Trail has one or more of some sort of volunteer water quality monitoring program. Some of these are administered through state or local governmental agencies. Others are operated by non-governmental organizations (NGOs), community groups, or school districts. A sampling of volunteer, citizen-science, water quality monitoring programs along the Lewis and Clark Trail are listed below, by state. This is not a comprehensive list, as programs are developed on a continuing basis.

Idaho

PCEI Adopt a Stream:

<http://www.pcei.org/aas/>.

IDAHO Master Water Stewards:

<http://www.uidaho.edu/cda/idah2o>.

Idaho Department of Environmental Quality Citizen Volunteer Monitoring Program:

https://www.deq.idaho.gov/media/1060462-citizen_volunteer_monitoring_program.pdf.

Idaho Sierra Club Water Sentinels:

<http://www.idaho.sierraclub.org/#!boise-watershed/c1vw1>.

Lake Pend Oreille Waterkeeper, Citizen-Based Water Quality Monitoring Program:

<http://www.lakependoreillewaterkeeper.org/water-quality-monitoring-program.html#.VAnInvmwLFA>.

Illinois

Illinois Volunteer Lake Monitoring Program:

<http://www.epa.state.il.us/water/vlmp/index.html>.

Sierra Club River Monitoring Project, Illinois:

<http://illinois.sierraclub.org/rpg/watermonitoringproj.htm>, said to be coming soon.

Illinois RiverWatch Volunteer Stream Monitoring Program:

<http://www.ngrrec.org/Riverwatch/>.

Iowa

Iowa Water Sentinels:

<http://vault.sierraclub.org/watersentinels/map/iowa.aspx>, accessed September 20, 2014.

IOWATER, Iowa's Volunteer Water Quality Monitoring, Iowa Department of Natural Resources:

www.iowater.net.

Izaak Walton League of America, Linn County Chapter, Save Our Streams:

<http://yosemite.epa.gov/water/adopt.nsf/d850a81d7b0bcf638525730f00557262/bfb51eea205f505f852567eb0065301a!OpenDocument>.

Kuemper Catholic Grade School Sixth Grade

Maquoketa River Water Quality Team Lake Delhi Restoration Project:

<http://www.lakedelhi.com/>.

Kansas

Kaw Valley Heritage Alliance, StreamLink:

<http://www.kvha.org/>.

Missouri

Missouri Stream Team Volunteer Water Quality Monitoring Program:

<http://www.mostreamteam.org/>.

Greenway Network, Inc., Dardenne Creek Wetlands and Watershed Project:

<http://www.greenwaynetwork.org/index.php>.

Montana

Blue Water Task Force – Gallatin Watershed:

<http://www.bluewatertaskforce.org/>.

Flathead Basin Commission Volunteer Monitor Program:

<http://flatheadbasincommission.org/>.

Montana Watercourse:

<http://mtwatercourse.org/monitoring/>.

Nebraska

Nebraska Wildlife Federation Adopt A Stream Program:

<http://www.nebraskawildlife.org/education/adopt-a-stream/>.

North Dakota

River Keepers:

<http://www.riverkeepers.org/index.php/projects/description/category/water-quality-monitoring>.

Oregon

Oregon Department of Environmental Quality Volunteer Monitoring Program:

<http://www.deq.state.or.us/lab/wqm/volmonitoring.htm>.

South Coast Watershed Council:

<http://currywatersheds.org/>.

Columbia Riverkeeper Water Quality Monitoring Program:

<http://columbiariverkeeper.org/water-quality/water-quality-monitoring/>.

Willamette Riverkeeper Volunteer Water Quality Monitoring Program:

<http://www.willamette-riverkeeper.org/WRK/waterquality.html>.

South Dakota

Citizens Monitoring:

<http://sdlakesandstreams.com/>.

Washington

Bellevue Stream Team:

http://www.bellevuewa.gov/stream_team.htm.

Clark County Volunteer Monitoring Program:

<http://www.clark.wa.gov/environment/stormwater/streamhealth/monitoring.html>.

Coho Smolt Trap Monitoring Stream restoration vegetation and structure monitoring:

<http://www.midsoundfisheries.org/>.

References

- Bookchin, M. (2007). *Social ecology and communalism*. Edinburgh: AK Press.
- Bright, W. (2004). *Native American placenames of the United States*. Norman: University of Oklahoma Press.
- Fromhold, J. (2010). 2001 *Indian place names of the west*. Lulu.com, pub.
- Holmer, N. M. (1948). *Indian place names in North America*. Upsala: A.-b. Lundequistska Bokhandeln.
- Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, N.C: Algonquin Books of Chapel Hill.
- Maller, C., Townsend, M. Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: 'Contact with nature' as an upstream health promotion intervention for populations. *Health Promotion International*, 21(1), 45–54.
- National Trails Training Partnership.
<http://www.americantrails.org/resources/fedland/nht06elkinton.html>.
- Source:
<http://docisto.info/view.php?id=museums.alaska.gov/EightStars/src/activities/intermediate1.pdf&k=customize a flag>, slide 4. See also:
http://www.metisnation.org/media/376268/gfbf_final_web.pdf.

APPENDIX B

Lewis & Clark Tribal Legacies Curriculum Development Project



Flag Curriculum

by

Lindsey X. Watchman

About the Author

Lindsey X. Watchman (Umatilla/Walla Walla)

Indian Name: Patéewas

I graduated from Chemawa Indian School in 1990, and then enlisted in the U.S. Air Force during the Persian Gulf War, serving stateside and overseas from 1991–1998.

Did you know? Before heading to boot camp, *every man or woman* wishing to serve its nation must agree (twice) to a solemn oath to defend the homelands [*and flag*] of the United States.

And for many Native American veterans...an additional, implicit oath is *concurrently rendered*: to defend our Tribal homelands (aka “reservations”). So at nineteen years old, ***I swore to protect both*** the U.S. flag and the Confederated Tribes of the Umatilla Indian Reservation flag—where I am an enrolled member.

Did you know? There are 566 sovereign Tribal Nations throughout the United States . . . and each of these nations has designed its own Tribal flag, crest or seal.

National flags may visually represent their peoples’ values, history, language and even geography. Every symbol, stripe, and color is carefully selected. You’ll recognize these components within this curriculum as you do your research on the U.S. flag and a Native American flag.

After an honorable discharge, I chose the closest university to my reservation . . . Eastern Oregon University, where I earned a Bachelor’s degree in Philosophy, Political Science, and Economics. Nine years later, my eldest child graduated from high school, so I returned to school earning a Master’s Degree in Education in Curriculum and Teaching from the University of Oregon. Theoretically, I was now prepared to be a middle/high school social studies teacher.

I have been involved in Indian Education for nearly two decades. I currently manage a pilot grant

from the U.S. Office of Indian Education to strengthen educational collaborations between the Confederated Tribes of the Umatilla Indian Reservation, the State of Oregon, and local school districts. I am a proponent of charter schools, project-based learning, language immersion, and utilizing a culturally-responsive and relevant curriculum pedagogy.

Note to Teachers:

A valuable, hands-on context / content activity, and an opportunity to check for understanding, is the task to develop and design an individual, group, classroom, or school flag that incorporates one's environment into it.

Lastly, for all who may consider utilizing this curriculum, or any portion thereof...please know you are welcome to edit, enhance, and deviate from this model—I ask only that *you share your version forward*.



Lewis and Clark Tribal Legacies Curriculum Development Project

Tribal Flag Curriculum

Anticipatory Set:

Flags are keys to their owners' identities—essentially non-verbal enshrinements of historical facts. They highlight the collective values of a group of people, as well as the land they occupy. The emblematic shapes and colors chosen for use on a flag transcend literal references, and they imbue a specific civil authority under the flag's guise.

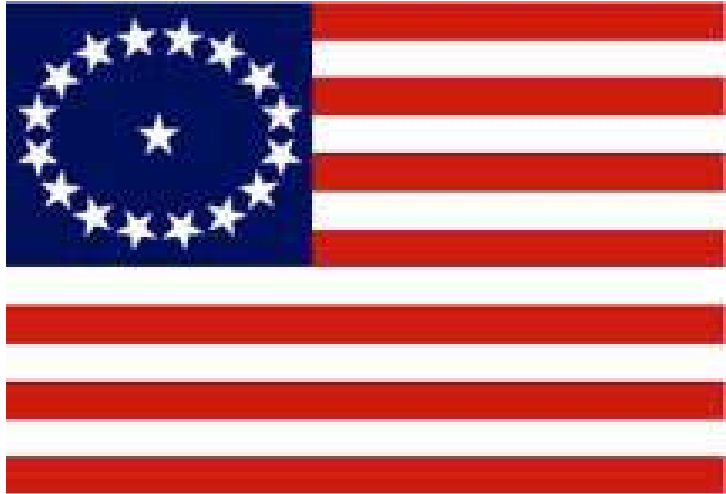
During the long era of geographical exploration and discovery by land and sea that began in Europe in the early fifteenth century, the mere hoisting of a banner on a flagstaff was sufficient (from the claimant's point of view) to claim ownership of a land and its natural resources, as well as to summon the allegiance of all of its inhabitants to a new ruler or government.

According to Lydia Whirlwind Soldier, in her publication "Lewis and Clark Journey: The Renaming of a Nation," specific purposes of the expedition were exercised and witnessed from the outset:

On their way up the river, Lewis and Clark meet the Kickapoo, Osage, Oto, Ottawa, Ponca, Arikara, Missouri, and Yankton nations: the peoples of what is now Missouri, Kansas, Nebraska, and South Dakota. Lewis and Clark deliver speeches, express the wishes of the government. Peace medals are given, and paper chiefs are selected for each Tribe. They tell the Tribes that the land belongs to the United States, to their "Great White Father" who lives in the east. Shotguns and cannons fire from the endless arsenals to show the father's power. **A Yankton [Sioux] newborn is wrapped in the U.S. flag, and paternalism for Native Tribes is born.** [emphasis mine]

At the time of Lewis and Clark's epic journey (1803–1806) there were only seventeen states in the Union.

Thus, the version of the American flag (at left) was carried by Lewis and Clark during their expedition as they met and interacted with the Native American Tribes that assisted them along the way.



Flags of various sizes were offered or traded to Tribal Chiefs as tokens of good will, and to symbolize the new relationship to be formed between the U.S. Government and North America's aboriginal inhabitants.

To this day, this practice of using flags is still employed. Modern-day examples include the United States moon landing in 1969 and purposeful planting of the astronauts' flag. In 2007, Russia sponsored a dive 2.5 miles underwater and planted their national flag in a waterproof capsule to lay claim [symbolically, not legally] to the Arctic floor in hopes of securing the Arctic's potential motherlode of natural resources . . . namely oil and gas.

An underwater flag? A flag on a moon where no one currently lives? Why would these things occur? Flags must mean something. Flags must have value.

After completing this lesson on flags, students will become aware that flags are not mere cloth, and flags are not merely artistic expressions. Flags represent so much about a place, a people. Every symbol on a flag has a purpose, and even the colors have a meaning.

We will begin with breaking down the components of the United States flag, then a State flag, and finally a Tribal national flag.

Learning Objectives:

This curriculum applies to state or common core standards in several disciplines, such as: history, social studies, geography, civics and art. It can be delivered to elementary, middle, and high school grade levels and beyond. The topic of flags applies to every one (as constituents of one or more socio-political entities). The topic of flags, their development, the process of approval, and the symbolic meaning of each is a case study of a people, of their history, and their connection to a place...often, the very intimate place they call home. Nearly every nation of a people has adopted a flag that represents who they are. Lastly, a flag can also symbolize a nation's sovereignty.

In this lesson, SWBAT (i.e. students will be able to):

- 1) describe the history, design (symbols), colors, and adoption of the U.S. flag.
- 2) summarize the history, design (symbols), colors, and adoption of a state flag.
- 3) present the history, design (symbols), colors, and adoption of a local, Tribal nation's flag.
- 4) design a new flag incorporating personal and group values.
- 5) identify the use(s) of flags during the Lewis and Clark Expedition.
- 6) articulate the recognition that a national flag is an example of sovereignty

Assessments:

This curriculum contains a variety of individual, group, and classroom activities. Assessments include individual and group participation observation, pre and post-knowledge surveys, individual research efforts, and presentations of findings.

Finally, grade and learning-level appropriate accommodations are made through the various versions of the worksheets, as well as research and presentation requirements.

State / Common Core Standards Met:

History, art, social sciences, civics, and geography.

Levels: K–5 (elementary) 6–8 (middle school) 9–12 (high school)

Step-by-Step Procedures:

Read the anticipatory set and the lesson objectives (above) so that students will be aware of the new topic and know where we will be heading throughout the lesson.

Part I – UNITED STATES FLAG

Activity #1 Individual Activity. Open-ended background knowledge survey.

Directions: Students are given 7–10 minutes to complete personal responses to the questions below (via the worksheet).

This serves as a pre-topic survey of background knowledge, and can then be incorporated as open-ended questions on the post-assessment.

Questions:

1. In your opinion, what does a flag represent? What is its purpose?
2. What feelings do you get when you see the American flag (also known as “Old Glory”) waving in the wind?
3. Do you think “values” are incorporated into the U.S. flag? How?
4. Do you associate with another flag? If so, explain which one and how.
5. How can a flag represent a nation of people and the nation’s sovereignty?

Activity #2 Classroom Activity. Open-ended background knowledge survey.

Directions: Teacher will ask students to share with the class their responses to the open-ended background knowledge survey. Class discussion will take place for 10–15 minutes.

Teacher will write student comments on the blackboard for others to read, consider and discuss. This becomes our “group baseline” of knowledge. Students will thus be primed for new learning content.

Activity #3 Individual Activity. United States flag component pre-assessment.

Directions: Students will be provided 10 minutes to complete the United States flag component pre-test. Scores shall be recorded, and these will serve as a baseline for the same, or similar, post-curriculum assessment. Students will turn these in.

Lecture: It is now time to provide learning-objective content as it relates to the American flag. Use the attached “U.S. Flag” fact sheet. The information shared here will answer the pre-assessment questions.

United States Flag
component pre-assessment

Name: _____

~~~~~  
**Directions: Fill in the blanks with an answer to the best of your knowledge.**

1. Who is credited with sewing the first American flag? \_\_\_\_\_
  - a. What year? \_\_\_\_\_
2. What year did Congress approve the first flag? \_\_\_\_\_
  - a. What day of the year is observed as Flag Day? \_\_\_\_\_
3. How many horizontal stripes are there on the current American flag? \_\_\_\_\_
  - a. What colors are they? \_\_\_\_\_ and \_\_\_\_\_
  - b. What do the stripes represent? \_\_\_\_\_
  - c. What do these colors signify? \_\_\_\_\_ and \_\_\_\_\_
4. How many stars are on the current American flag? \_\_\_\_\_
  - a. What does each star stand for? \_\_\_\_\_
5. Does the blue field behind the stars mean anything? \_\_\_\_\_
6. The flag is displayed daily from \_\_\_\_\_ to \_\_\_\_\_, unless it is lighted.
7. The flag is flown at half-staff to show \_\_\_\_\_.
8. Why is the flag folded into a triangle? \_\_\_\_\_  
\_\_\_\_\_.
9. What is the proper method of disposing an old flag? \_\_\_\_\_  
\_\_\_\_\_.
10. What other events / holidays during the year do we acknowledge the U.S. flag?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_



**United States Flag**  
**component pre-assessment**

Name: ANSWER KEY

~~~~~  
Directions: Fill in the blanks with an answer to the best of your knowledge.

1. Who is credited with sewing the first American flag? **Betsy Ross**
 - a. What year? **May 1776**
2. What year did Congress approve the first flag? **1776**
 - a. What day of the year is observed as Flag Day? **June 14th**
3. How many horizontal stripes are there on the current American flag? **13**
 - a. What colors are they? **red and white**
 - b. What do the stripes represent? **the original 13 colonies**
 - c. What do these colors signify? **red: hardiness and valor / white: hope and purity**
4. How many stars are on the current American flag? **50**
 - a. What does each star stand for? **each state in the Union**
5. Does the blue field behind the stars mean anything? **a new constellation**
6. The flag is displayed daily from **sunrise** to **sunset**, unless it is lighted.
7. The flag is flown at half-staff to show **grief for lives lost.**
8. Why is the flag folded into a triangle? **it is the shape of the cocked hats worn by soldiers of the American Revolution.**
9. What is the proper method of disposing an old flag? **it should be destroyed in a dignified way, preferably by burning.**
10. What other events / holidays during the year do we acknowledge the U.S. flag?
 - a. **Veterans Day**
 - b. **Independence Day**
 - c. **Memorial Day**
 - d. _____

Part II – STATE FLAG

Anticipatory Set: Not only do countries adopt national flags, typically their smaller, internal states do so as well. Each of the 50 United States of America has adopted a state flag, which represents each state’s distinct people, land, history and sovereignty.

Activity #4 Individual Activity. Research a State flag.

Directions: Now having reviewed the history, design (symbols), colors, and adoption of the United States flag, let’s do the same for a state flag.

This can be the state where we currently live, the state in which we were born, or perhaps a state where we wish to retire . . . your choice.

Students are to select and research a state flag, provide a picture, and describe its history, design (symbols), colors, and adoption, using the provided worksheet.

This can be accomplished individually, in pairs, or in groupings of four.

Presentations may be given to the entire class as time allows.

Accommodation: Some students may have recently migrated from another country. Allow such students to do research on their country’s flag, if they so choose. Further, since most U.S. students have European heritage, they may wish to choose a European country’s flag to research (and share), in lieu of a state flag.

State Flag Research Worksheet

Name: _____



1. Name of the state whose flag you are researching. _____.

2. What year was your state formally admitted into the Union? _____.

3. What year was its flag formally adopted? _____.

4. Describe any symbols included on the flag. _____

_____.

5. Are there any animals on the flag? _____ If so, why? _____

_____.

6. Are there any plants on the flag? _____ If so, why? _____

_____.

7. Is there any writing on the flag? _____.

8. What does the writing mean? _____.

9. Are there any numbers? _____ What do the numbers mean? _____.

10. What colors are used? _____.

11. Do the colors used mean anything specifically? _____

_____.

12. Any other information (or perhaps controversy) surrounding the state flag?

_____.

Part III – Tribal FLAG

Anticipatory Set: Did you know that there 566 Federally-recognized Native American Tribes in the United States today?

Most of these Tribal governments have only recently (within the past 30 years or sooner) designed and approved a Tribal national flag that represents their people, land, history, and values.

Even here, the flag serves well as an example of sovereignty.

Activity #5 Group Activity. Research a local Tribal flag.

Directions: Students will be grouped into fours (4) and are to select and research a local Tribal nation flag (in their state, if possible).

Groups will present to the entire class a picture of the flag, describe its history, design (symbols), colors, and adoption. Hint: find the Tribes in your state, then go to their website for information about their flag.

Groups will select a speaker(s) who will present their findings to the rest of the class.

Use the Tribal flag worksheet provided.

Tribal Flag Research Worksheet

Name: _____

~~~~~

1. Name of the Tribal Nation whose flag you are researching. \_\_\_\_\_.

2. What date/year was the Tribal flag formally adopted? \_\_\_\_\_.

3. Describe any symbols included on the flag. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_.

4. Are there any animals on the flag? \_\_\_\_\_ If so, why? \_\_\_\_\_

\_\_\_\_\_.

5. Are there any plants on the flag? \_\_\_\_\_ If so, why? \_\_\_\_\_

\_\_\_\_\_.

6. Is there any writing on the flag? \_\_\_\_\_.

7. What does the writing mean? \_\_\_\_\_.

8. Are there any numbers? \_\_\_\_\_ What do the numbers mean? \_\_\_\_\_.

9. What colors are used? \_\_\_\_\_.

10. Do the colors used mean anything specifically? \_\_\_\_\_

\_\_\_\_\_.

11. Any other information (or perhaps controversy) surrounding the Tribal flag?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_.

## Tribal Flag Research Worksheet

Name: EXAMPLE

- 
1. Name of the Tribal Nation whose flag you are researching. **The Confederated Tribes of the Umatilla Indian Reservation (CTUIR).**
  2. What date/year was the Tribal flag formally adopted? **May 2002.**
  3. Describe any symbols included on the flag. **The strip at the bottom is similar to beaded decorative strips on what have come to be known as Chief's blankets, which were often carried, worn or adorned by horses carrying prominent leaders or headmen. Within the strip is the butterfly design or hourglass lying on its side with a square in the center to represent people, men and women, boys and girls. Inside is a cross which can be interpreted as a star, the four cardinal directions, or as the four elements – air, water, fire and earth.**
  4. Are there any animals on the flag? **Yes** If so, why? **There are four hoof marks in the top left and right corners of the flag. There are three horses, one for each Tribe in the confederacy. Each is a different breed (a paint, a solid dark, and a speckled) to remind us of the once great wealth measured by horses. At the time of Lewis and Clark, the Cayuse had amassed and cared for over 10,000 horses. We received our first horse pair in early 1700.**
  5. Are there any plants on the flag? **No** If so, why? \_\_\_\_\_.
  6. Is there any writing on the flag? **Yes. "Treaty of 1855."**
  7. What does the writing mean? **A reminder of the year that our treaty was signed with the U. S. government, which formed the reservation.**
  8. Are there any numbers? **Yes** What do the numbers mean? **Year treaty signed.**
  9. What colors are used? **The background color is red.**
  10. Do the colors used mean anything specifically? **The red symbolizes sacrifice, bloodshed, and courage.**
  11. Any other information, or controversy surrounding the Tribal flag? **The first flag was on a yellow background with one horse, and became a target; however, it also moved forward a dialogue. Changes were then made following the results of a community survey. The new design was formally voted on by the General Council (2001) and adopted by a Board of Trustees resolution in 2002.**

## Part IV – CREATE YOUR OWN FLAG

**Activity #6** Individual and Group Activity. Design a new flag.

**Directions:** Students will spend 3 minutes individually reflecting on what they feel are the most important symbols and/or values for use on a flag.

Colors to use should also be considered, and a meaning assigned to each.

Students will be grouped into fours (4). In their groups, students will share out and discuss their individual values. Utilizing a consensus or democratic method of approval, the group will determine which ideas, symbols, and colors will be incorporated into their group flag.

Students will use the flag development worksheet as a guide. Groups will present to the entire class a hand-drawn picture of the flag, describe its history, design (symbols), colors, and adoption process.

### **Guidelines:**

A flag should be simple, readily made, and capable of being made up in bunting; it should be different from the flag of any other country, place, or people; it should be significant; it should be readily distinguishable at a distance; the colors should be well contrasted and durable; and lastly, and not the least important point, it should be effective and handsome.

— National Flag Committee of the Confederate States of America, 1861

[Quoted in William John Gordon, *Flags of the World, Past and Present: Their Story and Associations* (London and New York: F. Warne, 1915), 197.]

According to flag enthusiast Ted Kaye, there are Five Basic Principles of Flag Design:

- 1) the flag should be so simple that a child can draw it from memory;
- 2) the flag's images, colors, or patterns should relate to what it symbolizes;

- 3) limit the number of colors to three, which contrast well and come from the standard color set;
- 4) never use writing of any kind or an organization's seal; and,
- 5) avoid duplicating other flags, but use similarities to show connections.



# CHAPTER 4

## Primary Sources For American Indian Research



**Carol Anne Buswell, MA,**  
*Education Specialist, National Archives*

## Introduction

**A**cademics, educators, and most school children know primary sources are very important for conducting research and providing information for writing projects. In spite of this, many (if not most) are puzzled as to how to find them and exactly how to treat them when they are finally found. A few *potential* historians may not even be absolutely sure they could identify a primary source if they saw one.<sup>1</sup> In addition, when looking for primary sources about American Indians, the records themselves are often hidden under several added layers of complexity. This sometimes leaves even seasoned researchers feeling lost and confused.

## The Basics

### Definitions

First, the following is a rather general definition of a primary source from Yale University.

*Primary sources provide first-hand testimony or direct evidence concerning a topic under investigation. They are created by witnesses or recorders who experienced the events or conditions being documented. Often these sources are created at the time when the events or conditions are occurring, but primary sources can also include autobiographies, memoirs, and oral histories recorded later. Primary sources are characterized by their content, regardless of whether they are available in original format, in microfilm/microfiche, in digital format, or in published format.*

([http://www.yale.edu/collections\\_collaborative/primarysources/primarysources.html](http://www.yale.edu/collections_collaborative/primarysources/primarysources.html))

If you were to tell or write a story about an event in your life, you would be a “primary source.”

*You were there at the time and you participated in it yourself.*

In order to understand this concept even better, let us look at what a primary source is not. It would go without saying, that a primary source is not a secondary source. So let us look at the definition of a secondary source from Princeton University.

*A secondary source interprets and analyzes primary sources. These sources are one or more steps removed from the event. Secondary sources may have pictures, quotes, or graphics of primary sources in them.*

*Some types of secondary sources include publications, such as textbooks, magazine articles, histories, criticisms, commentaries, and encyclopedias.*

*Examples of secondary sources include a journal/magazine article which interprets or reviews previous findings, a history textbook, [and] a book about the effects of WWI.*

(<http://www.princeton.edu/~refdesk/primary2.html> )

Therefore, going back to the first example, if you were to tell a story in your own words about an event someone else had told you, your story would be a secondary source. Or, if you had read a collection of documents, come to a conclusion and wrote a book, drawn a picture, or sung a song about what you found, that book, picture or song would be a secondary source because your own opinion would now be included in the information.

In conclusion, as long as nobody has interpreted it for you, a government document, letter, photo, cartoon, drawing, painting, oral history, moving picture, object or other material created by someone who was there at the time of the event is usually a primary source.<sup>2</sup>

For a curriculum designed to teach children the concept of primary and secondary sources, see featured curriculum Exploring Your Own Community (Buswell, 2015) available at [HonoringTribalLegacies.com](http://HonoringTribalLegacies.com)

## Careful Analysis of Primary Sources

Now that you have a basic understanding of primary sources, does it mean the information you find there will always be true? Think about this for a minute. Everyone has, at some time in their lives, heard, read or even told stories that are purely fabricated. They may have even sworn the story was true. Government officials, estranged spouses, wayward children, and the rest of humanity might occasionally falsify something as well, even in a primary source document, such as a job application, an IRS Tax Return, or a letter back to the main office. That is why careful analysis is so important.

Doing careful analysis of a source does not need to be difficult. There are basic questions that should always be asked when first examining a document. Think of the journalism questions, who, what, where, when, and why.

1. Who was writing (or photographing, or drawing, or recording, etc.) the source document?
2. What information does the document contain?
3. When was the document created?
4. Where, geographically, was the document recorded? Sometimes documents are recorded far from the actual home of the Tribal community or communities.
5. Where did the subjects of the document actually live?
6. Why was it created? What was its purpose?

After doing this for the first few documents, it seems to come almost automatically and will take only a few minutes.

The next questions that must be asked are also fairly simple and usually become part of an “analysis arsenal” very quickly.

1. Is the document portraying the truth?
  - a. Can you find evidence from other sources to back it up?
  - b. Does it make sense given what is already known about the subject? (However, always be aware that sometimes the source you are analyzing may be the only accurate account available.)
  - c. Do the time-frames match known historical facts?
2. Is the author of the document showing a particular bias?
  - a. Is there evidence of prejudice, either for or against the subject of the document?
  - b. Does he/she have a cause to promote?
  - c. Does the document itself promote or negatively target any particular group?
3. Are there cultural or language differences that need to be taken into account? This question is a little harder and requires some sensitivity and advanced preparation.

You should keep this question in mind when doing secondary source research, early in the process.

Always look for other clues as well, such as signatures and marks. For instance, notes written on a document or stamps placed there might indicate additional information. It is very easy to completely overlook these marks. Sometimes they are very important or tell a related story. For instance, a document marked “Secret” may be followed at a later date by a “declassification stamp” and date. This could tell you when the public, the press, and legal reviewers were able to actually see the document. Some documents have been kept classified for 50 years or more, making the information virtually inaccessible to the public during that time. Even after a document is “declassified,” it does not follow that the public will become aware of it immediately. It just means they can see it if they can find it in an Archives somewhere.



Figure 1 - Photo of a Japanese Balloon Bomb recovered from the Cheyenne River (South Dakota) Indian Agency in 1945. <http://research.archives.gov/description/285259>. (U.S. National Archives) Near the end of the Second World War, thousands of balloon bombs were released by the Japanese government. Nearly a thousand reached the United States, traveling on trade winds. Amazingly, even the press kept them secret. The U.S. Government felt if the public knew about them, it would threaten national security. Documents regarding the subject of Japanese War Balloons were classified until about 1970. Still, their existence remained virtually unknown for another 20 years. (Mikesh, 1990)

## The Importance of Where And When

When looking for primary sources about a particular Native American community or even a larger topic, such as the development of fishing rights, following good basic historical research procedures is important. First, you must start with at least an overall understanding of the Native community or topic in question. This information is usually most efficiently gathered in secondary sources. Study the history of the community or subject. Locate people or events in geographic space. Then relate that geography to a specific time period.

*When* and *where* events happened are the two most important elements for locating a primary source. The reason for this has to do with the way primary sources are housed. They are usually found in archives, library special collections, historical societies, museums, or Tribal offices. There is one major difference between the records government archives store and those records found in a library special collection, museum, historical society, and the like. Collections of records, such as those found in libraries, museums, and historical societies have been collected based on pre-determined collection rules and availability. The organization may decide that only part of an available collection suits their needs. Therefore, you may find John Doe's original collection split up and residing in more than one university, library, historical society, or museum.

Governments, on the other hand, have a different approach to archiving records. An archives is a repository. Government agencies are required to save all permanent records and send them to their respective archives. A permanent record is one that is deemed necessary for historical, administrative, or day-to-day business. All other records are destroyed. Therefore all permanent government records will be held in their respective archives. Government records are stored approximately as follows:

- 🌐 Federal government permanent records go to the National Archives of the country.
- 🌐 State government permanent records go to the State Archives of that state (such as the Washington State Archives).

🌿 County government permanent records usually go to the county archives of that county (although sometimes they go to the state archives).

🌿 Local government records most often go to a local archives or the county or state archives in which they reside.

The records in both “collections” and “government repositories” most often consist of loose papers, photos, video, audio tapes, maps, or drawings of some kind. They are most often stored in file folders, filing cabinets, boxes, map cases, and the like. They are usually organized in whatever way the original owner or government agency arranged them.

When receiving documents, the first thing the archivist, librarian, or Tribal officer usually does is label them by their “creator.” For instance, in the case of a library Special Collection, if materials were received from the John Doe estate, the first level of organization would be “John Doe.” The records themselves might be records John Doe wrote himself or collected from other sources. The library would probably call them the “John Doe Collection.”

The procedure is much the same when a government archives receives material from a particular government agency. The government archivist labels them by the agency name first, which is essentially the “creator.” Often the specific office of the agency becomes an essential part of the agency designation as well. The documents themselves are carefully maintained in the original filing system and order determined by the “creator.” Over a period of time, they are carefully preserved, usually in acid-free folders, photo protectors, and boxes before they are put on a shelf.

Once the creator is determined and recorded, “series lists” are compiled. Related groups of records within the collection are each called a series. For instance, accounting records would be one series, a photograph collection would be another, recorded oral histories might be another, and correspondence might be another series. If a date range for the records can be identified, it is always attached to the series name. You might end up with something like:

(Creator) Bureau of Indian Affairs, Grand Ronde Siletz Agency, Oregon.

(Series) Land, Resource and Allotment Records, 1870–1954.

There probably will be other series in the same group of records as well. For instance, in the Bureau of Indian Affairs, Grand Ronde Siletz Agency, Oregon records there are many more, including:

(Series) Case Files for Grand Ronde, Siletz, and Roseburg Allottees, 1894–1956.<sup>3</sup>

(Series) Decimal Files, 1897–1955.<sup>4</sup>

Tribal officers, government archivists, or librarians then make a “finding aid,” listing each series under the name of the creator with at least a general description. They then file the boxes away in a specific location in their archives or special collections area so they can be retrieved easily when requested. These areas are usually not open directly to the public. They usually must be requested from the archivist on a form of some kind. Then the archivist or librarian will bring them out on a cart to view in a special, secure room.

Now, the records are ready to be searched. Sometimes there are indexes available within the series, but more often there are none. Some documents may have been scanned and placed online, but often there is limited time or a shortage of funds to finance such a venture.<sup>5</sup>

## A Note About Handwriting

It should be noted that older primary sources are usually hand-written. This proves to be a stumbling block for some students. Although transcriptions are sometimes available for more famous documents, the more obscure, ordinary documents usually are not transcribed into typewritten form. Since real ground-breaking historical discoveries are very often found in the obscure and ordinary files, it may be advantageous to give (or receive) instruction for those who cannot read handwriting. There are many cursive handwriting lessons available online.

Explanations for the meanings of old script, which can be challenging for anyone, can be found in several sources. For instance, a tutorial on Old English script can be found at

<http://www.nationalarchives.gov.uk/palaeography/> (National Archives of the UK).



A very interesting online article about the cultural significance of handwriting in early America relating to American Indians in the seventeenth century can be found at

[http://cdm.reed.edu/cdm4/indianconverts/studyguides/colonial\\_american\\_handwriting/cultural\\_significance.php](http://cdm.reed.edu/cdm4/indianconverts/studyguides/colonial_american_handwriting/cultural_significance.php) (Reed College).

## **Finding Primary Sources About Native America**

### **Identifying the Subject, Tribe, or Community**

As in all research, it is important to narrow your topic so limited research time is well-used and the resulting article, book, paper, blog, etc., is focused enough to be interesting. With Native American research, the methods used to file, arrange, and store their records make this careful approach even more important.

First, American Indian records are most often filed or identified by a Tribe or community in a particular geographic area. This, of course, is partially because Tribes were, from the time of European contact, essentially individual countries. Native government entities potentially had their own treaties with Spain, or Russia, or France, or England, before they made a treaty with the United States.<sup>6</sup> Even after United States independence, each Tribe was treated separately as an individual foreign country until 1831, when the U.S. Supreme Court declared them all to be “domestic, dependent, Nations” (United States Supreme Court, 1831). The United States continued to make treaties with individual Tribes throughout the seventeenth, eighteenth, and nineteenth centuries.<sup>7</sup>

Although sometimes more difficult to access and search, records from locations other than the Federal Government, such as Tribal governments, private collections, and state and local governments, often list their materials by individual Tribes, bands, or communities as well. Once again, they focus on time and place and they focus on a single Tribe or small group of Tribal communities. For larger subjects or concepts, it is best to concentrate on a few Tribes to use as examples, at least at first. This will help you find records more quickly and easily.

## The Reason Federal Records Are So Important

The permanent records of all United States federal agencies are stored in the National Archives of the United States. The National Archives holds records in one of several physical locations.

Because of the “domestic, dependent, Nations” designation, Tribal governments have always held a unique political position directly under the United States government. Because of this, they were not directly subject to state or local governments until the twentieth century, when they could choose a relationship (or not) for economic or other reasons. Therefore, there are records in the National Archives for Native Americans that are not there for the rest of the population. For instance, birth records, kept in county and state archives for the rest of the population, are sometimes found in the records of the United States Bureau of Indian Affairs records at the National Archives.

Reports of Births and Deaths at  
Fort Berthold Indian Agency for March 1889.

Deaths.

| Date.                 | Name.                | Tribe. | Sex. | Age. | Cause of Death.   |
|-----------------------|----------------------|--------|------|------|-------------------|
| March 1 <sup>st</sup> | Kindman              | S.B.   | F.   | 23.  | Miscarage.        |
| " 3 <sup>rd</sup>     | Oral                 | "      | F.   | 2    | Consumption.      |
| " 4 <sup>th</sup>     | Syr. Thrasak         | S.B.   | M.   | 1    | Pneumonia.        |
| " 4 <sup>th</sup>     | Yellow Back          | "      | F.   | 57   | (not known).      |
| " 7 <sup>th</sup>     | Mary goes out        | S.B.   | F.   | 7    | Pneumonia.        |
| " 9 <sup>th</sup>     | Loss in the woods    | "      | F.   | 28   | Pneumonia.        |
| " 13 <sup>th</sup>    | Lean Bear            | Manbau | M.   | 51   | Acute Rheumatism. |
| " 15 <sup>th</sup>    | Sam Manau            | "      | F.   | 28   | Consumption.      |
| " 18 <sup>th</sup>    | Good Bear (chief)    | S.B.   | M.   | 2    | Pneumonia.        |
| " 20 <sup>th</sup>    | Love Woman (chief)   | S.B.   | F.   | 2    | Pneumonia.        |
| " 26 <sup>th</sup>    | Stank's (daughter)   | "      | F.   | 17   | Consumption.      |
| " 30 <sup>th</sup>    | Beavis Smith's child | S.B.   | M.   | -    | Still Born.       |
| " 31 <sup>st</sup>    | Beavis Smith         | S.B.   | F.   | 18   | Pneumonia.        |

Births.

| Date.                 | Name of Parents | Sex. | Tribe. |
|-----------------------|-----------------|------|--------|
| March 1 <sup>st</sup> | Mrs. Crowfoot   | F.   | S.B.   |
| " 30 <sup>th</sup>    | Beavis Smith    | M.   | S.B.   |

Respectfully,  
J. J. Reckhow,  
Agency Physician.

Figure 2. Reports of Births and Deaths, 1886–1890.

(Image 21 of 36). Bureau of Indian Affairs. Fort Berthold Agency.

<http://research.archives.gov/description/7570279>

(U.S. National Archives)

Given this unique relationship between Tribes and the Federal government, it seems as if finding records in the National Archives should be easy.

- ✿ There should be little or no searching through state, county, or local government records.
- ✿ Everything seems as if it should be in one place.
- ✿ Records are becoming more easily accessible online.

To some degree this is true. At the same time, it is also not true. For instance, commercial Internet access is, like everything else, determined by usage and economics. If a Tribe, band, or community has a small population it might not be the first in line to have records included on a commercial, or even a government website.

The truth is, many primary sources for American Indians are still sitting in archives boxes and will not be available online for years. Even when they are online, it is best if you understand the “old ways” of finding documents so you can more quickly and efficiently find them in the online search engines.

## Many Federal Agencies

Native American Tribes, bands, and communities have had different sorts of relationships with the federal government. As a result, evidence and documents are residing in the National Archives from several different agencies, depending, again, on place and time. Remember, when looking in archives, you need to search first by the creator of the documents.

The earliest federal records were kept by the *U.S. Department of War* and its sub-department *The Bureau of Indian Trade*. U.S. records from both of these agencies have largely been transferred to the *Bureau of Indian Affairs* (Record Group 75). War Department records include journals and reports. Trading houses (also known as “factories,” and run by “factors” or “traders”) were often the first point of contact between Native communities and Europeans.<sup>8</sup>

The *Bureau of Indian Affairs* has been the primary agency responsible for administering Tribal land, leases, annuities, allotments, removals, BIA schools, special censuses and similar issues

for the Federal Government since 1824. This is the creator that archivists most often refer their patrons to for American Indian records. The *Bureau of Indian Affairs* is known to archivists as “Record Group 75.” It is the primary creator for federally recognized Tribes.

But, what about the treaties? Where are they? What about Tribes that were “terminated” or otherwise lost their federal recognition? What about Tribes who were later restored to federal recognition status? What about Tribal people who traded their allotments for land in the public domain, away from Tribal areas? What about Tribes who refused to move to a reservation and disappeared into the general population? Where are their records? And where are those famous photographs of Native chiefs and ambassadors to Washington D.C. that are seen so frequently on the web? Are they in the Bureau of Indian Affairs records? Are they somewhere else? Are there photos of ordinary Tribal citizens? Where are they?

The truth is most are stored in the National Archives in the records of *other* Federal agencies, such as the *Records of the U.S. Government* (Record Group 11, where all original treaties between the US and other countries as well as with American Indian Tribes are kept), the *Records of the Bureau of Land Management*, *Records of the U.S. District Courts*, *Records of the Bureau of the Census*, *Records of the Department of the Interior*, *Records of the Smithsonian Institution: Bureau of Ethnography* (photographs), the *Records of the U.S. Signal Officer* (photographs), the *Records of the National Park Service* and many others. (See Buswell, Appendix, for a list of relevant federal agencies.)

For Tribes who have been terminated or otherwise lost their federal recognition, there are the records of the *U.S. Census*, the *Bureau of Land Management*, and hundreds of other agencies whose records record the general population. Tribes that have been restored in the twentieth century have records, but they usually are not stored at the National Archives. Their records ordinarily remain with the *U.S. District Courts*, the *Bureau of Land Management*, and the *Bureau of Indian Affairs* themselves, as well as in other federal agencies. Usually, they were created too recently and have not yet been released to the National Archives.

**When searching primary source documents in person, remember the highest level of archival, special collection, or museum organization will probably be the “creator” of the document.**

- 🌀 Ask an archivist or librarian to suggest appropriate “creators.”
- 🌀 Choose a creator to search.
- 🌀 Ask the archivist or librarian to locate appropriate “finding aids” that list the series filed under that creator.
- 🌀 Search the series listings and their descriptions.
- 🌀 Request the documents.
- 🌀 Look through documents in person or hire someone to do it for you. (Sometimes hiring a professional researcher is less expensive than traveling to a distant facility).

## **Physical Locations of Original Federal Agency Documents at the National Archives**

The National Archives holds over 12 billion original paper documents, as well as digitized copies and records that were “born digital.” These documents take up a lot of space. In an attempt to “regionalize” many records, separate facilities were built across the United States at various times. There are facilities located in Washington, D.C. ; College Park, Maryland; Boston, Massachusetts; Philadelphia, Pennsylvania; Atlanta, Georgia; New York, New York; Kansas City, Missouri; Chicago, Illinois; Fort Worth, Texas; San Francisco, California; Riverside, California; Seattle, Washington; and St Louis, Missouri.

Each of these facilities (except those in Washington, D.C. ; College Park, Maryland; and St. Louis, Missouri) holds records from federal agency field offices located in the states within a specific geographic region. Washington, D.C. , on the other hand, holds early administrative records of all federal agencies across the entire United States, as well as more modern records of agencies in outlying areas, such as Alaska. College Park, Maryland holds more modern administrative records of all federal agencies, as well as most photographs, moving pictures, cartographic records, electronic records, and sound recordings. St. Louis, Missouri, holds modern military records, particularly records of individual service performed since World War I.

The records you are seeking might be in any of these locations. For a listing of *Bureau of Indian Affairs* records by state and Tribe, see <http://www.archives.gov/research/Native-americans/bia.html>. For a listing of local facilities of the National Archives and the states whose records they hold see Buswell (2015) or look for the facility nearest you at <http://www.archives.gov/locations/>.

## The National Archives Online Catalog

It is a good idea to keep all possible federal agencies in mind when searching the National Archives Online Catalog, also known as Online Public Access (OPA).

- 🌀 When searching the *National Archives' Online Catalog* at [www.archives.gov/research/search](http://www.archives.gov/research/search), a broad search is possible, but topics are not clearly defined so your results may be variable. For instance, by using a simple term, such as “Choctaw,” only series descriptions or individual documents that have been *identified* as “Choctaw” will appear.<sup>9</sup>
- 🌀 An even better approach is to type in the name of the Tribe and the word “Indian.” Records in the National Archives usually refer to Native Americans by this term, probably due to the existence of the *Bureau of Indian Affairs*.
- 🌀 Better yet is to conduct an advanced search and focus your search by federal agency, Record Group Number, or Tribal name. Use several different search terms, not simply the first one that comes to mind. Also, consider using two-word searches.
- 🌀 When searching the Bureau of Indian Affairs, first go to <http://www.archives.gov/research/Native-americans/bia.html> to identify all possible agencies who may have administered the business of the community over time. Then use the agency names in the Online Catalog search box. Bureau of Indian Affairs agency offices were also known as an “agency,” “subagency,” “Superintendency,” or “Area Office.”

Always keep in mind that only a small percentage of existing primary sources about any Tribe is on line at the National Archives at this time.

## DOCSTEACH.ORG

Another National Archives resource, created especially for teachers and students, is DocsTeach at [www.docsteach.org](http://www.docsteach.org). The Native American related documents have been selected specifically to give a small representation of records from every Bureau of Indian Affairs agency for which digital images have been included in the Online Catalog. This, at the very least, can give you an idea of what is available.

Treaties, photographs, and other relevant documents are being added to DocsTeach on a regular basis. There is a special Native American landing page on DocsTeach at <http://docsteach.org/home/Native-americans>, where one can focus a search even more. DocsTeach is also available as an iPad application, so it can be used by teachers and students alike. The documents and activities on both the website and the iPad app have been meta-tagged, so topic searches are often quick and easy.

## National Archives Social Media, Publications, and Exhibit Sites

Collections of documents from the National Archives can be found in various places organized by topic. These are not consistent for every Native community, but can be useful when they are available. For instance, the National Archives is represented on many social media websites. Most of them can be found listed at the bottom of the main Archives webpage at [www.archives.gov](http://www.archives.gov). These can be important for various reasons.

- Long videos are sometimes placed on the National Archives' YouTube Channel, while the Online Catalog may only contain a short clip. All YouTube Channels from the National Archives are available at <http://www.archives.gov/social-media/youtube.html>

- Portions of exhibits created by one of the National Archives offices across the country are sometimes included on the National Archives' Flickr Channel and nowhere else. Other materials are added by the National Archives regularly. Starting at <https://www.flickr.com/photos/usnationalarchives/>, type in U.S. National Archives Indian (or the name of a Tribal community).

🌐 *Prologue Magazine*, published regularly for over 40 years, is partially represented on line and contains articles, usually written by archivists, giving background information and several primary sources on a specific topic. Use the general search box in the upper right hand corner of the main website at [www.archives.gov](http://www.archives.gov) to search this publication. Use “Prologue” as one of your search terms.

🌐 Several blogs are regularly written by National Archives staff members. These discuss primary sources by topic or highlight one interesting document. Use the general search box in the upper right hand corner of the main website at [www.archives.gov](http://www.archives.gov) to search for specific articles. Use “blog” as one of your search terms, and then “Indian” or a Tribal name.

🌐 Online exhibits produced by the National Archives can be located on the main website or in other locations on the web. A central location for finding these records is at <http://www.archives.gov/exhibits/index.html>. The newest exhibit, “Records of Rights,” includes a significant American Indian section.

## Presidential Libraries

The Presidential Libraries and Museums (Herbert Hoover through George W. Bush) represent an important subdivision of the National Archives. Each library or museum holds materials collected by or for that specific U.S. President. Following is a list of the Presidential Libraries holding significant primary sources relating to Native Americans during the President’s term in office. Check their search engines, finding aids, and subject guides. The term “American Indian” is the most profitable search term; however you may need to try others. Occasionally a subject guide or guide to holdings must be located first.

🌐 Harry S. Truman Library and Museum, <http://www.trumanlibrary.org>.

🌐 Dwight D. Eisenhower Library, Museum, and Boyhood Home,  
<http://www.eisenhower.archives.gov>.

🌐 John F. Kennedy Presidential Library and Museum, <http://www.jfklibrary.org>.

🌐 LBJ Presidential Library, <http://www.lbjlibrary.org/>.



- ✿ Nixon Presidential Library and Museum, <http://www.nixonlibrary.gov/>.
- ✿ Gerald R. Ford Presidential Library and Museum, <http://www.fordlibrarymuseum.gov/>.
- ✿ Jimmy Carter Presidential Library and Museum, <http://www.jimmycarterlibrary.gov/>.
- ✿ Ronald Reagan Presidential Library and Museum,  
<http://www.reagan.utexas.edu/archives/textual/whormsub/whormsub.html>.
- ✿ George Bush Presidential Library and Museum, <http://bushlibrary.tamu.edu/>.
- ✿ William J. Clinton Presidential Library, <http://www.clintonlibrary.gov/>.

## The National Archives' Record Center at Lenexa, Kansas

A National Archives' Record Center stores both permanent and non-permanent records directly under the control of federal agencies themselves. This particular Record Center also houses records created in a joint venture between the National Archives and Records Administration (NARA) and the Department of the Interior, known as the American Indian Records Repository (AIRR). It stores primarily modern records. Not many of these records are available to the public. According to their website, at

[http://www.doi.gov/ost/records\\_mgmt/american-indian-records-repository.cfm](http://www.doi.gov/ost/records_mgmt/american-indian-records-repository.cfm):

*AIRR provides authorized researchers, federal employees who are conducting the historical trust accounting, Tribes, and contractors secure access to inactive records for research. Records are stored in strict compliance with NARA standards.*

A YouTube video about the AIRR is available at <http://www.youtube.com/watch?v=JunJCRhxnFk> (Native Report, 2013).

## Selected List of Other U.S. Federal Resources

### Bureau of Indian Affairs

The Bureau of Indian Affairs sometimes retains records in their own offices rather than sending them to the National Archives, particularly for records of federally recognized Tribes since about 1990 but also for some much earlier. Check the National Archives Online Catalog first to

see if the records you are seeking have been transferred to the National Archives before contacting the Bureau of Indian Affairs directly. Information about BIA regional and other offices can be found at <http://www.bia.gov/WhoWeAre/index.htm>.

## The National Museum of The American Indian

There are two facilities of the Smithsonian Institution's National Museum of the American Indian, one in New York and one in Washington D.C. Both facilities hold many collections of Native artifacts and other primary source materials from across the entire United States. Many images of their artifacts and other materials are available online at <http://nmai.si.edu/>, as well as engaging educational materials. A convenient compilation of records, along with a game using primary sources, can be found at <http://www.nmai.si.edu/exhibitions/infinityofnations/>.

## Library of Congress

The Library of Congress holds both primary and secondary sources. The Library's primary purpose is to collect relevant source material and books for the United States Congress; however, these materials are also available to the public. The Library's holdings are varied and include millions of primary source documents from across the globe. Many thousands are available online at <http://www.loc.gov>. There is an active Education program at the Library of Congress, and many online educational materials related to American Indians are available, including the following:

- Classroom themed sets: Native American, <http://www.loc.gov/teachers/classroommaterials/themes/Native-americans/>.
- Exhibits of themed materials, <http://www.loc.gov/exhibits/>.

## National Park Service

The National Park Service has created many online and on-site educational programs centered around Native America. Many of these programs provide direct access to oral histories and other primary sources. Included in these programs are lesson plans, field trips, curricula,

traveling trunks, distance learning, institutes and field schools, and media for loan.

🌐 The main website for educational materials (focused for American Indian) is located at <http://www.nps.gov/teachers/teacher-resources.htm?q=American%20Indian&o=-date:D:L:d1>.

🌐 An important National Park Service website containing easily accessible oral histories is the Lewis and Clark Trail, Tribal Legacy Project at <http://www.lc-Triballegacy.org/main.php>.

## Important Resources Outside the Federal Government

### Tribal Sources

The most important place to learn about each Tribal community is from the Tribal citizens themselves. Most federally recognized Tribes have websites and education departments, but very few actually display copies of primary sources online. The most recent listing of federally recognized Tribes is published in the Federal Register on an annual basis. The January, 2014, listing is located at <https://www.federalregister.gov/articles/2014/01/29/2014-01683/indian-entities-recognized-and-eligible-to-receive-services-from-the-united-states-bureau-of-indian>. Most Tribal websites can be located through a Google search online. Documents held by individual Tribes may not be available to the public.

### Library Collections, State and Local Government Archives and Departments

University and public library special collections, private collections, as well as some state and local government departments of education and archives, are also great resources for primary sources about American Indians. Remember most of these are “collections,” so items in their listings may be copies of government records, material gathered from outside sources, and/or secondary sources. Collections may not have all of what was originally available, so look for more of any collection elsewhere as well. Some of the catalogs return both primary source finding aids

and secondary sources. Including the word “document” in your search will sometimes result in more primary sources.

A short list of available materials in non-government and state government locations across the United States follows. Please keep in mind that this list barely scratches the surface of what is available. Googling the terms Indian and Archives, as well as similar searches, will net a huge number of additional sources.

- ✿ Oklahoma Historical Society (an affiliate of the National Archives):
  - See a YouTube video about the holdings of OHS at [http://www.youtube.com/watch?v=S0ihGj\\_4N3E](http://www.youtube.com/watch?v=S0ihGj_4N3E).
- ✿ Oklahoma State University digital collections including:
  - Transcriptions of most Indian treaties (Kappler), <http://digital.library.okstate.edu/kappler/index.htm>.
  - Index to the decisions of the Indian Claims Commission, <http://digital.library.okstate.edu/icc/index.html>.
- ✿ University of Oklahoma digital archives
  - Western History Collection, <http://digital.libraries.ou.edu/homehistory.php>.
- ✿ University of Oregon Special Collections
  - Native American subject guide to finding aids, <http://library.uoregon.edu/speccoll/guides/Native.html>.
  - Historic Oregon Newspapers (a digital, searchable collection on line and free), <http://oregonnews.uoregon.edu>.
  - SWORP (Southwest Oregon Research Project, 1850–1950), which consists of photocopies of original documents from national repositories that relate to “the history of Native peoples of greater Oregon.” Finding aid can be found at: <http://nwda.orbiscascade.org/ark:/80444/xv14723>.
  - Microforms Subject Guide to Native American Studies, <http://library.uoregon.edu/govdocs/micro/Native.htm>.

- 🌐 Montana State Department of Indian Education, <http://opi.mt.gov/programs/indianed/>.
- 🌐 Northwest Digital Archives
  - Compiled finding aids for many colleges and universities in the Pacific Northwest, as well as the Siletz Indian Community records on line at <http://nwda.orbiscascade.org/>.
- 🌐 Southeastern Native American Documents Collection (a Georgia state-wide project called GALILEO, most easily searched in WorldCat), <http://www.worldcat.org/identities/lccn-no00-18881/>.

## Conclusion

Primary sources by and about Native Americans in the United States can be found in many places. It is important to think of American Indian communities as independently functioning, sovereign governments under the purview of the U.S. Federal Government. This makes the National Archives and other federal agencies extremely rich sources for primary source information.

Tribal governments are the most reliable source for information about each individual Tribe, although they might not always make their own documents available to the public. Each Tribal government makes that decision independently. Collections of primary sources found in libraries, state and local government archives, private collections, and departments of education may not represent all that is available on any particular Tribe or subject. Parts of any original collection could be in several places.

Remember, only a very small percentage of the vast array of primary sources connected to any American Indian community are likely to be on line at this writing. Familiarize yourself with the history and geography of your Tribal community. Practice searching and analyzing the records themselves. You will find the process becoming easier and easier. Using these principles will also make you more proficient in discovering what IS available online.

Do not give up. You will succeed. The records you find will certainly increase your understanding, and when you share what you have learned the collective understanding of all of humanity will increase in turn. Understanding can change viewpoints and even the course of history. Understanding can change the world.



Photo courtesy of the National Park Service.

## Endnotes

<sup>1</sup> This has been conveyed to this author by many new researchers, students, and teachers.

<sup>2</sup> There are exceptions and extensions for nearly everything in research. The rule, however, usually applies.

<sup>3</sup> You can see there are at least two series containing some sort of allotment records in this example. In fact, there are several more in the actual Grand Ronde Siletz Agency records.

<sup>4</sup> A decimal file is a subject file using a numeric (decimal) system to identify the subjects. Sometimes a key is needed to translate the numbers into subjects, but often they are obvious.

<sup>5</sup> Also, it is helpful to be aware that when individual documents are placed on line not all pages in a file are always included.

<sup>6</sup> See DocsTeach Activity, Treaties and Treaty Making, at <http://docsteach.org/activities/20659/detail>.

<sup>7</sup> For a more in depth explanation of Tribal sovereignty see Prygoski (n.d).

<sup>8</sup> The earliest trading was done by European companies, such as the Hudson's Bay Company. Hudson's Bay Company records can be found in the National Archives of the United Kingdom. Other countries trading with Tribes and bands before the United States came into being would have records in their archives as well, usually handwritten in the language of the country.

<sup>9</sup> Keep in mind, however, that important material is not always identified in such a simple way. Also, extra, unrelated material will certainly appear in the results, such as the 1940 Census records for everyone from Choctaw County, Mississippi. Broader classifications, such as "Five Civilized Tribes," or "Mississippi Indian," or "Oklahoma Tribes," may be missed by the search engine in this simple search. Creator offices such as "Muskogee Agency" may be overlooked as well.

## References

- Buswell, C. (2015). *Exploring Your Own Community* (Curriculum). [HonoringTribalLegacies.com](http://HonoringTribalLegacies.com)
- Kappler, C. J. (n.d.). *Indian affairs: Laws and treaties, Table of Contents; Japan's World War II balloon bomb attacks on North America; Palaeography: Reading old handwriting, 1500–1800, a practical online tutorial; From Marchall to Marshall, the Supreme Court's stance on Tribal sovereignty; and Study guide to colonial American handwriting.*  
Retrieved 2013, from Oklahoma State University Digital Library:  
<http://digital.library.okstate.edu/kappler/index.htm>.
- Mikesh, R. C. (1990). *Japan's World War II Balloon Bomb Attacks on North America.*  
Washington DC: Smithsonian Institution Scholarly Press.
- National Archives of the UK. (n.d.). *Palaeography: Reading Old Handwriting 1500–1800, a Practical Online Tutorial.* Retrieved 2013, from National Archives of the United Kingdom. Retrieved 2013, from: <http://www.nationalarchives.gov.uk/palaeography/>.
- Prygoski, P. J. (n.d.). *From Marshall to Marshall, The Supreme Court's Stance on Tribal Sovereignty.* Retrieved from American Bar Association. Retrieved 2013, from: [http://www.americanbar.org/newsletter/publications/gp\\_solo\\_magazine\\_home/gp\\_solo\\_magazine\\_index/marshall.html](http://www.americanbar.org/newsletter/publications/gp_solo_magazine_home/gp_solo_magazine_index/marshall.html).
- Reed College. (n.d.). *Study Guide Colonial American Handwriting.* Retrieved 2014, from Indian Converts Collection. Retrieved 2013, from: [http://cdm.reed.edu/cdm4/indianconverts/studyguides/colonial\\_american\\_handwriting/cultural\\_significance.php](http://cdm.reed.edu/cdm4/indianconverts/studyguides/colonial_american_handwriting/cultural_significance.php).
- United States Supreme Court. (1831). *Cherokee Nation v. Georgia* (30 U.S. (5 Pet.) 1).



## Selected National Archives' Record Groups known to contain records related to American Indians

*From Edward E Hill, "Guide to Records in the National Archives of the United States Relating to American Indians," Washington D.C., 1982, with additions by NARA, Seattle archives staff from the Online Research Catalog at [www.archives.gov](http://www.archives.gov). \*Indicates examples are also online at [www.docsteach.org](http://www.docsteach.org)*

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\*Record Group 11: [General Records of the United States Government, 1778–2006](#)

Record Group 12: [Records of the Office of Education, 1870–1980](#)

Record Group 15: [Records of the Department of Veterans Affairs, 1773–2007](#)

Record Group 16: [Records of the Office of the Secretary of Agriculture, 1794–ca. 2003](#)

\*Record Group 21: [Records of District Courts of the United States, 1685–2009](#)

\*Record Group 22: [Records of the U.S. Fish and Wildlife Service, 1868–2008](#)

Record Group 23: [Records of the Coast and Geodetic Survey, 1806–1981](#). (1869 manuscript by E. Ballard on Indian place names in Maine.)

Record Group 26: [Records of the U.S. Coast Guard, 1785–2005](#)

Record Group 28: [Records of the Post Office Department, 1773–1971](#) (Post offices in Indian Territory and other Native communities.)

\*Record Group 29: [Records of the Bureau of the Census, 1790–2007](#)

\*Record Group 30: [Records of the Bureau of Public Roads, 1892–1972](#)

Record Group 33: [Records of the Extension Service, 1888–2000](#)

Record Group 35: [Records of the Civilian Conservation Corps, 1933–1953](#)

Record Group 36: [Records of the U.S. Customs Service, 1745–1997](#)  
(Seamen proofs of citizenship includes indication of a few Indians.)

Record Group 39: [Records of the Bureau of Accounts \(Treasury\), 1775–1973](#)

Record Group 44: [Records of the Office of Government Reports, 1932–1947](#)  
(Reports relating to state legislation.)

Record Group 45: [Naval Records Collection of the Office of Naval Records and Library, 1691–1945](#)  
(Panamanian revolt. Seminole War. Others.)

- \*Record Group 46: [Records of the U.S. Senate, 1789–2011](#)
- \*Record Group 48: [Records of the Office of the Secretary of the Interior, 1826–2006](#)
- \*Record Group 49: [Records of the Bureau of Land Management, 1685–2006](#)
- Record Group 50: [Records of the Treasurer of the United States, 1808–1970](#)
- Record Group 51: [Records of the Office of Management and Budget, 1905–2002](#)  
(Records of Indian Day Schools, Boarding Schools and Hospitals.)
- Record Group 53: [Records of the Bureau of the Public Debt, 1775–2005](#) (Primarily for the Cherokee Outlet and Oregon.)
- Record Group 56: [General Records of the Department of the Treasury, 1775–2005](#)
- \*Record Group 57: [Records of the U.S. Geological Survey, 1839–2008](#)
- Record Group 59: [General Records of the Department of State, 1763–2002](#)  
(Mostly foreign relations, however there is a military commission granted to Chief Okana-Stote of the Cherokee by Governor Louis Billouart, Chevalier de Kerlerec in 1761 . . . so there may be more records between foreign dignitaries and American Indians.)
- Record Group 60: [General Records of the Department of Justice, 1790–2002](#)
- Record Group 69: [Records of the Work Projects Administration, 1922–1944](#)
- Record Group 70: [Records of the U.S. Bureau of Mines, 1860–1995](#) (Some correspondence with the Bureau of Indian Affairs.)
- \*Record Group 75: [Records of the Bureau of Indian Affairs, 1793–1999](#) (This is the largest group of records relating to American Indians.)
- Record Group 76: [Records of Boundary and Claims Commissions and Arbitrations, 1716–1994](#) (Includes lists of Indian words and geographic place names, records of exploring parties, etc.)
- \*Record Group 77: [Records of the Office of the Chief of Engineers, 1789–1999](#)
- \*Record Group 79: [Records of the National Park Service, 1785–2006](#)
- \*Record Group 80: [General Records of the Department of the Navy, 1804–1983](#)  
(Records of American Indian personnel.)
- \*Record Group 83: [Records of the Bureau of Agricultural Economics, 1876–1959](#)

- \*Record Group 86: [Records of the Women's Bureau, 1892–1995](#)
- Record Group 90: [Records of the Public Health Service, 1794–1990](#)
- \*Record Group 92: [Records of the Office of the Quartermaster General, 1774–1985](#)
- Record Group 93: [War Department Collection of Revolutionary War Records, 1709–1939](#)
- \*Record Group 94: [Records of the Adjutant General's Office, 1762–1984](#)
- \*Record Group 95: [Records of the Forest Service, 1870–2008](#)
- Record Group 96: [Records of the Farmers Home Administration, 1918–1975](#)
- Record Group 99: [Records of the Office of the Paymaster General, 1791–1917](#)
- Record Group 102: [Records of the Children's Bureau, 1908–2003](#)
- Record Group 104: [Records of the U.S. Mint, 1792–2007](#) (Indian Peace Medals.)
- \*Record Group 106: [Records of the Smithsonian Institution, 1871–1952](#)
- Record Group 107: [Records of the Office of the Secretary of War, 1791–1948](#)
- Record Group 108: [Records of the Headquarters of the Army, 1828–1903](#)
- Record Group 109: [War Department Collection of Confederate Records, 1825–1927](#)
- \*Record Group 111: [Records of the Office of the Chief Signal Officer, 1860–1985](#)
- Record Group 114: [Records of the Natural Resources Conservation Service, 1875–2002](#)
- \*Record Group 115: [Records of the Bureau of Reclamation, 1889 - 2008](#) (Lantern slides and photographs of Native communities.)
- Record Group 118: [Records of U.S. Attorneys, 1821–1994](#)
- Record Group 119: [Records of the National Youth Administration, 1934–1945](#) (Limited film footage of Apache.)
- Record Group 120: [Records of the American Expeditionary Forces \(World War I\), 1848–1942](#) (American Indian troops.)
- Record Group 121: [Records of the Public Buildings Service, 1801–2000](#)
- Record Group 123: [Records of the U.S. Court of Claims, 1835–1984](#)
- \*Record Group 126: [Records of the Office of Territories, 1881–1976](#)
- Record Group 135: [Records of the Public Works Administration, 1933–1939](#)

- Record Group 147: [Records of the Selective Service System, 1926–1975](#)  
(Men drafted from Indian Territory.)
- \*Record Group 148: [Records of Commissions of the Legislative Branch, 1928–2007](#)
- Record Group 149: [Records of the Government Printing Office, 1935?–1935?](#) (Photos and lantern slides of many subjects.)
- Record Group 153: [Records of the Office of the Judge Advocate General \(Army\), 1792–2010](#) (Mostly court martial records.)
- Record Group 159: [Records of the Office of the Inspector General \(Army\), 1814–1917](#) (Records of the Montana, Dakota, and Modoc Wars.)
- Record Group 163: [Records of the Selective Service System \(World War I\), 1917–1939](#)
- \*Record Group 165: [Records of the War Department General and Special Staffs, 1860–1952](#)
- Record Group 187: [Records of the National Resources Planning Board, 1931–1943](#) (Maps of some reservations.)
- Record Group 192: [Records of the Office of the Commissary General of Subsistence, 1818–1913](#)
- Record Group 203: [Records of the Office of the Chief of Finance \(Army\), 1792–1942](#)
- Record Group 205: [Records of the Court of Claims Section \(Justice\), 1793–1947](#)
- Record Group 206: [Records of the Solicitor of the Treasury, 1791–1934](#)
- \*Record Group 208: [Records of the Office of War Information, 1926–1951](#)
- Record Group 210: [Records of the War Relocation Authority, 1941–1989](#)  
(Colorado River Relocation Center relating to the Mojave.)
- \*Record Group 217: [Records of the Accounting Officers of the Department of the Treasury, 1775–1978](#)
- Record Group 220: [Records of Temporary Committees, Commissions, and Boards, 1893–2008](#)
- \*Record Group 233: [Records of the U.S. House of Representatives, 1789–2011](#)
- Record Group 235: [General Records of the Department of Health, Education, and Welfare, 1935–1981](#)
- Record Group 261: [Records of Former Russian Agencies, 1802–1929](#)
- Record Group 267: [Records of the Supreme Court of the United States, 1772–2007](#)

- Record Group 276: [Records of the U.S. Courts of Appeals, 1891–1992](#)
- Record Group 279: [Records of the Indian Claims Commission, 1946–1983](#)
- Record Group 291: [Records of the Federal Property Resources Service, 1944–1982](#)
- Record Group 306: [Records of the U.S. Information Agency, 1900–2003](#)
- \*Record Group 330: [Records of the Office of the Secretary of Defense, 1921–2008](#)
- Record Group 360: [Records of the Continental and Confederation Congresses and the Constitutional Convention, 1765–1821](#)
- \*Record Group 370: [Records of the National Oceanic and Atmospheric Administration, 1928–2008](#)
- Record Group 381: [Records of the Community Services Administration, 1963–1981](#)
- \*Record Group 391: [Records of U.S. Regular Army Mobile Units, 1815–1970](#)
- \*Record Group 393: [Records of U.S. Army Continental Commands, 1817–1947](#)
- \*Record Group 412: [Records of the Environmental Protection Agency, 1944 - 2006](#)
- \*Record Group 435: [Records of the Indian Arts and Crafts Board, 1929–1988](#)

Also see: Records of the Presidential Libraries

# CHAPTER 5

## **The Art of Learning: From Cradle to College and Beyond<sup>1</sup>**



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## Introduction

**I**nstilling love for the art of learning has and will continue to be the greatest challenge for any society, primitive or advanced. New life needs to be prepared to survive and thrive in the society into which it is born. The human child being born into the most complicated advanced form of societal life has the greatest challenge, and those responsible for adequate child development needed for survival face the greatest of all challenges. Who are those responsible? Each member at all levels in the educational system of any society are responsible. Those who provide private and public means, develop the standards and enforce them, and educators at all levels from parents to professors should be held accountable. How is the educational system in the United States faring in its responsibility?

Is the letter of the law, requiring that each child be afforded equal educational opportunities in accordance with the United States constitution, being carried out? If we can say yes to these challenges, then a love for the art of learning will have been instilled, and the survival of coming generations require it. Let us examine and address these responsibilities. Do our institutions of learning offer adequate classroom atmospheres conducive to learning to meet today's technical and societal needs? Do the current Common Core State Standards (CCSS) meet measurable assurances for the needs of tomorrow?

## Children in Classrooms

In the United States normal classroom settings have changed dramatically as the demands of society have become higher. In light of growing pressures to succeed, we see district curricula and home environments are ever changing. These changes are severely affecting the student population, from cradle to college. In the educational system success is measured by academic marks, scholarships, and earned college degrees; in our current society measures of success include high paying jobs and material acquisitions. A media savvy society confirms and helps drive these pressures. The fast pace of change in today's technological age demands advanced learning in

all fields. With a full curriculum and rising demands, teachers and students perpetually feel pressured to perform at ever higher levels. This mounting pressure is making teachers and students feel defeated and overwhelmed, causing a quick burn out and a sentiment of inevitable failure. A common response to the multiple initiatives or learning demands from teachers, parents, or students to know how or be able to implement the expectations in classrooms has been articulated as unmanageable; increasingly the classroom environment is not conducive to teaching or learning the current standards. The mindset is that these standards are impossible or unreachable. We believe the opposite to be true.

Every child is instinctually a learner. We would serve all students well to remember that each and every child inherits a natural aptitude for learning and responds to environmental stimuli when the fundamental aim is to create independent learners in a child-centered classroom with increasing cognitive demand. One of many challenges may be providing the most effectual environmental stimuli. Our classrooms should allow students/children the opportunity to use the strategies acquired from each year of learning to be carried from one year to the next and then into adulthood. We are in a period when aligned educational initiatives should be able to benefit all the children of this nation, to help them define or feel a sense of meaning, and to guide them to develop motivation and interest amongst their peers (Goodman, 1994).

The Common Core State Standards (CCSS) framework provides a start. The CCSS can be combined with the belief that the overarching goal is to make all students meet and/or exceed expectations and nothing less. To maximize the learning potential of all would require the collaboration of teachers, parents, community leaders, and policy makers. Developing or striving to continue the extensive work to empower learning and to build upon an educational community's strengths will launch an experience of transformation extending learning well beyond the curriculum (Piaget, 1969; Vygotsky 1978).

One way to think about challenging all learners to develop and demonstrate their full potential is to identify the cognitive level at which students are processing what they are learning. A model describing this process of developing knowledge within cognition can occur along a continuum consisting of four levels:



- ☼ declarative knowledge—the *what*;
- ☼ procedural knowledge—the *how*;
- ☼ conditional knowledge—the *when*; and,
- ☼ conceptual understanding—the *why*.

This model was introduced in the mid-1980s by educational researchers Ann L. Brown and Annemarie Palincsar, and it has been used and adapted in many forms since then by educators, cognitive psychologists, and others. Here is a general explanation of the model:

☼ ***Declarative knowledge*** is the “what” of content. As its name implies, it is the type of information that students can declare, that they can repeat back when asked to do so. Declarative knowledge is important when students are learning the basics of a new subject area, such as vocabulary and nomenclature. It is also necessary for the elements of a subject that need to be committed to memory and raised to the level of automaticity—in other words, information that must be recalled instantly and accurately at a moment’s notice in order for learning to progress. While most subjects have a significant body of declarative knowledge, it is difficult for students to retain all of this without the opportunity to process at the following three levels.

☼ ***Procedural knowledge*** is the “how” of content knowledge. In general, it involves the application of declarative knowledge in predictable, routine, and conventional ways. Most content knowledge has rules or methods associated with its use. For example, English grammar defines how to use the declarative knowledge about parts of speech. The commutative property in mathematics tells students about how certain mathematical relationships work. Students need to know and be able to follow these procedures accurately. In many classes, instruction consists almost exclusively of introducing content in a declarative fashion and practicing procedures. Students who know and can use knowledge procedurally have reached a solid novice level in a subject area.

☼ ***Conditional knowledge*** is the “when” of the use of content knowledge. As students progress from knowing the content to knowing how to apply that content, the next step

is knowing when to use which sort of technique in order to apply or otherwise use the content. For example, in order to comprehend a text fully, a reader must understand the use of a metaphor or a simile, and knowing when to use these literary devices for the best effect requires conditional knowledge. Understanding under which conditions to use which statistical methods, based on the nature of the problem being studied, is another example. Conditional knowledge helps students know how to select from among a range of possible or potential methods, choosing the most appropriate, efficient, and effective approach. In other words, a procedure that may be perfectly fine in one context may not be as useful or the best choice in another. As students acquire and practice a wider range of procedural techniques, they reach the level at which they can begin to make wise choices. Students at this point have surpassed the novice level and are emerging as competent users of the content knowledge. They are becoming strategic learners.

🌱 **Conceptual knowledge** is the “why” of the use of content knowledge. Whereas declarative knowledge gives learners raw material, and procedural and conditional knowledge enable learners to do something with that material, conceptual knowledge enables learners to know and understand why they are doing what they are doing. This ability then equips learners to make better and more strategic decisions about the ways in which they want to process information and apply it to a range of complex problems or situations. Understanding that history includes multiple perspectives, some of which are contested, enables a learner to produce a far more sophisticated analysis of a time or place in the past, one that takes into account more than one possible explanation. Conceptual knowledge lets learners function at a metacognitive level to ask themselves if what they are doing makes sense and if they are accomplishing what they want to accomplish. Learners at this level are demonstrating emerging expertise in the subject area.

All four levels are critically important because as students move through each level of cognition, their retention of everything they learned at previous levels solidifies. Procedural knowledge reinforces declarative knowledge. Conditional knowledge reinforces procedural and

declarative knowledge. Conceptual knowledge strengthens all three. Deeper learning occurs when students have the opportunities to experience each level as they progress through their instruction in a subject area. Not all students will reach the same ultimate level, but all need the opportunity to process information at each of the levels, in part to gauge their own understanding of the content but, more importantly, to begin to think more like an expert in the subject area.

These levels support the use of learning progressions that are more than just a series of concepts or topics taught in order. A true learning progression will consist of more than a sequencing of the content to be learned. It will also describe learning activities along all four levels of the knowledge complexity progression that build on the content knowledge being learned. One of the true advantages of the Common Core State Standards and their culmination at a college and career readiness level is that content can be introduced, developed, and extended across grade levels until students are able to process the content at more complex cognitive levels, as specified in this four-level knowledge complexity progression.

The balance and proportion of teaching that is geared to each level says a lot about whether students are really being challenged and the degree to which they are encouraged and permitted to develop the types of cognitive skills associated with deeper learning. While different subjects and courses call for different proportions of each standard, students in general should have opportunities to process content at all four of these levels on a regular basis in all subject areas.

This is true regardless of the future path a student is hoping to pursue. The ability to process complex knowledge is a key foundational skill for twenty-first-century learners. It is no longer necessary to group students into those who will work with their heads and those who will work with their hands. All work will require a much greater emphasis on the thinking components and the ability to process information and solve non-routine problems. All instruction will need to take students to the higher levels of cognitive engagement at the conditional and conceptual levels of the model.

A second important factor that helps explain why it is important to have instruction that encourages deeper learning derives from advances in brain and cognitive science. At the heart of this body of research is the finding that the brain is malleable and capable of developing if stimulated to do so. Notions of intelligence as a one-dimensional fixed construct are being replaced with more multidimensional conceptions of human intellectual capacity. In these new frameworks, effort becomes as least as important as aptitude. In other words, it is possible to expect more of all students, and students can achieve more when they are let in on the secret that they are capable of much more if they make a sustained, productive effort to learn. Labeling them with test scores that purport to capture their “true” ability level only serves to defeat the message that their effort is at least as important as their aptitude.

Researchers have also discovered that the human brain is not like a library or some sort of grand catalog in which all information is organized into discrete packets that is grouped by topic in a neat and orderly fashion, to be recalled on demand. Instead, the brain tends to create meaning based on its sense of what is important, and it takes whatever information it has at hand and then makes the best sense it can out of it. The problem for educators is that breaking subject-area knowledge down into small bits and then teaching the bits sequentially deprives the brain of the ability to get the big picture and to figure out what is really important. Rather than storing each bit sequentially when information is presented in isolated packets, the brain tends to forget bits, connect bits up in unintended ways, leave gaps, and miss the larger purpose and meaning of the bits. Testing models that focus on the bits do not provide much insight into student conceptual understanding or the larger structure of knowledge that informs the uses of information.

The net result is that the brain struggles to retain many or most of the individual bits of information, in part because it is not receiving any cues that these bits are important, and in part because few of the bits connect with any larger framework, or schema, which the brain uses to organize and retain relevant and necessary knowledge and information. This is why students can learn and then forget content that is taught at multiple grade levels and why they can demonstrate detailed knowledge of a phenomenon with absolutely no understanding of the phenomenon

itself. This is one of the reasons test scores at the high school level on tests such as the National Assessment of Educational Progress (NAEP), which gets at conceptual understanding along with content knowledge, have flat lined over the past two decades. Teaching and learning in secondary schools in particular becomes increasingly dependent on student conceptual understanding to retain information and on learning progressions that build over time toward larger and more complex structure of knowledge. High school students are simply not making any more sense out of what they are being taught in earlier grades, nor do they seem to be retaining this information any more effectively than in the era before standards.

The CCSS is a framework for creating deeper learning that extends beyond declarative and procedural knowledge. In doing so, the CCSS establishes a common set of high expectations for all students regardless of their background or the labels given them by well-meaning adults. A key to success with the CCSS is being literate in a multi-faceted way and employing a comprehensive literacy approach. While the CCSS for English Language Arts (ELA) delineate specific expectations in reading, writing, speaking, listening, and language, each standard need not be a separate focus for instruction and assessment (CCSS, Introduction, p. 5).

It is important to note that the standards are the benchmarks or goals that specify what we want students to know and to be able to do at the end of each grade band. The CCSS set the goals, help set the objectives and the learning targets, and the schools control the means.

Learning the standards intimately is the responsibility of the reader because of the deep, rich, and increased rigor of what the standards are asking teachers and students to do. However, we must also ask ourselves what the standards are not saying. With reflection, one can visualize what sub-skills or learning progressions are needed to meet the grade level standards. The best advice given is to read and re-read the new standards like a great book. With each reading the purpose and value of the standards will become clearer.

The initial focus brings into play the dialogue and collective thinking about how to achieve optimal learning in a classroom or within the student's mindset. The capacity of the mind is beyond measure; while stimulating or tapping into the minds of children, it is critical to motivate them to

think beyond the lesson and connect it to their larger world. They should be building on who they are by using their “Funds of Knowledge” to generate change or to have agency in their own lives. We should be encouraging, motivating, and inspiring not the status quo, but the potential of what could be—*who* they could be!

No single factor may be more important to student success than the degree to which students are allowed and encouraged to take ownership of their learning. Not only does this key learning skill result in improved achievement, it is a more efficient and cost-effective way to manage the learning process. When students take ownership of learning, many more approaches to learning are possible, ranging from self-guided methods to online courses. Absent such ownership, the traditional teacher-student didactic approach is the only real option, but such an approach may not be sufficient when deeper learning is desired and when the goal is for students to master the Common Core State Standards and become college and career ready.

At the heart of student ownership of learning is a complex of intersecting skills and dispositions. Among them are the topics explored in the next sections:

- ✿ Goal setting
- ✿ Persistence
- ✿ Self-awareness
- ✿ Motivation
- ✿ Help seeking
- ✿ Progress monitoring
- ✿ Self-efficacy

**Goal Setting:** Perhaps none of these skills and dispositions is more important than having a goal or reason to learn. That goal can be as broad as desiring to develop more fully as a human being or as targeted as wanting to become, say, a medical records technician. In some ways, it does not matter what the exact goal is as long as students see the academic programs in which they are engaged as somehow contributing to achieving their goals. Having the goal to become a rock guitar player or professional snowboarder is not a bad thing in and of itself. It can lead students to develop

skills of disciplined practice and stronger self-control and self-direction, but only rarely does the goal connect very directly to classroom academic success. For far too many students, goals of this nature are not really goals at all; they are fantasies or diversions that can hinder them from coming to grips with the reality of what it takes to be ready to succeed in their lives.

Learning how to set goals should begin when students are young and then be incorporated into schooling at all subsequent grade levels. Students should learn how to set and achieve short-term, medium-term, and long-term goals. A short-term goal might revolve around doing better on the next assignment. A medium-term goal might require improving a skill area such as time management by learning how to manage time better over the course of an academic term. Longer-term goals should be specific enough to focus student behavior but broad enough to acknowledge the multiple pathways available to achieving the goal. Goals of this type generally are stated in terms of some sort of desired academic or career accomplishment, such as attending college, pursuing a major or career area, or developing an interest. Long-term goals can take many forms and can be quite fluid. The key thing is for all students to have one or more throughout their years in school.

Goals need to be recorded, and progress toward them needs to be measured regularly. One of the key things this accomplishes is a sense of causality—that students' actions matter and that students can influence or control their lives through their actions. It is worth noting that many young people come from communities in which cause and effect does not seem to hold sway, where bad things happen to good people for no apparent reason, where goals are rarely achieved and are often thwarted by the most arbitrary and unfair of circumstances or occurrences. Students from such backgrounds have a difficult time buying into the idea that hard work now pays off in the future. Giving these students tools to create some sense of control in their lives by setting and achieving goals, however modest those goals might be initially, can be exceedingly empowering and instill perseverance. Knowing how to set goals also puts youth on the road to developing the self-reliance they will need in order to succeed in postsecondary education and the workplace.

**Persistence:** Achieving goals requires the development of a constellation of skills. Most goals worth pursuing require persistence—the ability to continue in the face of frustration and failure. Many well-intentioned educators (and parents) attempt to minimize student frustration and failure by limiting challenge or by over supporting. The effect can be to create young people who are not aware of their limitations and overestimate the significance of their accomplishments. The result is fragile learners who avoid situations that might shatter their carefully crafted illusion of competence.

Others have used terms such as *grit* and *tenacity* to describe the necessary behaviors to support goal achievement. The term *persistence*, however, may be more suitable because the implication of terms such as *grit* and *tenacity* is that learners must first have obstacles to overcome in order to be gritty or tenacious. *Persistence*, on the other hand, connotes sustained effort over time and not necessarily triumphing over barriers, whether institutional, personal, or otherwise. Persistence does accommodate *grit* and *tenacity* but does not require adversity to demonstrate a commitment to maintaining effort sufficient to complete the task at hand or achieve meaningful goals. Students do not need obstacles placed in their paths for them that they must overcome tenaciously, such as poor teaching, poor facilities, unclear ends and aims, and irrelevant content, in order for them to demonstrate they are worthy of college and career opportunities. Learning challenges need to be carefully crafted to reward persistence, not create additional barriers.

**Self-Awareness and Locus of Control:** Competent learners are cognizant of how good their work is. They know, independent of the teacher's judgment, whether what they are doing is of high quality. Students with experience in the performing arts and competitive sports perhaps understand this phenomenon best. They know that, ultimately, it does not matter how a parent, teacher, or coach assesses their achievement. The true judgment is in the performance itself, and the final judgment often emanates from an external audience that has its own criteria by which it is judging the performance.

Self-aware learners are capable of saying a work product is not good enough even when they have received a high mark or praise for it. They can do this because they have sufficient



confidence in their abilities to improve, largely through hard work. They do not need to explain away a less-than-stellar performance by blaming others. They are comfortable discussing the strengths and weaknesses of their work, taking pride in what they did well, and planning how to improve in areas where they did not. Self-aware learners have an internal mechanism of sorts that tells them how well they are doing. They do not need to be perfectionists who cannot take any satisfaction even from a very good performance or product. They are, however, realists who on occasion come to grips with the fact that they must settle for less than their best effort because they do not have the time or because the improvements they know they could make would not be noticed. They do not, however, kid themselves about what they have done and what they need to do.

This type of internal locus of control manifests itself in many ways. Effective learners who possess a range of key skills and techniques know how to become motivated to complete challenging tasks and assignments, even in areas where they may be less interested in the subject. They use a combination of internal and external motivation. Although many educators extol the virtues of intrinsic motivation, wherein students do things for the sheer joy of doing them, extrinsic motivation has its place as well. Knowing they need good grades in order to meet admission standards if they are to pursue their goal is just as important for successful students as completing an assignment for the sheer interest or excitement generated by the topic.

Students need help learning how to identify and harness both forms of motivation and to recognize that they are unlikely to do well in most classes without a combination of the two. While teachers and other adults can create systems that maximize student motivation, ultimately the students must manage their own motivation. They need to learn how to gear up even in situations where they are not naturally excited. They need to be given the tools that effective learners use to get through the tough times that all learners experience over the course of their schooling. Equipped with these tools and strategies, learners are ready for postsecondary environments, workplace training, military, and other environments that expect them to be motivated and engaged.

These types of learning skills can be taught to all students. Currently the tendency is to view many of the key learning skills as personality traits that some students possess and others lack. The

evidence, however, suggests that these skills are all highly teachable, but that they are going to be more challenging to learn for students from some backgrounds. When students do not necessarily believe they can be successful, it is harder to get them to internalize these skills. In this case, success can breed success, and students can be taught these skills incrementally and come to see that they are better and more successful learners as a result.

***Help Seeking:*** Skillful learners know when they need help. It is surprising how many learners do not know when they are in over their heads. And even when they do, they do not know how to get the help they need or simply do not go after it. Our research and that of others suggests that the students most in need of help are the least likely to pursue it on their own. Students from low-income families, members of certain ethnic minority groups, and those who are first in family to pursue postsecondary educations tend to struggle in college because they do not know how to get help, or they believe that accepting help indicates they are not really college material in the first place. They inadvertently set a high bar for themselves, in part because they believe that all the students who are succeeding are doing so without the need for help.

In contrast, high achievers know how to seek help so well that sometimes they institute a near-monopoly on such resources. Perhaps online learning environments will level the playing field because all students can pursue help anonymously, but it is more likely that the anonymity will play against those who most need help. A more effective approach is to teach the students who most need it how to access available resources on their own. They need to develop a mind-set that seeking and accepting help is not tantamount to failure. They need to know that everyone needs help at one point or another; they may just not see how others are receiving the help they need.

Another way to think about many of these self-monitoring behaviors is the notion of student self-efficacy, which is the idea that learners can produce the effect or outcome on the learning that they desire. Self-efficacy is the sense of control over the factors that make a difference for success in a chosen endeavor. This concept is closely related to empowerment because learners can legitimately advocate for and pursue their own success and have the power to do so.

Keeping up with research and theories about deeper learning, while building in students a foundation for college and career readiness, is a move in the right direction. Research and professional development is imperative for the teacher’s capacity to implement any initiatives while working with the education system. The ELA CCSS are addressing the need for comprehension skills and the ability to critique and reason. Students are asked to do research in order to justify a claim while attending to a text; in addition, they are learning to use text to provide the evidence to support one’s opinion. If ideas do not resonate from the learning process, it will not attach to memory. Let us inspire students to use their knowledge to generate change in our world. Students must have ample opportunities to take part in a variety of literacy rich, structured conversations, whether as part of a whole class, in small groups, or with a partner. Being productive members of these conversations requires that students:

- ✿ contribute accurate relevant information;
- ✿ respond to and develop what others have said;
- ✿ make comparisons and contrasts; and,
- ✿ analyze and synthesize a multitude of ideas in various domains.

As a reader we invite you to think of various domains in multiple contents/disciplines, settings, and purposes. In this context consider place-based literacy, multi-dimensional and inter-woven culturally and generationally. Let us revisit this term of “place” as identified in the introduction beginning with a quote from one of Luisa’s advisors from the University of Colorado who was commenting on her “Analysis of My Autobiography” in graduate school: *“Your analysis made me realize that for you, identity is linked with **place**—“El Valle.” I wonder what would happen when you no longer live there. I guess you keep the connection growing by visiting often.”*

### **Luisa's Reflection: Looking Back**

Through the autobiography I had written for my graduate program in 1996, I was asked to tap into the “funds of knowledge” of my family. Each family member interviewed for my autobiography helped me align each experience of my life as it contributed to the sources of my literacy. Each family member without fail connected it to a historical context from the geographical region from which they came.

The San Luis Valley in Colorado, where I grew up, was designated a national historic district in 1976. Long ago, during the eighteenth century, three divisions of Comanche Indians ruled Colorado's plains. They had been armed by French explorers. The Utes claimed the valley had been theirs forever. Other Native people—Comanches, Kiowas, Navajos, Pueblos, Apaches, Arapahos, Cheyennes—knew the valley, too. Back in 1598, don Juan de Oñate had claimed the valley for King Phillip II of Spain. Such was the state of affairs in August 1779 when Juan Bautista de Anza, Governor of New Mexico, allied with and accompanied by the Utes and Jicarillas, led his Spaniards against the Comanche Chief Green Horn and changed forever the history of this region. To historians this is only the textbook history of the San Luis Valley, but to the descendants in the region it is living history. They were never conquered culturally and each independent culture is alive and thriving. Most languages were preserved and remain in use. Native American Tribal tongues, as well as French, Spanish, and English are all spoken, depending upon one's company. And, yes, claims to Native offspring, when orphaned, are fought over in the United States courts. Native Americans still maintain their sovereignty, and the Spanish and French retain their cultures. No, this history is not taught in the schools but in the homes, through customs and norms, established religions and traditions. The people of El Valle are all ferociously proud of their heritage, and equally proud of their nation that permits them this freedom.

During the interviews made in preparation for the autobiography, each family member had a historical context and special moments to share. Every detail in relation to my ability to become a literate and a functioning member of society is in direct connection to my lineage and multi-cultural background. My culture, history, place of my parents' birth, and community helped with my ability to become the lifelong learner I am to this date. Please note that this written project was not a prescribed lesson, but an alternate curriculum that took researching and reading parallel historical texts along with interviewing my elders to determine what was fact vs. opinion. I didn't learn this or “my” history in the K-12 school setting. Nor were the Comanche Tribe's nor the Spanish immigrants' history introduced throughout my academic career. The impact this graduate school experience had on my life and career calibrates with who I am today as a leader. I know it takes an individual to decide what he or she will learn, but it is important to recognize the environment in which students learn. It is important to build upon the lessons of the past to help inform our future as we live the present day.

Historically, the understanding of “place” has been the cornerstone of teaching and learning in Tribal communities. As described in the chapter, Place-Based Multiliteracies Framework, place is a concept encompassing multiple interconnected elements, including ecosystems, homelands, physical features, plants, animals, peoples and their cultures, languages, stories, health, and wellbeing. Understanding this complex entity requires a multilayered framework, such as that presented by multiliteracies. A place-based multiliteracies framework Honors Tribal Legacies through exploration of “place” using a range of modalities or “design modes,” including visual, auditory, tactile, spatial, smell/taste, movement/gestural, linguistic, and spiritual. The framework begins with what students know as a foundation for new learning. Students are then explicitly taught means for using diverse “design modes” to explore specific situations. Stakeholders associated with a specific place are identified and their perspectives are shared and examined from different vantage points. Understanding and respecting these multiple viewpoints serves as a foundation for developing creative responses to challenges faced in real world contexts.

Place-based inquiries are not in conflict with the CCSS. The CCSS allow teachers to have the ability to make choices in their lessons as long as they maintain an emphasis on attending to the rigor of cognitive demand in an integrated comprehensive way. The example of the autobiography that was not researched and written until graduate school should be re-considered as an opportunity for children. Imagine what this type of personalized research, writing, speaking, listening, critiquing, and synthesizing could contribute to a student’s identity in middle school or high school. To bring a lesson to life as it connects to the student’s identity in learning while attending to the cognition of learning becomes more meaningful and valuable to students. Curriculum, instruction, assessment, engagement, inspiration and goal setting must correspond with where students are in the present day as learners. An instructional choice has to come from within. If teachers use prescribed lessons with the outcome being all the same, some children will continue to fail. To transform one’s teaching and practice will require meeting the students’ needs by building on their strengths, considering who they are culturally, and what they know.

### **Luisa's Reflection: Building on Strengths**

As a classroom teacher, several of my students exhibited severe behaviors, such as impulsive behavior, an unwillingness to learn new concepts, an inability to stay on task, an unwillingness to practice self-assessment, intense feelings, dysfunctional coping behaviors while working with others, and some were affected by outside stimulation. As a practical example, I tied engagement and focus to a thematic lesson over a period of time; it was successful and brought forth amazing work from all of my students. The children who would give little or nothing from a prescribed lesson gave me optimal work. My end result was a beautiful 50-page published book written and illustrated by first graders. We celebrated by performing an extension of a separate authentic story written by the students as well.

Not only did I bring my class together with this project, it created a connection with the parents, who were drawn to help in the classroom and beyond the school day. For example, a first-generation, newly-arrived parent from another country and with limited English language ability came to our school community. She thanked me profusely at the end of the year, expressing how she had been able to practice English alongside her daughter throughout the year. In my opinion, my children felt successful, and it was a validation for me that all students, regardless of their background, can succeed when we have high expectations. I know this to be true, and I would tell my students, "This is our classroom, our home of learning, and we live here for the duration of the day. Here is where we can make difference." As William Glasser (1990) mentions, we cannot control the inherent factors of the child's world but we can control what happens at school. This is where we can help a child achieve success.

## **Why the Common Core State Standards?**

In order to implement the common core it is imperative that we examine the document itself. We highlighted a portion of the of the CCSS introduction to help explain why. This will help create a common language that is kept consistent throughout the implementation of the standards. We do not wish to begin with our interpretation but with the big ideas about what the transition will look like in a student whose education has been shaped by the standards ever since kindergarten. A recommendation is to read the CCSS Introduction section multiple times with practitioners in the field and talk about what it means to our students. This process will help create a foundation of clear expectations as we look at the whole child, using the CCSS text as a source for understanding implicitly and explicitly. A reader needs to compile information across the text and draw inferences based on patterns found in the details, connecting them to the whole

of the text. This process is pivotal before we can take the CCSS to application or implementation. This reading strategy or process is what we are asking students to do and what we should model for teachers as an expectation of what we want readers to demonstrate, to know, and to be able to do within their teaching or learning. “As specified by the CCSSO and NGA, the standards are (1) research and evidence based, (2) aligned with college and work expectations, (3) rigorous, and (4) internationally benchmarked” (CCSS, Introduction, p. 3). The descriptions that follow are not standards themselves but instead offer a portrait of students who have met the standards set out in this document. As students advance through the grades and master the standards in reading, writing, speaking, listening, and language, they are able to exhibit with increasing fullness and regularity these capacities that are expected of the literate individual.

### At a Glance: Students Who are Career and College Ready for Reading, Writing, Speaking, Listening, and Language (ELA, CCSS, Introduction, 7)

**They demonstrate independence.** Students can, without significant scaffolding, comprehend and evaluate complex texts across a range of types and disciplines, and they can construct effective arguments and convey intricate or multifaceted information. Likewise, students are able independently to discern a speaker’s key points, request clarification, and ask relevant questions. They build on others’ ideas, articulate their own ideas, and confirm they have been understood. Without prompting, they demonstrate command of standard English and acquire and use a wide-ranging vocabulary. More broadly, they become self-directed learners, effectively seeking out and using resources to assist them, including teachers, peers, and print and digital reference materials.

**They build strong content knowledge.** Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise. They refine and share their knowledge through writing and speaking.

**They respond to the varying demands of audience, task, purpose, and discipline.** Students adapt their communication in relation to audience, task, purpose, and discipline. They set and adjust purpose for reading, writing, speaking, listening, and language use as warranted by the task. They appreciate nuances, such as how the composition of an audience should affect tone when speaking and how the connotations of words affect meaning. They also know that different disciplines call for different types of evidence (e.g., documentary evidence in history, experimental evidence in science).

## At a Glance: Students Who are Career and College Ready for Reading, Writing, Speaking, Listening, and Language (ELA, CCSS, Introduction, 7)

**They comprehend as well as critique.** Students are engaged and open-minded—but discerning—readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author’s or speaker’s assumptions and premises and assess the veracity of claims and the soundness of reasoning.

**They value evidence.** Students cite specific evidence when offering an oral or written interpretation of a text. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others’ use of evidence.

**They use technology and digital media strategically and capably.** Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

**They come to understand other perspectives and cultures.** Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own.

If we learn to make the experience of learning meaningful as it relates to the whole child by embracing a comprehensive approach to multiliteracies, the former tension between student and teacher will be lessened while simultaneously motivating the learner. We cannot drastically change culture or inherent factors, but we can immediately change the school environment. Having access to the ability to think critically about what is being read and to understand what the author is trying to say can be supported by parallel texts during that same timeframe to increase the cognitive demand as we think of how to extend thinking with the ability to articulate new knowledge or perspective (Hess, 2009). Not only are we encouraging close reading, but we are nurturing the



ability to communicate and write about what was read by supporting it with evidence in text. This will allow for success, by graduating the students into society with the tools for making better choices while thinking critically. This change will ultimately establish a better society. Change becomes a real life component.

## How Can Teachers Help?

If we change the methods of teaching from schooling to education we can change the outcome from failure to success. First, we must understand our children. If we know our children we can meet their needs more specifically. For example, if little Michael is in control of his parents with his overt behavior, we then know this behavior has created a patterned response for Michael to obtain control. Our next step would be to try and work with him on making better choices that produce results that will then become conducive to learning. This ties to the locus of control as we think of the high executive functions or skills needed to be proficient in school.

Knowing our children requires the establishment of community between school and children. Once a relationship is developed a natural mutual trust between the child and teacher will occur. Extending trust that enables children to know they are safe will also empower learning. Students participate in a risk free environment and learn that it is ok to make mistakes, but they also understand those are the building blocks of success, building on those as lessons. Children are then better prepared to make their own choices, allowing them to feel a sense of control over their environment, and hopefully achieve success by gaining education. In order to promote success we have to promote improvements in our education or schooling methods. The old method of being taught “at” and then having to regurgitate facts is outdated. Facts imparted in this way do not become part of an education because they are no longer applicable in the post-schooling world. Education occurs when what students have learned can become useful and extensible.

The CCSS are now asking for systemic changes to literacy and mathematical practices and learning. We are asking learners and teachers to attend to the three shifts as we transition to the ELA CCSS. Building knowledge through content rich, non-fiction texts is playing an

essential role in enhancing literacy as set forth in the standards. According to the guidelines set forth in the standards, teachers in K-5 classrooms should strike a 50-50 balance between assigning informational and literary readings. The goal is for students to develop mutually reinforcing skills that exhibit a mastery of standards for reading and writing across a range texts and classrooms (CCSS, Introduction, p. 5). The ELA Standards place great emphasis on students writing to sources (i.e., using evidence from texts to present careful analyses, well-defended claims, and clear information). Rather than asking students questions they can answer solely from their prior knowledge or experience, the Standards expect students to answer questions that depend on their having read the text or texts with care.

To build a foundation for college and career readiness, students need to learn to develop their writing as a clear form of communication for an external audience (ELA, CCSS Writing, p. 18). A clear shift for reading closely and attending to academic vocabulary is clearly articulating the need for attending to the deep meaning of the text. Shifting literacy practice from focusing solely on the skills of reading and writing, the Standards highlight the growing complexity of the texts students must read to be ready for the demands of college and careers. It is worth repeating often that the process of achieving literacy success comes from utilizing multiple approaches and weaving each literacy skill or sub-skill through the continuum of literacy learning progressions while also attending to cognition.

Theoretically, we know that making education a meaningful experience is central to the core in learning and equally important is enticing learners to do more with their education. As stated in our previous real world example, first graders not only published their own story, they took it a step further, presenting and performing their own story in a class play that pulled in the school community. This production was an impressive feat for first-graders who had been faced with low expectations from other teachers as a result of their behavior, second-language acquisition, and low socio-economic status. When the educational experience becomes a process it becomes exciting and valuable.

Traditional schooling, in general, has not allowed for choices. Children are handed a curriculum and expected to learn what is being taught. At times, the objectives are forced. A student may learn the content of Social Studies/History from memory for example, but the content itself does not become meaningful because it was not tied to anything familiar to a child's background. Ask yourself, "How many history, government, or social studies lessons do I truly remember from school?" This is an example of what we consider "schooling." It becomes education when we bring history to life. It is when we include the "what and why" that it becomes important to learn history.

### **Luisa's Reflection: Schooling vs. Education**

Why is Martin Luther King important? I learned this part of history very well. As I reflect on my experience as a middle school student my 8th grade teacher tied it into my personal history of being Latin American or Latina, and how what he did impacted my personal and current life. His civil rights leadership made it possible for me to attend college or, as she put it, "People died so you could sit in that seat today! Never waste a moment of learning time." This was only the tip of the iceberg. My teacher made our class ponder questions about where the civil rights movement really began. I did a research paper that led all the way back to the Native American History before the settlement of the colonies. It was not until many years later that I was informed of my pedigree and the history of the people who came to the "New World," now known as the Western Hemisphere. In tracing my ancestors, I was able to appreciate more profoundly what it meant to be a considered a Latina.

I still remember and feel the gifts of Ms. Jacqueline Hunt's teaching. I pay tribute to her passing, not only was she my 8th grade teacher, but she became a friend for life. She made sure to keep track of me until she left this earth several years ago. Her husband called me in Washington to tell me how special I was to her and I would always be her "Weezie." My memories of Ms. Hunt will stay with me for my lifetime. She changed my life forever, and we were still friends until her passing. This is my example of education. Educating our students is important. Using "Funds of Knowledge" (Greenberg, 1989, 323) will develop a context of learning that is personally integrated with the student's personal background. This becomes an educational process not a schooling process.

A report from the National Research Council<sup>2</sup> makes clear that transferring what is learned in one setting to an unfamiliar one is not easy. Students must work diligently over extended periods of time to develop emerging expertise in a subject area. In the process, they acquire not just the skills associated with the subject area, but they also begin to understand how experts think differently than novices do. This type of metacognition helps them when they begin to learn something new. They not only apply content knowledge they have learned elsewhere; they also understand the process of moving from novice to expert learner, and they can accelerate their learning in new areas because they know what expertise looks like and can compare their current state of knowledge and skill to a higher, desired level.

Students who have developed expertise in something, almost anything, have a distinct advantage over students who have never reached a level of high competency in any area. Think of students who are highly skillful musicians or have achieved a degree of expertise in particular hobbies or interests. These students know how to work hard to achieve a goal and the amount of work it takes to be successful in an area. They know and appreciate better the gap between where they are and where they want to be and how to close that gap.

The context of the classroom also influences how students learn, as does their relationship to one another and to the learning tasks. In other words, the kinds of interpersonal and intrapersonal skills students are developing and using in the classroom affect their ability to understand, process, and retain the content information and concepts they are being taught. This is particularly true when the goal is for students to engage with complex content organized around key ideas and concepts of a certain subject area.

Students need to understand the underlying principles of what they are studying if they are to apply these to new and novel situations, especially beyond the structured opportunities to practice that they are provided in class. They need to understand the nature and types of problems they will encounter in the subject area, the solution strategies and options available to them, and how the two interact with one another. In other words, they need to develop the metacognitive skills necessary to make decisions about how to process what they are learning. Eventually, they will

draw on their understanding of the content they have learned and the problem-solving techniques available to them to address challenges or complete tasks that are entirely outside the boundaries of what they have practiced previously.

## Comprehensive Systems

“A system is a group of linked parts, assembled in subsystems that work together toward a common end” (Redding, 2009, p. 7). The whole system functions most efficiently and effectively when the roles of the people and the subsystems they compose are coordinated. “Systematic implementation practices are essential to any national attempt to use the products of science—such as evidence-based programs—to improve the lives of its citizens” (Fixsen et al, 2008). Following a systemic, multi-component plan to improve the proficiency of both struggling and highly-skilled learners ensures learners who are college and career ready.

Learners who achieve literacy success are surrounded by committed, supportive systems. Family members are the catalysts in literacy development. High performing organizations and schools become partners in continuing literacy success, and are characterized by a clear and shared focus. Having shared goals, clearly articulated and well publicized, are especially critical when one considers the tremendous change that must take place for all learners to achieve a competent level of literacy. System-wide commitment, therefore, is the belief held by all participants that literacy achievement is a key and achievable mission of our communities and schools. Commitment is the final element critical to the success of a sustained and systemic approach. Many different groups and individuals contribute to the literacy development of a child. Such groups and individuals include, but are not limited to:

- Family members
- Early childhood practitioners
- Medical and health care providers
- Higher education faculty
- Teachers

- ✿ School leaders and staff
- ✿ Community members
- ✿ Geographic environment
- ✿ Learning community
- ✿ Policy makers including the state education agency, and people in professional development

At the center of the system are our children and students. The purpose of the system is to ensure that each child achieves literacy success to be able to think, create, question, solve problems, and reflect in order to participate effectively in a pluralistic, global society. Each action taken within the system and each member of the system must address or answer the following question, “What is it that children/students need to know and be able to do to achieve literacy success?”

While we build our future with our children, we are working on creating change. It is our social responsibility to change. Working with not only our communities, but our neighboring communities in other states, the nation, and the world, sharing what we know and being aware of what we do not know, makes us interactive versus reactive as we work within a system. A comprehensive literacy system could also be reflective of our work with other states, contents, education systems, work systems, community systems. Life is different, as we now know it, given the power of technology and communication. A conversation today is beyond this space and time and has few limits. We are no longer limited by the concrete walls of our school buildings, nor are we confined to paper and pencil learning. This is twenty-first-century learning. Information is transferred as quickly as we can type it. We teachers are no longer alone, but we are **together** as we think of preparing our children for an uncertain future. We have to interact with others to have engagement and create consensus building or our work will face resistance. We are part of a learning community—and not just in our district, state, or nation; we are now citizens of the world.

As we think of education within a system, our thinking has to change. We do not speak of a system of opposites, such as “them” and “us.” Rather, a system is grounded in a context, and we need to create a common language and a look through a comprehensive lens. In this case,

comprehensive refers to a holistic system, a child situated in the center of interlinking communities as they extend to the nation and the globe. No longer are we sitting in an environment where “our” decisions do not have a ripple effect beyond ourselves.

Visualize, if you will, a pond into which someone has just thrown a pebble. The stone may progress straight down until it lands on the bottom of the pond. But, as we think of the stone’s journey, it travels through several sub layers of water—symbolic of life—effecting and rippling the status quo. Each progression towards the pond’s floor has created a different wave or movement. The end result of the action might be only what we think of in our mind’s eye as the initial action, such as “I threw a stone.” At first we might simply see the wave, but in thinking more deeply, we recognize it as an energy force that will move the additional layers underneath.

Literacy is now that pond. Research has come together and shown the link in learning progressions as we think of it within all contents, contexts, and the whole child. Each child is different from the next, but the end goal for our system is to make sure every child is literate. Being literate has taken on a whole new meaning. Literacy is a layered approach that is inclusive of language, reading, writing, thinking, speaking and listening. The ELA Common Core State Standards needs to be taught in tandem with learning progressions and content areas as we think of the whole child. It is important that we rethink the term literacy. It is important to revisit the idea that we are part of a learning community as we rethink how to teach literacy, what standards to address to become fully literate, and how to define what a literate child is. The standards have changed, and this will impact instruction, change the assessments, and, in the end, determine what a child will be. Literacy is no longer just reading, writing, or communication taught in isolation, but in tandem across the content areas. Literacy is not just a demographic, culture, or language issue. It is the essential grounding light that becomes the flow of critical thinking and learning progressions.

### **Luisa's Reflection: Meeting the Needs of Children by Knowing**

As a reading specialist I used multiple measures to determine the learning strengths of each student. In my own literacy and language training I learned the value of a comprehensive assessment system (universal screener, progress monitoring, diagnostic, formative, and summative assessments) for developing deeper student learning. We were taught to capture and save student profiles to ensure the most effective growth over time by using demonstrated evidence for our students. To help with transitions, student profiles were then passed with the student into the next grade and helped with classroom placements. In the grade band teacher conversations, we knew where each student's learning had progressed at the end of the previous school year. In the school year 2000–2001, we were aligning our assessment system down to the student level. As rudimentary as it was, we used developmental continuums to help determine instructional practices for the following year. It was a brilliant process that generated very specific teacher conversations with learning plans crafted for each child. Within each profile we included beginning, middle, and year-end writing, reading, and math samples as we highlighted demonstrated skills on a learning progression introduced by Bonnie Hill Campbell. Her work helps inform current learning progression work for the Smarter Balance. “Roaming Around the Known” (RAK; Clay, 1991) is the expression I liked to use when, as a reading interventionist, I observed the children at the beginning of the year. I later developed the skill to bring it up to scale for my whole classroom, using this intensive reading training method to inform my instruction. I would capture evidence anecdotally and save it to target each student's personal instruction.

Although Dr. Marie Clay applied her observation directly to reading, writing, speaking, and listening, the RAK can be used to observe all methods of learning. It need not be limited to the content of literacy. In my current practice, I call this formative assessment while providing just-in-time feedback that would have an immediate impact on students' learning. As I developed and sharpened the tools I learned in my Reading Recovery training, I realized how invaluable they later became as I embarked in Orton Gillingham training: “In the summary of the Observation Survey the teacher brings together what she has observed. She describes what the child can do, and what is partially known, at the boundaries of his knowledge as it were.” (Clay, 1991, p. 71)

We cannot meet the needs of our children until we know who, what, where, when, and how our children can learn. Instructional supports that supplement the core instruction/curriculum while attending to standards require our reflection and the collection of evidence (through any form of assessment) to determine critical areas of instruction. Clear and substantial evidence is important to determine next steps and make informed decisions—in an unbiased approach—to assess quality student proficiency for all students.



## Scoring Student Work for Deeper Learning

It is possible to score student work against standards that challenge all students to be more engaged and to think more deeply about what they are learning. The scoring guide explained here is built around six organizing concepts, stretching along a novice-to-expert continuum (see Figure 1). The organizing concepts are insight, efficiency, idea generation, concept formation, integration, and solution seeking. As learners become more skillful, they progress in performance in each of these areas, from emerging novice, to novice, and then to accomplished novice, emerging strategic thinker, strategic thinker, accomplished strategic thinker, and emerging expert. This creates 42 cells, each of which holds a description of student work. Teachers can use these six concepts and seven levels to analyze a range of sophisticated student work products along a continuum of cognitive development and learner competence.



Figure 1: Continuum of Novice-To-Expert

Many educators find it challenging initially to cope with the complexity of a model with this much information and this considerable number of categories. However, capturing deeper learning does require some attention to complexity and performance along a number of cognitive dimensions. The good news is that as teachers use the scoring guide more, they quickly internalize the elements and become adept at rating the cognitive complexity of student work. In this case, teachers themselves must experience deeper learning before they can apply the scoring guide in an appropriate fashion. When teachers do understand the concepts embedded in the scoring guide, they have a powerful lens through which to gauge the depth and complexity of student learning. Each of the organizing concepts is explained here in more detail:

- 🌀 *Insight* involves the ability to use the rules of the subject area in a procedurally correct fashion and then to become progressively more insightful about how to go beyond literal interpretation of subject area rules to combine or skip steps, ignore a rule if a more elegant solution is available, and, ultimately, use the rules intuitively rather than literally. Learners who become insightful in the use of disciplinary rules are able eventually to generate more original and interesting work.

- 🌀 One characteristic of novice learners is that they have difficulty completing tasks with *efficiency*. Experts spend much less energy than novices do on comparable tasks. This phenomenon can be observed in a wide range of fields, such as sports, where novices struggle to perform the same routine that the expert accomplishes effortlessly. Watch beginning skiers or snowboarders floundering on the slopes, expending vast amounts of energy just standing and maintaining their balance; then compare this with the accomplished skier or snowboarder who makes the sport look effortless. In deeper learning, efficiency is the ability to use the best methods possible to complete a task such that someone scoring the task would find few ways in which it could have been done more efficiently. Most learners complete some elements of tasks efficiently while struggling with others. A lack of efficiency can lead to a confusing final product. Students may even give up on parts of the task, project, or assignment. This then affects its overall quality.

✿ *Idea generation* is another important variable that distinguishes levels of deeper learning along the continuum. Novices produce few original ideas, preferring to repeat well-worn observations and conclusions because this is what emerges from following a prescribed set of procedures. As learners develop strategic competence, they venture into the arena of idea generation, perhaps tentatively at first. Many of the initial ideas they put forth may be variations on conventional wisdom in the subject area. As they advance in expertise, they eventually come to the point where they are experimenting with ideas that are more novel and unconventional. Although not all learners get to this point, most can reach the level where they are offering ideas that are their own and not simply restating what they have been told or have read.

✿ *Concept formation* is the idea that as learners become more sophisticated, they begin to organize their work around concepts rather than simply presenting information in a series of statements. Concepts are a means to organize information, observations, or ideas. They are the next level up the cognitive structure chain from purely observational conclusions. More expert learners consciously design work products around a set of concepts, making sure the conceptual structure is firmly in place before beginning to generate the final work product. For example, students who are asked to complete an assignment in which they explore and explain the way truth and beauty are represented in three separate pieces of literature will need to be able to formulate concepts and organize a piece of work around them.

✿ Work products that show high levels of *integration* avoid the novice problem of having each section of an assignment be essentially stand-alone in nature. Products that are integrated can have distinct sections, but they contain connections within and across sections. Novice literature reviews that describe study after study without making connections among the studies or summarizing the significance of them demonstrate novice-level performance. So too do papers that contain bulleted lists with scant explanation or elaboration accompanying each list and minimal connection among lists. Expert performance on

such a task would include periodic summaries of the points being made in the studies, a section comparing and contrasting findings, and an overall summary that synthesizes and integrates the observations and generalizations offered throughout the review. The paper would be a coherent whole that the reader would find easy to understand and would view as a value-added interpretation of all the specific information included in the review.

🌀 *Solution seeking* is the act of resolving the problem or issue that the task poses. This is not the same as getting the right answer, when there is one, although this is one component of solution seeking. Beyond the right answer, it is about proposing a result that is responsive to the question posed initially. Novices often do not answer well the question they are asked to address, in part because doing so requires either effort or insight that may be difficult for them to muster. It is easier to respond to a question they wish they had been asked than to respond to the one they were asked. As learners become more strategic, their solutions improve and become better aligned with the challenge posed by the task. Expert solutions are cogent, coherent, and completely responsive to the task as posited.

The six constructs embodied in the scoring guide serve as examples of how deeper learning can be examined in ways other than conventional measures of right and wrong or of open-ended rubrics, such as *approaches*, *meets*, and *exceeds*, which provide little information to students about what they need to do to improve their performance. Assessing deeper learning does require thought by the assessor and attention to the quality of thinking demonstrated by the student, but employing a structured framework for feedback to learners tells them how to improve their technique as thinkers and the work products they create.

Note also that for students to move from novice to emerging expert as strategic thinkers requires many opportunities to practice and develop these skills, not one or two assignments in eleventh or twelfth grade. This type of complex cognitive development occurs over an extended period of time with multiple opportunities for practice and corrective feedback. For this reason, instruction needs to be organized around K–12 learning progressions that develop deeper learning in addition to content acquisition.

## Conjunctive vs. Compensatory Systems

*Conjunctive versus compensatory standard setting.* In the assessment world, two basic approaches are commonly used to determine if someone meets a standard when multiple criteria or performance standards are being used to make the determination (as will be the case when the consortia assessments are fully implemented on their own or in combination with other state-specific measures). A conjunctive system requires students to meet a defined level of performance on all measures. A compensatory system allows for some variation in scores across measures (see Table 1).

| <b>Table 1. Example of a Conjunctive Approach:<br/>College Readiness Benchmarks by Subject</b> |                   |
|------------------------------------------------------------------------------------------------|-------------------|
| <b>Subject</b>                                                                                 | <b>Percentage</b> |
| English                                                                                        | 67                |
| Reading                                                                                        | 52                |
| Mathematics                                                                                    | 46                |
| Science                                                                                        | 31                |
| All four subjects                                                                              | 25                |

Source: The Condition of College and Career Readiness 2012 (Iowa City, Iowa: ACT).

If a state follows a conjunctive approach and requires students to meet specified performance levels on several measures, then fewer students overall will reach the required level to be deemed ready. Table 1 presents an example of what a conjunctive approach looks like. The ACT computes its annual determination of the number of students nationally who are college ready by setting a cut point on each of its four tests (English, reading, mathematics, and science) and then determining how many meet all four. In 2012, 67 percent of students met the readiness standard in English, 52 percent in reading, 46 percent in math, and 31 percent in science. Under a conjunctive system, no

more than 31 percent could possibly meet the standard because this is the number who met the standard in the area where the lowest percentage met it, science. The actual figure is 25 percent because 6 percent of students who met the science standard failed to meet one of the other three standards.

The net result is that fewer students achieve the overall standard when a conjunctive approach is taken. The conjunctive approach works best when making a broad generalization about the performance of a whole group, as in the example. It is less effective when it is applied to individual students, some of whom may fail to reach the required performance level on only one of the exams and therefore not meet the overall standard but still be capable of succeeding in a particular program of study or major in college. This is a problem because, for some students, falling short on one of four measures may not have a significant practical effect on the likelihood of their subsequent success.

A compensatory approach allows some flexibility. A student could use stronger performance on one measure to compensate for a score that fell below the standard on another but above a specified minimum. The advantage of this approach is that more students are going to meet the overall standard. The disadvantage is that individual students may have more overall variation in their knowledge and skill levels than students who are declared to meet the standard on all measures. The compensatory approach does not generate information about the knowledge and skills of groups of students that is as easy to interpret as does a conjunctive model.

The strengths and weaknesses of conjunctive and compensatory methods are important to understand. One assumes that all students need to do all things equally well to be recognized as being college and career ready. The other is based on the belief that a college- and career-ready student is someone whose skills may vary within a defined range, but can compensate for weakness in some areas with strengths in others.

This is a critical distinction because it influences a whole range of decisions about how to organize instruction for students, particularly those who are struggling. The conjunctive model suggests that interventions focus primarily on areas of student weakness, regardless of their future

interests. A compensatory approach acknowledges student strengths and allows students to continue building on them while not ignoring their areas of weakness.

*Trade-offs between conjunctive and compensatory.* If college readiness is defined simply as the ability to enter a four-year university without the need for remediation, then a conjunctive approach is probably a good way to go. That is because students are expected to be ready for the full range of general education courses across multiple disciplines. They need to be proficient in the uses and applications of English and mathematics to science, social sciences, and related academic areas because they will take courses in all of those areas to meet their breadth requirements. The assumption is that a sufficiently high score on English and math exams means they are ready for all of these courses.

Students going on to postsecondary studies in programs that do not require the full range of academic disciplinary knowledge may have more room for variation in readiness measures, particularly test scores. This may also be true for students who are very clear about the college major they wish to pursue. While all students need a foundation of academic knowledge and learning skills, a student entering a program with an emphasis on basic numeracy, such as bookkeeping, may not need the same mathematical knowledge as a student entering a pre-engineering program, even though both programs require quantitative skills. College majors have long taken this into account to some degree, making exceptions for students with deficiencies in one area if they show greater strength in another.

For example, a student pursuing a medical records technician certificate or associate degree will benefit from much stronger and more specialized reading and vocabulary skills than a student in an automotive technician program that emphasizes graphical information, schematics, and instructional manuals. Both need a foundational level of literacy, but the precise reading skills each needs vary, and the scores they need to demonstrate achievement on any particular set of measures in order to indicate readiness will likely be different.

Herein lies a significant challenge when implementing the Common Core State Standards or any other set of college and career readiness criteria: Should college and career readiness be defined as one high, consistent level of performance that all students need to reach—knowing that not all students will reach it and that many of those who do not reach it will still be perfectly capable of succeeding in postsecondary education somewhere? Or should readiness be designated in terms of performance ranges that allow students to compensate for weaknesses in one area with strengths in another, based on the specific types of postsecondary programs to which they aspire? Clearly the manner in which college and career readiness is defined affects the way scores are interpreted and how readiness is put into practice operationally, particularly in terms of remedial course placement.

Each approach has benefits and drawbacks. If the scores designating college and career readiness are set at a uniform level, fewer decisions have to be made about individual students. A glance at a score tells students and teachers who is meeting the readiness standard and who is not. Students know where they need to devote more time and energy to meet the standard. The problem with this approach arises when significant numbers of students fail to reach that score level in one area, particularly if most of them are very close to reaching it. Should these students be deemed not to be college and career ready and in need of remediation? Political pressure, if nothing else, will be strong to find an accommodation for them. This has been the case when high school graduation tests have resulted in many students falling just short of meeting the standard. The most common solution has been simply to lower the required scores or offer alternatives to the state test.

If students are allowed, within a given range, to compensate for a lower score in one area with a higher score in another, then more decisions need to be made about how the strengths and weaknesses of individual students align with their goals. Students' academic aspirations come into play to a greater degree. The feedback students receive is in relation not just to their cut score, but to their postsecondary goals as well. Improving our tracking and advising in these areas will require more and better information about the knowledge and skills students actually need to succeed in specific postsecondary programs of study.



The compensatory model can also be problematic for students who have no sense of what their future might be and therefore cannot connect their scores with any postsecondary program. This is a major challenge that schools should be addressing by having students explore and broaden their vision of the postsecondary and career options open to them. The only way to avoid having students aspire to less challenging futures is to get them motivated about pursuing options that require greater educational attainment. Even with such experiences, not all students will be able to articulate a goal. For these students, a conjunctive set of requirements may help them keep all of their options open. The conjunctive approach makes sense here because it prepares students better for the full range of general education courses in multiple subject areas.

One danger of a purely compensatory approach without specifying a foundational level that all students must meet in all subject areas is that some schools may be tempted to track students with lower scores in, say, math into career options requiring less math without necessarily challenging students to strive first to improve their math performance. Regardless of whether scoring is conjunctive or compensatory, all students should have the opportunity to reach all of the Common Core State Standards.

If the goal is to ensure that as many students as possible have the best opportunity to succeed in postsecondary education, it may be necessary to use elements of both conjunctive and compensatory models depending on student interests and aspirations. Doing so will keep the focus on what students can conceivably do, not only on what they cannot do. Readiness will be a function of knowledge and skill at a foundational level and in relation to specific postsecondary goals, interests, and aspirations.

## Conclusions

### Concluding Thoughts from Luisa Sanchez-Nilsen

The process of becoming an effective reader and writer is a symbiotic process with a relationship to behaviors in a child's development. The process encompasses communities, schools, home, early education and care settings. Empowering learning for all will help us teach as well

as learn with our students and to encourage creative thinking (Dewey, 1916). In closing, content standards describe the knowledge and skills learners will need to know and be able to exercise at the end of the each school year. Each of the standards describes a series of sub-skills that build upon the next learning skill, in order for a child to be prepared and ready for the beginning of each grade, which is typically tied to an age band. It is my belief that one standard is not more important than the next. Within each standard are a series of skills or learning progressions that are needed to build a pathway between grade bands. Standards establish clear and consistent guidelines for every student, to ensure students are prepared for a career or college. The standards also provide a way for teachers to measure student progress throughout the year. Consistent standards across the district provide teachers, parents, and students with a set of clear expectations, promoting equity and access. Importantly, the standards promote an integrated approach that ensures all content areas are responsible for instructional development.

The Common Core State Standards (CCSS) are designed to:

- ensure all students and teachers are held to consistent, high expectations;
- ensure students graduate with the skills to make them competitive on a national and international level; and,
- provide clear and focused guideposts for all students, families, and teachers.

### **My Personal Mission Statement: David Conley**

Making more students capable of succeeding in college and careers is no longer an option; it is a necessity. My goal has been to discover what students need to do to succeed and what educators need to do to make this happen. The startling finding of my research is that students can learn or acquire all the knowledge, skills, dispositions, and abilities needed to succeed in college, careers, and life. Rather than the potential for lifelong success being limited to a subset of students, it turns out that schools can equip essentially all students with the tools to achieve such success. My mission has been to spread this message, to build the tools to help schools achieve the goal of all students being college and career ready, and to provide models that let educators develop new ways of teaching that permit all students to succeed.<sup>1</sup>

## References

- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford Press.
- Blackorby, J., Schiller, E., Mallik, S., et al. (2010). *Patterns in the identification of and outcomes for children and youth with disabilities*. Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/pubs/20104005/pdf/20104005.pdf>
- Burns, M. (1992). *Math and literature (K-3), book One*. Sausalito, CA: Math Solutions Publishing.
- Campbell H., B. (2001). *Developmental continuums: A framework for literacy instruction and assessment K-8*. Norwood, MA: Christopher-Gordon Publishing.
- Carlyle, A., & Mercado, B. (2012). *Teaching preschool and kindergarten math, more than 175 ideas, lessons, and videos for building foundations in math, a multimedia professional learning resource*. Sausalito, CA: Math Solutions Publishing.
- Chapin, S.H., O'Connor, C., & Anderson, N.C. (2009). *Classroom discussions, using math talk to help students learn, Grades K-6*, Edition 2. Sausalito, CA: Scholastic, Math Solutions Publishing.
- Clay M. M. (1991). *Becoming literate: The construction of inner control*. Portsmouth, NH: Heinemann.
- Clements, D., & Sarama, J. (2009). *Learning and teaching early math: The learning trajectories approach*. New York: Routledge.
- Confer, C. (2005). *Teaching number sense, kindergarten*. Sausalito, CA: Math Solutions Publishing.
- Council of Chief State School Officers (CCSSO). (2010). Common core state standards. Retrieved from <http://www.corestandards.org/>

- CCSSO. (2011). *Application of common core state standards for English language learners*. Retrieved from <http://corestandards.org/assets/application-for-english-learners.pdf>
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York: MacMillan.
- Escamilla, K., Perez, D.R., & Herrera, S.G. (2010). *Teaching reading to English language learners, differentiated literacies*. Boston, MA: Allyn and Bacon.
- Evenson, A., McIver, M., Ryan, S., & Schwols, A. (2013). *Common Core Standards for Elementary Grades K-2 Math & English Language Arts*. Alexandria, VA: ASCD.
- Fixsen, D.L., et al. (2008). *Implementation research: A synthesis of the literature*. National Implementation Research Network (NIRN) website. Chapel Hill: University of North Carolina. Retrieved from <http://nirn.fpg.unc.edu/resources/implementation-research-synthesis-literature>
- Glasser, W. (1990). *The quality school: Managing students without coercion*. New York: Harper Collins.
- Greenberg, J.B. (1989). "Funds of knowledge: Historical constitution, social distribution, and transmission." Paper presented at the annual meetings of the Society for Applied Anthropology, Santa Fe, NM.
- Hess, K. (2009). *Cognitive rigor matrix and curricular examples: Applying Webb's depth-of-knowledge levels to Bloom's cognitive process dimensions*. (Available for Math, Science, Reading/Writing, etc.) See, for example, [http://iowaascd.org/files/6214/0354/3553/CRM\\_writing2\\_2013.pdf](http://iowaascd.org/files/6214/0354/3553/CRM_writing2_2013.pdf)
- International Reading Association (IRA). (2011). *Literacy implementation guidance for the ELA common core state standards*. Newark, DE: International Reading Association.

- Lesaux, N.K., & Marietta, S.H. (2012). *Making assessment matter: Using test results to differentiate reading instruction*. New York: Guilford Press.
- National Association for the Education of Young Children and the International Reading Association. (1998). *Learning to read and write: Developmentally appropriate practices for young children*. A Joint Position Statement. Originally published in *Young Children*, 53:4, 30–46. Retrieved from <http://www.naeyc.org/files/naeyc/file/positions/PSREAD98.PDF>
- National Association for the Education of Young Children and the National Council of Teachers of Mathematics. (2010). *Early childhood mathematics: Promoting good beginnings*. A Joint Position Statement. Retrieved from <https://www.naeyc.org/files/naeyc/file/positions/psmath.pdf>
- National Early Literacy Panel. (2008). *Developing early literacy: A scientific synthesis of early literacy development and implications for intervention*. Retrieved from <http://lincs.ed.gov/publications/pdf/NELPReport09.pdf>
- National Research Council. (2009). *Mathematics learning in early childhood: Paths toward excellence and equity*. Washington D.C.: National Academies Press.
- Parrish, S. (2010). *Number talks, helping children build mental math and computation strategies, grades K-5*. Sausalito, CA: Math Solutions Publishing.
- Piasta, S. B., Justice, L. M., McGinty, A. S., & Kaderavek, J. N. (2012). Increasing young children's contact with print during shared reading: Longitudinal effects on literacy achievement. *Child Development*, 83:(3), 810–820. doi: Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2012.01754.x/full>
- Pinell, G.S., & Fountas, I.C. (2011). *The continuum of literacy learning, grades preK-2: A guide to teaching*, 2<sup>nd</sup> edit. Portsmouth, NH: Heinemann.

Redding, S. (2009). "Introduction." In *Coherence in Statewide Systems of Support*, Thomas Kerins, Carole Perlman, and Sam Redding, Eds. Lincoln, Ill.: Academic Development Institute, Center on Innovation and Improvement.

Schifter, D., Bastable, V., & Russell, S.J. (2010). *Building a system of tens, calculating with whole numbers and decimals, casebook: A collaborative project by staff and participants of teaching to the big ideas*. Boston, MA: Pearson.

Strickland, D., & Shanahan, T. (2004). Laying the groundwork for literacy: The National Early Literacy Panel releases preliminary findings in its synthesis of research on early literacy education. *Educational Leadership*, ASCD, p. 74–77.

Tomlinson, C.A. (2014). *The differentiated classroom, responding to the needs of all learners*. Alexandria, VA: ASCD.

Van de Walle, J.A., Lovin, L.H., Karp, K.S., & Bay-Williams, J.M. (2014). *Teaching student-centered mathematics, developmentally appropriate instruction for grades preK–2. 2<sup>nd</sup> edit.* Boston, MA: Pearson.

### **Common Core State Standards (CCSS Web Resources)**

Coleman, D., & S. Pimentel, *Revised Publishers' Criteria for the Common Core State Standards in English Language Arts and Literacy, Grades K – 2*. Retrieved from

[http://www.corestandards.org/assets/Publishers\\_Criteria\\_for\\_K-2.pdf](http://www.corestandards.org/assets/Publishers_Criteria_for_K-2.pdf)

*Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects*. Retrieved from

[http://www.corestandards.org/assets/CCSSI\\_ELA%20Standards.pdf](http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf)

*Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects: Appendix A*. Retrieved from

[http://www.corestandards.org/assets/Appendix\\_A.pdf](http://www.corestandards.org/assets/Appendix_A.pdf)

*Common Core State Standards for ELA and Literacy in History/Social Studies, Science, and Technical Subjects: Appendix B.* Retrieved from

[http://www.corestandards.org/assets/Appendix\\_B.pdf](http://www.corestandards.org/assets/Appendix_B.pdf)

*Revised Publishers' Criteria for the Common Core State Standards in English Language Arts and Literacy, Grades 3–12.* Retrieved from

[http://www.corestandards.org/assets/Publishers\\_Criteria\\_for\\_3-12.pdf](http://www.corestandards.org/assets/Publishers_Criteria_for_3-12.pdf)

### **Additional Common Core Web Resources**

*Achieve the Core.* This site is assembled by Student Achievement Partners to provide free, high-quality resources to educators now doing the hard work of implementing these higher standards. Retrieved from <http://achievethecore.org>

*Illustrative Mathematics.* Illustrative Mathematics provides guidance to states, assessment consortia, testing companies, and curriculum developers by illustrating the range and types of mathematical work that students experience in a faithful implementation of the Common Core State Standards, and by publishing other tools that support implementation of the standards. Retrieved from <https://www.illustrativemathematics.org/>

National Parent Teacher Association. *Parents' Guide to Student Success.* In Spanish and in English. This was developed in response to the Common Core State Standards. The Guide includes key items that children should be learning and activities that parents can do at home to support their child's learning. Retrieved from <http://www.pta.org/parents/content.cfm?ItemNumber=2583&navItemNumber=3363>

Smarter Balanced Assessment Consortium website. Retrieved from <http://www.smarterbalanced.org/>

*Tools for the Common Core Standards.* News about tools that are being developed to support implementation of the Common Core State Standards for Mathematics. Retrieved from <http://commoncoretools.me/>

*Washington State Comprehensive Literacy Plan: Birth to Grade 12* (draft). (n.d.) Seattle: Washington State Department of Early Learning, Washington Superintendent of Public Instruction. Retrieved from <https://www.k12.wa.us/ELA/pubdocs/CLP.pdf>

### **Other Web Resources**

American Institutes for Research. Center on Response to Intervention website. Includes the *Essential Components of RTI*. Retrieved from <http://www.rti4success.org/essential-components-rti>

Center for Educational Leadership, University of Washington. *5 Dimensions of Teaching and Learning*. Retrieved from <http://www.k-12leadership.org/5-dimensions-of-teaching-and-learning>

Center on Instruction website. Provides information on Research-Based Instruction. Retrieved from <http://www.centeroninstruction.org/>

Institute of Education Sciences. *What Works Clearinghouse*. Provides educators with the information they need to make evidence-based decisions. Retrieved from <http://ies.ed.gov/ncee/wwc/>

### **Video Resources**

Council of Great City Schools. *From the Page to the Classroom: Implementing the Common Core State Standards – English Language Arts and Literacy* (51:49). Retrieved from <http://vimeo.com/44521437>

Hunt Institute. *The English Language Arts Standards: Key Changes and Their Evidence* (6:25). Retrieved from

<http://www.youtube.com/watch?v=JDzTOyxRGLI&list=UUF0pa3nE3aZAfBMT8pqM-5PA&index=6&feature=plcp>

### **For Parents and Caregivers**

Washington State Department of Early Learning. *Washington State Department of Early Learning Guidelines*. This is a resource for understanding how young children grow and develop and what parents, early learning educators, and caregivers can do to support that growth and learning. Retrieved from <http://www.del.wa.gov/development/guidelines/>



Washington State Department of Early Learning. *Love. Talk. Play*. Provides ideas for how to love, talk, and play as a part of everyday activities with children. In English and Spanish. Retrieved from <http://lovetalkplay.org/>

Washington State Department of Health. Child Development Materials. Includes *Love. Talk. Play*. plus development and growth charts. Retrieved from <http://www.doh.wa.gov/YouandYourFamily/Immunization/ChildProfileHealthPromotion/HealthPromotionMaterials/MaterialsbyTopic/Development>

### **Brain Research**

Center on the Developing Child, Harvard University. Uses science to enhance child well-being through innovations in policy and practice. Retrieved from <http://developingchild.harvard.edu/>

Institute for Learning and Brain Sciences, University of Washington. Has an emphasis on enabling all children from 0 to 5 to achieve their full potential. Retrieved from <http://ilabs.washington.edu/>

### **System Resources**

Department of Early Learning, Washington State. Early Learning Plan. Retrieved from <http://www.del.wa.gov/publications/elac-qris/docs/ELP.pdf>

Washington Superintendent of Public Instruction. *Washington State Birth to Three Comprehensive Literacy Plan*. Retrieved from <https://www.k12.wa.us/ELA/pubdocs/CLP.pdf>

## Endnotes

<sup>1</sup> Sections of this chapter have been excerpted and adapted from the following source:

Conley, D. T. (2014). *Getting Ready for College, Careers, and the Common Core: What Every Educator Needs to Know*. San Francisco: Jossey-Bass/Wiley.

<sup>2</sup> Pellegrino, J., and M. Hilton, Eds. (2012). *Education for Life and Work: Developing Transferable Knowledge and Skills in the Twenty-first Century*. Washington, D.C., National Academy Press.

# CHAPTER 6

## **Collecting More Than Evidence: Graduating from High School in Washington State Using Culturally Responsive Tasks to Show Reading, Writing, and Mathematical Skills**



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## Introduction

In 2006, the Washington State Legislature approved legislation that required students in the class of 2008 and beyond to earn a Certificate of Academic Achievement, by passing a reading, writing, and mathematics assessment in order to graduate from high school.<sup>1</sup> While many believed these new requirements would better equip all students to be successful after high school, others felt some students might feel large-scale assessments would leave them voiceless, disenfranchised, and discouraged. Advocates for students who struggled to meet this new graduation requirement urged Washington's legislature to create alterNative paths for students who possessed proficient skills in the content but for one reason or another needed the opportunity to demonstrate their skills in another way, perhaps in a setting that was more culturally-relevant, authentic, and applicable to students' interests.

After hearing testimony by three particular groups—educators of Indigenous students, faculty of Career and Technical Education (CTE) programs, and parents and school counselors of students who suffered from severe test anxiety—the legislature approved three alterNative methods to demonstrate skills that were equal to or greater in rigor than the large-scale assessments. The three alterNatives were a grade comparison system, college test scores equivalency, and a classroom-based assessment called the Collection of Evidence (COE). The Office of Superintendent of Public Instruction (OSPI) was given the job to oversee these options, collectively called Certificate of Academic Achievement Options.

This paper describes how one of these options, the Collection of Evidence, was developed and implemented with a connection to Indigenous students (i.e., Native Americans and Alaska Natives). OSPI staff continually strive to support culturally relevant and authentic opportunities for Indigenous students to show their knowledge and skills. Research regarding instruction for Indigenous students is addressed throughout the paper in order to verify the use of a culturally-relevant alterNative assessment as appropriate for high school graduation. The use of this research by Native American educators is an acknowledgement on our part that, as non-Native authors, we observe and comment on our assessment from a non-Indigenous view. The expert

perspective for Indigenous students found throughout the selected research is evident. It endorses the importance of Indigenous student success with recognition that these students have one foot in the world of the “mother” culture and the other foot in the world of the “mainstream.” We write this paper as a statement that valid and reliable alternative assessments based in cultural relevance can be a viable method of showing proficiency on state standards.

## Collection of Evidence (COE)

The COE is a classroom-based collection of work that offers students the opportunity to select reading passages, writing prompts, and mathematics problems that match an individual student’s interests, cultural background, and specific areas of technical focus. The COE’s format encourages teachers to use teaching methods and curriculum materials directly relevant to their students’ lives and values. The content knowledge and proficiency levels within the COE requirements are the same skills required for all Washington State students. Teachers can embed the instruction of state standards into rich contexts, which may provide students a gathering place where previously-marginalized stories, writings, and issues can be raised. While constructing COEs, teachers serve as mentors, students are apprentices, and the collected work provides an authentic “snapshot” of the whole student.

OSPI content staff (reading, writing and mathematics assessment experts) created a list of COE requirements that included the development of performance tasks that offered authentic entry points for Indigenous students. Since the COE is the opportunity for students to “speak” through their performance on tasks administered in a learning environment rather than a testing environment, it allows students to bring their histories and perspectives as well as their reading, writing, and mathematics skills to the table. With the COE, Indigenous students, and many others, are able to demonstrate the skills necessary to earn their high school diploma by submitting classroom-based work samples.

In this chapter, we will recognize the work of the Gordon Commission. This group of national experts convened to study the current policy and practice of educational assessment, to estimate

how education will change in the future and what a proactive response should be, and to generate recommendations concerning the design of future models for the use of educational assessment. Next, we will explore other states in the country that offer different types of alternative assessments as options for meeting graduation requirements. Then, with an understanding of the national policy and the state-level implementation in place, the remainder of this chapter focuses on the COE and its continuing work towards supporting culturally-relevant and authentic opportunities for Indigenous students to show their knowledge and skills to meet graduation requirements.

The COE guidelines, a reading passage, a writing prompt, and a description of a mathematics task are presented here both as evidence for our approach and for actual use in the classroom. (Links to all classroom materials appear in the Appendix.) We also include two COE success stories: one from a student and another from an administrator. Our conclusion is designed to bring our approach full circle by reflecting on the COE's opportunity for students who have not met standards, and their teachers, to participate in a powerful, authentic and rigorous assessment.

## Gordon Commission

The need for alternative assessments such as the COE is addressed in the work of the Gordon Commission on the Future of Assessments in Education.<sup>2</sup> Jim Pelligrino, a member of the Commission says,

**... good assessments provide timely, constructive information that help students accelerate their learning and teachers personalize instruction. Commission members expressed concern that the use of test results for the sole purpose of school accountability has overshadowed, at times, the more valuable uses of assessments. The Commission also found that although digital technologies that may one day be used for real time assessment of learning show promise, much more research is required before they can be fully integrated into classrooms and schools. Accountability must be achieved in a way that supports high quality teaching and learning. It must be remembered that at their core, educational assessments are statements about what educators, state policy makers, and parents want their students to learn and, in a larger sense, become. What we choose to assess will end up being the focus of classroom instruction.<sup>3</sup>**

Pelligrino’s assertion that good assessments provide valuable information about students aligns with the philosophical commitment of Washington’s assessment program, including the COE. The COE is an exit exam and is not used for school accountability. Plainly speaking, the Gordon Commission’s work is an influential statement to educators and policy makers about the need to review the use of assessments in education. But, as purposefully political as the Gordon Commission’s goal is, the words of its chairperson remind the researcher and the teacher alike to focus on the real goal—to know students. Dr. Edmund Gordon says,

**One of the things we’ve been exploring in the commission is the relationship between the affective and situative domains in relation to the cognitive domains. We’re beginning to understand that, in human intellectual functions, the affective (or the emotional) and the social situations in which problems are engaged are as important as the cognitive processes on which we have been focusing our attention.<sup>4</sup>**

Gordon reminds us that the core of alterNative assessments should be to respect and honor the heart, the head, the community, and the personal context of a complete student. The clarity of Gordon’s thinking leads to the reality that a multi-faceted assessment is a true measure of a student walking into the adult world with the skills and knowledge to make a difference.

## **COE Compared to Other State Approaches**

A review of other states’ approaches to alternative assessments used for graduation purposes provides context for the unique nature of Washington’s COE and the strong commitment Washington has made to purposefully address the importance of creating collections that represent the interests and values of Indigenous students. States, districts, and schools refer to a compilation of student work with various terms such as collections, assortments, selections, and portfolios. For the purposes of this discussion, all of the alterNative assessments that involve a body of student work will be referred to as “collections.” This designation will provide a common understanding of the use of student-driven assessment used in a variety of ways.

The Center on Education Policy (CEP) published a document entitled “Profile of State High School Exit Exam Policies” in 2011.<sup>5</sup> According to the state-specific information, seven states in the country offer a collection of evidence (or similar title) as alternative routes for high school graduation.<sup>6</sup> Massachusetts and New Jersey see a collection of evidence as a “last chance” attempt to graduate. They refer to the alternative assessment as an “appeal.” They also require many attempts at large-scale tests prior to providing students access to a collection. Students are required to take the large-scale state tests several times a year, attend remediation programs, maintain a 95% attendance rate, and hold a consistent grade point average for set periods of time before they become eligible to submit a collection. In calling the student work an “appeal” and requiring four “traditional” attempts to meet standards, students who struggle may find their desire to graduate becomes dimmer with each unsuccessful experience.

Students in Oklahoma and New Mexico must also try multiple traditional assessments before attempting “end of course” projects aligned with state standards. However, like Massachusetts and New Jersey, the purpose of their collections is not clearly articulated as an alternative assessment. Maryland, Oregon and Washington go beyond the four previous states in their recognition that student collections are rigorous, aligned to the state standards and developed in the classrooms. Maryland offers an opportunity for students to submit a collection that contains state-designed project modules. After not meeting standards on a state assessment, student projects are designed at the state level, aligned with the state guidelines, reviewed by teachers, and scored at the local level.

Oregon and Washington offer students the opportunity to develop and submit collections with the most authentic match between classroom work and proficiency expectations. In Oregon, students are able to put together multiple pieces of evidence in order to create a compensatory compilation that shows their ability to meet a standard. Students are able to access the collection option without first failing the state test. The state education department works with committees of teachers to develop state assessments that are given at the local level and scored by classroom teachers using state scoring rubrics. Although Oregon’s classroom-based assessment acknowledges



the legitimacy of an alternative assessment as an equal route to meeting graduation requirements, there does not appear to be a documented process for developing a culturally-sensitive set of tasks. Like most of the states with alternative assessments, Washington requires all students to attempt the large-scale tests in reading and writing—the High School Proficiency Exam (HSPE)—and the mathematics End of Course (EOC) Exams in Algebra and/or Geometry before accessing the COE.<sup>7</sup>

The analysis of the seven states shows that, while the collection of evidence option is available to students in many states, Washington appears to be unique in its opportunity for individuals to show skills through a culturally-relevant lens. The COE is the most expensive of the assessments offered to Washington students; the general assessment costs about \$30 per test and the COE costs about \$400 per test. As such, the program is continually scrutinized by the legislature and a couple of recent changes have been made to reduce the overall costs of the program. Initially, Washington state teachers were trained to score the collections. This provided a valued opportunity for professional development, which strengthened the teachers' understanding of best practices for classroom instruction and provided insight on how to support students in the development of collections. Due to budget limitations beginning in the school year 2012–2013, the COE is no longer scored by teachers but instead by local, professional scorers. Also, students must attempt the large-scale test twice in order to access the COE, and may only submit one collection per content area in the course of their high school career. Intense discussion accompanied the changes, but the state legislature and OSPI concluded that continuing to provide access to the COE was important even though the opportunity had to be narrowed to one attempt.

## COE Guidelines

The guidelines for the COE involve students submitting 6–8 “tasks” that showcase their best work in the content area (reading, writing or mathematics). A task is an assignment framed to address the state content standards. The guidelines encourage classroom teachers to provide students instructional intervention over time, practice their skills at their own pace, and produce

their unique “take” on the topic. Throughout the process of building a COE, students develop skills, verify understanding, and create a picture of who they are and what they value.<sup>8</sup> Geneva Gay (2010) in her book, *Culturally Responsive Teaching: Theory, Research, and Practice*, takes this analysis even further when she talks about Indigenous students’ ways of thinking and ways of being that merge the self with a high school diploma. When an Indigenous student successfully submits a COE and meets the academic requirements to graduate from high school, the effect can be powerful. Gay says,

**It is intellectually liberating. This freedom results in improved achievement of many kinds, including increased concentration on academic learning tasks, such as clear and insightful thinking; more caring, concerned, and humane interpersonal skills; better understanding of interconnections among individual, local, national, ethnic, global, and human identities; and acceptance of knowledge as something to be continuously shared, critiqued, revised, and renewed. (p. 37) <sup>9</sup>**

It is not only students who benefit from accessing the COE but their teachers as well. Through both the scoring process and the development of instructional intervention strategies focused on skills immersed in the Indigenous student’s life, teachers have developed a heightened awareness of how to merge state standards and the community values of Indigenous people. Gay comments on the impact:

**For some, culturally responsive teaching is also liberating in that it guides students in understanding that no single version of “truth” is total and permanent. For this, teachers make authentic knowledge about different ethnic groups accessible to students. The validation, information, and pride that culturally appropriate pedagogy generates is both psychologically and intellectually interesting. (p. 37)**

Washington’s COE alterNative assessment has been successful for all types of students but it is not a panacea that produces a 100% passing rate. The struggle that some Indigenous students may feel to find their voice and show their skills is also apparent for out-of-country transfer students who try to cope in a world where English is their second language. Many students transfer into the

state from South American, Asian, European, and African countries and feel immense pressure to graduate from high school. Students who come from backgrounds of poverty and attend school intermittently often have to depart from their family’s history and experience in order to pursue a high school diploma. Every student has a story. Every student wants to be heard. But, sometimes the school system inadvertently imposes rules and expectations on both teachers and students that they must overcome.

COE problems, tasks, and prompts were developed collaboratively by OSPI staff and teachers in Washington’s schools over a period of time. Early on, it became a priority for OSPI to develop tasks to engage a wide variety of students, including Indigenous students, with meaningful contexts. In the early days of the COE, there was a great range of teacher-developed assessments. Some teachers initially struggled as they used a variety of materials to create their tasks. They found that textbooks did not work, district or school-specific curriculum was too narrow, and trying to incorporate outside materials often did not engage all students. After years of task development, there was a final core concept that emerged: context was everything. When educators realized that passages, problems, tasks, and prompts written by and about Indigenous people engaged these students, the responsibility and the opportunity to provide a variety of relevant contexts became paramount.

In conjunction with OSPI staff, the work began on developing culturally-relevant assessment materials. They agreed that well-written reading and mathematics tasks and writing prompts would share common characteristics. These prompts would be:

- **authentic** to student interest and background;
- **relevant** to students’ lives, values, and communities;
- **accurate** in depicting social and historical issues;
- **respectful** to ways that honor non-traditional ways of thinking;
- **fair** and free from bias in order to elicit responses in a safe setting;
- **valid** in order to match the requirements of proficient work; and,
- **reliable** in order to demonstrate that passages, tasks, and prompts elicit similar application of skills from different students.

Once these characteristics were defined, task development for the COE became the coalescing place where thoughtful educators of Indigenous students shared their materials to develop tasks that represented diversity and cultural relevancy. Teachers invested themselves professionally by selecting their own reading passages, creating reading and mathematics tasks, and developing writing prompts. Teachers submitted their own problems, tasks, and prompts annually, and they were reviewed at the school, district, and state levels. Districts and schools formed task-writing committees and matched the tasks to their curriculum and professional development plans. At the beginning of every school year, OSPI collected problems, tasks, and prompts that were “retired” from the pool or bank of tasks. OSPI staff reviewed the problems, tasks, and prompts and made sure they aligned with the state standards and the COE guidelines. As of 2012, OSPI retired these teacher-made tasks and released them to the field via a CD and online locations including the COE webpage: [www.coe.k12.wa.us](http://www.coe.k12.wa.us). Currently, all tasks submitted in a COE must come from an “Inclusion Bank” of state generated problems, prompts, tasks.

## COE Examples

Here we will turn to sharing some examples of reading passages and tasks, mathematics problems, and writing prompts developed by educators of Indigenous students for use in COEs. All of the problems, tasks, and prompts follow the same guidelines used for developing Inclusion Bank assessments. Joseph Bruchac granted us permission to use his poem “Birdfoot’s Grandpa” as a sample reading passage, and the “Dear Grandchildren” writing prompt was in place for several years as an Inclusion Bank prompt. A current mathematics COE task was not available at the time we went to press. However, we have described the core characteristics necessary to include in the development of a mathematics COE task.

In a Reading COE, a work sample is the student’s written response to questions linked to a passage. In the Reading COE, students are asked questions representing three levels of reading understanding: comprehension, analysis, and critical thinking. Within each of these three levels, the questions are developed from a subset of academic skills. These skills are called targets. In the

**Birdfoot's Grandpa**  
**by Joseph Bruchac**

The old man  
must have stopped our car  
two dozen times to climb out  
and gather into his hands  
the small toads blinded  
by our light and leaping,  
live drops of rain.  
The rain was falling,  
a mist about his white hair  
and I kept saying  
you can't save them all,  
accept it, get back in  
we've got places to go.  
But, leathery hands full  
of wet brown life,  
knee deep in the summer  
roadside grass,  
he just smiled and said  
they have places to go, too.

guidelines for the Reading COE,<sup>10</sup> students must read three or four literary passages and three or four informational passages. There are three questions in a task, each representing a target. In the poem by Joseph Bruchac, “Birdfoot’s Grandpa,”<sup>11</sup> the poem meets the criteria for cultural relevancy described above. The poet immediately establishes the **authenticity** of the theme, traveling with one’s elder, by describing the journey the young person and the grandfather are taking together. The poem illustrates the **relevancy** to Indigenous students’ lives as the car starts and stops, comparing and contrasting the tugs and pulls of colliding and affirming values of different generations within a community. The poem itself is **accurate** in demonstrating a core value of Indigenous people—a reverence for nature. The poem is also **respectful**. The young person sees the wisdom in

the grandfather’s perspective as he says that “they have places to go, too.” In one more way it is **relevant**. The poet knows that the journey will continue, indicating that the stops along the way will not make it end; rather, they enrich the journey.

For an Indigenous student to read a poem that links his world to the requirements of showing his comprehension, analysis, and critical thinking skills for the COE, careful and thoughtful questions must follow the same criteria used to identify a culturally-relevant literary selection. Using the same criteria, these three questions would be evaluated by educators of Indigenous students to ensure their authenticity and validity.

1. What is an inference you can make about the grandfather’s connection to nature?
2. Compare and contrast the young person’s and the grandfather’s journeys in the poem.
3. What do you think happened to the young person in the car after the grandfather says “they have places to go, too”?

In question #1, the student is asked to make an inference from the poem to support an answer that comes from the student's thinking. Since the question asks about the connection to nature, the task writer hopes the student will respond to the **authenticity** of the setting and bring his background knowledge and respect for older generations to his reading answers. In question #2, the reader is asked to compare and contrast the two journeys. The task writer is attempting to ground the question in **relevancy**. In this poem there is tension between the young person and the grandfather. They each have a different idea about their destinations. The task writer hopes that students will reflect on the differences and the similarities in the poem as well as their own experiences. In question #3, the task writer asks students to extend beyond the poem and bring their own values to their answers. Students may develop a response that brings their own backgrounds to the question. This question is **respectful** of students' unique backgrounds and allows for an entry place for them to share personal connections to the poem.

In the Writing COE, a work sample is a persuasive or expository example of student work that is a response to a prompt. A writing prompt for the COE must contain three elements: topic, audience, and purpose. In order to bring a work sample to life, the student must want to bring his life to the work sample. One popular Writing COE prompt that many Indigenous students have included in their COEs is the "Dear Grandchildren" prompt. It is now released to the field via the COE webpage and is available for classroom practice. The prompt reads:

*Dear Grandchildren*

Although it may be hard to imagine, but in your future you may have grandchildren! In a multiple-paragraph letter to those future grandchildren, **explain** how a special time or an event in your life so far would be important for them to know about. Remember to support your position using specific reasons and examples.

The **authentic and relevant** nature of the prompt is the focus on family and learning. The concept of explaining how "a special time or event" in a student's life is important is a **fair prompt as it values the lessons learned through growing up**. Students can write from a "safe place," because the prompt itself provides validation for them individually and as part of a community. Lastly,

the opportunity to look forward to future generations and see the power of family in their lives, the lessons they have learned, and the reflection they are able to make through the examples they provide, establishes a writing opportunity that is **respectful**.

In the mathematics COE, students are asked to demonstrate an understanding and an application of examples of mathematics skills in algebra and geometry. The students also are asked to show their work and explain how they got their answers. The mathematics tasks adhere to the same guidelines for cultural responsiveness as reading and writing. Some tasks incorporate everyday life concepts, and specific economic, policy, or resource issues. The tasks are about actual issues involving fisheries, forests, art, and land management. The mathematics skills are embedded into these topics and give students a viable reason for solving real-life problems.

A sample mathematics COE task would provide the student with a scenario or a context that makes a connection to real life experiences. A graph might be titled with a relevant issue to Indigenous students' lives. It may describe the number of fish caught over a period of years, or the number of canoes that participate in the annual Canoe Journey for Puget Sound Tribes, or the number of families supporting students participating in school sports teams. The student is then asked to review the information, use mathematical knowledge to construct a representation about the relationships using a scatter plot or another appropriate mode, and finally draw conclusions about the information using the intersection of mathematic skills and relevant knowledge.

Each mathematics COE task should be **authentic, relevant, respectful, and accurate**. A task that addresses all four of these characteristics will be accessible to a wide audience of students. An **authentic** task is one that uses mathematics in a way it would be used in a real-world situation. For example, a task may ask students to use skills from the Data and Statistics strand to organize, represent, and analyze data around the use and sustainability of natural resources. When developing tasks that are **authentic**, the focus should be on the actual ways mathematics is used in the everyday world—both mainstream and reflective of the Indigenous ways.

A mathematics COE task represents an **authentic** connection, both difficult and **respectful**, between the mainstream world and the reverence Indigenous people have for fish populations,

canoe journeys, or community involvement in school sports. In a potential mathematics COE task where a student demonstrates his mathematical skills by using real-life data about fish populations, the context surrounding the mathematics task is critical. An agency representing the “mainstream world,” such as the Washington State Department of Fisheries, may use the information from the graph differently. The researchers may think of fish populations as a way to measure the health of a species or as a representation of effects on nature due to pollution or over fishing; whereas, the job of analyzing this data from a mathematical perspective for Indigenous students is both personal and **relevant** to their cultural values. The option is not only to show the mathematics skills needed to solve this problem but also to include a prediction about the future of the fish population and connect it to the students’ world, both historical and present.

Anton Jackson, Mathematics Specialist at OSPI, says that:

**Mathematics COE tasks should be relevant to the experiences and goals of Indigenous students.**

**Because those experiences and goals are as varied as the students themselves, it is important to involve those students in the ... selection of relevant tasks for their COE. For example, tasks can be developed and reviewed at that state level for students who have keen interests in auto repair, construction, resource management, music, art, and education. The more a student can relate to and be engaged with the task, the better that student will perform on the task.**

**In all cases, mathematics COE tasks should be respectful of the experiences, culture, and background of all peoples. Each task should go through a review process that involves input from a variety of people with various backgrounds. Special attention should be given to ensuring the respectful representation of all peoples by eliminating stereotypes and culturally-insensitive scenarios or situations. Tasks that present people in positive, appropriate situations will appeal to a wide audience of students.**

**Finally, the mathematics in COE tasks should be accurate. For example, when developing a task related to construction of a traditional, Indigenous building, attention should be given to the accuracy of the mathematics in the task. As with ensuring the task is respectful, ensuring an accurate task can be achieved through a thoughtful, thorough review of the task.<sup>12</sup>**



## Impact of COE

The impact of the COE on students' lives is not only visible in their analyses of poems about journeys, or papers about their elders, or mathematics problems about fish populations. The authors interviewed an Indigenous student to find out how the COE gave her an alterNative way of showing her skills and linking her own collection to her culture. One young woman from a Tribe in the Puyallup Valley shared her story with us.<sup>13</sup> She was a giggly, smiling young woman whom we could not help but like immediately. She placed in the advanced level of the state writing assessment a year earlier because she liked the topic "Community Values," but she says the state reading test was confusing to her.

"That test was a lot of pressure," she said with a dramatic sigh. "It was so much pressure. I couldn't look at anyone or talk about anything. I felt like I had to squeeze it out all at once. When I didn't pass I found out I had to take a COE class." She rolled her eyes. "I thought the COE class was bad, until my teacher told me I only had to write one essay a week. It was like a weight lifted off my shoulders. And," she emphasized, "I read more interesting articles, so it made it better and easier to write about."

One passage the student talked about that affected her strongly was a magazine article that described how the original fireplaces in the White House were built by slaves over 150 years ago. Now, an African-American President lives in the White House. She talked about how sad it made her feel, but then she said her feelings changed and she read the article carefully looking for evidence to support her answers. She said she wrote long answers to the questions because the topic *mattered* to her.

The student is deeply involved in the traditions of her culture. She enthusiastically describes her involvement in Pow-wows where she sings and dances the messages of her Tribe. Just a few weeks before the interview she was selected to be a Princess for one of the Tribal organizations in her local community. "I should have had a class like this (a COE class) as a freshman. Now I can pick apart an article and analyze it. I know all of those skills now," she waved her hand at the back of the room where her teacher had pasted all the titles of the reading strands and targets.

When asked what she was going to do when she graduates, she beams. “I am going to go to either cosmetology school or massage school. I’m going to open up my own business someday. I am also going to community college. I want to have something to fall back on.”

When asked if she had anything she would like to tell other COE students, she stood up from her desk as if she was ready to move on to her next challenge in life. “Tell them to be prepared to read and write. And, tell them not to procrastinate. I did that, and I had to write a lot at the end of the week.” She passed the Reading COE with flying colors. She was very excited about graduation and all of the doors a high school diploma would open for her.

A principal from a Tribal school in Western Washington emailed the COE staff about the powerful experience a student and his teachers felt when he passed his writing COE. The following is an excerpt from the email:

**The student has been living on his own for more than six years. He has lived a hard life, not only by living on his own from the time he was a young teenager, but he also experienced gangs, drugs, alcohol, and violence....he decided to make a big change in his life. The student does not want to get a GED or to consider himself a dropout. He wants to earn a high school diploma and graduate. He values education. He has come a long way down the “Red Road.” [The “Red Road” is a phrase used to represent one who is walking the road of balance, living right and following the rules of the Creator. It is behavior, attitude, and a way of living, a way of ‘doing’ with reverence—of walking strong yet softly, so as not to harm or disturb other life. (The administrator provided this definition in her email.)] He knows that to live a better life and continue down the Red Road, he needs that diploma. The only thing standing in his way is the writing assessment requirement. The COE is his opportunity to meet that requirement.**

**He came back to high school to complete the writing COE. Since he had only missed passing the writing WASL by one point, and the results were not back from the writing COE, and he had done all that was required for graduation, we thought he was good to go. When we found out that he barely missed passing the writing WASL again, he did a COE. Again, he missed by one point. He stuck with it and did an augmented COE and submitted it for scoring. The student passed the writing COE. He was ready to graduate.<sup>14</sup>**

The Tribal educators sent the COE staff a picture of the student standing in the school, smiling, and holding his diploma proudly in front of him. We look at this picture often. We do not share his name or his school, but he is one of the great stories of the COE’s positive impact on Indigenous students.

## Conclusion

Here we conclude our survey of the reasons for culturally-relevant assessments in Washington state that could be used to meet high school graduation requirements. The creation of the COE has become more than just a set of “different” tasks. Gordon’s thinking—that intellect, affect, and social situations all jointly engage with the cognitive process—sets a precedent for deconstructing the COE as “just” an assessment. Like our young woman who felt profoundly impacted by the information about an African-American President living in a house that African-American slaves help build, culturally-relevant “alterNatives,” became a locus for the connection between the mainstream society and the Indigenous world. Our learning was intellectual and emotional; it was social and cerebral. The COE was designed to be “alterNative,” and yet the path was traveled by students who came from varied backgrounds with different sets of values. The commitment to creating reading passages, writing prompts, and mathematics problems that reflect the need for authenticity of content, relevancy to students’ lives, and accurate portrayals of history has led to the development of respectful, fair, valid and reliable assessments.

What happens next to the COE? The COE is well known across the state. The fact that the COE is anchored in the classroom means also that it is bound to its roots as a culturally-relevant assessment. Without the culturally-relevant framework of the COE, it would not interest students and teachers would not see its value. As an “alterNative” assessment, the COE has been fluid, changeable, open, and supportive. Indigenous students can find themselves in the tasks and/or make connections to other contexts. It is as much a starting place as an ending place. Where it may have been an “alterNative” in the beginning, it has come to be many alterNatives. The numbers of diverse students now earning high school diplomas are making their voices heard. Their words—like songs—have a cadence, a rhythm, and a sound that were unknown to the mainstream world before. Now their stories are present, confident, culturally-rich, and empowered.

## Endnotes

- <sup>1</sup> Office of Superintendent of Public Instruction. 2004. RCW 28A.655.061. Relating to authorizing alterNative methods of assessment and appeal processes for the certificate of academic achievement. Retrieved from <http://www.k12.wa.us/GraduationRequirements/Requirement-CAA-CIA.aspx>
- <sup>2</sup> The Gordon Commission on the Future of Assessment in Education, retrieved from <http://www.gordoncommission.org/index.html>
- <sup>3</sup> Pelligrino, Jim and Gordon, Edmund, In “The Future of Assessment of Education,” retrieved April 17, 2013, from [http://www.gordoncommission.org/publications\\_reports.html](http://www.gordoncommission.org/publications_reports.html)
- <sup>4</sup> Ramsey, Donovan X. 2012. In “Dr. Edmund W. Gordon Battles to Eradicate Achievement,” *Diverse: Issues in Higher Education* 29:20 (November 8, 2012). Retrieved from <http://diverseeducation.com/article/49346/>
- <sup>5</sup> Dietz, Shelby. 2010. In *State High School Tests: Exit Exams and Other Assessments*. Center on Education Policy, retrieved from [www.cep-dc.org](http://www.cep-dc.org)
- <sup>6</sup> Center for Educational Policy, Executive Report 2010-2012, retrieved from <http://www.cep-dc.org/index.cfm?DocumentTopicID=7>
- <sup>7</sup> Office of Superintendent of Public Instruction. 2007. WAC 392-501-510 Access to AlterNative Assessments, retrieved from <http://apps.leg.wa.gov/wac/default.aspx?cite=392-501-510>
- <sup>8</sup> Office of Superintendent of Public Instruction. 2013. Collection of Evidence Guidelines. Retrieved from <http://www.coe.k12.wa.us/domain/22>
- <sup>9</sup> Gay, G. 2010. *Culturally responsive teaching: Theory, research, and practice* (2nd Ed.). New York: Teachers College Press.
- <sup>10</sup> Office of Superintendent of Public Instruction. 2013. COE Reading Informational and Literary Rubric, retrieved January 20, 2013, from <http://www.coe.k12.wa.us/cms/lib6/WA01000983/Centricity/Domain/32/Reading%20Rubrics.pdf>
- <sup>11</sup> Bruchac, Joseph. Birdfoot’s Grandpa. Retrieved from <http://www.nexuslearning.net/books/holt-eol2/Collection%204/Birdfoot.htm> and <http://josephbruchac.com/index.html>
- <sup>12</sup> Office of Superintendent of Public Instruction. 2013. Jackson, A. (2013, February 15) Personal interview.
- <sup>13</sup> Office of Superintendent of Public Instruction. 2013. COE Success Stories, retrieved from [http://www.wera-web.org/activities/WERA\\_Winter09/3.1%20COE%204%20of%204.pdf](http://www.wera-web.org/activities/WERA_Winter09/3.1%20COE%204%20of%204.pdf)

## Additional Resources

Bruchac, Joseph. “Birdfoot’s Grandpa,” <http://www.nexuslearning.net/books/holt-eol2/Collection%204/Birdfoot.htm> and <http://josephbruchac.com/index.html>

Office of Superintendent of Public Instruction. (2013). Checklist for Expository and Persuasive Writing, <http://www.coe.k12.wa.us/Page/262>

Office of Superintendent of Public Instruction. (2013). Collection of Evidence (COE), Content Guidelines, <http://www.coe.k12.wa.us/domain/22>

Office of Superintendent of Public Instruction. (2013). COE High School Conventions Scoring Guide CON, <http://www.coe.k12.wa.us/Page/177>

Office of Superintendent of Public Instruction. (2010). COE Reading and Writing Task/Prompt Forms, <http://coe.k12.wa.us/forms>

Office of Superintendent of Public Instruction. (2013). COE Reading Rubrics (Literary and Informational), <http://www.coe.k12.wa.us/Page/165>

Office of Superintendent of Public Instruction. (2013). COE Reading Task – “Birdfoot’s Grandpa,” <http://coe.k12.wa.us/forms>

Office of Superintendent of Public Instruction. (2013). COE Writing Prompt – “Dear Grandchildren,” <http://coe.k12.wa.us/forms>

Office of Superintendent of Public Instruction. (2013). Mathematics Learning Standards, <http://www.k12.wa.us/Mathematics/Standards/K-12MathematicsStandards-July2008.pdf>



# EPILOGUE



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**I**t is our sincere hope that this second volume, which illuminates our philosophies in the creation of this guide, also offers guidance for the creation of additional teachings (curriculum units) that will continue—long into the future, we hope—Honoring Tribal Legacies. Our first chapter in this volume lays bare our thinking and methods in designing the curricula that we are making available free and on line. By exploring the pattern we have followed, we hope to facilitate the design of new curricula that will be effective for both teaching and learning. The new language this method promotes inspires us to be creative in what we bring to the classroom and to build new relationships with our students.

Our second chapter in this volume explains how and why we advocate for a place-based multiliteracies education. This is an approach that is especially suited to studying diverse Tribal experiences, knowledge bases, and points of view, while also accommodating diverse literacies and learning modalities. Place intersects with identity and self in special ways, and learning that connects with place can have a deep and lasting impact on all of us.

The goal of fostering differentiated instruction receives additional attention in our third chapter. It suggests ways for responding to the various and multiple needs of learners. Our desire is that students engage with instructional materials and processes in the best possible way, one that results in a positive and lasting appreciation for students themselves, their new knowledge, and how they will approach the future.

While facts may be forgotten, the process of locating, digesting, and thinking critically about information is a skill we all try to impart in our students. Our fourth chapter has given us a rich tool chest for locating and maximizing our understanding of primary source materials, particularly as they relate to Tribal histories. In this endeavor, an expert archivist with deep familiarity with manuscripts, photographs, audio, video, and more, lends us her impressive expertise so that we may make the most of our time in the repositories where we will be better equipped to find the voices and perspectives of our forebears.

As our fifth chapter reveals, learning is an art that involves teachers, students, and families. Mounting pressures to improve upon an already full curriculum by instituting required standards

have been putting serious stress upon this art. Our contributing authors provide an antidote to help cope with the stress, encouraging us to continue to challenge our students to develop knowledge within cognition (keeping in the forefront the “how” and “why” when we look at the who, what, and when). They also provide examples for making knowledge culturally relevant, inspiring students to find self-awareness and agency, as they look forward, to make their lives what they wish them to be.

Our sixth chapter provides a window onto another inspirational response to the demands of state standards, particularly as standards relate to assessment. Here we see, again, a plea to keep curricula culturally responsive and to adjust to our students’ special circumstances and values. Native American students, along with African-American and Latino/a students, for example, could well have one foot in a unique culture and the other in “mainstream” culture. They will not all respond well to testing that is designed primarily for that mainstream. We learn from experiences at the high school level in the State of Washington how the new assessment method called Collection of Evidence has been successfully adapted for Native American students. When curricula are authentic, relevant, accurate, respectful, fair, valid, and reliable (e.g., drawing from some of the primary source materials mentioned above), instead of disenfranchising, they can be enriching and empowering.

Looking ahead, please join us in this endeavor to Honor Tribal Legacies in all classrooms, with all students, and attending to the whole child. Together we can keep our eyes trained on the prize of shaping our youth into healthy adults who will be confident, able, and excited about shaping a healthier and more equitable future for all Americans.



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