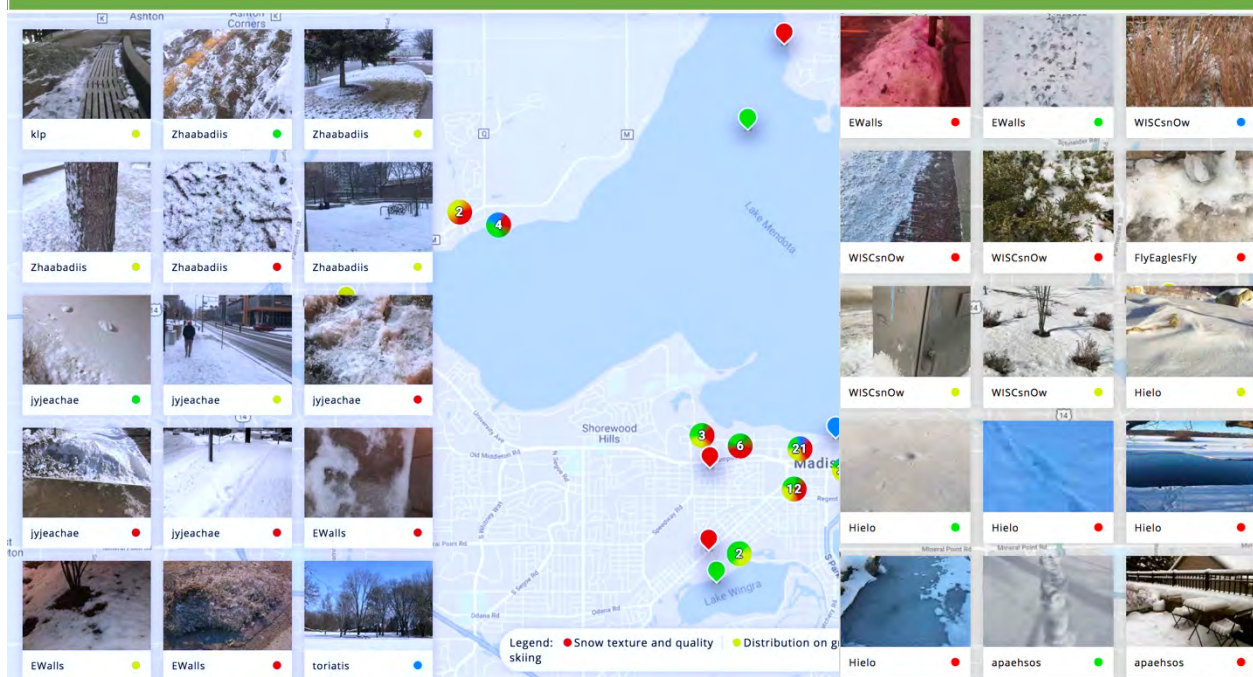


Journal of Folklore and Education

Common Ground: People and Our Places

2018: Volume 5, Issue 1



About the Cover Photo: Students in Thomas DuBois' Snow Challenge class document snow at the University of Wisconsin–Madison with Siftr, a freely available data collection and visualization platform allowing users to upload and geotag images and record and share associated notes and field observations (see “Siftr: A Tool for the Folklore Classroom,” this issue).

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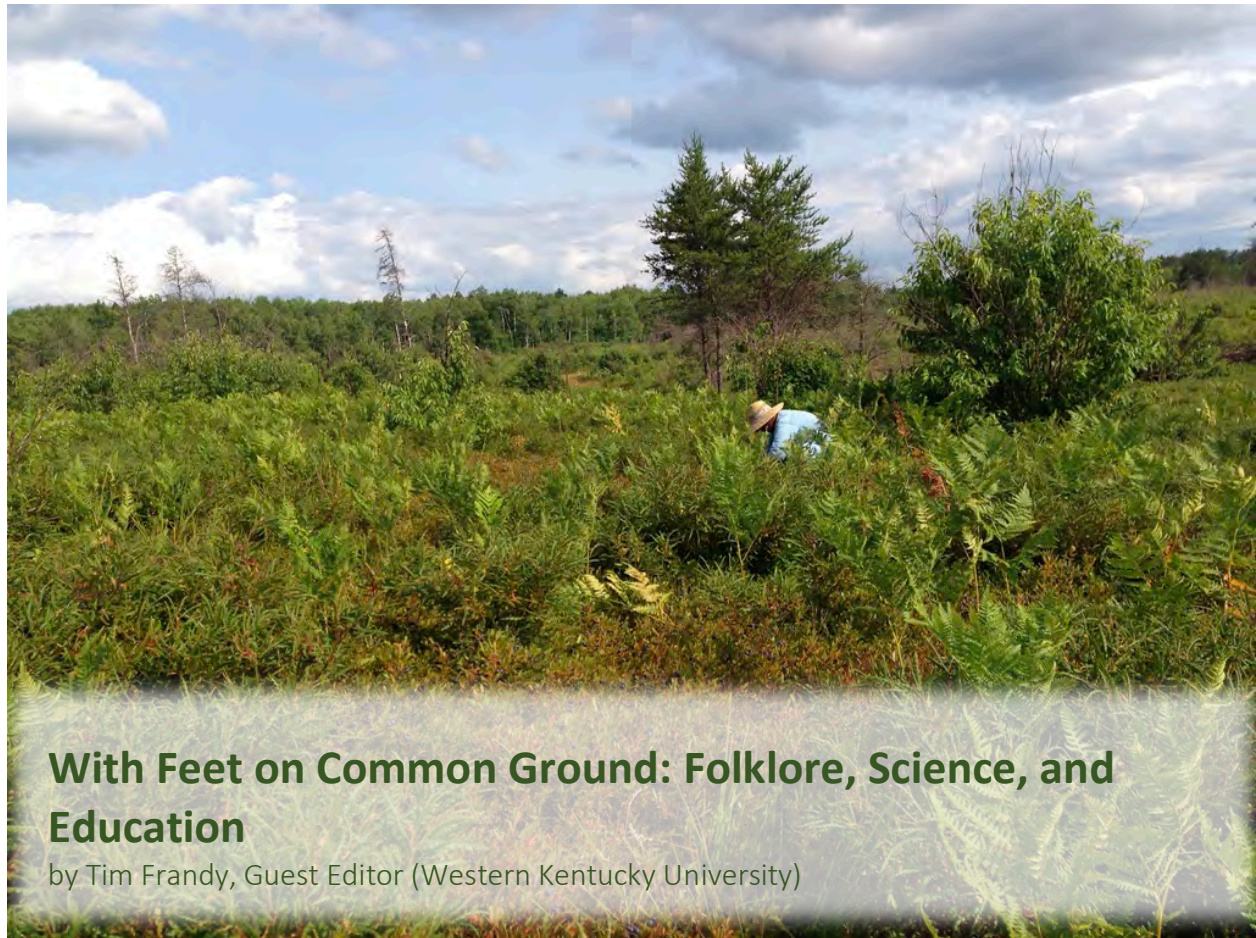
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With Feet on Common Ground: Folklore, Science, and Education

by Tim Frandy, Guest Editor (Western Kentucky University)

It's a chilly, damp August morning in northern Wisconsin as I sit to write this introduction to a special issue of *The Journal of Folklore and Education* called Common Ground: People and Our Places, a wonderfully diverse issue that brings together themes of space and place, cultural environments, pedagogical practices, and folklore and science. I've long believed that environments, sciences, and learning are situated within cultural frameworks. For that reason, I'd like to situate this introduction within my own.

It's common in my family—a mix of American-born Finns, Swedes, and Sámi who grew up harvesting wild foods as a way of life on the south shores of Lake Superior—to begin our conversations with talk about the seasons and the weather. We acknowledge August's distinct weather—often humid and fluctuating between cold and hot—that marks its separation from high summer and from the summery weather found short distances to the south. We recognize the signs of summer-autumn (in Finnish and Sámi, eight seasons are recognized rather than four), and we take note of the things we have seen outdoors. The mosquitoes have quieted from intolerable to mere annoyances. The first colors of autumn, yellows and reds, are finding their way into the leaves of trees stressed from disease, insects, or difficult weather. The rivers are low, as is common this time of year, but soon they will be susceptible to autumn floods. We discuss fish, deer, birds, trees, and plants. We do all this before we might think to ask about each other's welfare, family,

About the photo: Picking blueberries and huckleberries in a pine barrens, July 2014. Photo by Tim Frandy.

or work. Our own well-being is intertwined with webs of relations beyond the human community. Talking about the weather is the same thing as talking about ourselves.

Above all, this time of year, we talk about berries. The latter half of our summer involves rotating through regional berry patches, hidden in the deep forests of northern Wisconsin and Michigan, down logging roads, sometimes many miles away from the nearest house or paved road. Blueberries, huckleberries, raspberries, blackcaps, thimbleberries, blackberries. Sometimes juneberries, mulberries, pin cherries, chokecherries, cranberries, wild grapes and plums. Growing up, my family would spend several weeks in these berry patches, among mosquitoes, black flies, eagles, and bear, filling half a chest freezer with the fruits of our labors, which we squirreled away in old ice cream buckets. Our late summers are still filled with the scents of sweet fern and stink bug, the stain on the fingers, the phantom tickle of the ticks under the clothing, and the real itches of the bites that endure for weeks. We crouch for hours in remote pine barrens to pick low-growing blueberries until our legs ache, and we wear heavy wools on hot days in thorny blackberry brambles until we are drenched with sweat.

Picking berries shapes who we are, and how we interact with our place. We keep our eyes on the weather all summer long. Will there be a June frost that nips the blossoms—and destroys nearly all the blueberries for the year? Where will the berries produce best, given the rainfall this year? We observe the maturation of other plants, comparing them with our memories of previous years, to estimate when berries will ripen. We listen to the woods, the waters, and the weather, and we continue to learn from them every year. Berries are how we think, and how we understand—at least within this season.



A historically productive blueberry year in 2014 left wild berries looking like grapes on a vine.
Photo by Tim Frandy.

Berries affect how we want and expect land to be managed. Berries reflect and shape who we regard as family (you don't share good patches with just anyone), and a set of old customs dictates the etiquette and norms of appropriate and inappropriate berry picking behaviors, which often supersede actual written law. We remember through berries as well. We celebrate my late ambidextrous grandmother, who could out-pick anyone in the berry patch until she was 80 years old. And my great-grandmother, who would set up camp in a berry patch for weeks, picking all day and canning all night over an open fire. Or even the 80-some year old stranger my father once encountered in the blueberry patch, who clung to a walker with one hand and bent to pick berries at ground level with the other. She picked with a methodical and loving slowness, one berry

at a time, placing each individual berry carefully in a pail balanced on her walker's seat. My father called her his hero. We understood why.

But what I'm trying to get at is not simply about berries. As the seasons change, we fish, hunt, garden, gather, knock rice, tap trees, cut firewood, re-use and re-purpose the things around us in a variety of creative ways. Together, these customary practices shape our sense of time, our sense of place, and our sense of self. We belong to the place—it does not belong to us—to this bigger web of relations in which we have what many Indigenous scholars refer to as “relational accountability” (Wilson 2008, 99). We take what it gives us of its own accord, and we give back what we can to our non-human kin. These beliefs of reciprocal relations with non-human persons are ancient and well documented among Finno-Ugric peoples, and within our everyday practices they endure today, often in new, innovative ways. In the words of one of Finnish-American folklorist Marsha Penti's collaborators, “It's in us, this berry picking” (1991, 35).

In formal education, however, local knowledge and local culture tend to be undervalued, whether in the English, history, or science classroom. Although individual motivated teachers still can fight to find ways to engage the local, the last 15 years of educational policy have driven us in the opposite direction, toward the nationwide standardization of curricula and high-stakes testing. Curriculum design requires hard, political choices that privilege certain types of knowledge over others, that advance certain social agendas over others. This phenomena of politicization through standardization occurs as much in the sciences as in the humanities.

We have many classrooms where children learn to parrot that mitochondria are the powerhouses of the cell (information I perhaps have not used since high school), but we have been producing grown adults who are unable to recognize the kinds of trees in the forest, which plants around them are edible or medicinal, or how to read the clouds to predict the weather. How do we expect to protect biologically diverse critical habitats if our general population can only distinguish between evergreen and deciduous trees?

In classrooms, students participate not simply in science, but rather in science traditions that have taken shape over centuries. These traditions enculture: They privilege and marginalize certain subfields; they promote certain cultural assumptions that underlie a discipline; they cultivate specific kinds of relationships between scientists and the objects of their studies; and they create systems of hierarchy, value, and authority through scientific practice. These science traditions are deeply enmeshed with other systems of hierarchy and authority in our world, and the emergent fields of feminist science studies and postcolonial science studies have explored and critiqued how sciences operate to advance colonial and patriarchal agendas (Harding 1992; Crasnow, Wylie, Bauchspies, and Potter 2018).

We see these cultural phenomena play out in our everyday lives, in countless ways. Students are, for example, perhaps more likely to dissect frogs than learn about the threats to their habitat. The cultural dynamics of this curious rite of passage in biology classrooms likely teach us more about how humans should relate to animals than about the frog itself. Students are encouraged to perform their identity as emerging scientists publicly through either the killing of an animal in the name of science education, or the use of an animal specifically killed for the purpose of education. The ethical justification of killing for human learning is determined by a greater community of

scientists, as are the arbitrary lines surrounding a “humane” death. The formal methods of dissection (even the use of formal instead of colloquial names) set it apart from cruel acts of senseless mutilation. The frogs are not eaten, distinguishing our sciences from our dinner plate and our cultural life.

Students must negotiate these tensions and feelings of discomfort (perhaps inappropriately “playing” with a dissected animal to the amusement or disapproval of peers), choosing their own roles as individuals in relation to a broader and socially normalizing community. Some students—mostly young women, in my memory—in acts of protest refuse to participate in dissection. Only a few decades ago, many of these students risked failure of the lab assignment or even the course for their protests. Regardless of one’s stance on the importance of dissection exercises, it is clear that they enculture and engender young people into the shared ethics and values of a community of scientists—even amid threat of punishment for nonconformity. When we pretend that the sciences are somehow not political, somehow not cultural, we are complicit in perpetuating Western cultural hegemony and patriarchy through these disciplines.

Despite the challenges of standardization, many educators still creatively integrate the local into the classroom. One of my uncles is a retired high school biology teacher, and he would sometimes bring in a deer to butcher with his class, or perhaps some walleye to fillet or smelt to clean. In this informal but integrated curriculum, his students learned about animal anatomy and physiology, engaged in local cultural practices, and learned a practical application of food production. During deer hunting season—a major cultural event where I grew up—my uncle would talk about deer leading up to the hunt with his students. Where are the deer? What are they foraging on? Where are their bedding areas? How do cold rain, different kinds of snow, different strengths of wind affect their behavior? How does the end of the rut affect their behavior?

Many of these things I learned at home through dialogue and firsthand observation over the course of many decades. My brother and I learned to “read” the woods, to look for acorn beds, tender tree shoots, and other forage, along with trails, beds, rubs, scrapes, tracks, feces, and the like. We were taught if it was raining, deer would bed in balsam forests. If there is big snow, they bed down. Deer tend to move against the wind, unless the wind is too strong, in which case they don’t move at all...at least until they become hungry. Of course, their movement is further complicated by the nature of the forest, preexisting trail networks, swamps, clearings, and the like. These relatively simple tidbits of traditional knowledge are not static, but rather interpretive, generative, dynamic, creative, and participatory. Understanding those principles allows us to understand what a deer wants to be doing, what it is doing, and what it will likely do next. Having this knowledge puts me in relationship with the deer, and their networks of relations in the forest: their food sources, their bedding grounds, their trail networks. Why cut a healthy oak for firewood, if it’s providing nutritional acorns to a deer? With that oak needing 50 years to mature enough even to produce acorns, perhaps there is better option to heat my home. We work to take care of the deer, and they take care of us. To borrow the words of Ahousaht fisherman Robert Foley, “It’s trying to manage ourselves within the resource instead of trying to manage the resource” (Schreiber 2002, 372).

Our sciences say a great deal about our values as people and how we relate to our place in the world. What social and cultural agendas do they promote? What kinds of power do they perpetuate and contest? How do they marginalize and exclude? How might science classrooms be used to

support and sustain local cultures—the fiber artist, the woodworker, the herbalist? What impacts does standardization of science curricula have on local cultures, local knowledges, and a multicultural world? And how can we work as folklorists and educators to cultivate multicultural sciences in schools, as we have done in other disciplines?

Although science is often masked in a mythos of objective knowledge production, science traditions are largely cultural practices, and they depend on cultural frameworks in process, interpretation, and ethics. Even the “hard” sciences are reliant upon culturally constructed metaphor (to understand quantum mechanics or the 10 to 26 dimensions of string theory), simplified abstractions (Bohr model of the atom; vacuum-based classical mechanics), and meaning making (the philosophy of physics; centuries of speculation over the meanings of Euler’s Identity). In her classic work *Decolonizing Methodologies*, Maori scholar Linda Tuhiwai Smith critiques ethnocentrism in conventional Western research, asking: “Whose research is it? Who owns it? Whose interests does it serve? Who will benefit from it? Who has designed its questions and framed its scope? Who will carry it out? Who will write it up? How will its results be disseminated?” (2012, 10). Designing research questions, crafting methods to test hypotheses, and interpreting data occur within cultural frameworks. In the complex and dynamic real-world systems of the life sciences—in ecology, medicine, or public health—science is particularly dependent on these human factors.

Turning science into policy is also a cultural process. In the work of Erika Brady (1994) or Sandy Rikoon and Robin Albee in the Ozarks (1998), Dale Rosengarten (1994) in African American communities, Stuart Marks (1994) among traditional hunters in Zambia, or in my own work on Indigenous sustainabilities (Frandy and Cederström 2017; Cederström, Frandy, and Connors 2018; Frandy 2018), we can see how “conservation” and “sustainability” are often weaponized in ways that advance the conservation of one culture’s lifeways at the expense of another. In the Upper Midwest, non-Native people manage forests for sustainable timber, hunting, and tourism, and not for medicines, birch bark, and berries. In former times, blueberry-producing areas were regularly burned to increase their yield, until settlers who saw fire as destructive began implementing policies of fire suppression (Anderton 1999). Shared social and cultural values shape where scientists invest their energies and how science is applied and translated into policy and practice.

In recent decades, Indigenous (and allied) scholars have challenged the universality and exclusivity of Western science, looking at a wide variety of phenomena like traditional ecological knowledge (TEK) (Jacob 2013, Nadasdy 2007), Indigenous science (Kawagley 2006), Indigenous health care (Walters and Simoni 2002; Walters, et al. 2011), and ethnomathematics (Iseke-Barnes 2000). These Indigenous STEM fields were and continue to be sophisticated, dynamic, and resilient, despite centuries of stigmatization. Today, study after study shows Indigenous-managed lands often have cleaner water and greater biodiversity than adjacent federally run lands (Waller and Reo 2018, Reo and Karl 2010), or that once-stigmatized Indigenous medicines are highly effective (DuBois and Lang 2013). Clinics in Alaska and New Mexico claim great successes through the integration of traditional healers into their patient care, and Native communities have turned to traditional healing to assist with mental health, substance abuse, and a variety of public health challenges.

All science is ethnoscience, and we would be remiss to ignore the problematic legacy of the Enlightenment in Western sciences that endures today. These Enlightenment-based logics not only advanced science, but also helped propagate global colonization and modern capitalism. Elizabeth DeLoughrey and George B. Handley explain, “In sum, European Enlightenment knowledge, natural history, conservation policy, and the language of nature—the very systems of logic that we draw from today to speak of conservation and sustainability—are derived from a long history of the colonial exploitation of nature, as well as the assimilation of natural epistemologies from all over the globe” (2011, 12). It is no coincidence that the celebrated scientist and philosopher Francis Bacon was equally praised for his contributions to the development of the scientific method and his instrumental role in the founding of British colonies in North America. He was even commemorated on a 1910 stamp from Newfoundland, with the moniker “the guiding spirit in Colonization Scheme [sic].”

This legacy endures today in paternalistic attitudes toward Indigenous environmental management, in the dismissal of the efficacy of Native medicines, and in the deep racism in Western archetypes of “primitive” peoples and their cultural logics. According to Bonnie O’Connor and David Hufford, these logics bear connections to the 19th-century theory of cultural evolution:

[M]edicine, like the rest of culture, was presumed to have developed “upward” in a largely linear and unidirectional progression from its crudest, most primitive form into its modern, Western, highly sophisticated state.... This model remains very influential in current popular and professional thought, despite the fact that the evolutionary view on culture on which it was based has been largely dismissed by most modern scholars of culture (2001, 13),

As folklorists, we ought to be able to understand how science traditions shape how science presents itself today, and how racist and sexist structures perpetuate themselves through the production and reproduction of scientific knowledge. As folklorists, we ought to play a role in elevating vernacular approaches to a field whose methods are often dismissive of or even hostile to vernacular interpretations and authorities. As folklorists, we ought to find ways that science education can help strengthen local cultures, elevate subaltern voices, and promote alternative agendas, discourses, and methodologies within the STEM fields. As folklorists, we ought to recognize the creative brilliance of all the vernacular sciences in the world, while being able to distinguish them from the problematic positions of climate change deniers, chemtrail conspiracy theorists, and anti-vaxxers. As folklorists, we ought not be cast as science-deniers because of our valid questions and critiques that ultimately make science work better in a multicultural world. There is common ground to be found between our disciplines, and it is breathtaking.

This two-part special issue, *Common Ground: People and Our Places*, is centered around the diverse ways that people relate to our place in an environment, in the human world, in the cosmos, through both the vernacular and institutional sciences. Because of the large number of contributions to the issue, it has been broken into two parts—a first for JFE. The two issues are designed to mirror each other, bringing into dialogue educators, academics, and public humanists across several different disciplines, while spanning topics like Indigenous traditional ecological

knowledge, foodways, place making, disaster, language, public folklore, educational technologies, and innovative pedagogies and curricula on the ground.

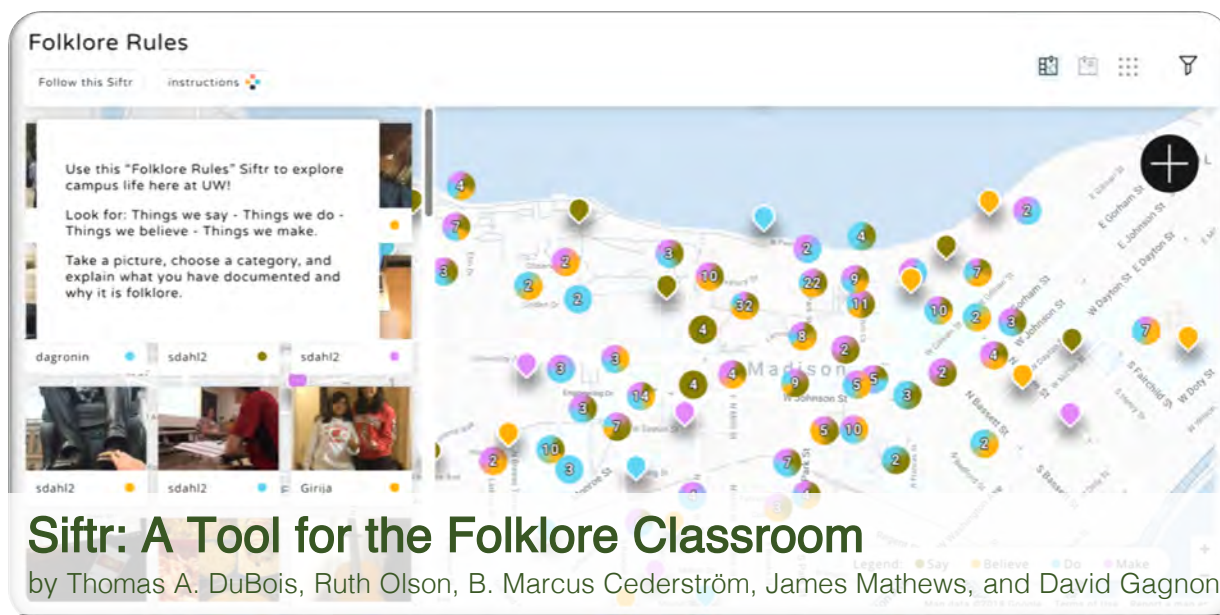
At least for me, on the ground is where I belong, as both a person and a folklorist, feeling the earth underneath my bare feet. There's a patch of blackberries not far from here that I've been wanting to look at. They should be just about ready, unless someone's found them first. Or should I drive north to pick more blueberries, where they mature later in the summer? If nothing else, wild rice is coming soon. And cranberries. And muskie. And deer. The afternoon sun has made the day warm and muggy. Which way is the wind blowing now?

Tim Frandy is an Assistant Professor of Folk Studies at Western Kentucky University. His research and public work involve cultural worldview, ecological folklore, the medical humanities, and cultural sustainability.

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Siftr: A Tool for the Folklore Classroom

by Thomas A. DuBois, Ruth Olson, B. Marcus Cederström, James Mathews, and David Gagnon

In many ways, large American research universities work to dismantle the importance of place in people's lives. Universities take pride in drawing students from disparate and distant locales, bringing young people together from "all 50 states" and any number of foreign countries. Once assembled at the university's campus, students are subjected to a curriculum that often emphasizes canonized cultural materials from far away and overlooks local languages and cultures, be they Indigenous, ethnic, or heritage. As students become socialized into a new "cosmopolitan" way of viewing the world, working with professors and teaching assistants drawn from across the planet, they often sever emotional ties with a home place that had formerly seemed deeply significant but now seems restrictive and irrelevant. Knowingly or not, American universities are often complicit in a process of deracination that prepares students for a rootless and untethered life, one spent following jobs from place to place and often valuing only those locales that are extolled in literature, movies, TV, or *The New York Times* Travel Section. Where once they spoke with enthusiasm of a local parade, Christmas lighting display, or community picnic, now they chuckle with an acquired sense of superiority about those poor fools who continue to live in the "fly-over states," "small-town America," "urban cesspools," "the boring suburbs," "the sticks," or "the boonies." Despite its state funding, mandated state resident admissions preferences, and avowed commitment to the greater good of the entire state population (the much touted "Wisconsin Idea"), the University of Wisconsin–Madison is one such large American research university.

Recovering a sense of place and discovering the riches or complexities of the local are tasks that lie at the heart of the study of folklore and should be regarded as fundamental goals or benefits of folklore education. As folklore educators at the UW, we know that one of the great moments of teaching folklore is watching students come to the realization that culture occurs all around them: They are not separated from culture, watching behind a screen or through reading a novel, but, rather, are on stage and participating in the constantly unfolding process of culture enacted right

here, right now. A sense of empowerment arises in students as they become aware that they are conversant in complex unwritten customs with deep historical roots. And a sense of respect is born as they come to understand the artistry of people around them—people whom they may have overlooked before or failed to appreciate fully. Many students regain a sense of appreciation for their home place and home culture when they take a folklore course. That they can do so while sequestered on a campus often far away from their homes can only occur if instructors make use of the campus and broader locale as a means and metaphor for valuing places in general and for demonstrating the rich connections that tie people and places together.

In this article, we present an innovative, user-friendly digital tool developed at the UW and now used in folklore courses at various levels to achieve locative education. Siftr is a freely available data collection and visualization platform that allows users to upload and geotag images and record and share associated notes and field observations. The application was developed by an interdisciplinary team of educational researchers, software engineers, and humanists at the UW known collectively as [Field Day](#). When interacting with Siftr, users can add and view field observations using either a specific mobile application (available for iOS and Android devices) or through the [Siftr website](#). In what follows, we present examples of Siftr projects incorporated into elementary, intermediate, and advanced undergraduate UW folklore courses to illustrate the potential and adaptability of this instructional resource to teach students about the richness and complexities of the world around them. Siftr provides a kinetic and visual activity that takes place most often in the outdoors and in the spontaneity of performed culture, but it also dovetails well with in-class activities and theoretical discussions. It is a platform that readily adapts to group projects and invites interaction and discussion that can enrich a folklore classroom, helping students contemplate the myriad ways in which culture is enacted in local contexts.

Folklore and Maps

Mapping has been a longstanding element of folklore research. At the very outset of our discipline, the historic-geographic method used maps to help chart and chronicle the passage of folk tales and other items of verbal culture across time and space (Krohn 1883, von Sydow 1910, Thompson 1953). In the mid-20th-century turn to material culture studies in Europe and then the U.S., mapping and atlases again became important tools for presenting complex data regarding the migration of styles and techniques across geographic and cultural lines (Glassie 1968, Sarmela 1994). In recent years, folklorists have rediscovered the usefulness of maps, creating new products that seek to make archived materials accessible to users in new ways (Tangherlini 2013, Gunnell 2015).

While much of this research has relied upon collaborations with professional cartographers and resulted in fairly static maps, the GPS revolution of the late 20th century made complex and continuous mapping a common aspect of everyday life, particularly for people with mobile phones. Siftr harnesses the photographic and GPS resources of smartphones (or computers with Internet connections) to geolocate ethnographic data (images, descriptions) on readily accessible maps, populating concrete spaces and times with relevant ethnographic materials. Once images and notes have been uploaded to a unique Siftr they can be viewed as geolocated icons on a map or via a photo gallery. Users can “sift” or filter through uploaded content by zooming into specific locations on the map, sorting by tags, or searching by upload date and/or keyword. They can also comment on each other’s images and notes.

There are many ways to use Siftr within an educational context, but typically teachers create a unique Siftr and then invite their students to contribute to it as part of a whole class assignment or inquiry project. Additionally, some teachers ask individual students or small groups of students to create their own Siftr as part of an independent field research project. While each assignment should be in line with teaching objectives and may require extensive planning, the act of setting up a new Siftr takes only a few minutes.

The set-up asks that you name your project, choose an icon, and give instructions.

You may also identify a color scheme.

Determine your starting location.

Add new data fields.

And, determine your preferred privacy settings.

(Siftr set-up screenshots; color added to differentiate between different screens.)

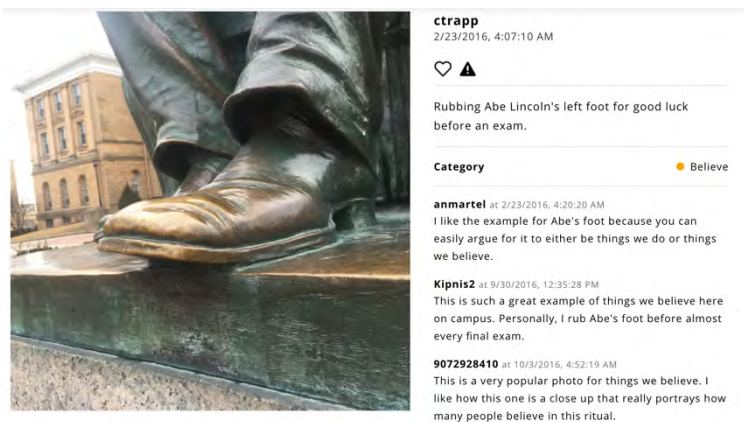
What follows is a discussion of Siftr assignments in the classroom designed by Ruth Olson, Thomas DuBois, and Marcus Cederström.

Siftr at the Elementary Level with Ruth Olson: Folklore Rules

The elementary folklore class is often a unique experience for students, their one-and-only folklore course, taken early on in their time at Madison or during one of their final semesters before graduation. At the UW, students often take Folklore 100: Introduction to Folklore as an elective or as a course that allows them to satisfy the university's Ethnic Studies (ES) requirement. Depending on their school and major, students' advisors counsel students to take an ES course early in their time at Madison or toward the end of their studies. Regardless of when students enroll, however, the course draws robust numbers and reaches a maximum enrollment of around 80 very early during the enrollment period. Other UW students opt for Folk 230: Introduction to American Folklore, a blended course of about 30 students, in which students do preparatory work online and meet in the classroom once a week for active learning—in-class interviews, small group meetings and discussions, workshops, etc. I have used Siftr in both these courses.

Whether they are first-year students or seniors, most UW students enrolled in introductory folklore courses have a very limited perception of what folklore is; one of my goals is to get students to recognize that folklore includes more than folk tales. I want them to understand that studying folklore is studying everyday life, and they can (and should) use their own lives to reflect on social processes at work and make meaningful connections to these processes and the concepts we study in class. During Week 3 of the 15-week semester, I use Siftr as an introduction to fieldwork, asking students to post pictures documenting different aspects of student life or local culture. For both Folk 100 and Folk 230, our [Siftr is entitled *Folklore Rules*](#), based on Lynne McNeill's book of the same title (McNeill 2013). Students traverse the campus to photograph examples for four different categories of expressive culture, based on McNeill's categories of what folklorists study: things we say, things we do, things we make, and things we believe. Doing this out-of-the-classroom exercise early in the semester gets the students actively engaged with ideas presented through course materials, helps them immediately apply concepts, and enables them to find examples illustrating those concepts. It also helps students see folklore as cultural events that occur in particular settings, either seemingly apt for the performance in question or seemingly incongruous. Siftr allows students to view folklore in relation to context and understand the profound ways in which the meanings of places become negotiated through expressive acts.

When someone seeking success on an exam rubs the left foot of the prominent statue of Abraham Lincoln in front of the university's main administration building, Bascom Hall, the act derives part of its interest because the Lincoln statue is grave and serious in appearance and the statue's location makes Lincoln a sort of surrogate for university authority and standards. Students in both courses often document the Lincoln foot rub and also debate whether the act constitutes "something we do," or "something we believe," as is evident in the image and comments posted by ctrapp in 2016.





Things we make: The owner of this bike filled their basket with fall leaves, making it a sort of impromptu decoration. It could be seen as a personal expression of how much they love autumn or a desire to share the beauty of the leaves. I liked this because I also have a habit of collecting pretty leaves in the fall.

Category

Make

Documenting a category like “Things We Make” can include finding someone (or evidence of someone) on campus who participates in a folk art form: a knitter, woodworker, or graffiti artist, for example. Students may document someone’s tattoo or a specially decorated backpack. Students may document customized additions to buses, bikes, delivery trucks, and cars. Once students photograph, caption, and geolocate their finds, they become visible to classmates in a different way—a cultural artifact or practitioner becomes spotlighted by the Siftr, so that other students may take note of the artifact in a different way next time they pass by. Seeing the image on Siftr, students may even feel enticed to seek out the scene to see the artifact firsthand. Collectively, Siftr allows students to build awareness of the folklore around them, connect that to a place, and inform each other about precisely the sorts of phenomena that they are learning about in class.

While instructing students on how to create an effective Siftr post, my teaching assistants and I also use the activity to emphasize the qualities that distinguish a good ethnographic photograph. Images that can be “unpacked” to reveal cultural information are an important part of folklore fieldwork, and students learn how to produce such images while they hunt for likely subjects for Siftr posts. A short handout I provide alerts students to important considerations, like asking permission before photographing, capturing steps in a process, and using the camera effectively to create clear and compelling images. Students comment on each other’s posts and build a cognizance of what characterizes a good ethnographic photograph.



agarwal39

10/2/2016, 1:39:19 PM



Here we can see a person working on a vase made of clay, the surroundings and the proper availability of tools represents that this person has a close relation with his work and usually works in a workshop along with other people. This makes him an integral part of the folk group consisting of all the people working in this workshop.

Category

Make

kleasure at 10/2/2016, 4:04:51 PM

This photo was taken really well. The way you capture the subject and the action he is performing is perfect.

Enter a comment...

In Folk 230: Introduction to American Folklore, a blended course, I found that students were more creative and energetic in the images and captions they chose to put on the Siftr, mainly because of face-to-face accountability. They knew that once they had completed the out-of-classroom assignment of posting on Siftr, they would be coming back together as a class to select and talk



serwin
10/2/2016, 1:41:33 PM

Things we do:

At every Badger game, students hold up a shoe or jingle their keys during every kickoff in order to make a lot of noise.

Category Do

No comments.

Enter a comment...



garmstrong4
10/2/2016, 3:04:36 PM

Beading is a traditional yet also now contemporary Native American art form. This could also fit under "Things We Make" but personally for me beading is part of my Native identity and I feel a strong cultural pride/ belief when I bead. Some bead work are worn for ceremonial practices such as a beaded vest for a wedding. This piece of bead work is going to finished into a barrette.

Category Believe

No comments.

Enter a comment...



vwlam
2/23/2016, 5:07:22 PM

My parents came down for the weekend and we had a very late Chinese New Year Celebration together where my mom and I cooked, and made red eggs for good luck.

Category Make

No comments.

Enter a comment...

about their favorite images (and why those images were favorites). I found that after students had completed a short self-assessment, they were not only more prepared to talk about their fieldwork decisions but also more alert to what they appreciated in other people's images. I then asked them to share with each other in small groups examples they had chosen from our Siftr, which allowed them to practice foundational folklore concepts and vocabulary. In our face-to-face meetings, it was easy to project our Siftr for the entire class on a screen and have students select and display examples they wanted to share and discuss with the class as a group. Often the items selected focused on familiar (and thus recognizable) material such as the statue of Abraham Lincoln at the top of Bascom Hill or the practice of holding up a shoe at kickoff at a Badgers football game.

But students also chose to focus on particular images that they saw as good photographs—aesthetically pleasing, clearly focused on the desired center of interest, delivering complex cultural information. They used the exercise to explore and celebrate their familial and cultural identities, things that the university experience threatened to alienate them from. Class and the Siftr activity became both a safe space and a brave space for displaying one's cultural identity. The Siftr exercise, undertaken early in the semester, helped students get to know each other and themselves better and recognize the Madison campus as a place where they could continue to practice their cultural traditions as elements of personal, familial, religious, or cultural identity.

Since a goal for both courses is for students to be able to situate their own experiences within the larger context of American culture and history, and to understand the richness of everyday American life, Siftr provides a very concrete, visual, and locative framework for literally inserting their culture into a map of campus. And this sensation occurred not only for students whose cultures differed from Madison's white Upper Midwest majority culture; white Wisconsinites documented ways in which people varied in customs or practices from one Upper Midwest community to another, as an interesting post regarding the game of Duck, Duck, Goose illustrates, while also coyly referring to the drinking culture at UW.

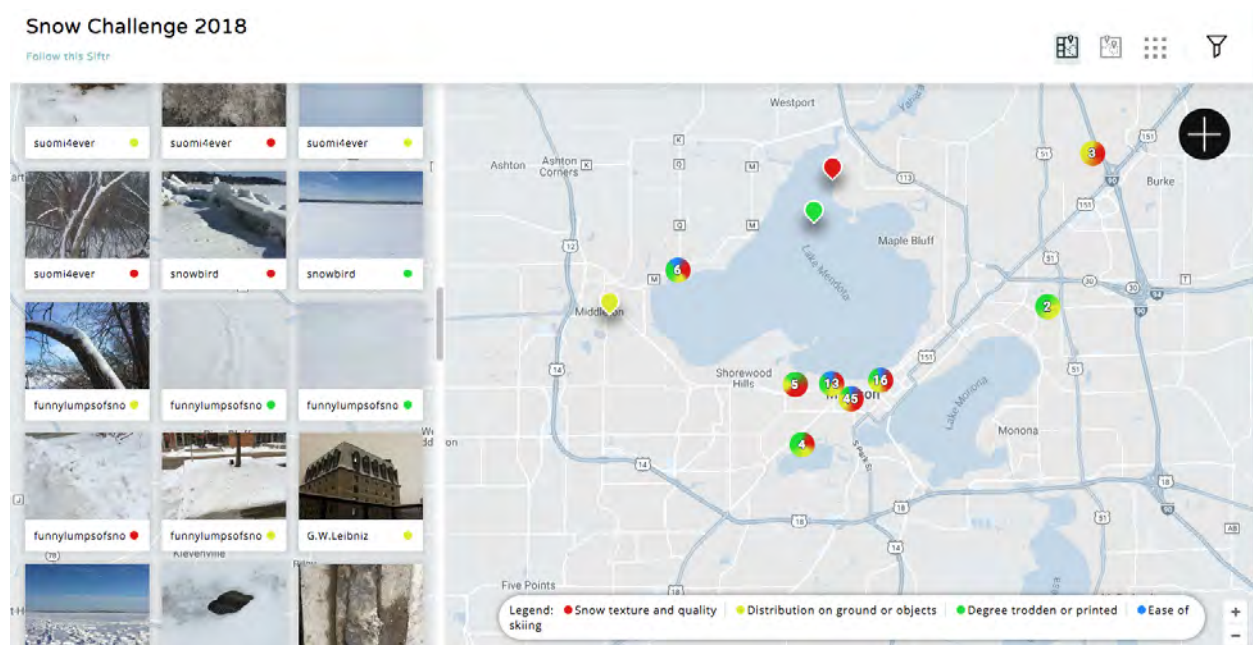


Through this set of exercises, students expanded their view of what constitutes folklore, became more familiar with the vocabulary folklorists use to talk about cultural expressions, and enhanced their understandings of identity, representation, and place.

Siftr at the Intermediate Level with Thomas DuBois: Snow Challenge 2018

The Siftr project Snow Challenge 2018 illustrates how Siftr can be integrated into an intermediate-level undergraduate course, helping convey the complexities of place as shaped by weather and cultural interpretations of it. The project occurs in Folk 443: Sámi Culture, Yesterday and Today. Cross-listed with Scandinavian Studies, this course takes an interdisciplinary approach to the study of the Sámi people by examining Indigenous modes of expression and worldview, contemporary cultural and political activism and by exploring the connections to Indigenous peoples' movements throughout the world. In the 2018 iteration of this regularly taught course, the Snow Challenge assignment was worth 20 percent of students' grades and took the place of an exam for the first third of the course. During this first portion students learned through readings and lectures about Sámi (Lapp) language, traditional livelihoods, and material culture. They read, among other works, Nils Jernsletten's (1997) introduction to Sámi traditional vocabulary for snow, reindeer, and fish as well as Harald Gaski's (1999) evocative essay on how learning terms for snaring ptarmigan played a role in his relationship with Elders in his family and with his identity as a Sámi person. Jernsletten avoids exoticizing Sámi traditional knowledge, explaining it as pragmatic information for effective living in the environment and way of life that Sámi have traditionally occupied. He describes specialized snow terminology as a distillation of concrete observations of environmental conditions packaged into a lexicon that can then be shared from one person to the next in the course of daily activities. Gaski explores the expressive aspects of this lexical process, as Elders instill in children a particular understanding of the world along with specialized terms that help describe

and categorize the world from a culturally specific point of view. These points are important for the course as a whole, as they suggest the importance of finding ways to ensure person-to-person learning in colonial educational systems that tend to atomize and theorize. Many modern Sámi educational activists maintain that the keys to effective Sámi education are frameworks that allow students to talk with and learn from Elders in authentic situations. In an educational context that included—and in some cases continues to include—residential boarding schools where children live apart from their parents for part of the year, guaranteeing such contact is difficult. Further, with the widespread migration of Sámi away from Sámi traditional domicile areas to cities in the south of the Nordic countries such as Oslo, Stockholm, and Helsinki, the challenges of dislocation become even more pronounced.



I wanted the Snow Challenge assignment to help students sense some of these issues in a way that simply reading about the situations would not permit. I wanted them to think about the world they inhabit, the ways their culture(s) may influence their attitudes toward that world, and the ways in which people form relationships with their environment through naming and characterization. Since traditional knowledge tends to be learned not through abstracted processes like reading a textbook but rather through hands-on activities, I wanted my assignment and assessment system for the part of the course related to traditional knowledge to mirror a learn-by-doing education model. In this respect, Siftr proved an ideal vehicle for accomplishing these educational goals.

The Snow Challenge had two parts. In the first, running from mid-January to mid-February, students were tasked with photographing and geolocating on the [class Siftr site](#) examples of Lule



Madda-bievla. An absence of snow around the base of a tree. Image by ilovemuohka, Minneapolis.



Vahtse. Fresh light snow that makes fresh animal tracks easy to recognize. Image by klp, Madison.

Sámi snow terms, drawn from the lexical work of Yngve Ryd (2007). Because Ryd's text is in Swedish and Lule Sámi, I produced a short translation of a selection of 29 snow terms from the work and created a website containing photographs and explanations.¹ Crucial for the effectiveness of this informational website was its responsive design, so that it would look good and be easy to use on a cellphone as students walked outside searching for varieties of snow. The overview of snow terms, also discussed in a class lecture, introduced words for snow texture, quality, distribution, degree to which it is marked by animal tracks, and effectiveness for skiing. I selected terms that I believed would be fairly easy for students to recognize (e.g., *bulltje* for snow adhering to vertical surfaces like tree trunks or walls) and that corresponded to different times of winter. Some terms, for instance, such as *slievar* (light, fresh, powdery snow lying on the ground) would be readily visible only immediately after a fresh snowfall. Others, such as *maddabievla* (an open area free of snow around the trunk of a tree) would become visible only later in the winter, when the snow has settled and begun to melt. Since winters in Wisconsin have become much less predictable in the past decade than previously, I needed a set of terms that would cover snow conditions over a range of different stages of winter. Students were permitted to work in teams, and they used team names instead of their actual names in their posts. They were required to post five images of snow and post comments on the posts of three other teams. I made screenshots of particularly fun or interesting images that students posted and displayed these in my PowerPoint presentations at the beginning of each lecture during the assignment period to help build student interest in the assignment and understanding of the tasks involved. Students enjoyed seeing their posts become elements of the lecture and were eager to see one or more of their images featured at the beginning of class.

The second part of the assignment asked students to reflect on what they had learned from the assignment, relating it to course readings and lectures as well as to their experiences interacting with the winter environment of the Upper Midwest. The resulting essays displayed a wealth of insights that reflected a richer integration of the ideas of traditional knowledge than students might have gotten only through reading. They showed an awareness

not only of the functionality of Sámi traditional knowledge but also of changes in their personal outlooks that resulted from doing the Snow Challenge, as comments from four students attest:

When snow is on the ground, it was just seen as snow to me. Nothing more, nothing less. But the snow challenge and this class [have] morphed my mind into looking into snow much differently.

A major theme in Sámi traditional knowledge is being able to identify how nature can both impact your survival and be impacted by your activities. One method of identifying these occurrences is through language....Observing these different snow types reveals how they may be used or what they may indicate to the observer. As I was taking photographs of snow, I was able to articulate different snow types that I have seen my whole life but have never had the words to describe their unique features. After learning snow terminology, I could more quickly identify snow types....I found that having a wide range of snow terminology made me feel more connected to my own natural surroundings. This connectivity showcases the importance of language in preserving the Sámi culture and traditional knowledge.

Lectures on language, culture, religion, and more have drawn our attention to a way of life that is so very different from our own; however, for some, it has opened our eyes to the workings of how we ourselves live. Not only that, but it has caused a perspective change, one in which some of us—myself included—have begun to notice little things in our day-to-day lives that we may not have consciously noticed before and how those things affect us.

This project, as well as the readings and lectures these past few weeks, have really enlightened my understanding of traditional knowledge. Before this class, it was my understanding that traditional knowledge does not change. I assumed that this is what makes it traditional. Furthermore, being a science major, it absolutely



Släbsát. Slushy, wet snow. Image by Honeybadger, Madison.



Bulltje. Snow adhering to a vertical object, such as a tree trunk. Image by Suomi4ever, Madison.

has been a longstanding belief of mine that science is far superior to what could be summed up as “old beliefs of people who lived in the woods hundreds of years ago.” Ironically, I have always had a respect for laymen, who have a great understanding of what specifically they work with, even if they do not have a scientific background. I consider my grandfather, who never set foot on a college campus, to be one of the most intelligent people I know. He has spent most of his life as a farmer and logger and knows almost everything there is to know about the flora and fauna that reside on his land. He taught me the difference between all of the different kinds of evergreens, as well as all of the fish in the local lakes. Grandpa knows which berries and wild mushrooms are safe for eating, where not to step in a swamp, and how to track the places where the deer are hiding. The fact that I could not fathom that Indigenous people have an even greater understanding of the plants and animals around them, down to effective medical treatments, in retrospect astounds me.

As these reflections abundantly illustrate, Siftr allowed my students not only to learn more about Sámi culture than they would have by reading alone, but also to think about their own lives, sources of information, and understandings of culture and community. One learning goal of the course calls for “a consciousness of self and other” and states: “Awareness of self is inextricably linked with awareness and empathy toward the perspectives of others.” In learning Sámi snow terms, and applying them to a Wisconsin landscape using Siftr, students come to recognize Sámi views of the environment and also their own. They realize that locale and culture go hand in hand, and that learning happens not only inside a classroom or library but also when outside, interacting with the environment or its various plants and animals. In a course offered at the intermediate level, in which students are expected to integrate their learning more fully into an overall educational outlook, the locative, kinetic, and integrative aspects of Siftr provide opportunities for learning that are substantively different from those that can be achieved in a lecture hall or seated at a seminar table. Siftr offers a tool for a substantively different kind of learning.



Slievar. Light, fresh snow lying on the ground.
Image by Apaesos, Madison.

Siftr at the Advanced Level with Marcus Cederström: Nordic Migration and the Labor Movement

I turned to Siftr to find a way to engage students with the study of historic folklore—specifically the laborlore of Nordic migrants to the U.S. in the late 19th and early 20th centuries. While there are mapping applications freely available, Google Maps comes to mind, Siftr’s focus on image-based geotagging provided an easy way to incorporate fieldwork and place-based research into the assignment. Rather than ask students to document historic sites of protest or labor unrest, for example, students apply Siftr across time and space to document the unremarkable sites of the labor movement by following immigrant labor activists and their migration to and through the U.S. By documenting the ways that Nordic migrants engaged in the labor movement, we can better understand the history of the working class in the U.S. as well as their vernacular expressions.

My Scandinavian Studies 520 and Folklore 530 course, Nordic Migrations and the Labor Movement, is a blended course with upper-level undergraduate students alongside graduate students. All students are asked to complete preparatory work online before attending class. Class time is designed specifically with active learning in mind, focusing on small group discussions, large class discussions, and a variety of in-class formative assessments. In my courses, I identify three or four content learning objectives and three or four skills learning objectives. I designed this Siftr to help students achieve one objective from each category:

Content Learning Objectives

Students will gain awareness of history’s impact on the present by demonstrating an understanding of the vernacular expressions of immigrants involved in the labor movement, specifically in a Nordic context.

Skills Learning Objectives

Students will be able to apply folkloristic research methodologies ethically in collaboration with at least two of the following: archives, libraries, community organizations, and community members.

Titled [Nordic Migration and the Labor Movement](#), this particular Siftr follows specific Nordic migrants from across the Atlantic as they engage with the labor movement in this country. Students, working in small groups, are assigned an organization with members who were active in the labor movement in the late 1800s or early 1900s. Some students may work with a specific union, others may work with a labor newspaper, and still others may be assigned a labor temple or hall or even a temperance organization. Once a group has been assigned an organization, each student will choose three Nordic immigrant members from that organization using membership rolls or historic minutes from archival sources. Although each student will be responsible for following the history of just one person, I require students to identify three potential candidates to ensure that the student is able to complete the assignment despite the challenges of conducting historical research on working-class immigrants.

The Siftr offers five categories to choose from: Danish, Finnish, Norwegian, Swedish, and Other Nordic, with Other Nordic allowing for smaller immigrant groups like the Faroese, the Icelandic,

and the Sámi to be represented. That Siftr only allows five categories does limit the application for a further expansion of this project to include other countries.

Beginning first with the address of the labor organization from which people are chosen, students conduct research to follow an immigrant from the U.S. back to their home in the Nordic countries. Each student creates five additional points of reference in the Siftr, allowing them to visualize the different paths immigrants traveled to arrive in the same place. Using archives, historic newspapers, online databases, and secondary sources, students create a timeline of an immigrant labor activist's life. That timeline is location-based and features images available in the public domain or through Creative Commons licensing along with contextualizing information in the form of short captions that include dates and information explaining why this particular place is important (Did the person live here? Did the person work here? Strike here? Attend union meetings here? Write a poem about this particular address?) as well as basic citations.



✕ This assignment carries a high risk of failure, so the assignment is not worth a large percentage of a student's grade. Conducting research about specific individuals who lived over a hundred years ago can be difficult, frustrating, and sometimes unfruitful. That is a feature, not a bug. In line with both the content learning objective (Students will gain awareness of history's impact on the present by demonstrating an understanding of the vernacular expressions of immigrants involved in the labor

movement, specifically in a Nordic context) and the skills learning objective (Students will be able to apply folkloristic research methodologies ethically in collaboration with at least two of the following: archives, libraries, community organizations, and community members), this Siftr project aims to teach students about how immigration influenced social movements, like the labor movement, on a national scale while also teaching about the challenges of connecting folkloristic research methods to historical projects and giving them the skills to overcome those challenges.

It's important to note that this assignment is scaffolded so that the research students are conducting here forms the basis of the documentary project that they turn in at the end of the semester. The Siftr is a tangible check-in of the student's research progress and students present one of their photos to the class. This gives students the opportunity to see what their classmates have added and examine a macro view that includes the work they are doing on a very micro level. Because of the scaffolded nature of this assignment, assessment is left to the students, similar to the Folk 100 and Folk 230 classes. Students are asked, among other things, why they chose a specific image, why they chose to include the caption they did, and how this particular person fits into the context of the class.



MarcusCederstrom
4/4/2018, 12:59:23 PM



In 1913, Signe Aurell spent over a week at the Swedish Hospital in Minneapolis, including Christmas Eve and Christmas Day. It was her first Christmas in the United States. She was released from the hospital sometime before New Years Day.

Demolished in 1976, the Swedish Hospital used to stand at 723 S 10th Avenue. Today, US Bank Stadium, where the Minnesota Vikings play, is just north of the lot.

Image citation: 1915. "Private Patient Room at the Swedish Hospital, Minneapolis, Minnesota." Hennepin Medical History Center, Accessed April 2, 2018.
<https://reflections.mndigital.org/catalog/hcm:2>

Category

Swedish

Of course, a project like this can present ethical issues. Tracking individuals, especially immigrants, involved in the labor movement has a nefarious history. In conjunction with readings, films, and news articles about that history, we discuss as a class some of those issues, focusing on why taking a historical perspective when examining social movements can be incredibly beneficial to our understanding of history as well as our lives today.

While the right choice for this particular project, Siftr does have limitations like most mapping applications. Because this project is designed to stretch across the Atlantic, zooming in and out of the map can prove time consuming. More important to this particular project is the inability to sift by historical time. Unfortunately, the application does not currently allow for backdating. Students cannot, for example, date a poem to May 1, 1913, but instead must include that information in the commentary. This limitation would be difficult to overcome if expanding the project outside the specific timeframe that I defined in class. That said, with clearly defined categories and timeframe, Siftr provides a visual tool to see individual immigrants' lives in a broader context—in this case in relation to the labor movement—and to examine folklore studies from a historical perspective, while actively engaging students in the necessary research skills.

Your Turn: Authoring a Siftr for Your Next Class

Given that Siftr is a Wisconsin product, and because of Ruth Olson's continuous collaboration with the Field Day lab, the team of developers who created Siftr (and co-authors of this paper), it was natural that Siftr would become a recurrent element of the curriculum in the UW Folklore Program. But Siftr's boundaries do not end at Madison's State Street or the shores of Lake Mendota. Siftr can be used in any classroom anywhere in the world for free. We suggest that folklorists at other institutions and in other course contexts may wish to come up with a Siftr that suits their course content, objectives, and methods. (See pg. 29 for more tips.)

In closing, we would like to relate a story of a single image. In an attempt to make an enticing and accessible database where UW students can find out information about each of the many majors and minors (called "certificates") available, UW personnel chose an image to display in connection with the Folklore Program. The image is a hand holding a paperback version of the works of

FOLKLORE, CERTIFICATE



The certificate in folklore is available to students working for a baccalaureate degree in any UW–Madison school or college, and to Special students. The purpose of the certificate is to acquaint students with the nature of folklore, its study, its public presentation, and its relations to a range of human experiences, intellectual currents, and professional endeavors.

Christopher Marlowe atop a spiral notebook and what looks like a big unopened reference book. While at first glance a seemingly innocuous and even appealing image, the UW Folklore Program staff became troubled by the figure. Although reading is an important part of what folklorists may do (as it is for biologists or economists or mathematicians), reading a volume of an author's poetry or plays did not seem particularly illustrative of what folklore research is all about. After much work, UW folklorists managed

to get the image changed to show a folklore interview. Where the old image seemed to go out of its way to delocalize itself, offering few clues regarding the reader's identity, location, or culture, the replacement image at least shows an element of folklore's work. But suffice it to say, a Siftr screenshot is a more fitting visual display for the Folklore Certificate. In its constantly shifting, multi-centered, and pluralistic nature, Siftr models the sorts of work we do as folklorists, and the sort of research we seek to invite and initiate our students into through our courses. Ethnographic data gets created by folklorists, processed, and then presented. Siftr models this entire process easily and effectively. Where the student in the UW-approved image reads a static book in some unidentified library or coffee shop, the *actual* UW folklore student is traipsing across town, noticing culture, photographing, interviewing, comparing, and concretely geolocating phenomena in a real-world, real-time setting. The folklore student not only *receives* information but helps *create* and *distribute* it. The activity pushes against the universalizing tendencies of university education, *localizing* experience in the way that it actually occurs in people's lives. We hope that this article allows our folklorist colleagues elsewhere to sense some of the exciting ways in which Madison folklorists aim to instruct students about our field, and we hope that our stories help to inspire you to use Siftr in new ways and in new assignments in your folklore courses.

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Endnote

1. See http://tadubois.com/Muohta/Snow_Challenge_index.html. I mounted this site as a subpage on my personal website, but it would be easy (and perhaps more effective) to use a simple WordPress platform for presenting such information approachably and effectively.

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URLs

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<https://fielddaylab.org/>
www.siftr.org
<https://siftr.org/30806>
<https://siftr.org/NordicLaborMigration/>

Classroom Connection: Develop a Siftr Project for Your Classroom

The following tips will help you develop a Siftr of your own. Anyone who generates a user account can build a unique Siftr project and distribute it to students in a particular course. Typically, the key components of authoring a Siftr include:

1. Identifying the focus of the Siftr, such as an overarching theme, research question, or area of inquiry.
2. Writing an overview or instructions that users can read to learn more about the Siftr. This is often used to provide background information or guidance for getting started and helping users know what to document or pay attention to.
3. Developing categories. While Siftrs do not have to contain a category, they are typically used to help users focus and organize their observations.

Authors also have the ability to do the following:

1. Create a unique URL for the Siftr. When first created, each Siftr is assigned a random URL (e.g., siftr.org/1234). Authors can replace the random characters at the end of this string with their own text. In an earlier iteration of the Snow Challenge assignment, for instance, Tom DuBois named his Siftr Snowchallenge (<https://siftr.org/snowchallenge>). Ruth Olson has named her annual Siftr Folklore Rules (<https://siftr.org/folklorerules>).
2. Specify the components of each observation. These include the following categories: photographs, select-one from a list, select-multiple from a list, single-line text, and multiline text responses.
3. Determine whether the Siftr is public or private. A public Siftr project can be found using the search feature on the Siftr.org website and it may appear under promoted, recent, and popular categories. A private Siftr is not searchable and does not show up on any feeds associated with the Siftr.org homepage, but anyone who knows the unique URL can view it.
4. Determine whether the Siftr requires moderation. If the moderation settings of a particular Siftr are set to “moderate,” then any contribution must first be released by an author before the content becomes visible on the Siftr. This means that the instructor for the course (or teaching assistants if the course is particularly large) must approve each image before it becomes visible on the site. If the moderation settings are set to “no moderation,” then the content is immediately displayed on the site. Regardless of the moderation setting, editors have rights to delete uploads and comments made by users.
5. Select the color scheme and map styles.
6. Add additional authors, who by default can serve as moderators.

A few other Siftr settings can be chosen, but the above lists allow you to plan your first Siftr and see how you like the platform. The development team continues to make adjustments and improvements to Siftr, in part in response to the ways that instructors use the platform in their courses.



Strategies to Broaden Knowledge: Citizen Scientists and Citizen Folklorists

Maribel Alvarez and Gary Paul Nabhan

My colleague Gary Paul Nabhan and I hold formal academic positions as social scientists at the University of Arizona's Southwest Center, but most of the people we work with know us instead as folklorists, narrators, documenters, storytellers, conveners, advocates, friends, and collaborators. The title of social scientist fits well with our backgrounds and job descriptions. We both earned doctorate degrees, in geography and anthropology, respectively. We teach classes, mentor and train graduate students, research social problems using theoretical constructs, and publish findings in academic journals. In other ways, however, the work we do reaches beyond the conventions of science as understood in most university settings. The majority of our investigations are conducted in partnership with community members, often by privileging the expertise found in local stories and ways of life. We frequently share our findings in nonacademic publications, often directed to nonacademic audiences. These practices complement, and sometimes challenge, claims to academic authority. They lead us to re-examine assumptions about who is an expert; in what settings our academic expertise is needed, invited, or may be redundant; and for whom the findings are important.

Gary and I are not alone in modeling these scholarly practices. We are part of a longstanding tradition of academic researchers who have sought to uplift models for community-involved or participatory research. Revolutionizing the fields of folklore and anthropology with ideas about reciprocal ethnography, citizen ethnographer, community scholars, and the various ways in which academic researchers can help advance an ethical commitment to the co-production of knowledge, these conversations have been taking place in the academy, in one way or another, since the 1970s.

About the photo: The Southwest Folklife Alliance works with Yaqui communities in Sonora and Arizona to honor one of the least understood aspects of Yaqui social history: culinary resistance. The collaboration builds upon research by Maribel Alvarez around the role of wheat in the formation of Sonoran economy and society and by Gary Nabhan and Native Seeds/SEARCH to revive interest in and commercial viability for the 300-year old wheat variety. Read more at <https://www.southwestfolklife.org/yaqui-culinary-resistance>.
Photo courtesy Southwest Folklife Alliance.

Folklorists, in particular, have helped lead the way. The idea that knowledge about human behavior and the natural world can exist in rich and erudite forms among “ordinary” people is essential to the folklorist’s worldview. A large part of what folklorists do in schools and communities is help people recognize the inherent value of what they know as insiders of the groups they belong to and the places where they live.

In the last 15 years a new trend has emerged that has pushed the boundaries of expert knowledge even further. Fueled by widespread access to the Internet and smartphones, citizen science is a growing practice that enables ordinary people, often without any formal scientific training, to contribute to scientific research in their spare time. Several headline-grabbing examples of citizen science projects have emerged (Xue 2014). Among them, the Rosetta algorithm created by David Baker at the University of Washington outsourced the scientific work of protein structure prediction to home computers and eventually led to the creation of the Internet game Foldit. In 2007, astronomers from Johns Hopkins and Oxford Universities developed a website to involve amateurs in helping classify galaxies. Tapping into the phenomenon of crowdsourcing, scientists are enrolling citizen naturalists to help assess the ecological impact of climate change and citizen subjects to help develop face recognition technology. In 2014, the *Oxford English Dictionary* formally recognized the term citizen science. The [Citizen Science Association](#), based at the Cornell Lab of Ornithology, lists more than a thousand projects currently open for public participation.

Since the early 2000s, Gary and I have worked, jointly and independently, in a variety of projects involving ethnobotany, Indigenous agronomy and foodways, desert arid lands, and transborder social dynamics. We have discovered that the modes of engagement most effective for empowering communities often lead in the opposite direction of the conventional assumptions of social science projects. For example, on some occasions we have questioned whether all the information that collaborators shared with us needs to be, or should be, published. Whether we are looking at uses of water in the Sonoran Desert or economic food initiatives in an urban neighborhood, our distinct lines of investigation frequently confound the boundaries where science ends and folklore begins. In some instances, the lore of desert living *is* the science: When will the rains come, what signs can be detected that rain will be abundant or scarce, why are washes in the desert unpredictable, how do ancient beliefs about waterways play out in conditions of water scarcity and climate change?

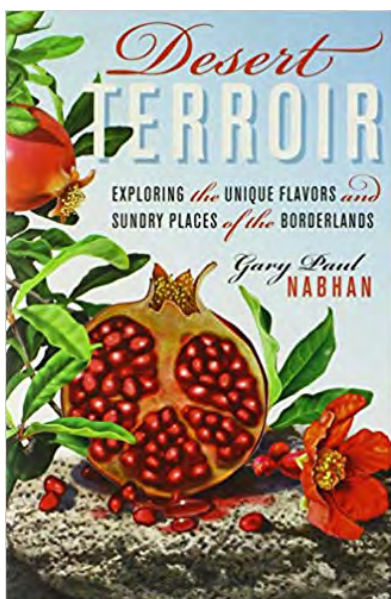
Minding questions of ethics and authority at the outset of an investigation changes the position and subjectivity of the researcher—it makes you humble and attentive in a special way. It also redefines what is at stake in the core scientific inquiry. For example, when Gary and I began a project a few years ago dealing with agricultural conservation of heritage wheat in the Arizona-Sonora Desert borderlands, our research questions quickly became entangled around inquiries of cultural memory, ritual and ceremony, resistance, sovereignty, and indigenous sustainability.

It was in this context that, in our own distinct arenas, we became curious about the possibilities of aligning what we were doing with the new principles and methods of citizen science. We were intrigued with the idea of a widely democratic research design that allowed ordinary people to set the terms of engagement with scholars or to drive the process of determining which questions needed to be prioritized in their local settings. Gary led several successful citizen science projects in the Tucson Basin identifying plants, their flowering times, and relationships to wild pollinators.

Adapting the concept further, I began to explore how a citizen folklorist approach to knowledge gathering in the Southwest could articulate a different relationship of authority and decision making between the university and the communities affected by our inquiries.

We believe these insights can apply to other educational settings and can help teachers re-imagine how to involve students in ethical practices of cultural and social investigations that place community members' desires, needs, expertise, and aspirations at the center of the project.

Below we share excerpts from a transcribed conversation that took place in February 2018 in which we explored our journeys, experiences, and insights working with citizen scientist and citizen folklorist approaches. We believe a conversation is the most appropriate format for modeling the kind of learning and authority sharing that we advocate. As a narrative genre, a conversation is characterized by fluidity and the co-creation of meaning: One person's idea triggers another's, and together they negotiate the credibility of the stories shared. The best findings in citizen science and citizen folklore often emerge as the result of conversations among peers—neighbors, residents, students, parents—and, occasionally, also in respectful exchange with a scholarly expert outside the community.



Gary Nabhan, W.K. Kellogg Chair in Southwest Borderlands Food and Water Security, writes extensively about food and place. He is an ethnobiologist, agroecologist, conservation biologist, and cultural geographer engaged in a number of biodiversity endeavors.

Gary has published more than 35 books exploring the interface between deep scientific knowledge of a place or region and its social and cultural character. He is internationally respected for his advocacy on behalf of “eating local” before this notion was widely known. A MacArthur Fellow and a founder of Native/SEED Search, his latest project involves the mapping and restoration of pollinators across the U.S.-Mexico border. My work as the Jim Griffith Chair in Public Folklore at the University of Arizona and Executive Director of the Southwest Folklife Alliance has led me to interact with dozens of ethnic, folk, and tribal community partners engaged in a wide range of inquiries of cultural preservation, economic development, and cross-cultural understanding. The agendas and priorities for these projects are often set by community partners in their own time, place, and terms; my participation or SFA's role becomes that of enabler, coach, and facilitator, sometimes only in the background. As a former Trustee of the American Folklife Center at the Library of Congress I have a special interest in documenting new, cutting-edge technologies of participation that can assist folklorists and communities come together to gather and share knowledge.

Work Cited

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Definitions and Frames

Maribel: I think we should start this conversation by considering what we each understand by the concepts of citizen science and citizen folklorist.



Gary: Citizen science emerged from both the non-formal environmental education world and scholarly groups on university campuses, like the [National Phenology Network](https://www.npnetwork.org/). The network uses citizen participants to track the life cycles of flowers. My take on it is that we don't have just one model of citizen science, but many. The various approaches can include work done under the direction of a scientist to gather very specific types of observations, work that the scientist performs on behalf of a public interest (like expert witnesses do), or work that members of a community take upon themselves to educate and redirect the efforts of a scientist. Sometimes these occur simultaneously and are in collaboration with one another, and at other times they're in creative tension with one another. My own work with the Comcaac Indigenous people in the Gulf of Cortez, Sonora, and to some extent with O'odam tradition bearers in Arizona, has unfolded under this larger umbrella I'd like to call participatory science. The same practices that we call citizen science are embedded already in what many indigenous communities do trying to teach themselves what traditional ecological knowledge they can recover and hold onto for new generations. It is taught by community tradition bearers through a method of primary observation. The difference between citizen science and indigenous participatory science in this manner is that the observations in the participatory or indigenous setting contain the traditional knowledge, practices, beliefs, and stories of multiple generations. In other words, the process of data gathering does not begin with observation, but instead observation grows out of the knowledge that shapes our vision of what to observe. It's not one or the other, or linear. For traditional communities, those two things are melded in a beautiful way.

M: Very interesting; part of the received wisdom of a community is knowing what merits attention and what does not. The recent interest in citizen science illuminates certain aspects of the production of knowledge that are crucially important for science. It is a way for science to refresh its perspective and be more effective. In a way, all great scientific discoveries in history emerged out of testing probabilities that were not previously considered. Yet, we also see in the enthusiasm about citizen science our tendency to celebrate as new practices that for some communities have been standard operating procedure since ancient times.

G: You know, one of the most interesting examples of this I know of happened in the Sonoran Desert. It concerned observations of a desert bird called the Poorwill. The scientific consensus was that this bird flew south for the winter like other birds. And the Pimas, whose ancestral home is the Sonoran Desert, kept on saying, "No, no. They don't. Look at their *plumas* (feathers), they are camouflaged with the rocks. And during the winter, they go to volcanic hills where they're completely camouflaged and you can walk within a foot of them, and they stay quiet because they know that's their protection. And so, we know that they stay here all winter and if you guys watch carefully, you'll see them too." Finally, an ornithologist listened to the Pimas and published a

Maribel Alvarez photo by P. Espinosa. Gary Nabhan photo from <https://www.garynabhan.com>.

correction to the scientific knowledge of record saying, “The Pima understood that these birds stay over winter here, and we have to acknowledge that.” So, what I love about this is the lesson that scientific endeavors must always be approached with great humility.

M: That’s an important lesson, indeed. The way citizen science has developed in the literature and through common practices over the last 20-plus years implies and accepts what today we call a DIY approach—or do-it-yourself. Basically, a scientist entrusts the nonscientist or the amateur scientist to gather data; this assumes a trust in the ability of the grassroots researcher to identify what is relevant data and what is, on the contrary, just stuff, or random phenomena, or noise. I find this element of trust to be one of the most interesting distinguishing characteristics of the citizen folklorist and citizen scientist approach. By valuing trust in the ability of the non-credentialed investigator we are pushing the envelope beyond community consultation. We are in fact realigning whose credentials are a better fit for different situations. In my work, sometimes I have assumed a role that is suited to the kind of skills I bring—like grant-writing, for instance. As a credentialed folklorist it can feel awkward to be assigned a role in a project that is primarily managerial, but this makes sense if that is the one thing I can bring to the common inquiry as an expert. I need to trust my co-narrators to know what questions to pursue, how to interpret what matters, and how findings affect the lives they are living. Sometimes I have experienced the opposite: The community has all the know-how and management capacity but they are in need of a frame for interpretation or a theoretical construct to make sense of why this thing is happening in this particular fashion. They call on me to offer larger frames of interpretation, comparative skills, or analytical tools.

G: I think we need to challenge our colleagues in the academy to clarify what we mean when we say a project run out of the university is participatory. Just as there are many varieties of citizen science—some in which the citizen part simply means that the scientist speaks up with courage about some controversial issue, like climate change—there is a range of understandings about what it means to engage the folk in participation.

M: I agree; participation can be defined in many ways. Sometimes we call a project participatory because we asked a bunch of questions—questions that we came up with based on our own understanding of what is relevant or important to know. If people are nice to us or polite and answer our questions, we say they participated. But that covers up in shadows a whole lot of steps. True participation of people on the ground of our community settings means making room to be shaken out of our previous assumptions or given knowledge.

G: Too often we lead with our assumptions; that can make for either terrible or wonderful science. Assumptions can be disguised as hypotheses—it is where we all start from, whether we acknowledge it or not. How are you applying the citizen folklorist approach in the work of the Southwest Folklife Alliance to find equilibrium between what is known and what is yet to be imagined?

M: We first used the concept of citizen folklorist to gather data about culturally diverse end-of-life practices. There was a real need in the community, among hospice workers, medical service providers, and even funerary home directors, to talk about cultural differences in how people talk about and experience death and/or planning for death. It was a big project, and we had limited

resources. In fact, we had only one folklorist in the project; it was she, Monica Surfaro Spigelman, who came up with the idea of amplifying our team of experts by recruiting a cohort of volunteers we could deploy to work in the community documenting end-of-life practices. Monica knew this was exactly how scientists were using large volunteer networks to dig into pools of data (like stars in the universe) too large for one person to manage. She said, “We’ll convene a group of citizen folklorists,” and the concept rang a bell. We began with 35 citizen folklorists; they researched end-of-life beliefs among groups it would have taken a single credentialed folklorist years to build rapport with. It has opened opportunities in different levels. We now have a way to validate the inherent skillfulness of neighbors to talk to neighbors about what they know to be true of their own lived realities. In some ways, this is not new. This practice is at the core of what ethnographers hope to do and often do, that is, understand the world from the point of view of the person who is an insider to that culture. But there is a slight qualitative difference in how we are using the concept of citizen folklorist. We did more than consult or interview “informants.” We also recognized the skills of inquiry and intellectual prowess of the community scholars or citizen folklorists who did not have a degree in folklore. We trusted they would get good data without our having to monitor their performance as researchers.

G: Yeah! That is so wonderful to be able to multiply the learners and the experts all at once. And it’s remarkable how much citizen science has grown not only in the number of people participating in it, but its influence on science overall. In studies of the *Mariposas Monarcas*, the Monarch butterfly, for example, one-third of all scientific papers acknowledge that they could not have learned what they learned about this endangered beautiful species had it not been for the data gathered and submitted by the participatory citizen science networks of schoolchildren and retired people recording where Monarchs were seen on their migration—both in the U.S. and Mexico.¹ Then there’s something else: the cultural meanings embedded in making those observations. Think about it. The Monarchs are kind of the Dreamers of the butterfly world. They come across the border and have status in both countries. And without those citizen scientists [on both sides of the border], we would not have enough knowledge to honor that. And now, the movement on behalf of immigrants brought to the U.S. as children, also known as DACA or Dreamers, have embraced the monarch butterfly as their icon; a symbol of those seeking safe passage across the border.

Ethical Horizons

M: Now that you mention the Dreamers, let me say something about the use of the term citizen in the concepts citizen science and citizen folklorist. The word citizen in these contexts does not refer to someone’s legal residency status—it is not a judgment on being documented or undocumented. Citizen in the present context evokes its early use in the formation of liberal democracies—an autonomous individual whose self-dignity matters in a system of political liberty (not a subject of a monarch or a feudal lord, for instance). Citizen is a word related to the emergence of what we call civil society, or the uncoerced, voluntary participation of social actors as part of a collective.² The use of citizen applied to any occupation usually implies individuals acting out of free will toward a social, common goal. I found a curious reference about the notion of citizen soldiers in the struggle over Texan independence in the 1830s. For most of the period before the Civil War, the various governments claiming sovereignty for the Republic of Texas relied upon ordinary citizens to volunteer for war and defense of borders. Most of the initiative to form these militias came from ordinary members of the community; no government agency drafted or coerced them.³ I believe this notion of independent agency carries through in the citizen folklorist and citizen

science concepts. People step up to play the role of “scientist” and “folklorist” out of their enthusiasm for the projects, regardless of whether they hold formal degrees in these fields or not.

G: Well, what you are saying is that at some point in the evolution of science and folklore as fields of study, knowledge was co-opted by the professions. The production of knowledge was assigned to experts and barriers were set in place to safeguard which forms of knowledge counted as valid. Medicine became a science and popular methods of healing became “folk medicine.” Same thing happened with music, or architecture, or botany and biology. In other words, knowledge became a privilege of those who could attain it. This conception of knowledge as a way to enforce social hierarchies is so diametrically opposed to the experiences I’ve had working with wonderful indigenous and ordinary people all over the world. I’m humbled so much by what common working people know, that we academically trained Western “scientists” don’t know. And I don’t mean this in a romantic way that attributes some supernatural powers to indigenous communities. I mean, traditional knowledge entails hard work. For instance, the Comcaac in Sonora, they are also called Seri, we’ve had workshops where we train young people as *Paraecólogos* (assistant ecologists), back to back with the Seri Elders and so-called academic experts on sea turtles. A *Paraecólogo* is like a first responder to wildlife. Over 400 Seri have participated in that program. They had observations about where sea turtles gather their food in the Gulf of California at different times in the year and at what water depths. That information astounded the Western scientists. They said, “We just thought they disappeared. We had no idea that people knew where they were.” The Seri also reported egg-laying nests far beyond what the Western scientists knew because they were walking on the beaches a lot. And there is this wonderful running thread between the science and the folklore. Yet, it was there, in the old songs and stories. My wife, Dr. Laurie Monti, and others have recorded dozens of Seri songs that alert people to watch out for what’s happening at certain times of the year.

M: Of course, that makes so much sense. I’ve always found helpful an article written a few years ago by the folklorist Steven Zeitlin, from New York’s City Lore, entitled “I’m a Folklorist and You’re Not.” He explains how at different crossroads in the evolution of folklore as a field of academic study and as a practice of public cultural advocacy and production, people have applied either “expansive” or “delimited” strategies to define who is a folklorist, and also possibly who ought to be involved in deciding and interpreting cultural phenomena.⁴ Zeitlin makes a point about the inclusion of folk-based artistic expression in the canon of American Art (capital letters) that I think applies equally well to the enterprise of citizen science and citizen folklore. He says that a folklorist is someone forever involved in the process of “recentering what others consider marginal.” He frames this statement within a logic model: Why would anyone interested in human knowledge and human quality of life be fine allowing entire forms of data that can help expand truth fall through the cracks of science?

G: So true. Yet in the efforts of trained expert scientists/folklorists to do good, we see a lot of concern about “giving people a voice.” I understand sometimes that is needed. But from the stories we are sharing, I derive a different conclusion. It seems to me people are talking all the time, but is anyone listening?

M: Exactly. In our work training and deploying citizen folklorists in an urban Mexican/Chicano barrio in South Tucson, for example, we realized that only a collaborative approach that demanded

listening at the outset would have any credibility with that community. People had grown weary of talking in vain; they had answered survey after survey that had come their way via university interns and grad students. The neighborhood was experiencing asset-mapping fatigue by the time we came in contact with them. Regardless of how we saw ourselves as folklorists, the university-backed folklore alliance was part of what folklorist Mary Hufford described as “the grid.”⁵ The more interesting things people had to say were off the grid and in what Hufford calls “the cracks,”—a public space for what might be left out. But, as you can imagine, even as the unheard speak, one of the criticisms leveled at citizen science is the question of reliability: Can the work of non-expert collaborators be counted on as accurate, or objective, or acquired by sound methods, or trustworthy? Fears about citizen scientists or citizen folklorists dumbing down the professional standards used to be expressed more openly a few years ago. What these fear-based responses missed was a recognition that the aim of folkloristic, grassroots, and citizen-driven inquiries is to complement, rather than replace, scientific knowledge. The folklorist Bert Wilson said years ago something that now renowned medical researchers are saying loudly to encourage citizen patients to help doctors understand things like chronic pain: People have a way of responding creatively to the circumstances they face. That is the bottom line of citizen folklore and citizen science: a fundamental appreciation that people observe their surroundings, interact with other species, negotiate changes in their environments, and adapt to variable circumstances, and that in doing all these practical living routines they accumulate bodies of knowledge that scientists and folklorists living outside those same predicaments may easily miss.⁶

Reliability

G: We cannot be blind to the frameworks of intellectual authority we work with. This reminds me of a story. So, one time we were doing a desert survey and one of our Seri collaborators, a vastly wise tradition bearer from whom we learned so much, Humberto Morales, said to our group of students from Arizona, “Oh, look! The ocotillo is in bloom! That’s the alert that sea turtles will be migrating into our water soon.” And one of the students laughed and said, “Well, the sea turtles can’t see the ocotillo, I mean why do you see a correlation there?” And Humberto, who was very smart, replied, “They are being triggered by the same global processes. I’m not saying that the sea turtle is seeing the ocotillo and is deciding to come up here, we wouldn’t be that dumb. We’re talking about the things that link us. Knowing the lore about the ocotillo is what alerts us to begin to look for the sea turtle.”

M: Wow. Right on. Reliability is a tricky subject for the university-trained mind. Sometimes I think what we are really saying when we question the reliability of stories people tell us about topics we’d rather be experts on is that there are certain things we’d rather not know, either because it does not fit into the scheme of how we imagine things ought to be or because the “talk back” hurts our egos. Sometimes, the knowledge shared by common people upsets the political ideals we have brought to bear into our research. For example, if you are a middle-class person who has benefited from orderly administrative procedures in zoning, taxes, labor laws, and police protection, it may come as a shock to hear that those same systems regularly fail or even injure poor people. When we confront these dissonances in the field, we retreat to our scientific mentality and question the validity of data [Chuckles]. Gary, remember when we worked on that project a few years ago with ranchers in the U.S.-Mexico borderlands? We heard the ranchers tell us about the problems they were having with their cattle on the border—from the undocumented crossers to the trespassing of human traffickers to raids by the Border Patrol. These guys were trying to

raise cattle in contested territory. And at the end of the day, whether these guys were espousing beliefs that confirmed points of view about the border by Right or Left intellectuals and activists, they knew what they knew. And I remember we found ourselves in the position of having to listen, because we had invited them to the table and now it was their turn to speak.

G: Yes, I remember. They knew what they knew. And so, this raises the issues of the political divide we see in this country right now, that rural and urban people vote differently and speak about issues differently. And sometimes I think that those divisions are so deep in the wounds that are still so raw and that is, in part, because rural people have had 40 to 50 years of experts saying, “What you know about your reality doesn’t count as much as what I observe.” I’m hoping that the gracious consideration of citizen science by academic and government scientists, and not to mention commentators and pundits of all kinds, can help heal that wound and there can be mutual learning, rather than this deep divide that is really ripping apart our country right now. That’s what my new book is about—*Food from the Radical Center: Healing Our Land and Communities*.⁷

M: One of the goals that advocates for citizen science express frequently, and I will say it is probably also true for citizen folklore, is to change the profession itself—Science or Folklore—to be more accountable to the people most affected by our research studies. But this leaves a door wide open for interpretation: Who should be accountable to whom? Should the volunteer researcher without formal training be accountable to the standards of the academic scientists/folklorist? Or is accountability a two-way street, and the scientist/folklorist must be accountable to the ones who hold the knowledge she wants?

G: Let me shuffle the question a bit. The critique I would have of accountability and veracity arguments is that, in a true sense, to do science that really matters we need to involve the participants in defining the problem we aim to study. If we want to change the way big Science or big Academic Social Science engages participants, we need to start by inviting people to our projects early, in the design phase. Together with the community we need to ask, “What’s the problem that’s most important here? What hypothesis are we testing? And after you collect data and compile it, would you like to be in the brainstorming session where we look for the patterns?” Instead, what we see is that many institutions ask participants—even those most affected by, say, environmental racism, where toxic material is affecting their families—to go out and get data for someone else’s hypothesis, and they are not even acknowledged on the papers that are published, necessarily. So, I think there’s a very interesting ethical issue here; but, more importantly, how do we involve the people who clearly are asking those questions in their heads? How can we include them in formative stages, not just in the data-taking?

M: I believe the folks who teach and practice participatory action research have done a good job at codifying the best practices in this area. The problem is that we have few mechanisms to gauge whether the participation levels are authentically horizontal or if it is only the rhetoric of participation that is reported in grants or press releases. There is a growing, beautiful movement now in something called equitable evaluation.⁸ Several large philanthropic foundations and professional evaluation associations are promoting this shift to create metrics that can allow us to determine whether a project in fact walks the walk of inclusive and equitable participation instead of just talking the talk we all love to hear. The idea is not to be the police of participation and make

researchers check off boxes, but to inspire an honest conversation about who and how someone benefits when we study a social problem.

G: Right, because many nonscientists and people in the communities where we work have wonderful life experiences in which they can do the critical thinking to say, “I’ve collected this data, but I’d like to see the pattern and debate with you what that pattern means.” And so, what we might say is that anyone hoping to do participatory science in the best possible manner is still carrying the baggage of our institutions with them. And those issues need to be resolved if projects are to bear the greatest fruit for everyone, not just for the university or the national society that eventually owns the data.

M: I think along with that we need to rethink how and where we publish our findings. In the work the Southwest Folklife Alliance has done, we have opted for a variety of formats—small pamphlets, monographs, Spanish translations, online journals. We have established agreements with our citizen folklorists for publishing the work they do and support them as well with a professional editor, because you may be a great observer but have difficulty getting your knowledge into writing. So, I think we try to think of ourselves—the professional folklorists—as coaches and capacity builders of the folks on the ground. I have even talked about a wraparound model, borrowing from the social work and clinical therapy fields. The wraparound must also consider compensation, even though the citizen science model is predicated in volunteerism, and one of its great benefits is the cost savings that may otherwise impair the research to take place at all. We also need to look at grant budgets through a lens of equity: Whose work are we declaring has more value with our budgets? And I am not in any way discounting the value of skilled specialists here. We hire academic ethnographers all the time to help support citizen folklorists on the ground. But equity really means distributive value. This is a horizon we have yet to conquer with regard to the insertion of community scholars into our projects. For too long science has been constructed in opposition to vernacular or folk or traditional knowledge, under a model of extraction. Even if we feel we are invited into communities, to participate as collaborators, we must also ask, what do I leave behind or reinvest or leave untouched because it’s the right thing to do?

G: That’s right. The good thing to emerge from the citizen science movement—and I hope it is what you are doing with the citizen folklorist concept—is that we are now in a better position to abandon the viewpoint that somehow citizen science is inferior to academic or government trained scientists. We need to honor all the contributions to knowledge that can help us save the planet with respect and consideration. That’s the only way we get alternative hypotheses and innovation, both about the past and the future.

Practice in Motion

M: I am encouraged by the increasing use of the framework of citizen folklorist to address the needs of communities. The Brooklyn Arts Council announced a series of training modules for community scholars in 2017 called Citizen Folklife with the tagline “Reclaim culture in your neighborhood.”⁹ The call for participants asked residents to sign up to become a Citizen Folklorist and explicitly stated it believed “the next stage of folklife documentation and advocacy” will be powered by the knowledge and media created, controlled, and shared by tradition bearers and their communities. This is an important benchmark for folklorists; to speak about a next level in folklife

documentation is also a way of acknowledging that some practices of the past are due for critical revision. Even though citizen folklorist sounds much like the extant practices of community consultation that folklorists and educators have used for decades, I find this more recent approach offers a new sharp edge of ethical engagement that moves the commitment to equitable participation a few degrees in the dial. The idea is not new, and neither is the spirit of collaboration with community members. But there is a heightened awareness about positions of authority in the new approach, reminiscent of the upending of roles and validity of truth claims performed by feminist folklorists and ethnographers a few years back.¹⁰ In a recent gathering we organized through the Southwest Folklife Alliance I was confronted with the qualitative difference that I am speaking about. The meeting gathered 45 Muslim women in Tucson in conversation around a shared dinner about end-of-life traditions. The professional folklore organization provided all the funding and logistical support for the event, but the entire agenda of the meeting was developed by hosts from the local Muslim community. The women had identified a list of questions to guide conversations at the dinner tables and served as facilitators and curators of the event. I was in attendance as notetaker at one of the tables. Other folklorists played the same role. Our role extended beyond the event as editors and publishers of printed and online materials, but the central driving force of the inquiry was powered by the community most affected by the topic. This was a rewarding experience that taught me a great deal about a subject I actually knew quite a bit about, yet having the intentional role as listener and behind-the-scenes collaborator offered a different perspective. After the gathering, one of the lead hosts told me how much she appreciated the definition of roles we had enacted and how clearly it communicated a shift on values—we aimed to serve the community, she said, and demonstrated this by trusting them to speak their truths freely. I wonder, how can we advance this practice in other settings, especially around more explicitly scientific inquiries?

G: I can see educators in other settings adopting some of the techniques of citizen science and citizen folklore to advance projects among students, residents, farmers, gardeners, and others. If I could offer a few simple guidelines to amplify the impact of these projects I would mention three key points. First, establish a large goal or umbrella under which many different topics or lines of investigation can fit, for example, “Climate Change.” By making the overarching theme large you create opportunities for many kinds of projects. Second, involve the people most affected by the theme: residents along a river or a coastline, hikers on trails, children in parks, and such. Third, resist the temptation to segregate the project team into data collectors and data interpreters, especially if the latter function falls to team members with academic credentials.

M: I agree. Theory emerges from the active process of interpersonal exchange and interpretation. Sit together in a room professional scientists or folklorists alongside community participants and study the patterns and deduce meaning out of the data collectively. In my view, this is the most important shift we can make. When we open this door, we also open ourselves to hearing the most wonderful tales of biological and cultural adaptation, often rooted in stories people have shared through generations.

G: These are forms of knowledge we cannot afford to ignore; as the world’s problems grow in complexity, we need all the help we can get, from anyone and anywhere, to make sense of our common dilemmas.

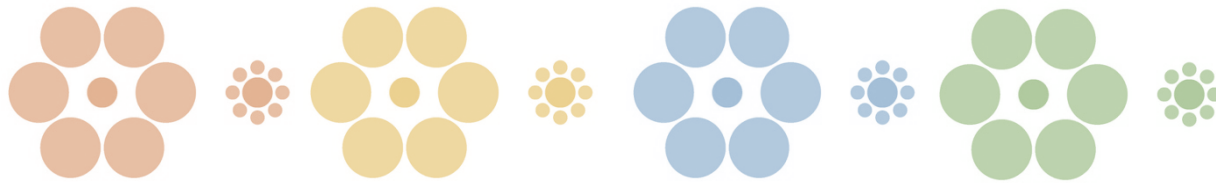
M: True. I am reminded of an emblematic story I heard long ago about the elementary school teachers in Tucson who were training in the methods of an anthropological concept called Funds of Knowledge.¹¹ This approach, like citizen science and citizen folklore, assumed that students in the classroom were not in deficit of practical knowledge about their life conditions; in fact, while they may have lacked arithmetic or reading skills, they possessed much savvy and expertise about a range of other practical living skills. One math teacher had a particularly hard time engaging students in the class activities. In the classrooms, her students seemed utterly uninterested in math. But one day while she was observing her students interact in the playground she discovered that one kid was bringing candy from Mexico on a regular basis and was running a makeshift import business among his peers. The same students who showed no interest in math class were quite adept at keeping accounts on how many candies they ordered, owed for, borrowed, and traded—in other words, all the practical applications of addition, subtraction, and multiplication she was trying to teach. This story and the Funds of Knowledge approach, just like several other key breakthroughs in folklife educational strategies, changed the way teachers saw their students and altered the pedagogies that were used in classrooms all over the nation. Citizen science and citizen folklore are the newest versions of this imperative to recognize the worth of people's own capacity to make sense of their worlds.

Endnotes

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8. Read more at <https://www.equitableeval.org>.
9. See <http://www.brooklynartscouncil.org/documents/2577>.
10. Behar, Ruth and Deborah A. Gordon, eds. 1996. *Women Writing Culture*. Berkeley: University of California Press; Lassiter, Luke Eric. 2005. *The Chicago Guide to Collaborative Ethnography*. Chicago: University of Chicago Press.
11. See González, Norma, Luis C. Moll, and Cathy Amanti, eds. 2005. *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*. New York: Routledge. A discussion using the Funds of Knowledge approach can also be found in Porter, Maureen K. and Susan Dawkins. 2017. Children of Shangri-Lost. In *Journal of Folklore and Education*. 4: 56-70. Accessed at <http://www.locallearningnetwork.org/journal-of-folklore-and-education/current-and-past-issues/jfe-vol-4-2017/children-shangri-lost>.

URLs

Citizen Science Organization: <http://www.citizenscience.org>
 National Phenology Network: <https://www.usanpn.org/usa-national-phenology-network>
 Southwest Folklife Alliance: <https://www.southwestfolklife.org>



Folk Illusions as Emic, Educational Prompt

by K. Brandon Barker

It is well established that illusions—when considered as a part of perceptual experience—facilitate learning. Visit the juvenile nonfiction section of educational books on illusions at your local library, and you will find a plethora of texts aimed at teaching youths about the wonders of perceptual oddities with titles like *Now You See It—Now You Don't*, *Amazing Optical Illusions*, *Seeing Is Believing*, *Awesome Optical Illusions*, *Cool Optical Illusions*. In those books, you will find many textual performances of a well-worn, literary trope I call the Illusion-Surprise.

I begin, here, a version of the Illusion-Surprise by guiding your attention to an object on the page, like the object below (see Figure 1). Next, I ask you to question that which you perceive: “Is seeing really believing? Can you tell which of these orange circles is larger?” The next question is perfunctory: “Are you sure?” If you have some familiarity with illusion literature and especially if you are a fan of optico-geometric illusions, then it is quite likely you have seen the object in Figure 1. This is the Ebbinghaus Illusion.¹ Because of the relative size of the blue circles that surround the orange circles, the orange circle on the left (the orange circle that is surrounded by larger blue circles) is seen as smaller than the orange circle on the right. See? Returning to the formula of the trope, I tell you now to take out a ruler and to measure the orange inner circles. “See?” I should ask again. “Seeing is *not* always believing!” And, presto, the Illusion-Surprise ends successfully as your ruler shows you that the inner circles are, in fact, the exact same size.²

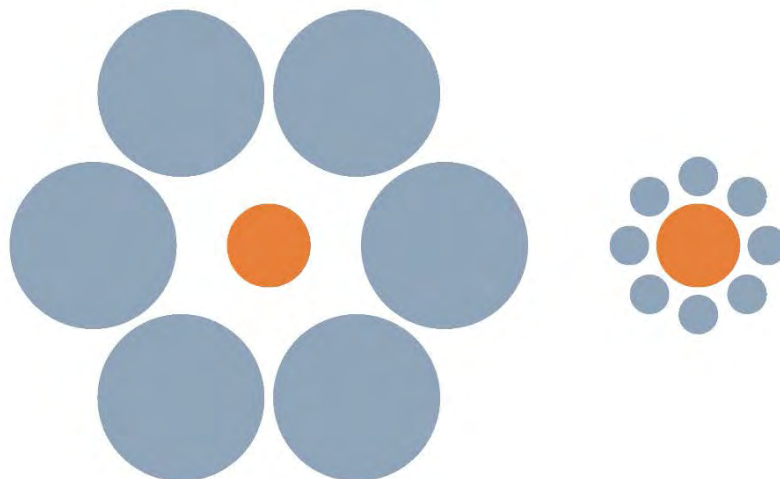


Figure 1. Which of the two orange circles is larger?

What is unclear about the Illusion-Surprise trope is whether readers—including youths and adults—are actually surprised to learn of the illusory tendencies of perception when they see an optico-geometric illusion on the page or screen. Even if you have never seen the Ebbinghaus Illusion presented above and even if you are surprised by its particular characteristics, is it the case that you have never seen (or heard, or felt) any illusion? That, I suggest, would be truly remarkable. And, when we consider the Illusion-Surprise trope alongside other cultural performances that feature perceptual illusions, we begin to realize that people, generally, are not even slightly naïve to the illusory tendencies of perception. After all, illusions that arise from natural contexts like the Waterfall Illusion and the Moon Illusion have been recognized since antiquity, and performed illusions appear frequently in a range of cultural contexts, including art, performing arts, warfare, religion, and—as we have just discussed—in a plethora of educational literature.³

Herein, I want to focus on the fact that illusions also feature in children’s traditional play. Folk illusions constitute a genre of play in which performers trick their own or their playmates’ perceptual systems into perceiving an intended illusion.⁴ Obvious examples are the Rubber Pencil trick, listening for the sounds of the ocean in a conch shell, and sly aunts and uncles who steal little noses from their two- and three-year-old nieces and nephews. In studying folk illusions for the past several years, my fellow researchers and I have found that, beginning around the age of seven, youths themselves frequently know about and are eager to perform several of these kinds of illusory tricks. Including variants, we have found more than one hundred folk illusions, including illusions performed across every perceptual modality. We have gathered remembrances from 21 states in the U.S. and from a total of nine countries on four continents.

Considering folk illusions alongside the Illusion-Surprise trope, we recognize the latter to be an example of not just a worldview dominated by writing (and by extension the verbal) but also an example of adultocentrism, long considered an ethnographic pitfall in children’s folklore.⁵ The genre of folk illusions suggests that perceptual illusions already have a place in children’s worldviews, and following Paddy Bowman’s charge that educators “must gauge cultural awareness,” we should consider forms within the genre as avenues for incorporating the implicit knowledge that children and youths bring to bear on an ancient and pervasive philosophical problem—the complex relationships between mind, body, reality, and social interaction.⁶

Folk Illusions as Classroom Activity

For the development of our catalog of folk illusions, I and my colleagues have administered surveys to college-aged students and gathered remembrances from dozens of adults. But, the most important insights of the study have come from working with middle-school students, summertime campers, Scouting participants, after-school program participants, and preschoolers in Louisiana and Indiana. The heart of these interactions has consisted of three steps: (1) showing participants a few illusions, (2) explaining some scientifically understood psycho-physical mechanisms that give rise to the illusions, and (3) asking the participants if they know any similar activities. In my experience, it is not enough simply to ask students if they know of any illusions for, unlike games, songs, and other playground activities, the category of folk illusions tends not to be represented in vernacular lexicons. Instead, it is the doing and performing of illusions that prompt dialog and interaction. What follows is a description of three folk illusions that I have successfully performed in educational settings.

For a video selection of 16 folk illusions, visit
<https://purl.dlib.indiana.edu/iudl/media/s55m312x7z>.

Zane's Illusion, An Optical Illusion

Each participant can perform Zane's Illusion by (and for) herself. She should simply place the underside of her right forearm (the same side as her palm) against her nose and between her eyes. In this position, her hand will be pointed toward the ceiling, and her forearm will be perpendicular to the ground. Then, she should stare ahead while she slowly passes her left pointer finger in front of her forearm. The pointer finger will be parallel to the ground. The strange visual experience is striking for almost every participant. I recommend having the entire class perform it all at once if for no other reason than to hear a chorus of gasps and laughter.



Zane's Illusion is named for the nine-year-old boy who originally showed us the trick in the spring of 2017. He even reported that he had come across the illusion by chance while fiddling with his fingers one boring school day. It remains an open-ended question how often visual illusions involving hands and fingers emerge as youths pass the time, but in a true instance of polygenesis, another ten-year-old boy showed us a variant of Zane's Illusion in the winter of 2017. He, too, reported discovering the phenomenon: "I just figured it out by myself."⁷ Of course, there is a much more widely recognized folk, optical

illusion involving the hands and fingers known variably as "floating finger," "floating sausage," or "sausage fingers." In a performance of Floating Finger, both tips of both pointer fingers are pointed at one another as they are held parallel to the ground in front of the performer's face. As the performer moves the fingertips closer together, an illusory floating finger appears between the two tips of the actual pointer fingers.⁸

Each of these visual illusions is the direct result of binocular vision. Zane's Illusion, especially, demonstrates that two separate images—one from each eye—must be coalesced by perceptual processes of the central nervous system for us to perceive a seamless visual field. That is, the human visual system typically depends upon physiological inputs from two eyes that are separated by a distance of about 6.5 centimeters.⁹ When the forearm is placed between the eyes, it becomes an additional, artificial barrier. As the pointer finger is passed in front of that forearm/barrier, higher-order visual processes in the brain are forced to select from the disparate inputs of each eye. Such competition is known as binocular rivalry. In Zane's case, the rivalry results in visually askew perceptions that the pointer finger is "invisible" or "foreshortened."

The Church Bell: An Auditory Illusion

The Church Bell illusion requires a few household items, but the illusion is so powerful that the preparations are worthwhile. You will need a few metal coat hangers (hangers made completely of metal with no cardboard, wooden, or plastic rods work best), a spool of yarn or strong thread, and scissors to cut the yarn into segments approximately three to four feet in length. Next, tie the middle of one length of string to the hook of one of the hangers. Now, a performer wraps the ends of the yarn around her pointer fingers two or three times; then, those wrapped fingers are placed

into the performer's ears. From this position, the performer swings the hanger, banging the hanger up against a hard, metal object, such as a table, a chair, or the metal tracks beneath black- and white-boards that hold chalk and markers. The performer—and only the performer—will hear a cacophony of church bells.



We have gathered remembrances of youths performing the Church Bell at summer camps, and the activity is sometimes featured as an exhibit in children's science museums. The folkloric quality of the illusion, however, can be confirmed as early as the 17th century. The French philosopher and physicist Jacques Rohault mentions the trick in his *Treatise on Physics* (1671) as a “diversion” for children. At that time, Rohault explains, children performed the illusion using the metal tongs and the andirons of the fireplace. The activity is clearly related to other activities featuring physical vibration of a string and auditory play, such as

the well-known telephone experiment, in which children use a long string and two Styrofoam cups to talk across distances. Likewise, the physical components of soundwaves commonly appear in educational introductions to auditory experiences ranging from musical harmony to sonic booms. The Church Bell demonstrates the importance of proximity between the vibrating hanger, string, finger, and the mechanisms of the inner ear.

That said, the Church Bell's traditional name also offers an opportunity for discussion of art in everyday culture. Like the regional lexical varieties—*firefly* and *lightning bug*—that name the visual experience of a bug that flies and glows at night, “church bell” constitutes a traditional selection of an expressive metaphor. After performing the Church Bell illusion, I ask participants if other metaphors and descriptions come to mind. If “church bell” is the perfect name for this activity, I ask if we can say why. Similarly, this folk illusion provides a fresh opportunity for discussing the embodied nature of subjective vis-à-vis objective experience. I have found it rewarding to have half of a class watch the other half of the class perform Church Bell. The naïve observers get to laugh at their performing classmates' astonished faces—not knowing or understanding why they, too, will soon be astonished by the reality of the illusion.

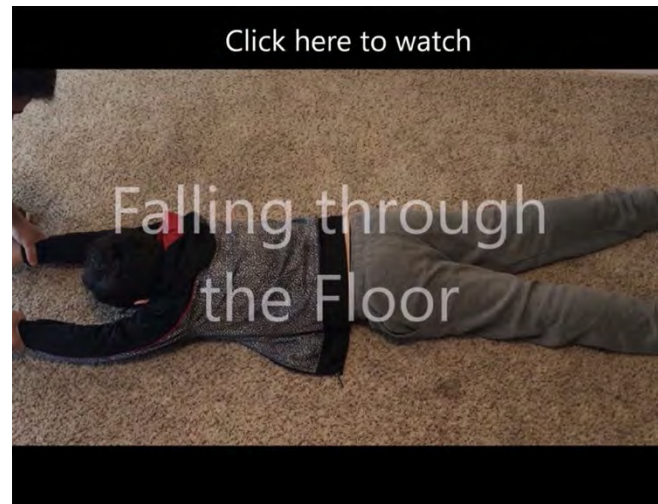
Falling through the Floor, a Proprioceptive Illusion

A performance of Falling through the Floor involves two participants. One participant, the experiencer of the illusion, lies face down on the floor (a soft mat or rug is helpful) with his arms stretched out above his head and with his eyes closed. The other participant holds the experiencer's wrists and lifts the experiencer's upper torso off the floor for about 30 seconds. At the conclusion of this 30-second lifting period, the experiencer's arms and body are lowered very slowly back to the floor. The experiencer will feel as though he is falling through the floor.

Falling through the Floor provides an opportunity to discuss less apparent aspects of perception that go beyond the five Aristotelian senses of vision, touch, smell, hearing, and taste. Falling

through the Floor is, in fact, an illusion of *proprioception*, which can be defined as one's perception of one's own body in space. Using laboratory instruments such as mirrors, cameras, and mechanical vibrators, experimental scientists can create a multitude of proprioceptive illusions, including phantom limb(s), illusory perceptions of falling, stretching, shrinking, floating, and of bodily displacement. Interestingly, the exact causes of proprioceptive illusions remain unclear. Some scientists and philosophers suspect that neurological explanations of proprioceptive illusions will likely require an "active" rather than a "passive" understanding of perception. In this line of thinking, proprioceptive illusions involve a complex intermingling of incoming, physiological stimuli with dynamic, active brain processes that constantly rely upon past experience to perceive the present.¹⁰

In variants of this folk illusion, the experiencer's feet are held in the air so that his legs feel as though they are falling through the floor. Verbal characterizations of the activity vary as well, describing the illusion as a sensation of "freefalling," of "falling off a building," and of "being buried in a grave." The latter, more macabre description is related to other séance-like activities that feature sensations of falling or floating—the most well-known being Light as a Feather, Stiff as a Board, and Floating Arms (a.k.a. "the doorframe trick"). We have gathered remembrances from college-aged students who, while growing up, performed Falling through the Floor or one of its variants from every major region of the United States. Given the unusual bodily position the illusion requires *and* the vulnerability inherent in the 30-second lifting period, Falling through the Floor demonstrates youths' deep, social commitment to the intended purpose of the activity and of the genre as a whole—to perceive an illusion. Folk illusions work in educational settings precisely because children and youths know about perceptually strange, reality-testing experiences, so they are eager to have new ones.



New Folk Illusions?

Having demonstrated and performed a few folk illusions with participants and having appropriately explained some of the perceptual processes that facilitate illusory experience, I conclude every educational visit by asking the youths if they know of any other activities that create tricky, illusory perceptions. Almost always, they have some new variant or some completely new form to share. In these moments, when I learn new examples of folk illusions from students, I fully recognize the importance of seeing through the Illusion-Surprise trope and of gauging the students' cultural awareness of the illusions. That is, by showing interest in youth's folk illusions, educators expose our students to the underlying, co-constructed nature of social (even educational) reality.

When things have gone very well, the student-participants—now consultants—become empowered in their playful excitement. Just as the subjective quality of illusions lends itself to personal points of view, the intersubjective quality of folk illusions leads the study of illusions to

Share Your Illusions

Like all research programs in folkloristics, the study of folk illusions is necessarily a communal project. I have worked extensively with Claiborne Rice, who co-authored several of the works cited in this article. I have worked with graduate and undergraduate students who have answered our surveys and who have, at times, conducted fieldwork sessions with children. I am grateful for the many remembrances from adult collaborators that have contributed to the project and, most importantly, I am grateful to the parents, teachers, and Scout leaders who have allowed us to work directly with youths.

Even with all of this help, we can be certain that our list of folk illusions is not complete. Educators working with children—especially children between the ages of seven- and seventeen-years-old—are highly encouraged to share the three illusions in this article with their students and to prompt their students to share similar activities. Barker and his co-researchers will be very thankful for readers to participate in growing the catalog of folk illusions by emailing descriptions of any newly gathered forms or variants of folk illusions to shareyourillusions@folkillusions.org.

emic perspectives. Finally, the emic perspectives of children and youths become paramount; who better to explain the depths of unreality than those whose folk practices are best equipped to experience it?

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Endnotes

(2016, 8). For more examples of the trope in juvenile nonfiction, see Green (1997, 14), IllusionWorks (2004, 3), Wick (1998, 8-9), Simon ([1976] 1998, 6-7), Baum and Baum (1987, 3).

It is worth noting that the Illusion-Surprise trope also appears in the professional and peer-reviewed writings of psychologists, cognitive scientists, and other scientists of illusions. For previous discussions of the phenomenon in these "adult," academic contexts, see Rice and Barker (2017, 52) as well as Barker and Rice (2018, pages tk).

3. The Waterfall Illusion is a visual, motion-aftereffect illusion that occurs after staring at a waterfall for a priming period of about one minute. When that time has passed and an individual looks, for example, at the rocks or cliffs next to the waterfall, the stationary rocks look as though they are rising upward, see Gregory ([1966] 2015, 109-12). In the Moon Illusion, the moon is reported to look larger when it is close to the horizon and smaller when it is higher in the sky. For a discussion of the history of these and other ancient illusions, see Johannsen (1971, 134-5).

4. See Barker and Rice (2012, 2016) for a more thorough introduction to folk illusions. For a complete study, see Barker and Rice (2018). For discussions of folk illusions in the contexts of science, see Rice and Barker (2017) and Martinez-Conde and Macknik (2016).

5. For a discussion of pedagogical problems resulting from adultocentrism and a comparison of adultocentrism to ethnocentrism, see Bauman (1982, 173-4).

6. See Bowman's discussion of teaching teachers in *Through the Schoolhouse Door* (Bowman and Hamer 2011, 30-5). For Bowman, gauging the cultural awareness (as well as political orientations) of her students remains both a pragmatic and an ethical choice: "I want to honor the expertise of my students..." (32). In this overlap—where ethics guide the folklorist's work—we recognize the shared existential roots of folklore in education and well-grounded performance theory. Perceptual illusions always arise from our interaction with our immediate ecological surroundings; to have our students learn from illusions, educators must begin in the same localized space.

7. This ten-year-old happens to be Lucas, the boy who features in the second and third videos—the Church Bell and Falling through the Floor—linked herein.

8. For a discussion of Floating Finger in the contexts of folk illusions and childhood development, see Barker and Rice (2018, pages TK). For a short, historical description of the illusion in the contexts of binocular vision, see Johannsen (1971, 135). For an early psychological description and testament to use of the illusion in classroom settings, see Sharp (1928, 173).
9. For an excellent and accessible introductory text to vision, I recommend Richard L. Gregory's *Eye and Brain: The Psychology of Seeing*, 5th ed. ([1966] 2015).
10. For a quick introduction to the philosophical stakes of active versus passive theories of perception, see Gregory (1987: 598-601). For a recent and vividly detailed summary of proprioception studies, see Proske and Gandevia (2012).

In a theoretical framework of active perception, a hypothetical explanation of Falling through the Floor's illusory experience would look something like this: In the multitude of one's past experiences of lying on the floor *without* actively moving one's muscles to lift one's arms, torso, or legs off the floor, one's body remains (as a result of physiology and weight) on the floor. The brain, then, deals with the highly abnormal, kinesthetically passive position of Falling through the Floor's lifting period by erroneously estimating the height that one's playmate has actually lifted one's arms and torso off of the floor. This mis-estimation combined with the slow lowering of the experienter's torso give rise to the illusion.

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When the Clowns Take Over the Classroom: Notes from the Circus Arts Conservatory in Sarasota, Florida

by Alison Russell

The Circus is evolving but we are at the forefront of that, allowing education to be a part of that.

—Karen Bell
Education and Outreach Manager
Circus Arts Conservatory



“Five, four, three, two, one...” A crowd of eager young faces counts down together, orchestrated by two enthusiastic clowns, Karen Bell and Robin Eurich. As they get to “one,” Bell releases the softball on a string, causing it to unwind from a medium pole in increasingly larger concentric circles, moving faster as the circles get wider. The ball hits a brightly colored block, causing a domino effect, and the whole Marvelous, Miraculous Circus Machine is set into motion.

The Marvelous, Miraculous Circus Machine is one of six structured lesson sequences that the [Circus Arts Conservatory](#) (CAC) in Sarasota, Florida, designed to use the local circus culture to improve STEAM (science, technology, engineering, arts, mathematics) education in nearby schools. The CAC is one of several circus troupes and academies in the city, which has a hundred-year history with this unique part of American culture. Recently, the CAC has been looking to expand engagement with the local circus culture by connecting directly with the formal school curriculum, particularly the growing educational emphasis on science and math curriculum. Led by formally trained clowns Karen Bell and Robin Eurich, the Circus Science Program has brought the tradition of the circus into classrooms, and classrooms to the circus in and around Sarasota, while teaching principles of science and engineering.

Circus Science was created, at first informally, through classroom outreach on behalf of the CAC. It started with a show for the Ringling Brothers Museum, during which a clown dressed as a professor taught the intricacies of the trapeze. Trapeze is one of the many artistic disciplines of the circus passed down through generations as part of the occupational knowledge of circus performance and tradition (Davis 2002: 21). This performance, however, was more than just the “what,” it was the “how.” The educational value of this performance sparked an idea. Teachers at Electa A. Lee Magnet Middle School in Sarasota County contacted the CAC. Rebekka Stasny, a teacher at Lee, and her team were looking for this type of curricular hook to enhance their interdisciplinary curriculum. For Stasny, the circus was a part of her life in Florida and something she and her students could share.

At Stasny's request, Karen Bell went to Lee and the two groups developed the daylong program together for 8th graders. A partnership between social studies and science expanded as Stasny discovered this was a creative way to teach science and help students meet Florida education standards. Over the intervening years, Bell worked with Stasny and other local teachers to develop a science and arts curriculum. Five years ago, when the CAC acquired the traditional circus school Sailor Circus, Robin Eurich also came on board. As someone with both a degree in physical sciences and experience teaching at Ringling Brothers, Eurich combines the informal transmission of circus skills in a folk tradition with formal pedagogy of STEM education. Together with a recent alliance with the University of South Florida's Partnership for Arts Integrated Teaching (PAInT), Circus Science has developed a full, standards-based curriculum that demonstrates the efficacy of place-based education and project-based learning in STEAM instruction.

One ongoing development is to take the already strong pedagogy and match it to standards and practices of the Florida school system. Bell and Eurich began to formalize their teaching in 2007 with arts integration workshops from the Kennedy Center Education Division, which taught art and theater educators how to go beyond enrichment and become a more integral part of the curriculum. Since then, they have followed the Kennedy Center Arts Integration Protocol, an approach enhanced by the partnership with PAInT. Denise Davis Cotton, the PAInT Coordinator, sees her role as adding to the rhythm and momentum of activities, partially by bringing codified arts and standards expertise to the project. The Florida Board of Education has worked to extend the focus on STEAM statewide and "strive to increase the number of students enrolled, with emphasis on students from underrepresented subpopulations as well as those who may be struggling" (Davis Cotton 2018). Davis Cotton says that they have a growing body of work that proves that this type of program helps students' STEAM knowledge, as well as their knowledge of community circus culture, as observed through pre- and post-assessment data.



A balancing clown.

Photo by Alison Russell.

The first layer of success is in implementation. Bell compares telling kids, typically ages 8 through 13, that they are learning physics to telling them they need to eat broccoli. It is easier if you show them that it is something that can be fun and doable before you introduce the fact that it is broccoli. This is achieved partially by the connection to the circus, which is exciting to a wide range of students (Sugarman 2002), especially when connected to the circus down the street.

Bell and Stasny both say they start with a simple question like "How does a tightrope walker balance?" or "How does a trapeze artist swing into the ring?" These open-ended questions create both more possibility and more buy-in. "Kids like to think outside the box," Stasny explains. "They learn a lot, and we learn a lot about how kids think" from posing these questions. Davis Cotton adds that it gives students ownership from the beginning of the lesson.

From there, Bell, Eurich, and the classroom teacher lead students through the experiment. The offering that most excites students is the Marvelous, Miraculous Circus Machine, the Rube Goldberg creation for which students must create at least three “cause-and-effect reactions” throughout the contraption (Bell 2017). The opening question is “How can students use Newton’s three laws of motion to create a grand circus entrance?” Students are given blocks, ramps, balls, string, and other small materials to create a version of the Machine in miniature. Once they have tried their own creations, it is time to head to the Big Top, to see it play out on a human-sized scale, making the CAC an integral part of the lesson’s implementation. Although it is possible to complete the activity in the classroom, the materials and space of the circus tent allow learning to be more authentic, occurring in the community rather than the classroom. The Big Top setting also ties the process to the physical space as well as the knowledge of the circus. Circus performers are able to be part of the action as the large Machine is set off, showing the connection between the showmanship of the visual circus display and the principles of physics that allow them to work.

Students who participate in Circus Science programs often work in teams, practicing the collaborative efforts that are essential to working circuses and increasingly recognized by pedagogical experts as [21st-Century Skills](#). As Stasny points out, today’s students will need those skills such as problem solving and collaboration because many jobs that students will pursue haven’t been invented yet. The improvisation of the circus is ideal for this type of learning and for Bell and Eurich’s ability to bond with the students. Elementary and middle-school students, Bell claims, are able to take more risks with the two performers in clown costumes than in a more formal setting. Both Bell and Eurich emphasize in the performance the acceptability of mistakes. In an era of rigorous testing, Circus Science emphasizes skills as well as content knowledge that promote a healthier learning environment.

That is why place-based education is so essential here as a reason to bring together science and arts education. Students are often required by the curriculum to use either their language skills or their math skills, their art skills or their science skills. Rarely is a curriculum integrated enough to do both. By combining the local culture of the circus, and the artistry involved in that tradition, with the more precise engineering of STEAM lessons, the whole brain, right and left, is engaged in learning, explains Davis Cotton. She speaks about a time when she attended a lesson and students were speaking the language of circus and science, while also enjoying the aesthetic experience of the circus performances. For her, it was an effortless opportunity to capture both sides of that experience.

Stasny sees the multiple levels of learning in the classroom as well. Early on in implementing the program she had a student who struggled with a learning disability and was largely unmotivated to participate. The creativity in the unit really excited the student about learning. He went home and built a potato launcher with his father, using some principles of physics taught by the CAC educators. When he brought it in, he was the star of the class. Stasny believes that moment was pivotal because he could show his learning in his own way, he could feel smart in his own way. Students who experience the program see that there are many different ways to approach learning, especially with physics.

Sarasota is becoming increasingly diverse, with many people who are not originally from the area entering the schools. With new populations coming in, Bell notes that they do not realize the

history of town. Part of the program is letting young people know about the place where they live, helping them take ownership of their area as well as the curriculum. Stasny feels as though many students did not understand or appreciate where they were living until the program began, tying them to their community. Sarasota is an arts-rich community, Davis Cotton explains. With Circus Science, students can optimize and create a strong sense of how it fits into American history and culture. The success of the program in Sarasota comes from its connection to the circus culture, even for those students who have never been to the circus before.



Ultimately, the largest testament to the success of this program is its growth and scope. From the collaboration with Stasny and Lee Middle School, Circus Science is now in 30 elementary and middle schools in Sarasota and Manatee County. Over 4,000 students have participated in Circus Science this year (Florida Department of Education). For those students, teachers have seen a 39- to 43-percent learning gain from the Circus Science and Marvelous Machine units based on a pre- and post-assessment of Florida STEM standards. These strides speak to the efficacy of the program in combining local history, STEM and STEAM education, and community folklife.

More importantly, students enjoy the outreach into their community. Bell mentions that students particularly like to visit at the end of the program, coming to the Big Top or the Ringling Circus Museum. They love to surprise docents with their knowledge when they see a circus artifact. Students are also able to speak knowledgeably with the CAC performers who take part in the fieldtrip experience. For example, they have an idea of just how difficult it is to gain the momentum and calculate the angle of the trapeze jump and have a greater appreciation for the effort. As Davis Cotton puts it, “they are able to speak the language.” Being the experts makes the learning more rewarding for students, particularly when they can use that knowledge in their community.

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Puck Rogers shows off a turnip he harvested.

Photo by Kate Haag Rogers.

Eating Your Homework: One Family's Intersections of Science, Place, Foodways, and Education

by Lisa L. Higgins and Katherine Haag Rogers

My son thinks he will be considered a man when he learns to make my hummus and his father's mustard recipe¹.

--Kate Haag Rogers

When families merge, they bring their stories, histories, and traditions together. This process is made especially clear as cultures and experiences mingle and collide on the family table. Cognizance of why we eat what we eat can be taught to preserve the history of the meal and shape the new narrative to be passed along as the future's history. About two decades ago, we—Lisa Higgins and Kate Haag Rogers—joined the same family, first in courtship and later in marriage. As relationships formed and grew, we brought our own ideas about food and found that although the food was not the same our interest in it was common ground.

Our spouses are siblings, an older sister and her younger brother, who were born just north of Kansas City and moved periodically, following their father's jobs. As they branched out, moving farther away from their roots, the Rogers family of four, our in-laws and their two children, sustained family connections with traditions, many rooted in foodways. Each time they uprooted and then resettled, the Rogers family planted a garden. When we joined them, we were drawn into this world of gardening and sharing their bounty as a matter of course. To this day, through long careers and into retirement, our family's elders garden; they preserve, can, and freeze what they grow, and they serve these fruits of their labor. Their two-car garage serves as a modern root cellar, home to full freezers and a bank of shelves lined with rows and rows of jars: jellies, jams, vegetables, pickles, relishes, and more. These homegrown and preserved foods have found their way to the tables of their children's families and, with them, the stories about these food traditions.

We quickly learned, usually around a dinner table, that there are family legends about the processes and products of the Rogers' family gardens—the good, the bad, and the infamous “canned patty pan squash.” These stories, and the annual reports from the garden, serve as the basis for many communications. They are told at family gatherings and at the table with the grandchildren. These stories are the second preserving of the fruits of the elders' labor. We, the newcomers to the family,



A corner of our in-laws' two-car garage is home to preserved foods from their garden.

Photo by Lisa L. Higgins.

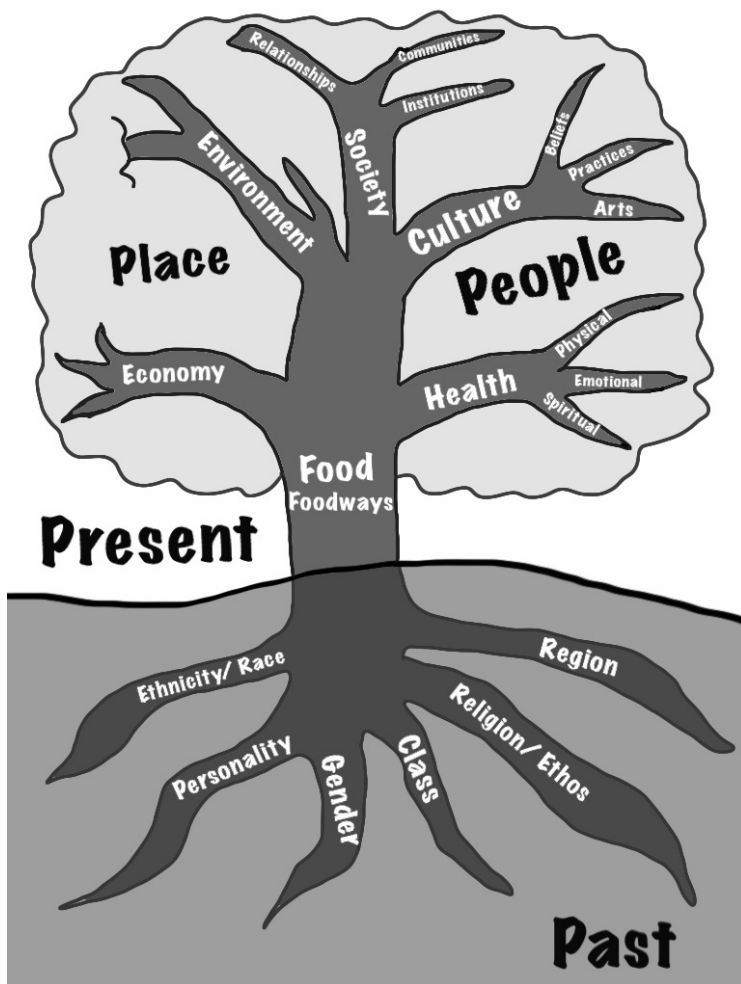


Figure 1. Dr. Lucy Long's Tree of Connections.
Courtesy Lucy Long.

also came into the fold with our own family foodways from the Mid-South and Upper Midwest. We, too, came from families who moved away from our families' roots to follow our fathers' careers. The array of traditions has merged, emerged, and evolved in our individual homes and at our collective gatherings at holidays, birthdays, weddings, and funerals. Our stories are braided with theirs in dishes old and new.

As global and local food systems change, Kate, who works as a community educator and in ethical food advocacy, has made it her mission to teach the next generation in the family about the food they eat so that the family histories can be preserved and so the children are aware of all the people and places that are part of their nourishment. The stories that were once simple have become more complex but, in Kate's eyes, no less important.

When the folklorist in the family, Lisa, attended a Future of American Folklore Conference in 2017 in Bloomington, Indiana, she found herself texting quotations and thoughts to Kate, the family farmer and homeschooler. In particular, during the session Applying Folkloristic Understandings of Food to Current Social Issues: Sustainability, Social Equity, and Diversity, panelist Lucy Long shared a graphic from [*Foodways Traditions of Northwest Ohio*](#) called the Tree of Connections. In the graphic of a tree, Long grounds her theory of food traditions in soil, roots, trunk, and branches—the past, present, place, and people (Figure 1).

In essence, we sisters-in-law found the Tree of Connections resonated not only

with our experiences in the Rogers family and in our families of origin but also in Kate's food advocacy work. We began to correspond via email and text, and we set up a Google Drive folder to "free write" about our family foodways. Lisa shared a foodways lesson from the Missouri Folk Arts Program's *Show-Me Traditions: An Educators' Guide to Teaching Folk Arts and Folklife in Missouri Schools*, which led to several paragraphs from each about family recipes and gardens. From the Foodways Vocabulary Worksheet (See pg. 62), we extemporized about the food we grew up eating—and avoiding: Kate holds dear childhood memories of kolaches, bratwurst, kraut, and pierogi. Lisa's family loves chocolate gravy over biscuits, turkey with cornbread dressing, black-eyed peas, and pink fluff Jell-O "salad." Kate's family ate handmade Bohemian breads from Vesecky's Bakery in Berwyn, Illinois. Lisa's family ate Wonder Bread and Hostess cakes straight off the truck after her father finished his route. Kate's great-grandparents owned an urban butcher shop down the street from the bakery. Lisa's great-grandparents butchered hogs in the winter on their farms in rural Arkansas.

From the vocabulary worksheet, we shifted our discussion to stories about recipes. Prized recipes. Family cookbooks. Great-grandma Daisy Belle's secret mustard recipe. Our mother-in-law's pumpkin pie squares. Kate's nondairy revision of the pumpkin squares. Lisa's mother's Thanksgiving cornbread dressing recipe, and Lisa's gluten-free revision of the dressing. In fact, we spend a lot of time thinking, texting, and sometimes talking about revisions to make recipes nondairy and gluten-free—especially before one of our bountiful, but rare, family meals when we can gather together in Georgia or Missouri. Allergens and vegetarianism are

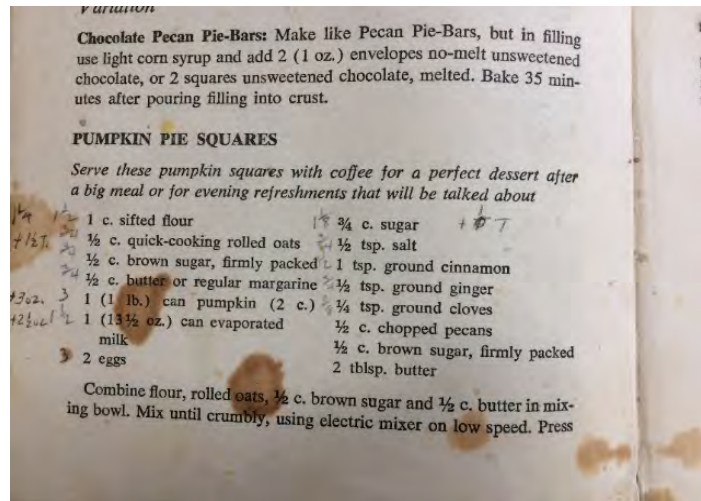


Figure 2. Our mother-in-law bakes pumpkin pie squares for Thanksgiving and Christmas. Her preferred recipe from the *Farm Journal's Complete Home Baking Book* is well-worn and stained and includes her notes for adjusting servings.

Photo by Lisa L. Higgins.

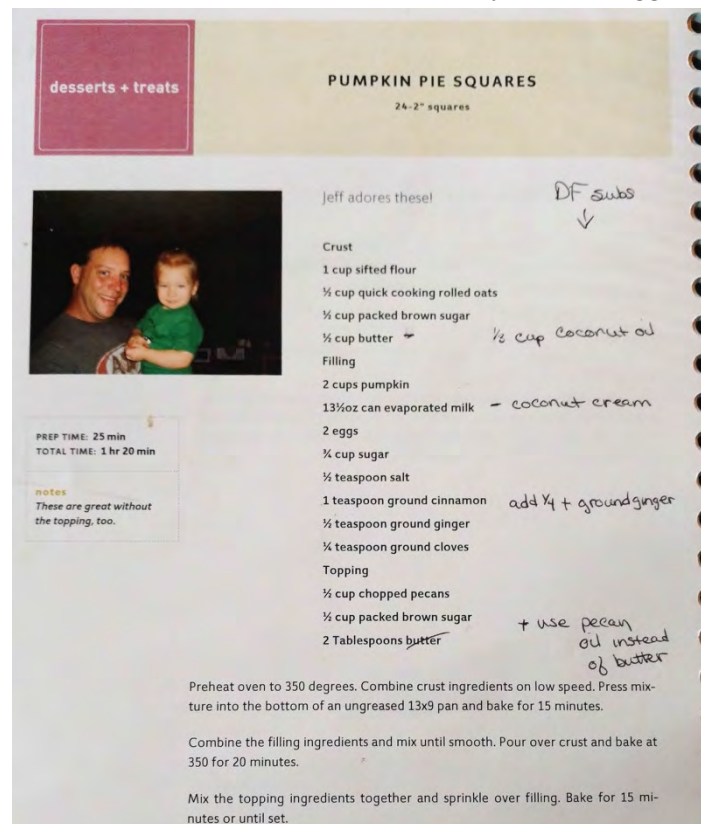


Figure 3. Kate included our mother-in-law's pumpkin pie square recipe in a family cookbook. Kate has made notes to make the recipe dairy-free for her children.

Photo by Kate Haag Rogers.

two key reasons that Kate's family garden grew into a hobby farm. A holistic education is another reason (Figures 2 and 3, Pumpkin Squares Recipes).

Kate, her husband, and their two children—affectionately called “Melon” and “Puck”—have lived in rural Southeast Georgia since the spring of 2011. Like the previous generation, this family has moved often to follow a career. Like the previous generation, this one resettles in new locations by tilling and planting gardens: “We move a lot. Getting adjusted to a new community, especially in rural areas, means adjusting to the local food culture.” In Georgia, Kate and family went a giant step beyond, working years to amend the soil and establish a hobby farm with chickens, guineas, and horses. They started a CSA program (community supported agriculture), and Kate is very active in the local homestead guild and its weekly summer market.

In 2015, she started blogging at [*Katy Had a Little Farm*](#) and describes herself as:

An ethical food advocate, writer, and community educator, I am also a wife, mother, volunteer and friend. Formally educated at a large Midwestern university, but an obsessive autodidact, I walked away from conventional agriculture and politics to devote myself to the health of my family and community.

My goal is to reduce the toxic load on our bodies, help people become cognizant eaters, and support an ethical food system. Clean food and real food are the focus of this paradigm shift.

Over the last seven years in rural Southeast Georgia, these two transplanted Midwesterners have nurtured their family and their farm side by side. Our families keep in touch with occasional visits, frequent phone calls, texts, Facebook, and Kate's blog. *Katy Had a Little Farm* is where our family learns more than we might otherwise about her pedagogy of the farm. Lisa, as a folklorist, is particularly curious and asks questions about the ways that Kate and family, outsiders to the region, established their place in the local community so firmly. She responded:

When we moved to the Southeast, we were really excited about all the things we could grow here that we'd never been able to grow elsewhere. We planted citrus trees, pomegranates, figs, and peanuts before our boxes were unpacked. We soon learned few people were still eating these local fruits. While we waited for our own plants to produce, we were able to glean from prolific plants that no one else wanted.

As we got used to the local restaurants and grocery stores, we were surprised that the food we associated with the region seemed largely absent, with the exceptions of sweet tea and instant grits. The drive-throughs were full, and the few local restaurants were serving the same fare one could find off any Interstate. What had happened to the southern fare we anticipated? Was this all that was left of southern food?

Through gardening and networking, we started getting a feel for the area, both our piece of land and the local culture. We stopped and talked to other gardeners, we

started a CSA garden from our farm, and we started learning about the region's food from people who remembered when it was made at home, collecting stories of what grandmothers served and children foraged before convenience ruled. We just had to peel back the recent layer until we got to food with meaning.

As the waiting list for our small CSA grew, so, too, did our food-based community. Slowly, the food on our table started to include stewed local greens, shrimp and fish from the closest coasts, heirloom grits, more okra, and Scotch bonnets. We grew an old variety of peanut and chewed sugarcane while we attended our first cane boil. Our table was growing to include our new community.

A group of us—eaters, farmers, teachers, and chefs—became a guild affiliated with our regional Okefenokee Heritage Center with the goals of promoting local food and supporting local farmers and artisans. We started a producer-only, local fare market that is going into its fourth year. Then we added an annual farm-to-fork meal and a homesteading conference. We offer local producers a place to sell their food, not just at the market but also through a co-op program. We provide volunteers and help with school gardens, work to bring local food into school lunchrooms, and host classes about food production and cooking. We partner with Saint Andrew's Society to glean fields and give away the food. We work with another community organization to teach food-insecure families how to prepare the foods they can get locally and seasonally so they can get the most quality and quantity from their resources.

These relationships between community members, local chefs, and farmers have helped revive the foods of the region and, by doing so, created common ground for people who otherwise may never have bonded. At our market, Chef Andy, billed as the Pop-Up Chef, takes anything the farmers are selling that day and turns it into samples. He teaches shoppers simple ways to use the products of the soil from our own area. Then, the farmers sell out of the products they brought that day.

There are no instant grits at the market. There are blue, white, and yellow grits, but no instant. I know how to make them now. There are no eggs from a windowless egg factory. Instead, there are eggs from a local farmer who knows most of her hundred hens by name and packs their eggs, four colors to a dozen, so customers smile when they open the carton. Market customers can enjoy these eggs with the sausage from her hogs, the biscuits her husband, another chef, makes, and the goat cheese from our local pastured dairy. Who needs a drive-through?

The market's produce farmers are there to tell how to stew greens or which tomatoes to use on a tomato and mayo sandwich. They can share the stories of how okra may have been transported by African slaves to the region and explain why the onions of this area are so outstanding. Folks can take home a bag of local shrimp from the people who caught it, and a mess of BBQ. Ours is a community built around passion and curiosity, and a community that never could have happened in a grocer or drive-through.

We insisted on eating this place, and it turned out we weren't the only ones who wanted to do that. In the summer, we forage for blackberries, figs, and loquats. In the fall, we glean pecans while many locals hunt for wild boar to make into sausage. There is a truck that parks in the same spot every year to sell green boiled peanuts on the side of the road. Another sells watermelons in the summer and turnips in the fall. We chew cane on the porch in the hot fall air and go to cane boils when it cools off. People are still doing these things. No one could see them from the drive-through. Since the rise of this local food movement, the number of people gardening has grown exponentially. The message resonates.

In addition to her curiosity about how the family found common ground as newcomers to the community, Lisa, always wearing her folklorist hat, was intrigued by Melon and Puck's homeschool education, which is so different from her own. Lisa has spent decades in the study of folklore as a student, scholar, and arts administrator. Overall, she credits those roles, where she met and formed relationships with an array of tradition bearers, as educational and catalysts for personal understanding, including with foodways.

Among my family and long-time friends, it has mostly been a given that I am (or was) a very picky eater. I was the stubborn child often left to sit at the supper table while my glass of milk grew warm and my dinner grew cold. My parents didn't operate as short-order cooks or cater to my limited palate, but they did allow me to fend for myself, as a loaf of enriched "white" bread and a jar of peanut butter were always in our cabinets. Often when I reflect on Thanksgiving meals, as many U.S. folklorists do with students and workshop participants, I recall that my grandmothers' tables were overflowing with bounties of roasted meat, vegetables, casseroles, and desserts. My plate was sad and fairly empty, usually only slices of ham and whipped potatoes, which I ate to have my share of cookies and pie (filling only—no crust). The maturity of my palate was so delayed that I can vividly recall when I first tried many foods, especially vegetables.

While both my grandmothers were avid gardeners, in my nuclear childhood family we had no gardens. We adopted convenience foods readily, although my mother, a huge fan of vegetables, usually had a family connection to supply her with squash, tomatoes, peas, and okra. She was a fan of u-pick fruit farms, and she often took us to strawberry patches to gather all we could. My paternal grandmother had a vast vegetable garden that stretched across the southern edges of three backyards. Gardening was a necessity all her life, even when she moved herself and six children into town. My maternal grandmother, too, gardened and cooked from her harvests. Today when I am digging in dirt it is almost always to tend to flower beds and pots, filled with striped petunias, irises, peonies, and hydrangeas. I have been in search of my mothers' flower gardens more than their vegetable gardens.

Working as a folklorist, too, expanded my palate. In the field, it is a cardinal rule to accept graciously what tradition bearers offer during site visits and other occasions. In the mid-1990s, I worked as a graduate assistant and accompanied

Dana Everts-Boehm, then director of the Missouri Folk Arts Program, to document an apprenticeship between a master maker of low-rider cars and his apprentice in a predominantly LatinX region of Kansas City. We spent time in the family's garage, and in the kitchen, where we observed firsthand the making of traditional Mexican favorite dishes, most of which I had never eaten before and never would have tried of my own accord. Not only did I sample every dish, I took home a sampling of desserts to share with my housemates. Simultaneously, at the University of Missouri, I was also teaching or co-teaching Introduction to Folklore and Women and Folklore, courses in which foodways were always prominent in the syllabus. Foodways proved especially vivid means to illustrate to college students how diverse their traditions were, even if they initially thought their traditions were homogenous. Years later, as the director of the Missouri Folk Arts Program, I knew it was imperative that we include a foodways chapter in our elementary school educators' guide.

After years within the Rogers family, my circle of gardening friends, and as a folklorist, I can see that my plate is fuller and more colorful. I find myself taking home yellow squash, zucchini, and okra from the in-laws' garden and cooking them on autopilot. I can almost somatically recall how my mom and grandmothers cooked. Before law school, my spouse worked in two cooperative grocery stores—one in Minneapolis and the other in Atlanta—two more occasions when I learned about more ethical food sources and to eat a bit less conservatively. At my house today, we typically only grow a handful of tomato plants and some herbs; however, we strive to shop as often as possible at farmers' markets and two independent grocers that support regional farmers. Our household commitment to foodways has shifted, as we also support organizations like the [Columbia Center for Urban Agriculture](#), especially in their mission to provide fresh, local food in spaces and for people who have little access. I want our neighbors across our small city to have opportunities like Melon and Puck—to sow, plant, harvest, and eat better food.

An ever-curious folklorist and evolving foodie, Lisa recognized, simply based on photographs posted on social media and texts, that Kate and family immersed themselves in curricula infused with farming and vice versa, at home and in their new community. Currently ten and eight years old, Melon and Puck spend a lot of time with their parents tending the farm, amending soil, weeding, planting, picking, gathering, and more. The whole family is regularly covered in dirt, whether a fine layer of dust or smudges of mud. The children are frequently photographed holding freshly picked vegetables or making a simple meal with the harvest. For visitors to the farm, Melon and Puck are capable, thorough, and accurate as they give tours of their fields, their poultry yard, and their horse barn.

Inside the house, Melon and Puck have their own desks and a computer station where they complete more conventional morning lessons, but Kate truly immerses their lessons in their everyday lives, and their everyday lives revolve around their land and its bounty.

The gardens naturally incorporate themselves into the learning of kids who get to work in them, but I intentionally use the gardens on a regular basis.²

The land was actually so integral to our lives, from our routines to their schooling, that I don't even know where to bite this elephant: The garden is more than just science class, catching bugs, shaking soil in jars to make the types separate, slicing stuff to put under the microscope, identifying plants, etc. The soil and the tending of the plants are part of the story of the food that is put on the table or shared with friends.

So, let me go back to our farm here [in Georgia], the food we grow, and the way we have used that as a teaching tool. We teach that we are part of a whole. The treatment/stewardship of the smallest elements, microbiome (soil, human, etc.), water, air, matter to the whole. We teach this literally by teaching ecology, but also in ethics and even sociology. Life cycles, nutrient cycles, basic responsibility . . . there is so much.

We have used our sales and the market to teach the kids about economics and value. Melon [nine years old at the time] and her two friends had a homemade dog treat business for the 2017 market season. They had to fill out paperwork, save receipts, find recipes, source ingredients, schedule time to make them all, worry about storage, price it all to make money, deal with customers, and manage all the finances.

We also tackle issues like slavery and forced labor in the supply chain, labeling, and ethical sourcing certifications.

We use food to teach culture. It is easy when it is another culture, far away, and with deep food roots, but we also teach about locality and seasonality, shaping what is traditional here. Local food culture is less obvious with our current supply chain and the transformation of food with the introduction of convenience foods, but the prevalence of okra, citrus, and po' boys still speaks to regional specialty.

The kids know how to forage in our area. They know about climate change and regional adaptation. This all informs their growing political awareness.

Conversations around the table are often heuristic, a series of questions that encourage the children to apply the knowledge they have acquired in their own backyard, at the market, and in community with other homesteading families. Books and the Internet are appropriate resources. Kate notes that [Georgia Organics](#) is a rich resource, often a first stop when she is looking for curriculum,



Melon Rogers plants seeds at her family's farm.

Photo by Kate Haag Rogers.

lesson plans, and activities. The site has a dedicated page for PreK–12 education resources, with videos, guides, and links to funding opportunities. Kate’s family is full of voracious readers, and they often read together, finding the children like Michael Pollan’s *[The Omnivore’s Dilemma: Young Readers Edition](#)*. Pollan’s website is also a resource, with FAQs and useful links. Kate, family, and the homestead guild use both sites in their local public schools and broader community food efforts.

This focus on food education and advocacy helps the children (and our whole extended family) to see the world through narratives of interconnectedness and inclusion. Our “tree of connections” grows taller, deeper, but sometimes withers. Our individual and family tables have shifted, waxing and waning over the years. New places and soils have been incorporated; new family and friends have been made. Diets have been tailored, the food system has morphed, and locations have been added. Our stories remain a critical focal point. With each dish, each variety, the narrative expands, and the opportunities for educating the next generation grow. We recognize, accept, and often relish the dynamism of our family traditions.

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***Katherine Haag Rogers** is a writer, community educator, rural communication strategist, and ethical food advocate. She recently relocated to the Midwest and continues her focus on food policy and rural development.*

Endnotes

1. At Kate and her husband’s wedding reception, our in-laws pulled the couple aside and handed them a recipe for the family’s mustard, a deeply held secret. Our spouses’ great-grandmother, Daisy Belle (1901-1978), owned and operated restaurants in Hamilton and Kingston, Missouri, where a menu favorite was ham sandwiches with the homemade spicy mustard. Puck knows that when he and his sister achieve similar milestones, like their father and their aunt, someone in the family will pull them aside and entrust them with the recipe and its story.
2. Kate notes that she also blogged about this topic in 2016: <https://katyhadalittlefarm.com/2016/04/29/educating-children-in-the-garden-it-isnt-just-for-homeschoolers-we-owe-it-to-the-next-generation>.

URLS

<https://foodandculture.org/center-projects/activity-guides-community-foodways-northwest-ohio>
<https://folk.wpengine.com/wp-content/uploads/2017/06/showme.pdf>
<https://katyhadalittlefarm.com>
<https://columbiaurbanag.org>
<https://georgiaorganics.org>
<https://michaelpollan.com/books/the-omnivores-dilemma-young-readers-edition>
<https://katyhadalittlefarm.com/2016/04/29/educating-children-in-the-garden-it-isnt-just-for-homeschoolers-we-owe-it-to-the-next-generation>

Foodways vocabulary worksheet



The vocabulary words below can be defined in many ways. Some families eat “**supper**” at night; others eat “**dinner**.” In some cultures, an orange or piece of fruit is dessert; in other cultures, **dessert** is something made from a recipe with more than one ingredient. In Asia or in Asian-American families, breakfast might include soup or fish. Ask your family to help you define each of these words. Then compare your definitions with someone in your class. There are no right or wrong definitions because different people can define each of these in different ways depending on their family history and culture.

A **meal** includes: _____

Breakfast

What time of day? _____

What kinds of foods? _____

Where is it eaten? _____

Lunch

What time of day? _____

What kinds of foods? _____

Where is it eaten? _____

Dinner or Supper

What time of day? _____

What kinds of foods? _____

Where is it eaten? _____

Dessert or Snacks

What time of day? _____

What kinds of foods? _____

Where is it eaten? _____

Activity: Food Stories

Social Studies

Developed by Kate Haag Rogers



Dinner Table Conversation. I like to take a component of our meal and trace it all the way back to its origin. Take a slice of bread. It was not just conjured from nothing by our neighbors Irvin or Amanda. The grains existed before they deftly coached them into bread.

- What kind of grains are used?
- Is it Spelt or Emmer or something else?
- Where does this grain come from?
- What methods are/could have been used by the farmer who grew it?
- What kind of soil and climate does it like?
- Is it a candidate for perennial grain production?
- Was it rescued from extinction?
- What cultures have eaten it before ours?
- What other ways has this variety been used?
- What would you like to do with it?
- How does it taste compared to the last bread you ate?

Next, let's do a vegetable, one from the grocer.

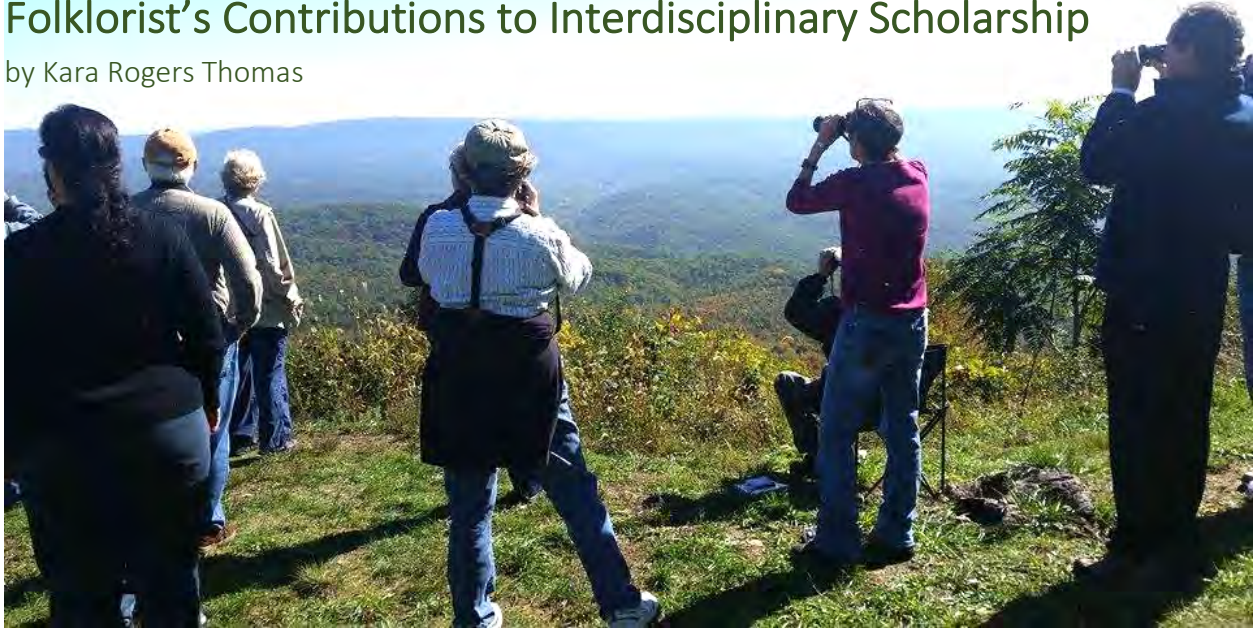
- What kind of tomato is this?
- Where was it grown? Peru? Georgia? How far away is that?
- How was it grown? Does it say "hot house" or "vine ripened"?
- How might this have been harvested? By machine or human labor?
- Was there packaging that had to be disposed of because of this purchase?
- Is this tomato conventionally grown or organically certified?
- How is the taste? Flat? Sweet? Acidic? Watery?
- How is the texture? Is it tender or firm? Does it seem like styrofoam?
- What considerations do you think brought this variety to market?
- How does this compare to other tomatoes you've had?

What about entire dishes? Do you still tell the stories of the food you make? Do you look them up if they are not your stories? That is how you become a part of the food's story. Do not ever be satisfied with the answer that something being Grandma's dish. *Why* was it Grandma's dish? Did she love it? Did someone else? Was it a reflection of her social class, her financial situation, her skill level, her culture, or ethnicity? Did she get the recipe from a cookbook or from her neighbor? Was it her grandmother's?

You may search the internet for answers, but you can earn a 10% bonus for talking to a human for a least one of your answers.

Rubbing Shoulders or Elbowing In: Lessons Learned from a Folklorist's Contributions to Interdisciplinary Scholarship

by Kara Rogers Thomas



With a growing awareness of the benefits of a STEAM (science, technology, engineering, art, mathematics) educational approach in academia, folklorists are reframing their work to contribute to interdisciplinary endeavors. While institutions may not fully understand the value of the arts and humanities, students continue to be interested in those pursuits and programs, which investigate the complex relationship of culture, environment, and scientific inquiry. Academia is unlikely to see much growth and development in new folklore programs, but interdisciplinary collaborations can help solidify folklorists' place on campus, making them indispensable to their institutions and more competitive on the academic market.

Whether we are considered worthy collaborators or unwelcome intruders often depends upon specific projects and the disciplines involved. Philosophically, folklore studies in particular and the arts and humanities in general, should and do influence the understanding and application of STEM (science, technology engineering, mathematics) pursuits. Practically, however, in the current higher-education environment, influentially and financially speaking, STEM does not require the arts. Like our colleagues from the arts and humanities, at many institutions, folklorists are struggling against academia's current, hoping the fuller implementation of a STEAM-oriented approach can provide a lifebuoy for the sustainability of our discipline on our campuses.

In their 2013 essay, "Edgework and Boundary Crossings," Mary Hufford and Betsy Taylor make a strong case for the value of the growing field of public ecology, which they define as, "an interdisciplinary, multisectoral approach to the study and management of complex socio-

About the photo: Sociology students in Folklore in Appalachia conducted research on regional outdoor leisure activities with members of Homeground, an organization dedicated to bringing people together to enjoy the outdoors, and to appreciate the vital role of nature in our lives and communities, Fall 2016.

ecological systems” (100). Bridging the divide between academia and society in order to forge new public and environmental policy which recognizes and values the perspectives of multiple stakeholders is key to such collaboration. The creation of an open and ongoing dialogue between scientists, government officials, forest practitioners and the general public, an approach some have referred to as “participatory development,” is crucial when the common goal is sustainability that promotes community well-being; allowing for the successful integration of economy, ecology and society.

By using our ethnographic skills to document and analyze local knowledge in context, folklorists can play an important role in this undertaking, demonstrating the merit of a STEAM-based approach. But a number of different disciplinary and cross-disciplinary approaches currently embrace seemingly similar goals. While the pursuit of collaboration that recasts our work, potentially increasing our worth and visibility in the academic sector, is a worthy endeavor, we should be cautious in our approach. Contributing to these types of projects and programs does not require folklorists to reinvent themselves and take on new academic identities. The best collaboration allows us to draw deeply from the well of folklore studies.

This essay focuses on my experiences integrating folklore studies into my university’s major in ethnobotany and minor in sustainability studies. Although both programs provide an opportunity to demonstrate the value of folklore’s disciplinary leanings, my involvement in the ethnobotany program, with its narrow epistemological approach, left me questioning the merit of my discipline in that context. My experiences in sustainability studies, however, which prioritizes a more holistic approach dependent on strong transdisciplinary collaboration, renewed my appreciation for folklife studies and the contributions folklorists bring to the table when engaging in research with the sciences. In the process of realizing both successes and failures in my undertakings, I have learned that when embarking on the sometimes turbulent waters of interdisciplinary collaboration with the sciences, for a folklorist, folklore studies must always guide one’s navigational course. My own attempts at collaboration have been most successful when the folkloristic lens provides my focus. My efforts falter when I allow STEM-leaning disciplines to overshadow my skillset and expertise. Moreover, I have found that projects allowing for a broader approach to understanding the intricate connections between culture, environment, and economy fare better than niche projects concentrating on narrow aspects of inquiry.

Over the past several years, my institution, Frostburg State University (FSU), has embraced STEM education. Programs in science, technology, engineering, and mathematics have received the lion’s share of programming funds, fulltime faculty positions, and support for student work study, while programs in the humanities languish and departments in the social sciences are pressured to prove their merit by demonstrating their efficiency, measured by faculty-to-student ratios and faculty course loads. In my 14 years there, the University has faced a series of unrelenting financial crises as administrators struggle to attract and retain students to our regional institution in one of the most impoverished counties of Maryland.

According to administrators, an emphasis on STEM education serves the dual purpose of attracting students while offering training and resources beneficial to the economic development of the

regional community. A quick internal search of STEM education on FSU's website netted 236 hits. In the past decade every new academic program in the College of Liberal Arts and Sciences, including the expansion of graduate studies, has been tied directly to STEM endeavors.

The allure of STEAM—Science, Technology, Engineering, *Art*, and Mathematics—has been slower to catch on. Another recent website search yielded few results. Significantly, one was in the context of notes from the Alumni Association's board of directors meeting. Here they asked how the University could convince alumni that they valued the diversity of the arts and were committed to retaining those programs, while acknowledging that the arts were no longer seen as central to the University's mission.¹ Acknowledging that shift is noteworthy given the University's historical identity as a liberal arts institution.

Certainly, my college's infatuation with STEM education is not unique. Humanities programs around the nation are currently imperiled, and once distinctive disciplinary-centered programs in the social sciences have merged with other programs. At my institution, Mass Communication recently merged with Communication Studies, which emphasizes technology, and similar junctures are under consideration. Faculty morale has plummeted and academic departments outside the typical STEM spectrum are scrambling to reinvent themselves and forge new interdisciplinary connections with STEM departments and colleagues. Subtly shifting universities from STEM toward STEAM has become a mission of self-preservation for many. Whether those collaborations are welcomed or discouraged depends upon many factors.

From its inception, my career path at FSU has focused on finding points of connection between folklore and the sciences. In 2004, Maryland Traditions, at that time a collaborative effort between the Maryland State Arts Council and the Maryland Historical Trust under the direction of Rory Turner and Elaine Eff, partnered with FSU to create a contractual position for a folklorist. In the year prior, FSU committed to creating a program in ethnobotany—the study of people and plants. That program's director was housed in the biology department, but the major was intended to be an interdisciplinary undertaking involving faculty from biology, chemistry, and geography. FSU was keen on creating an ethnobotany program that developed opportunities in western Maryland, and the dean, provost, and president at the time recognized the value of emphasizing place-based ethnobotany in Appalachia. They believed a folklorist could address the cultural component central to ethnobotany's mission. Because ethnobotany itself is a hybrid between botany and anthropology, the development of an undergraduate degree in the absence of cultural specialists was perhaps untenable from the outset. My own course offerings in folklore and anthropology would become central to the new degree program.

In tandem with our efforts to build the ethnobotany program, FSU was also partnering with other organizations, including West Virginia University, the University of Maryland-College Park, and the Tai Sophia Institute to create an Appalachian Center for Ethnobotanical Studies (ACES), and funding was flowing in. Our then U.S. Senator, Barbara Mikulski or her representatives, attended several meetings and committed ample funding to the University for the Center's establishment. Mikulski hoped our efforts would culminate in an herbal processing facility in western Maryland, bringing new jobs to the region.

I was invited to those planning meetings, where I rubbed shoulders with chemists, botanists, geologists, and pharmacologists. Laboratory science was strongly represented, and at most of our gatherings, I was the lone outlier. Early on, however, my contributions were respected and appreciated. For ethnobotany to thrive at FSU it needed to embrace a cultural component, and my ability to engage community members and document the work of local herbalists was seen as an asset. My own education grew as my role in the program deepened. I helped organize the first ACES symposium, creating a keynote session highlighting a roundtable discussion by regional herbalists and featuring Orville Hicks of North Carolina as the evening's entertainment. A master storyteller from a family of storytellers, Hicks regaled us with stories in which plants were some of the main characters. At another gathering, we welcomed the folklorist Mary Hufford as our featured speaker, and she introduced the cultural concept of the seasonal round.

Ethnobotany students were required to take my courses in cultural anthropology and folklore. Their enthusiasm provided the impetus needed to develop the classes Sociology of the Environment and Shamanism, Magic, and Folk Healing. As I transitioned from contractual to tenure track, with a home in the Sociology Department, I was encouraged to create a minor in cultural anthropology, which many ethnobotany students pursued, given the overlap in requirements.

Ten years ago, STEM had yet to become cliché and STEAM was not in the offing, but that was what we were endeavoring to accomplish through our collaboration. There was great potential in the project, however, the strain of being the only faculty member on the planning committee to represent a strictly cultural component began to weigh heavily. Time and again, I found myself a solo voice representing cultural and artistic components, surrounded by what seemed like a sea of individuals from the sciences, who spoke a language I struggled to understand. As those discussions turned to the chemical analysis of black cohosh and the economic possibilities of growing and harvesting it, I felt increasingly sidelined and overwhelmed. Being a lone wolf, representing both the humanities and social sciences was draining. My increasing marginalization grew when a new director, with a background in economic botany, joined the faculty.

I continued to offer my classes, and ethnobotany students continued to take them, but I felt that I lacked the background needed to build bridges between cultural studies and the botanical sciences. I could provide an understanding of culture in general terms, but I was deficient in the specific



Classroom Connection: The Seasonal Round

Classrooms moving through the school year will also be moving through a seasonal round. In addition to holidays and special events, seasonal changes affect our work, recreation, foodways, beliefs, customs, even our worldviews. Students see how seasons change the landscape, but they may not have considered how other aspects of their lives and the life of their community change according to the season.

Find the full lesson plan at <http://www.locallearningnetwork.org/seasonal-round-lesson-plan>.

knowledge and vocabulary necessary for the exploration of such a narrowly defined focus. As the ethnobotany program developed, biology took a more prominent role. Geography courses were excised, and several courses I taught were removed from the core requirements and featured only as electives. I was left feeling that to contribute to the ethnobotany major, my expertise and understanding had to expand well beyond my own discipline, perhaps even at the cost of my disciplinary identity. In 2011, ACES hosted a symposium in collaboration with John Hopkins University. By that time, the distance between my interests and the ethnobotany program had diverged so greatly that I was not invited to the event. Soon after, ACES took a hiatus.

A few years ago, the ethnobotany program had an official review with an ethnobotanist, with a background in anthropology, as the outside reviewer. His strongly worded recommendation advised the program to expand the cultural component. Reacting to that criticism, together the Sociology and Biology Departments submitted a request for a joint tenure track position for someone who would contribute cultural anthropology courses to the minor and offer courses geared more specifically toward ethnobotany. That request was denied. Since then, ethnobotany has become more fully aligned with the Biology Department and shifted closer to a curriculum in economic botany. Yet, its most recent review rendered similar results. The students interviewed said they wanted more, not fewer, courses featuring culture.

It has been seven years since I was actively engaged in attending ethnobotany planning meetings. In that time, I have had an opportunity to reflect on my experience. Why did a program so rich in collaborative potential shift toward a narrower focus resulting in the exclusion of interdisciplinary scholarship? What could I have done to improve the situation? In retrospect, I should have recognized the value that my disciplinary leanings brought to the table and been less intimidated by the sciences. I should have worked more closely with the ethnobotany program to develop research opportunities that drew equally from cultural and botanical perspectives—understanding that I did not need to provide a bridge to ethnobotany myself, but that collaboration would have been the bridge. Most importantly, I should have reached out to others on campus in the arts and humanities to foster more interest in and support for the ethnobotany program to ensure that the loss of one individual did not mean that STEAM reverted to STEM.

Those lessons have served my university well in other collaborations on campus. In large part due to my growing interest in environmental activism, nurtured by my work in ethnobotany, I have sought out others engaged in investigating the overlap between environment and culture. Collectively, those efforts culminated in the establishment of an interdisciplinary minor in sustainability studies. Anticipating a significant expansion of professions related to sustainability studies, in the past two years there has been some deliberate discussion of the creation of a major in the field—with the University hopeful that a new program might attract an additional stream of students.

On our Sustainability Steering Committee, the social sciences and humanities are as strongly represented as the sciences. Since its inception, faculty from history, sociology, psychology, philosophy, and English have contributed equally to lively discussions with faculty from biology, geography, chemistry, and engineering. Students are given some latitude in their selection of courses, but cultural and scientific components are equally represented and required. Although we have developed a new introductory course in sustainability studies and a capstone senior seminar,

both of which take an interdisciplinary approach, the rest of the courses supporting the minor were all previously listed in the course catalogue. It was simply a matter of seeking out the instructors from those courses and discussing how those courses could be retooled or updated to address issues of sustainability. In true STEAM fashion, the art department has also contributed by offering exhibits and workshops in recycled and found materials art.

Essentially, our efforts have been successful not because contributing faculty feel forced to develop an expertise in a new discipline, but instead because each of us is encouraged to ask how our own disciplines can contribute to an interdisciplinary understanding of the nexus of culture, environment, and economy. Our participation in this minor prompts us to engage more deeply with our own disciplines and to be more reflective about what those disciplines offer to the burgeoning field of sustainability studies. The same can be said for our students, who pair a sustainability studies minor with a vast array of majors, allowing the knowledge and experience gained in the minor to resonate with their knowledge of their major, particularly in the applied realm.

My participation in sustainability studies has prompted me to become more intentional in my course content. My Folklore in Appalachia course takes on themes of cultural sustainability while also highlighting examples of folklore that directly address human relationships to the natural world. We look at occupational lore historically associated with the logging operations, feature a local oral history collection on coal mining, and study songs and ballads from the mines and labor movement. My students learn about the chestnut blight and watch a documentary that addresses how the blight affected folkways and cultural sustainability in Appalachia. Class research—projects of the Appalachian Teaching Project administered through a partnership between East Tennessee State University and the Appalachian Regional Commission—have included documenting local foodways and agricultural practices, working with the organization Home Ground to document outdoor recreation traditions, working with regional residents and classes from a local elementary school to create a community quilt depicting sense of place themes, and teaming up with a watershed association to engage in a listening project recording attitudes about fracking (unconventional natural gas drilling).



Sociology students in Folklore in Appalachia, Fall 2016.

In my cultural anthropology course, an introductory level class, cultural sustainability has become an overriding theme. Arguably, that theme should be central to any class in cultural anthropology, but the inclusion of the course in the requirements of the sustainability minor has pushed me to connect topics and themes more meaningfully. For instance, in that class we examine ways of making a living, framing discussion with an exploration of globalization and its influence on cultural change by sharing examples of the tension that can arise when one mode of production directly interferes with another, such as the violent clashes between herders and farmers in Niger or horticultural and foraging cultures finding their previous ways of life unsustainable due to the encroachment and expansion of the palm oil industry and resulting deforestation. We connect those themes to modes of consumption, acknowledging the global reach of our own consumption habits and their impact on cultures worldwide. That material augments earlier discussions of environmental racism. Toward the end of the course, we look at examples of social movements and protests by people struggling to protect the natural landscape and their right to remain there. Issues of climate change, climate refugees, the Dakota Access Pipeline Protest, and activists working to stop the development of a series of dams in the Amazon become topics of discussion. We also look at the folklore and artistic creations that help to galvanize people to action—song, costume, narrative, material culture, performance, and more.

Being pushed beyond my comfort zone has led me to develop new research interests and pursue collegial relationships with faculty across disciplinary lines. Although I remain the only folklorist, and even the only cultural anthropologist, on campus, I am surrounded by colleagues who have similar goals and motivations despite our different backgrounds. In my time at FSU I have become a model of interdisciplinary scholarship, and I have realized that I cannot do it alone. The work of a single individual cannot successfully turn STEM to STEAM; meaningful collaboration is key to the transition. The best collaboration allows us to deepen our relationship with our own discipline, allowing our expertise to anchor our role in inquiry and discussion.

If and as higher education moves away from conventional disciplinary leanings and continues the trend toward devaluing the humanities and liberal arts, a concerted effort by individuals engaged in humanities and social sciences across the board will be needed to advocate for the value of our knowledge and experience. Collectively, we must reach across disciplinary lines to demonstrate that STEM needs the arts and humanities as much as we need STEM.

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Endnote

1. The minutes from this meeting read: "How do we reassure people that we will have diversity; STEAM (incorporating Arts into STEM) not giving up on areas of the University, but understanding that we are not going to be enhancing those areas because it is not our focus" (AABOD Minutes 10.23.16).

Work Cited

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Growing Right: Pop-Up and Popular Pedagogies for Public Environmental Folklife

by Jess Lamar Reece Holler, with Carol Goland, Scott Williams, and Jeremy Purser

In spring 2015, part way through my first year of public folklore graduate study at Western Kentucky University, I approached Ohio Ecological Food and Farm Association (OEFFA) Education Program Director Renee Hunt fresh on the heels of attending my first OEFFA conference in Granville, Ohio. Breathlessly, I asked whether OEFFA had ever thought about doing an oral history project. I had been documenting sustainable agricultures in Western and South Central Kentucky for the past five months as part of my graduate study, but I was yearning to trace this history as it played out in my own Ohio, where the burgeoning organic farming movement deeply shaped my childhood sense of the interconnections between food, environment, and health. Indeed, Renee replied, OEFFA *had* dreamed of gathering their history, and for quite some time. From that conversation, and a whole lot of magic from co-conspirators statewide, our project—*Growing Right: Ecological Farming in Ohio, 1970s–Now*—was born.

With funding from Ohio Humanities, the Greater Columbus Arts Council, and the Puffin West Foundation, *Growing Right* has conducted 50-plus interviews with farmers, growers, and activists across the state. Moreover, in summer 2017, the project launched 16 pop-up exhibits at farmers' markets, grocery stores, and health-conscious food venues across Central Ohio. In September 2017, as an unexpected wrap-up to our tour series, we were accepted to exhibit at Farm Aid, held that year in Burgetttsville, Pennsylvania.

About the Photos: Designer Jeremy Purser's fieldwork photography-inspired postcards advertised *Growing Right's* Summer 2017 farmers' market pop-up tour and multimedia website.

Our project's documentation methods strove toward an ecological method for public environmental folklife work. We followed in the spirit of folklorists attuned to material culture and vernacular architecture, such as Michael Ann Williams,¹ John Dorst, John Vlach, and others, as well as pioneering environmental folklife study projects like Mary Hufford's Pinelands Folklife Project and the Coal River and New River Gorge projects.² *Growing Right* has spent two summers visiting the farms, groceries, and places of Ohio's organic movement. We documented oral histories and verbal memories of practitioners' lives in the movement and their synchronicity with their places and ecologies. Thus, we produced a much broader, multimedia fieldwork kit than is standard in oral history practice: hours-long oral history recordings, yes, but also thousands of fieldwork and object photographs, walking interviews, and media-rich farm tours. In our second fieldwork summer, we added acoustic ecology ambient environmental sound recordings, video shorts, and experimental 16mm film. Our fieldwork method has blessed us with a plentitude of documentation and the question: How do we re-associate these multiple forms of documentation of place, *off* the many farms and locations where this movement happened, to help communicate the broader story of why and how organic farming grew in Ohio?

Growing Right has provided a unique opportunity to mobilize folklife, oral history, and public history documentation methods and forms of public engagement and presentation to share the story of Ohio organics. It has also offered the rare opportunity to develop a truly public-facing popular pedagogy around materials folklorists usually traffic in: oral history, soundscape recordings, walking and working interviews, film and video, and fieldwork photography. Although the field of public folklore has cultivated public programming for venues as diverse as public libraries, narrative stages, and audio/mobile tours for decades,³ *Growing Right*'s plan for exhibition and engagement also grew out of pop-up models for interaction popular in the current local food scene (where food trucks, pop-up installations, and kitchen takeovers reign supreme) and ideas about the power of ephemeral and sited engagement from the art-for-social-change and public history worlds. Out of this nexus, we decided to share our work where Ohioans shop and eat. Our project, thus, moves in stride with emerging trends in both emplaced *and* mobile cultural interpretive work and across public history, arts, and museum worlds, to collaborating with audiences, instead of educating them.⁴

The Growing Right Project: Ecological Farming in Ohio, 1970s-Now is a multimodal environmental folklife, oral history, and public history project launched in 2016 as a partnership between folklorist and environmental humanist Jess Lamar Reece Holler and the Ohio Ecological Food and Farm Association (OEFFA). Founded in 1979, OEFFA is Ohio's leading voice in organic farming education, certification, and policy advocacy. The organization helped build the organic movement in Ohio, from the ground up. As a public culture project, *Growing Right* launched out of mutual attention to and interests in the changing status of organics in contemporary culture. As organics have become more ubiquitous and as the success of the overall movement eclipses the history of OEFFA, we have sought ways to track the specific cultural history and players shaping this movement and remind wider publics that the ecological food and farm movement has *always* been an intersectional social movement and is, by no means, done organizing. For more, see www.oeffa.org and growingrightproject.com.



OEFFA Grain Growers' Chapter President Dave Shively of Shively Farms in Henry, Ohio.

Photo by Jess Lamar Reece Holler, for OEFFA's *Growing Right* Project.

Sharing authority, or, rather, a shared authority, has been a central concern in public folklore, oral history, and public history practice since Michael Frisch popularized the term (1990). Vernacular culture work and the listening arts take the work a step further; often, we folklorists literally collaborate with and co-curate alongside communities of practice. Examples include the Wisconsin Teachers of Local Culture's cultural tours, developed collaboratively by folklorists, teachers, and community cultural organizations,⁵ and the community co-curated documentary exhibitions of the Philadelphia Folklore Project, such as the 2016 *Tibetans in Philadelphia* exhibit.⁶ Recent volumes in the wider cultural organizing field, like the Pew Foundation's *Letting Go: Sharing Historical Authority in a User-Generated World* (2011), following on the heels of calls like Nina Simon's *The Participatory Museum* (2010), have pushed the imprimatur for sharing authority in documentation and also in interpretation of fieldwork and public historical materials a step further: beyond the conventional, assumed spaces of public cultural work practice (libraries, archives, universities, museums) and out into new digital realms and on-the-ground places where communities live and work. Mobile and emplaced methodologies—what one panel at the National Council for Public History's 2016 meeting in Baltimore⁷ provocatively called “the new mobile public history”—suggest that perhaps public culture work is most effective when produced by and for home audiences and communities and installed locally. This special affordance for social engagement, in the spirit of trans-local organizing, is also created when such work deliberately takes up wheels and shares out across communities.⁸ It is here, and with our eyes on emplaced, ambient, and existing potential audiences, that we rooted *Growing Right's* public programming.

Grassroots Education: The History of OEFFA

OEFFA was founded in 1979 after a Cincinnati based land conservation organization, Rural Resources, called together activists from the Federation of Ohio River Co-Ops (FORC) and upstart and reformed farmers, grocers, and consumers with a bold charge: Why couldn't the organic, chemical-free food that the burgeoning co-op movement was demanding be grown *in* Ohio, instead of shipped from organic farms in California and elsewhere? To do that, someone would have to train and educate farmers *and* consumers in an era when land-grant institutions like Ohio State University thought organics were bunk (Anderson 1983), and they would also have to build, by hand, a new local foods infrastructure. This was Ohio's nascent organic movement, before it even recognized itself as such.

The first OEFFA conference in 1979, according to project oral history interviews and print cultural sources, drew at least three disparate crowds: "back-to-the-lander" hippies many people might think of when imagining early organic farmers; "salt of the earth" farmers, many well into middle age, who grew up before the age of chemical agriculture and witnessed firsthand the harmful effects of a first generation of American pesticides on their lands, livestock, and bodies; and a new wave of conscientious consumers connecting environmental and health activism to demands for clean food for themselves and their families.

Like so many young movements for social change, early OEFFA was run out of basements, garages, and living rooms, and was catalyzed by homespun print ephemera that don't often make it into archives: Xeroxed newsletters, flyers, and bulletins did the work of education and policy advocacy, building a virtual imagined community out of a dispersed

Mobile Public History/Culture Work in Action

Many exciting projects have provided inspiration for Growing Right's mobile sensibilities. Public historian and social practice artist Erin Bernard's [Philly History Truck](#), for example, operates on an innovative exhibit cycle: It comes into neighborhoods to collect, document, and collaboratively design a themed exhibit on neighborhood history and life, launches a pop-up exhibit in a local space, then moves elsewhere. Janis Thiessen's oral-history-based [Manitoba Food History Truck](#) follows a similar model. Digital projects too, like liberatory archives worker Jarrett Drake's collaborative [A People's Archive of Police Violence in Cleveland](#), California's collaborative [Anti-Eviction Mapping project](#), or the [FracTracker Alliance](#) born out of a citizen science concern for the often-invisibilized landscape of fracking in the U.S., similarly scale up and aggregate local perceptions and experiences and allow for new sorts of trans-local witnessing and, with that, action.

In our same moment, however, still other leading-edge projects seek to emplace the work of oral history and folklife radically in contexts where the work can vibrate in resonance with its surroundings. For works in this vein, see Suzanne Snider's oral history listening parties and [automotive archives](#), the [Laundromat Project](#), Tennessee Watson and Lauren Hadden's [Wage/Working jukebox project](#), Aman Mojadidi's [phone booth oral history project in New York City](#), Concordia University's [Centre for Oral and Digital Storytelling's](#) themed soundwalks in postindustrial Montréal, and their [A Flower in the River](#) commemorative audio procession project. The wider environmental justice vernacular cultural mode of the toxic tour as discussed in Phaedra Pezzulo's *Toxic Tourism: Rhetorics of Pollution, Travel, and Environmental Justice* (2007) and available for research via countless YouTube videos similarly puts embodied mobility to work to convey historic or occluded environmental harms.

network of growers, grocers, activists and consumers but also a real community that did political and social work.⁹ OEFFA's annual *Good Earth Guide*—originally a print edition and now an online directory listing all organic producers and ecologically sympathetic grocers and outlets in Ohio—connected participants across the state, made neighbors aware of each other, and helped draw together the early supply-and-demand networks that helped develop a system of farmers' markets around the state.

Grassroots and popular education were central to OEFFA from the beginning, too. From that first gathering, what became OEFFA's celebrated annual statewide conference brought seasoned and new farmers, growers, and consumers together to talk about everything from how to make a profit by growing organic garlic to how to launch direct marketing to the groundwork and policy planning required to establish Ohio's first set of organic standards. Local chapters took on direct organizing, market cultivation, and policy work from Ashtabula to Athens to the Ohio River. Popular summer farm tours rounded out the program and brought consumers and other farmers directly to successful organic farms to discuss growing methods, animal husbandry, terrain, and environmental challenges and victories. The tours have been a key educational tool. Ohio's ecological farmers had to band together and teach each other, so place-based and experiential education, in which a farmer invites a crowd to come to her farm and learn how she does it, was the *modus operandi* for OEFFA and the organic farming movement from its earliest moments.

Ohio's organic movement, thus, is a story of polygenesis at its best: a movement formed at the intersection of diverse other social moments, including the women's movement, spiritual calls to ecological consciousness (Mary Lu Lageman 2017), 1970s anti-strip mining

Collaborator Reflection: Executive Director
Standing at the brink of OEFFA's 40th anniversary, we as staff knew there was a lot of history about which we and our members could be proud . . . if only we knew it. After four decades, few original founders and members were still around; they'd moved away, gotten involved in other pursuits, and, sadly, died before we could capture their stories. But we were certain that something extraordinary had occurred in the late 1970s and early 1980s and wanted to know it and share it. Especially for a new generation who might sneer at organics precisely because its great success has converted it from something revolutionary to mainstream, telling this story is urgent. But as a small nonprofit with limited human and financial resources, we could never have undertaken this documentary work on our own.

From my background teaching sustainable agriculture in an interdisciplinary, liberal arts context, I'd listened to many of Ohio's organic pioneers share their stories of organic conversion with my students and mentally catalogued recurrent themes of health scares, family disagreements, neighbor scorn, "going cold turkey" challenges of transition, and eventual triumph. I knew that Ohio's early organic farmers had resolutely and generously taught themselves and each other and that their isolation from traditional agricultural institutions had given the organization a grassroots legacy that continues today.

Collaborating on the *Growing Right* Project has been an opportunity for organizational learning for us: learning (again) the value of storytelling, learning about OEFFA's own history, deepening our relationships with key members by hearing their stories, full length, in their own words, learning how to collaborate well beyond our disciplinary and methodological wheelhouse.

—Carol Goland, Executive Director, OEFFA

activism in Appalachian Ohio (Rich and Sally Banfield 2016), concern about the toxicity of agricultural chemicals (Ralph Straits 2016), rural-urban food sovereignty programs (Frye 2016), and the farm labor organizing movement in Western Ohio (Shafer 2017)—among others. OEFFA uniquely allowed these various actors to constellate themselves across the state and, through the drafting of state organic standards and rise of OEFFA’s certification program, to build a recognized label for organics to address the growing consumer demand for chemical-free and ecologically produced food.

OEFFA had, of course, grown out of its own storied history, but by 2016 when our project launched, organic foods were more ubiquitous than ever. With so many changes in the players and landscape, OEFFA itself had lost touch with some of the *specific* history of how this movement came to be. In short, right at a moment when reflection on our movement's roots to catalyze a stronger future was most critical, our hindsight vision was fuzzy—but our movement history wasn’t yet entirely out of reach.

Together, we saw a window to do radical roots work to bring the stories, activism, and provocation of the early organics movement to the table again for an era of ever-increased climate uncertainty, terrifying new extractive regimes, and continuing corporate and chemical assault on the integrity of our food and water systems. Figuring out how to tell a story about this diverse movement that was already self-aware and rooted in the work of consciousness-raising through place-based participatory instruction and consumer education, however, was a taller order. It turns out the answer was not so much in the *how* but in the *where*. A folkloristic perspective and listening-arts based documentary media toolkit, combined with bringing the fruits of our documentation directly to consumers in a farmers’ market setting, helped amplify the sometimes-forgotten stories behind today’s organic movement and directly heighten consumer awareness, and then participation, in the movement through buying organic food.

Thus, (almost) from the get-go, and with some spurs from a visionary state humanities program and a wonderful team of project humanities consultants, we imagined a destiny for *Growing Right* beyond the archive. Our project amplified the relationship between preservation and access and immediately fueled fieldwork back into the world to foster opportunities, encounters, conversations, and the possibility for social and personal transformation toward a more just world.



Popular education continues today through tours. Organic vegetable farmer Mick Luber hosted a farming and fracking tour at his Bluebird Farm in Cadiz, Ohio, as a part of OEFFA’s Summer 2016 farm tour series. This tour, in the midst of Eastern Ohio’s pipeline construction frenzy, aimed to show other farmers and consumers what the threat of Eastern Ohio’s fracking boom looks like firsthand on one of Ohio’s earliest certified organic farms.¹⁰

Pipeline construction site with carnivalesque bunting, near Bluebird Farm in Harrison County, Ohio.
16mm film still from *Farming in the Age of Fracking*.¹¹

Thus, popular education was baked into *Growing Right*'s design before we turned on an audio recorder. *Growing Right* sought to document a usable past for a grassroots movement before the movement's founders passed on, yes; but, as critically, we aimed to circulate these stories in the world through a unique pop-up exhibit format, interview indexes created through the Louie B. Nunn Center for Oral History's Oral History Metadata Synchronizer (OHMS) platform,¹² and curated multimedia pieces.

Our vision was to take *Growing Right* to the streets to bring our project interviews and fieldwork documentation to sites of Central Ohio food shopping encounters to surprise, educate, sometimes delight, and, occasionally, offend. Our pedagogy was designed to mirror and reflect the active, ongoing popular and grassroots education philosophy of Ohio's organic movement. In this way, *Growing Right* embodies the spirit of the boots-on-the-ground education work that many of OEFFA's farmers do at farmers' markets every week of the growing season, when they share the philosophy, personal beliefs, growing practices, and ecologies of food. We feel good about using this model of education that has worked for 40 years and is emic to the movement, while also extending it to uncovering and commemorating OEFFA's history and amplifying the stories of the particular people and places who grew today's movement, whether or not they're still at market.



The pedagogy of our project, importantly, was designed to mirror and reflect the active, ongoing popular and grassroots education philosophy of Ohio's organic movement.

Growing Right Co-Curator and Organic Movement Archivist Scott Williams, right, engages visitors during our final Summer 2017 pop-up exhibit at the Saturday farmers' market at Columbus' Historic North Market. Jess Lamar Reece Holler, for OEFFA's *Growing Right* Project.

Not Just “Expensive Kale”

From the beginning, OEFFA’s consumer education was a sort of counter-education; the ecological farm movement in the late 1970s and early 1980s stood starkly counter to mainstream agricultural education and practice. *Growing Right* interviews with early organic farmers make clear that the organic movement in Ohio took consumers’ concerns about the impacts of food and agricultural chemicals quite seriously and was deeply influenced by farmers’ negative experiences with chemicals on their own bodies and the ecosystems where they lived and worked.¹³ The organic movement also dedicated itself to building alternative spaces of access to food grown safely, without toxic chemicals, on farm stands, at farmers’ market, or via a growing network of bold early Ohio natural grocery and cooperative stores. In these spaces people could get organic, Ohio-grown food for themselves and exchange the knowledge that ultimately built our movement.¹⁴

Part of our project design endeavored to re-expose the grown-over roots of organic farming as a radical social movement nurtured by consumer advocacy and grassroots environmental activism. Just like the early organic movement exposed the dangers behind chemical pesticides and fertilizers, so too was *Growing Right* designed to include the labor, voices, perspectives, and concerns of those who had launched the movement but might be occluded from contemporary visibility—especially in the hustle and bustle of a booming local farmers’ market. Thus, in the spirit of the early movement, we pitched our public pop-up exhibits to “all Ohio eaters.” We wanted to reach organic consumers who shopped at farmers’ markets already but might not have thought of the history of organizing that created those markets. We also wanted to reach consumers who might sneer at organic produce, thinking, “It’s just more expensive kale,” and to those for whom food access and affordability is a real issue.

Here, too, a folkloristic perspective proved useful. It was these recalcitrant visitors whom we especially hoped to engage with the stories of the particular people and places that built Ohio’s organics movement. Maybe this engagement wouldn’t or couldn’t change their minds on the kale, but we did hope the history of the movement, shared directly in the voices of its founders, would spark even a quick consideration of why so many Ohio farmers have spent their lives building a healthy, chemical-free foodshed for Ohio and beyond. In the best possible scenarios, we got to talk about what these cautious naysayers felt *might* make organic food more accessible or possible as a sustainable agriculture for our work.

Early Ohio organic herb farmer
Karen Langan, of Mulberry Creek
Herb Farms in Erie County, Ohio.

Photo by
Jess Lamar Reece Holler, for
OEFFA’s *Growing Right* Project.



Designing *Growing Right*: The “Where” of the Pedagogy

Growing Right was born as an engaged archival project with plans for a digital exhibit. Working in the vein of many archives and public and local history organizations, we were thrilled to build a critical resource for OEFFA, today’s broader organic movement, and consumers. However, as Stephen High powerfully suggests in his reflection on the inspiring locative, mobile, and otherwise in-situ oral history experiments and public-facing products of Concordia University’s Centre for Oral History and Digital Storytelling, “One wonders, however, if the [I]nternet is the place for deep listening” (2013). After David Merkowitz of Ohio Humanities reviewed an initial draft of our grant proposal for project support, he said something that synced with what High suggests and radically expanded our imagination of places of public encounter: Many a digital public humanities project is born and dies and nobody knows it ever lived at all. What if, he suggested, we got out to do talks or narrative stages about the digital project website as promotion for the project? And what if we did this someplace fitting for the movement, like a farmers’ market? We took David’s idea and ran. We came back with a changed project that mimicked the grassroots popular educational strategies—from farm tours to hands-on workshops—OEFFA has been using to catalyze the ecological food and farm movement in Ohio since the beginning.

History and vernacular culture, it turns out, have much the same problem as an organic farm: They’re often hidden from view. Likewise, not every tomato easily tells her story. Growers at a neighborhood farmers’ market are required to provide a “growing practices” sheet. *Growing Right* saw that a behind-the-scenes tour or a website is also needed to make visible the arc of the labor and vision behind organic food’s ecologies—ecologies that may be hidden when that tomato shows up, silent, on the table, without the farmer there to narrate. And certainly, the story of the founding generation of Ohio organic growers wasn’t being told at the North Market or Worthington Farmers’ Market on a bustling July day in 2017. To get to that story, you have to squint and imagine back before there were farmers’ markets or even organic labels at all. Visibility is especially an issue for Ohio’s organic grain and dairy farmers, many of whom sell their products on commodity markets and don’t interface and share their stories with customers directly. *Growing Right*’s public exhibition plan gave us a chance to redirect our sense of our audience from dispersed publics on computers to the incidental audiences at our chosen markets and grocery stores. We could see, talk with, and directly engage with oral histories and fieldwork documentation of Ohio’s original organic farms right as they shopped locally.

Designing for an environmental oral history/folklife pop-up exhibit tour to farmers’ markets and grocery stores also gave us the opportunity to situate our oral histories and transmit sense of place across spaces—sharing the journey organic food takes from farm to market. Thus, our pop-up tour

Farmer Bob Henson, of Henson Family Farm in Clinton County, Ohio, cheers during a viewing of a prototype *Growing Right* multimedia piece featuring many of his friends and fellow early Ohio organic farmers during *Growing Right*’s pop-up exhibit at the trade show hall at OEFFA’s 2017 Annual Conference in Dayton.

Photo by Jess Lamar Reece Holler, for OEFFA’s *Growing Right* Project.



to farmers' markets and groceries in Central Ohio afforded the chance to cluster the faces, sights, and sounds of a farm in Ashtabula or Clinton County for an audience in greater Columbus. It invited audiences to consider how those local ecologies, the environment to the human labor of building the movement, played into the landscape of Ohio organics. Suzanne Snider of the [Oral History Summer School](#) teaches that one of the most powerful effects of oral history recording is to get bodies in a room to experience listening together. These listening parties, as Suzanne calls them, might seem innocuous but are potentially powerful moments of co-witnessing the shared texts of people's lives. They bring together people who might be changed by an encounter with an oral history recording and do something with that affective experience. *Growing Right* aimed to do that with our organic movement oral histories and fieldwork photos. Thus, our pop-up's presence in the ordinary farmers' market layout—with the pasta vendor or French pastry baker on one side and the family farmstead or pickle lady on the other—could also queer the temporal expectations of the markets and provide a diachronic moment of movement history at the farmers' market itself. *Growing Right* sought to create an opening to restore the fuller ecology—cultural and historical—of a market's organic wares, in the midst of an otherwise unbroken present tense. In an era of “know your farmer, know your food,” the popular education and public folklore work of *Growing Right*, in celebrating OEFFA's history and exposing the story of Ohio organics, insists that's not just an edict that should exist in our neatly bounded contemporary moment.

Folklorist Jess Lamar Reece Holler poses with a seedling and a *Growing Right* pop-up tour rack card at one of the exhibit's three installations at the Franklin Park Conservatory Farmers' Market, Columbus.

Photo by Christie Nohle, Franklin Park Conservatory and Botanical Gardens.



Although our pop-ups were initially designed to advertise our multimedia website and digital public humanities project, they quickly became their own form of public engagement—ephemeral and temporal, sure, but also shot through with the unique pedagogical affordances of the fieldworker and curated clips from fieldwork with Ohio's founding organic farmers being on site at real Central Ohio farmers' markets. Embedding our educational work in the farmers' market space enabled us to engage and document new stories formally, through early experimentation with Michael Frisch's PixStori app and vox pop field recording and photography of shoppers interacting with our exhibit, and via unrecorded conversations and exchanges with those

wandering into the booth. Not unlike the project website, however, the pop-up exhibit tour also performed a telescoping scale of place within the locations and contexts we chose for exhibition. Although we could only set up our tent at one market or grocery at a time, our presence signaled and made explicit the actual multiplicity of places, locations, ecologies, movements, and times that made up the organic movement across its history.

Co-Curation All the Way Down: Collaborating Within the Movement

Our exhibit project brought together two strands: our ongoing fieldwork project documenting oral histories and media from farms and other locations across the state and the print cultural history. Our chief collaborator in this latter effort was Scott Williams, an early FORC activist, early OEFFA member, and ecological food and farm movement community archivist. I met Scott in the audience at OEFFA's 2015 conference, where a narrative stage that became the early inception for this project was being convened by folklorist and rural sociologist Howard Sacks of Kenyon College's [Rural Life Center](#). From a seat next to mine, Scott regaled me with horror stories of the day when farmer, co-operative activist, and early OEFFA member Mick Lubber brought a binder of photos of the movement's early days to an OEFFA conference in the mid-1980s, to a "recap of the early days" panel. The event was packed, conversation afterward was great, and, in the shuffle, Mick's binder was lost. With it, decades of pictorial evidence of the movement disappeared. Luckily, despite such mishaps in OEFFA's memory keeping, the movement has Scott. Trained in archival work and president of the Columbus chapter of the Aldus Society for Rare Books, Scott has spent the past 40-odd years unofficially maintaining an archive of early print ephemera from the ecological food, farm, and co-operative movements in Ohio, including pamphlets, the early run of OEFFA newsletters, marketing brochures, historic editions of OEFFA's *Good Earth Guides* ... and 30 years' worth of organic food labels.

Collaborator Reflection:

Project Co-Curator/Archivist

The most valuable aspect of OEFFA's *Growing Right* project for me was to see and participate in the dialogues with the public who visited the pop-up installation at farmers' markets. We reminded older folks, and shared with younger ones, how just a few people started this region's organic food and farm movement—easy access to which is taken for granted today! We debated. We informed. We networked. And we had fun. I enjoyed sharing with folks of all ages peculiar (often organic) fruit and vegetable labels that I have been collecting since they began to be heavily used, starting in late 1970s. But seeing the public take an interest in hearing the oral history of OEFFA was the best! We were giving the original organic farmers of OEFFA each their 15 minutes of fame! Starting in the 1970s, I was involved with writing, marketing, and archiving the history of our natural bulk whole food co-op movement, which got me into saving OEFFA's print culture due to my crossover involvement. While serving on OEFFA's board during a transitional phase (all volunteer to part-time manager) about ten years after its founding, I helped with fundraising, conferences, writing, and marketing. Again, I always tried to save fleeting examples of our print culture like membership brochures and conference vendor handouts. We continue to face strong obstacles to achieve our vision of a globally just and ecologically sound food system. I like to think that OEFFA's *Growing Right* Project is working to strengthen the public's awareness of just how precious our small foothold is.

— Scott Williams, Project Co-Curator and
Movement Archivist

Scott's collection became the basis for the print culture part of our exhibit and helped diversify its voice. We took clear curatorial steps to ensure the public understood the organic movement was built by people, so it was important not to back-impose a monolithic story on that history. As such, Scott decided on several categories of print materials at the hinge of the other movements that birthed it and continued alongside Ohio's organic food and farm movement—like the Midwest's historic co-operative movement. Ultimately, our pop-up exhibit showcased a rotating set of “curated” facsimile documents in five broad categories: OEFFA newsletters, brochures, miscellaneous and oversized documents, the history of the co-op movement, and the history of food labels. In keeping with best practices in museum studies and the public humanities,¹⁵ Scott and I worked together to co-curate his collection: first, through mini-oral history interviews on the provenance of each item in his collection and then, through many cycles of co-writing. The finished item-level labels are in his voice, with the larger exhibit-level labels featuring two sections—my commentary from the vantage of synthesizing the fieldwork together with these print cultural sources and Scott's as the collector and curator who has stewarded these materials over the years and directly participated in their making.

Although it admittedly baffled some, the exhibit also worked to foreground the process of its own curation: Scott's decades of collecting and my fieldwork and documentation process. Rather than mystify the journey from dispersed statewide social movement to nonprofit organization to oral history and folklife exhibition, we decided to show our seams and turn that process inside out. We chose this for fellow methods geeks like ourselves and to demystify the organic movement and portray it as an active grassroots effort that grew with every little contribution and came to influence how Americans could access and demand information about food origins in major ways (like food labels).



Jeremy Purser's custom-designed oral history posters at *Growing Right's* two-week installation at the Keller Market House—a regional foods aggregator housed in a historic grocery store in downtown Lancaster, Ohio. Poster design and idea based on Clara Gamalski's (free snacks) project, documenting class and food choice preferences in Pittsburgh.

Politics of the Excerpt: Designing for Ambient Attentions

A major challenge and opportunity was how to display long-form oral histories, interviews, and audio farm tours in a pop-up setting, designing not for event-based attention (like a more

conventional documentary screening or public folklore narrative stage) but for ambient, wandering, interruptive, and interrupted attentions.¹⁶ After discussions with our public humanities consultants, we knew we had about three minutes to hook people on-site. Any further engagement would rely upon interest generated through those three minutes and the snappy design of our project postcards. These linked to our website and each referenced a different Ohio farm, farmer, or grocer featured in our interviews. Modular design thus was critically important. Riffing on the model of the [Southern Foodways Alliance](#) modular toolkit, which includes a full-length oral history, representative photography sample, and short slideshow, we created a series of short multimedia slideshows to accompany our long-form interviews. Some focused on particular farmers and others, like our chemicals and health piece, offered similar and contrasting experiences across multiple farms, locations, and generations to give a diverse perspective on how a particular issue or concern manifested in Ohio's ecological food and farm movement.

Excerpting a full-length history to a digestible multimedia short, of course, is a political act. Who gets to say what part of someone's life story, labor history, and movement involvement makes the cut? Moreover, narrative moments that "pop" for a visitor to catch a narrative of someone's life may not be the ineffable moments and attitudes that define a person's sense of ecological attachment and entanglement—the primary thing we sought to communicate. Thus, much of the time (and in presentations we've shared on the project) we went for conversion stories, which cropped up across many interviews in which farmers define a particular moment or event that brought them to organic farming work. Other pieces simply introduced the farmer and tried to go "beyond the human," following recent attentions to multi-species ecological method,¹⁷ to give a sense of a life in organic work. Our pop-up eventually adopted a multimodal strategy: We presented formats and listening/viewing opportunities ranging from full-length oral histories (over headphones or speaker), short multimedia pieces, and donated iPods fitted with ambient/environmental soundwalks from farms across Ohio.



Pop-up visitors watch and listen to a multi-media short piece during Growing Right's most-visited pop-up installation, outside of Westerville's Raisin Rack Natural Foods Market.

Photo by Jess Lamar Reece Holler, for OEFFA's *Growing Right* Project.

Although it made for less strongly curated visitor experiences and opened the floodgates for multiple interpretations, we found that there was something more honest in displaying our full-length oral histories and offering the chance to drop the cursor wherever they wanted. They could

understand they were hearing part of a longer, more contextualized encounter rather than a cleaned-up, didactic excerpt with one pinned-down intervention. Critically, however, the short pieces allowed us to show sense of place and give visitors a rich sensory encounter with a mediated framing of the farmer's places and ecologies, vistas that unintentionally might get occluded at the farmers' market and grocery store. These images, rotating at four-seconds-per-image speed baked into the iMovie software, allowed a different scope and scale to our short pieces that perhaps countervailed the tidy, necessarily incomplete audio excerpt.

Importantly, we presented multimedia experiences on an iPad atop vintage orchard crates juxtaposed with a set of static, pop-art designed oral history posters, envisioned by our graphic designer on the model of food studies scholar and activist Clara Gamalski's (free snacks) installation in Pittsburgh. Each poster presents one narrator with a quote from the interview. Designed in an arresting pop-art style in bright neons, the posters formed a backdrop "quilt" to the exhibit and allowed an ordinarily time-based narrative medium (oral history), as well as the wide scope and range of the project's narrator pool, to connect visually all at once. We weren't, of course, off the hook with the politics of the excerpt. We tried to select a variety of quotes on



Growing Right Audio and Multimedia

Listen to this excerpt from an oral history interview with farmer Alex Dragovich of Mud Run Farm in Stark County on fracking threats in Eastern Ohio and the importance of clean water.

<https://soundcloud.com/itsyrmisfortune/alex-dragovich-mud-run-farm-stark-co-08072017-excerptwater>



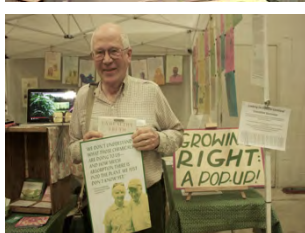
Listen to this excerpt from an oral history interview with farmer Mick Luber of Bluebird Farm in Harrison County on how he got involved with the early organic food and farm movement in Ohio.

<https://soundcloud.com/itsyrmisfortune/mick-luber-harrison-co-interview-excerpt-organic-farming>



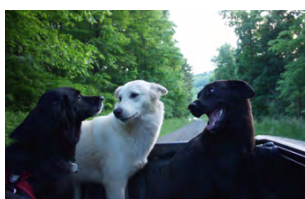
See a multi-media slideshow from an oral history interview and fieldwork visit with farmer Mary Lu Lageman of the Grailville Community in Clermont County on what drew her to agriculture and to Grailville after an early life in the environmental movement.

<https://youtu.be/8KL3vCZTxjc>



View this excerpt from an oral history interview and fieldwork visit with farmers Anne and John Hohmann of Clearview Farm in Licking County on how they came to Clearview; and opposition to the dominant culture of chemicals in the American agricultural system.

<https://youtu.be/So8aArTnc>



View this introduction to the *Growing Right* Project that models the multimedia slideshow format the project used from the beginning.

<https://youtu.be/WXSPT3bQcfw>

Collaborator Reflection: Graphic Designer

I was very excited when Jess invited me to collaborate on *Growing Right*. I don't often get the opportunity to develop a vision for a project from the ground up. Even rarer are opportunities to do that with people and a movement I feel so strongly aligned with. I wanted to bring an aesthetic that was simultaneously specific enough to appeal to the urban art-and-design-literate and still broad enough to engage people who aren't often handling print ephemera and seeing exhibitions. My strategy to achieve this was inspired by many of the cultural institutions and design studios that I collected brochures and catalogs from when I lived in New York City: Through pastiche I wanted to reference the beginning of the era that the project documents (1970s) while keeping it fresh and contemporary. I was energized by Jess's support and enthusiasm for the direction I ideated. We worked together to refine the vision and landed on a design toolkit that lent itself to successive iterations of postcards and posters as the project progressed. *Growing Right* is near and dear to my heart—it was very satisfying to have a hand in broadcasting the voices and stories of growers on the frontier of a movement that was championing health, well-being of our lives, and the well-being of our land for ourselves and future generations.

— Jeremy Purser, Slow Poach Design
and *Growing Right* Lead Designer

different topics—the toxic smell of pesticides that drove one young grain farmer to convince his father and brother to farm organically, the importance of risk for entrepreneurship, the small miracles and big politics of ecological stewardship—so we weren't just using our narrators to spew some central vision of organics. Ultimately, the short quotes we chose and the posters went up on a particular day, influencing the message of the overall booth.

The project benefited enormously from our partnership with Jeremy Purser of Slow Poach Design—a farm and kitchen worker, and an experimental sound artist who happened to be a former junior designer at *Modern Farmer* magazine. In our graphic design collaboration, we tried to design for the same ecological consciousness we wanted to inspire or invite in our potential audiences. Our design approach, from the main font to posters, postcards, and rack cards evoked bright 1980s themes and reflected the visual culture of the era of the rise of OEFFA, organic farming certification standards, and solidification of the movement in Ohio.

Importantly, our bold 1980s-meets-ethnography look wasn't what people expected when they thought of organic farming. Inundated with images of carrots, baskets, straw hats, and roosters, we wanted

to push the dominant (and maybe stale) farmers' market/organic farming visual culture to show the wider labor and ecologies behind popular organic farming narratives. Thus, our postcards pushed the chickens to the side of the frame and foregrounded the free-range lawn the chickens were pastured on, for example. Some popular images from the series of 12 postcards didn't show *people* or *food* at all. Instead, they showcased the places, processes, and material culture of the behind-the-scenes lives that made this movement possible: stacked pastel-sea-foam cordwood with a pale pink border or a deep-blue-and-powder-pink rendition of grain farmer David Bell's basketball hoop inside his soaring barn. We tried to embody environmental humanities methods in our rack card design, as well, with a checkerboard pattern drawing together dozens of fieldwork images of plants, hands, barn cats, pups, goats, chickens, and grains from across the state in a broad movement ecology. The rack card, which explicitly advertised our summer 2017 pop-up tour dates

and locations, also served as a “grand scale” statement of our project’s reach and interacted nicely with the postcards, each featuring a specific farm and place documented in the project.

We released our project postcards in seasonal batches to reflect the tides of Central Ohio farmers’ markets. The first set launched in February in time for the annual OEFFA conference, an early May set marked the onset of spring produce, and a high-summer set launched as tomatoes hit the markets, and we hoped the limited-edition, designer-made sets would draw people back across the season, or lure them to follow our tour across multiple markets. We’re not totally sure if it worked—or if anyone explicitly came back to visit our exhibit at different farmers’ markets over the course of the summer just so that they could gather up a complete set of project postcards—but we’d like to think we helped inspire some seasonality in our pop-up exhibits, to match the spirit of the farmers’ markets.

What an Ecological Method Means for Fieldwork

Attention to an ecological method in our design work was sometimes at odds with how some elements of fieldwork practice tend to center the voice, authority, perspective, and attention upon human narrators and experiences. Folklife methods emphasize an attention to context in the performance of expressive cultural texts and often include documentation of material culture, landscape, built environment, and “surround.” The pressure for broadcast-quality sound and documentation as an archival and a publicly circulating record, however, anxiously animates both oral history and public folklore practice and in some ways hobbles the expansive ecological moves that *Growing Right* aimed to make. Why shut the door to cicadas, unplug a fridge, or avoid the sound of the rain on a shed roof if we’re trying *not* to reify a nature/culture divide, to cut off the human from her fundamental co-constitution in and with her places, environments?

Thanks to funding from the Greater Columbus Arts Council in our second summer of fieldwork, *Growing Right* could experiment liberally with ecological methods through other fieldwork means rooted in experimental time-based media practice. We headed back into the field prepared to record sit-down oral histories, process interviews, walking interviews, and broad photo-sets of our first fieldwork summer; but we also began to work in two new documentary forms: soundscape audio recording and 16mm film. Our soundscape recordings documented walks through a half dozen farms, homelands, and surrounds, recorded in real time. These less narrative forms, while not easily condensed, also resist the narrativizing that concerned us about some aspects of the project. Although still mediated by the recorder and the choice of where and how to stroll, these recordings communicate and transmit a sense of place and what Jeff Todd Titon has called a sound ecology (2017). Our foray into experimental 16mm film for a project on the effects of nonconventional oil and gas extraction in Eastern Ohio, *Farming in the Age of Fracking*, allowed us to use the Bolex camera’s unique single-frame and multi-frame shooting functions to create visual symphonies of still and moving images, organized by differing durations, in an attempt to capture the entangled ecologies of fracking and organic farm production on three farms in Stark, Harrison, and Belmont counties. We hope to loop this experimental footage via our iPad and iPod listening platforms into future pop-up exhibits.¹⁸

Ecological Method: Toward a Public Environmental Humanities?

All told, *Growing Right*'s pop-up exhibits have been about a simple question: What happens when we surface, show up, and interpret out (and out loud, on-site) the sometimes-lost, sometimes-forgotten, and sometimes-deliberately-obscured histories of the people, places, and labor behind our food, and the environmental impacts of how that food is grown...in the middle of a bustling market or grocery store? Ultimately, through our site-based exhibition practice, we've hoped to inspire changes of heart—sudden, surprising, and newfound attention to the larger economic, environmental, labor, and organizing ecologies that have made our now-robust and still-growing organic food and farm system possible. At the end of the day, of course, it's difficult to measure impact. Was *Growing Right* successful? We can't measure the pop-up tour's influence on increased purchases of organic food or epiphanies. We've counted the modest boost in traffic to our website and YouTube oral histories after pop-up events, but in an era of standardized results our experiment has also been about a radical hope in an unfolding audience encounter, which may bloom then and there in the moment or spring up years down the line. These are the sorts of attention—a gradual orientation toward a whole way of seeing, a gradual inability to cordon off the risks and harms of agricultural chemicals to the people and communities most in danger of exposure and accumulation—that birthed Ohio's organic movement. Following Martha Norkunas, we hope we've provided the space for encounter with the kind of deep “listening across differences” (2009) that might slowly suggest, on the strength of OEFFA's founding farmers' narratives and places, the planetary urgency of another way of connecting.

Looking ahead toward another Farm Bill, ongoing public debates about the toxicity of Monsanto's RoundUp/glyphosate (Gillam 2017), increasing explosions and uncertainty for fracked communities in Southern and Eastern Ohio,¹⁹ and legality of repurposing and storage of toxic frack waste across the rest of the state, *Growing Right* hopes to take another leap with these local stories of movement-building, organizing, and resistance. In 2018–2019, we plan to launch a pilot podcast series; adapt our long-form oral histories, soundscape recordings, and walking and process interviews for a series of short documentary pieces for broadcast radio; edit a short experimental film on the impacts of nonconventional hydraulic fracturing and injection wells on Ohio organic farms; and publish our full series of OHMS-indexed interviews with curated fieldwork photography for OEFFA's 40th anniversary in February 2019. While our pop-up tour may have been a temporary experiment, our work mirrors the everyday advocacy and education our farmers do every season, whether from the farmers' market tent, the tractor, or lobbying in Washington, DC. We hope *Growing Right* provides a provocative example for how nonprofit agricultural, environmental, and citizen science organizations can collaborate with and through the public environmental humanities and long-established vernacular listening arts to encourage the divestments from toxic heritages and investments in regenerative practices necessary to combat a damaged food system in an era of ever-more urgent environmental crisis. Let's usher in a new area of public environmental folklife devoted not *just* to telling the stories, but also staging encounters that just might finally be adequate to our (chemically-burdened), ecologically imperiled world.²⁰

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Jess Lamar Reece Holler is a community-based folklorist, public historian, cultural worker, and documentarian in the emergent interdisciplinary field of public environmental humanities. Her work focuses on vernacular experiences, mediations, and organizing around health, labor, everyday toxicity, and attachments to place. She runs Caledonia Northern Folk Studios, a multimodal documentary arts, folklife, public history, and oral history consultancy in Columbus and Caledonia, Ohio. Reach her at oldelectricity@gmail.com and via caledonianorthern.org.

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Jeremy Purser (Project Designer) is a graphic designer, kitchen worker, farm laborer, and experimental musician based in Durham, North Carolina. He runs Slow Poach Design, see slowpoach.com (sounds) and jeremypurser.com (design). Reach him at jeremypurser@gmail.com.

Scott Williams (Project Co-Curator) is a grant writer, community archivist, rare books collector, lifelong activist with Ohio's co-operatives movement, and early OEFFA member. He lives in Columbus, Ohio. Reach him at scott.williams99@att.net.

For correspondence about the project, reach out to growingrightproject@gmail.com.

URLs

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Manitoba Food History Project: <https://www.manitobafoodhistory.ca>

A People's Archive of Police Violence in Cleveland: <http://www.archivingpoliceviolence.org/purpose>

Anti-Eviction Mapping Project: <https://www.antievictionmap.com>

FracTracker Alliance: <https://www.fractracker.org>

Basilica Hudson (Automotive Archive, A Roving Memorial): <http://basilicahudson.org/tag/suzanne-snider>

The Laundromat Project: <https://laundromatproject.org>

Wage/Working: <http://wageworking.org>

Smithsonian.com: <https://www.smithsonianmag.com/smart-news/phone-booths-are-back-times-squareand-time-theyre-telling-immigrant-stories-180963879>

Concordia University (Centre for Oral History and Digital Storytelling): <http://storytelling.concordia.ca>
Concordia University (A Flower in the River): <http://storytelling.concordia.ca/projects/flower-river>
Oral History Summer School: <http://www.oralhistorysummerschool.com>
The Rural Life Center: <http://www.rurallifeatkenyon.com>
Southern Foodways Alliance: <https://www.southernfoodways.org/oral-history/>

Endnotes

1. For a concise history of tensions between folklore studies and material cultural, environmental, and vernacular architectural attentions, see Michael Ann Williams' 2015 American Folklore Society Presidential Address, in print as: Williams, Michael Ann. 2017. After the Revolution: Folklore, History, and the Future of Our Discipline. *Journal of American Folklore*. 130.516: 129-41. Video recording available via the American Folklore Society here: <https://youtu.be/6nu3krNSeDY>.
2. This research, ongoing, was first generously sponsored through a 2016 Parsons Fellowship at the American Folklife Center at the Library of Congress, in collaboration with Jeffrey P. Nagle, environmental, labor, and technology historian. For more on these important early cultural conservation and environmental folklife collections, many spearheaded by folklorist and cultural organizer Mary Hufford, visit the American Folklife Center at the Library of Congress, or see the *Tending the Commons: Folklife and Landscape in Southern West Virginia* digital exhibit at <https://www.loc.gov/collections/folklife-and-landscape-in-southern-west-virginia/about-this-collection>.
3. See Jens Lunds' and Jill Linzee's work in Washington State with the Northwest Heritage Resources' Audio Tour Guides, AKA the Heritage Audio Tour Guides. For more information or to order, see Washington Folk Arts, a project of Northwest Heritage Resources <http://www.washingtonfolkarts.com>.
4. Nina Simon. 2010. *The Participatory Museum*. Santa Cruz: Museum 2.0; Seriff, Suzy. 2016. Like a Jazz Song: Designing for Community Engagement in Museums. *Journal of Folklore and Education*, 3: 3-7. See also <http://www.locallearningnetwork.org/journal-of-folklore-and-education/current-and-past-issues/journal-of-folklore-and-education-volume-3-2016/like-a-jazz-song-designing-for-community-engagement-in-museums> for other writing on participatory museum culture.
5. See the Wisconsin Teachers of Local Culture webpage and professional development resources at <https://wtlc.csumc.wisc.edu> and teacher-led cultural tours at <https://wtlc.csumc.wisc.edu/teaching/teacher-led-cultural-tours>.
6. See project page at the Philadelphia Folklore Project website <http://www.folkloreproject.org/gallery/tibetans-philadelphia>.
7. See National Council for Public History 2016 Program Guide for *Challenging the Exclusive Past*, Alternative Modes of Engagement: Social Curation and the New Mobile History, featuring Michael Van Wagenen, Bill Adair, Erin Bernard, and Michael Frisch, <http://ncph.org/wp-content/uploads/2016/02/2016-Annual-Meeting-Program-Final-Web.pdf>.
See also Erin Bernard, The Philly History Truck <https://phillyhistorytruck.wordpress.com> and "A Shared Mobility: Community Curatorial Process and the Philadelphia Public History Truck," in *Exhibitionist* <https://static1.squarespace.com/static/58fa260a725e25c4f30020f3/t/594c479fe6f2e13236a10209/1498171332219/15+EXH+Studies+Bernard+EXH+Spring+2015-15.pdf>.
8. Fischer-Hoffman, Cory with Amanda Ruffner, Lauren Kelly, Megan Pellegrino, and Jess Lamar Reece Holler. 2016. Online and Off-Line Memory-Keeper: New Technologies for Community-Based and Non-Traditional Archives, co-organized/presented at the Oral History in the Mid-Atlantic Region (OHMAR) 2016 Annual Conference. Hagley Museum. Wilmington, Delaware. April 14-16.
9. See "Harv Roehling, Locust Run Farm — Oxford, Ohio [FULL-LENGTH]", <https://youtu.be/zWbWsTypUvQ>. Multimedia piece produced from oral history interview, conducted by Jess Lamar Reece Holler for *Growing Right*. May 31, 2016. Oxford, Ohio. Also see Locust Run Farm, OEFFA's *Good Earth Guide*. <http://www.oeffa.org/userprofile.php?geg=207>.
10. See Take a Farm Stand Tour, in OEFFA's 2016 Ohio Sustainable Food and Farm Tour Series, via <https://lucas.osu.edu/sites/lucas/files/imce/LocalFood/OSU%202016%20Farm%20Tours.pdf>, pp. 7; and Mick Luber's Bluebird Farm, via OEFFA's *Good Earth Guide* <http://www.oeffa.org/userprofile.php?geg=1385>.
11. *Growing Right's* experimental film on the impacts of fracking and extraction on organic farms in Eastern Ohio. Film produced through a Program Support grant to OEFFA, from the Greater Columbus Arts Council (GCAC).
12. For more on OHMS and its rise out of the landscape of digital access demands for oral history archives and repositories, see Boyd, Douglas A. 2014. 'I Just Want to Click on It To Listen': Oral History Archives, Orality, and

Usability. In *Oral History and Digital Humanities: Voice Access and Engagement*, eds. Douglas Boyd and Mary Larson. New York: Palgrave MacMillan.

To index your oral history or folklife collection via OHMS, see the Louie B. Nunn Center for Oral History's excellent website: Oral History Metadata Synchronizer: Enhance Access for Free. *The Louie B. Nunn Center for Oral History at the University of Kentucky Libraries*, <http://www.oralhistoryonline.org>.

Excellent resources on oral history indexing aimed at students and educators in liberal arts contexts (but useful for community scholars and others) are also available via the Great Lakes Liberal Arts Consortium's Oral History in the Liberal Arts (OHLA) initiative portal at <http://ohla.info>. Folklorists and cultural workers will also appreciate OHLA collective member and Oberlin College professor Ian MacMillen's thoughtful project blog post, Between Oral History and Ethnography, <http://ohla.info/between-oral-history-and-ethnography>.

13. See multiple project interviews, most available at *Growing Right Project's* homepage growingrightproject.com. Especially relevant here are interviews with Mick Luber, Bluebird Farm, Daryl, Diane and Denis Moyer of Moyer Brothers Farm, David Bell of Paul Bell & Sons Farm, and the Greggs of Gregg Farms.

14. For project interviews focused on the early history of natural foods markets, grocery stores, and co-operatives, see interviews with Sally and Jon Weaver-Summer, Margaret Nabors, Ed Perkins, Mick Luber, Scott Williams.

15. See for example Murawski, Mike. Object Stories: Rejecting the Single Story in Museums in *Art Museum Teaching*, <https://artmuseumteaching.com/2012/12/26/object-stories-rejecting-the-single-story-in-museums>; the Portland Art Museum's Object Stories <https://portlandartmuseum.org/objectstories>; and any work of the Philadelphia Folklore Project www.folkloreproject.org.

16. These reflections have been shaped by conversations with Shilarna Stokes as well as with project humanities consultants Howard Sacks, Brooke Bryan, Danille Christensen, and Sara Wood and Carol Goland, Scott Williams, and Jeremy Purser.

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18. An inspiration for a product that creatively uses these media materials is Charlie Hardy and Alessandro Portelli's pioneering early experimental oral history audio essay, *I Can Almost See the Lights of Home*. For more visit the digital project in *The Journal for Multimedia History*, Vol. 2, <https://www.albany.edu/jmmh/vol2no1/lights.html>. For Charlie Hardy's reflections on the making of the project, see Hardy, Charles III. 2014. Adventures in Sound: Oral History, the Digital Revolution, and the Making of 'I Can Almost See the Lights of Home': A Field Trip to Harlan County, Kentucky. In *Oral History and Digital Humanities: Voice Access and Engagement*, eds. Douglas Boyd and Mary Larson. New York: Palgrave MacMillan.

19. See "Fracking and Farmland: Stories From the Field," via OEFFA's Farm Policy Matters for more information at <http://policy.oeffa.org/frackingfarmland>.

20. This concept of "staging the encounters that just might finally be adequate to our (chemically-burdened), ecologically imperiled world" should be credited to Mary Hufford, email messages to author, January-March 2016. See also Hufford, Mary. Working in the Cracks: Public Space, Ecological Crisis, and the Folklorist. *Journal of Folklore Research*. 36.2/3: 157-67.

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Listeners connect posters to oral history and multimedia excerpts during *Growing Right's* installation at Farm Aid 2017's Homegrown Village, in Burgettstown, Pennsylvania.



Our River, Our Home: A Critical Pedagogy of Place

by Ellen McHale and John McKeeby

It's Thursday afternoon in Amsterdam, New York, and area high school students are climbing the stairs at the Amsterdam Free Library for their weekly gathering of the Environmental Study Team (EST). Each Thursday from 4 to 6 p.m. this core group of dedicated teens participate in activities that promote the stewardship of their local waters, environment, and community. A partnership program of the New York Folklore Society and the Schoharie River Center (SRC), teens in Amsterdam's EST program conduct quantitative scientific research about their local waters and engage with the area's residents and its traditional arts through oral history interviews, media, and folklife documentation.

The Schoharie River Center's EST is a year-round environmental science-based career and life skills development program of SRC, a nonprofit environmental and cultural organization. Working with youth ages 12 to 18 who live within the Mohawk and Schoharie Watersheds of New York State, the SRC's EST programs teach youth to assess, record, and document the water quality and health of their communities' local watersheds. Using EPA-approved testing and assessment procedures (water chemistry analysis, benthic-macroinvertebrate sampling and identification, and bacterial testing) SRC environmental educators work with EST teens in the field (and the streams) to conduct hands-on scientific inquiry-focused research on the ecology of the watershed—its plants, animals, insects, and geology.

As a partnering organization, the New York Folklore Society works with the same youth to teach ethnographic field methods to record the area's human habitation—its folklore and oral narratives, material culture, occupational traditions, and cultural traditions. Youth in the program work with cameras, digital recorders, and video cameras to document the cultural makeup of the region. In

making cultural connections to the region's waters and ecology, the program encourages the students' intimate relationships with the environment and their place within this environment and the larger community. SRC and the New York Folklore Society have been engaged in an educational partnership since 2010, working closely with teens in a model of collaborative learning to document both the human and animal habitats.

As students explore watershed ecology they also speak to elders in the community, participate in hands-on folklife experiences, and learn the techniques and skills of oral history and ethnographic field methods. Students explore the "commons" that is the Mohawk/Schoharie Watersheds: They hike its trails, kayak its waters, ski its woods, replenish its riparian zones, and cycle its roadways. They participate in an annual archaeological field school, variously excavating water-powered mill sites on the Schoharie, abandoned Erie Canal locks, community gathering places, and slave and servant quarters of New York's 18th- and early 19th-century patroons to experience history and learn firsthand about daily foodways and community and agricultural activities. Drawing upon the folklife of the region, they are mentored by community elders to learn dry wall building techniques, historic timber framing methods for barn construction, blacksmithing, and fishing skills such as casting and dry fly making. They interview elders about their play experiences on the Schoharie Creek and their occupational experiences on the Mohawk Barge Canal. Annually students participate in the science of maple syrup production in a timber-framed traditional sugarhouse that several of them built. Throughout, they document their experiences with camera, video, and sometimes audio recording. Drawing upon the skills and methodologies of regional folklife documentation, students are provided instances where people share a body of folklore because of their attachment to place and their shared identity (Jones 1976), and the students both record and participate in those experiences.

The Methodology

The goal of EST is to increase youths' understanding and knowledge of the emergent environmental issues confronting their communities and provide (through experiential learning) the skills and critical knowledge needed to analyze situations, make informed decisions, and take action to protect and improve the quality of their local environment (McKeeby, Jones, Keville, and McKeeby 2011). Youth come to the program from a variety of avenues: self, friend, or family referral (60 percent); referred by a school counselor, probation officer, or a community service provider (40 percent). Participation is voluntary, and most youth choose to participate for an average of four to five years, through middle and high school—years that are often times of turbulence and transformation for many young people. The EST program is intended to influence youth at many levels. Through focusing on their strengths, their natural curiosity and interest in the world, and their developmental needs, the program is able to establish areas of mastery, healthy relationships, and positive identity in the students' lives. For troubled and at-risk youth, the EST program provides the physical and the psychological space to explore their world (the natural environment and community) through an objective lens based on the scientific methods of observation, data collection, and analysis. EST youth explore and assess their environment while working in teams with other youth and trained adult environmental educators, field biologists, archeologists, and community scholars.

Youth in EST meet weekly, with each of the regions' five chapters conducting stewardship over their local waters. The Amsterdam Environmental Study Team meets in an after-school setting in

the local library. In 2017, through grants from the New York State Council on the Arts and the Community Foundation of the Capital Region, the EST program began to work with staff of the New York Folklore Society and Youth FX, an Albany-based video production program that engages youth in making media productions. Beginning in 2017, the EST team worked with Youth FX to learn techniques of video production and editing. As an object of study, they focused upon the newly constructed pedestrian bridge recently built to link two Amsterdam neighborhoods previously separated by the Mohawk River. The youth of the Amsterdam EST program had already experienced the difficulties in accessing the Mohawk River as the city, and its highway and railroad, provided barriers to direct access to the waterfront. Because of this, they were interested in documenting community perceptions of the Mohawk River and the impact upon these perceptions by the increased accessibility accorded by a pedestrian bridge that was newly completed. This pedestrian bridge linked two communities in Amsterdam and provided a way to traverse from highly industrialized North Amsterdam to the historic neighborhood of Port Jackson. The team's short-term exposure to Youth FX's film program resulted in a five-minute film shot and edited by the students.



Buoyed by this initial experience, the Amsterdam EST teens immediately began planning their next video documentary in a more direct merging of their hands-on scientific inquiry and video documentation. As with several communities in the northeastern U.S., Amsterdam is a 20th-century industrial city with an aging infrastructure. Its wastewater treatment system is dependent upon early 20th-century technology that includes aging sewage pipes as well as an outdated combined sewer/storm water outflow system (CSD) of handling rainwater. For decades, this aging sewer system of the city has been regularly malfunctioning, dumping raw sewage into the Mohawk River by way of the North Chuctanunda Creek. This has been compounded with each heavy rain as the combined stormwater/sewage drainage system that is a typical response mechanism to drainage in many cities is engineered to get rid of excess water by dumping it into our nation's waterways. While Amsterdam is not alone in its need to mitigate sewage leaks into major waterways, the city

experienced ongoing problems in 2016 and 2017, probably as a result of climate change and a documented increase in the frequency of high rain events in this part of New York State. The frequent sewage discharges heightened public awareness of the problem.

After their initial success with shooting and editing [*My River, My Home*](#), the teens of the Amsterdam Environmental Study Team program wanted to shoot and script their own documentary about the effects of outdated wastewater treatments systems on the health of the Mohawk watershed. Armed with cameras, notebooks, and video equipment, the team set out to study the problem and determine the extent of public awareness. Adult leaders conceived of their role as catalysts and mediators, helping students to explore their “place” through the memories, experiences, and words of Amsterdam’s narrators and tradition bearers. Drawing upon previous folklore fieldwork, the program introduced students to people who might provide points of view that they might not get from the governmental structures or civic leaders who are most often the spokespeople for communities. Students interviewed community members such as a lock tender on the Mohawk Barge Canal; the Haudenosaunee Mohawk spiritual leader Tom Porter, who had founded a new Mohawk community on the shores of the Mohawk River; key high school teachers; local historians; and community scholars. The students spent an afternoon with the engineering staff of the New York State Canal Corporation who are directly responsible for the canal system’s maintenance. On several occasions, they interviewed the many casual boaters and yachtsmen who have taken advantage of Amsterdam’s marina and dock space. They contacted the mayor and public works personnel. They conducted a survey, using psychometric indicators, to ascertain whether the new pedestrian bridge has affected feelings of “place attachment” with Amsterdam’s residents who are increasingly finding the bridge to be a pleasant recreational space. These experiences were added to the ethnographic documentation collected in 2016 and early 2017. Folklore and education professionals provided models and visionary leadership for the effective engagement of students with tradition bearers and community scholars.

Merging Cultural Documentation and Environmental Education

The experiential nature of environmental education has been shown to be effective in the development of social skills, individual agency, and competence (Chawla 2006). As youth encounter their physical and cultural environments, they learn that they can think critically about their communities and their roles as agents of change within their community (Schusler et al. 2009). Youth engaged in experiential learning through the EST program frequently enter the program with a hands-off attitude towards scientific inquiry, having learned the scientific methods taught in school but being told they will have an opportunity for direct participation only when they reach more advanced studies. In EST, microscopes are provided to each individual to view biological samples and one middle schooler expressed disbelief that she would actually get to “touch” the microscope. Another student who spent five years in the EST program related that her field biology class in college was repeating activities in which she had actively engaged as a 15-year-old EST member.

The process of experiential learning begins with students at only a rudimentary knowledge of field biology but with a genuine curiosity and eagerness to learn more. The EST model is joyful, allowing them to move from question to question to arrive at the answer. In the meantime, they are fully enjoying the sensory experience of being outdoors and in the moment of discovery and knowledge formation.



The geographer Yi Fu Tuan has provided an important framework for effective education in the “out of doors” through his theorizing about place and the role of place in culture. In his work on “senses of place,” Tuan observes that places gain meaning through the activity that we partake when in that locale, through the sharing of experience with other individuals, and the memories of the experiences in a place that bind us to that place in the future. Environmental psychologists have further examined Tuan’s concept and have made the distinctions between place “meaning”—the importance that individuals ascribe to a place—and place “attachment,” the degree to which individuals forge their identity through their relationship with place. Place-based educators have shown that youth shape their affordances—their “possibilities for action”—through participating in activities within their communities and in the social interactions that occur within community settings. Delia and Krasny point out that these opportunities lead to the development of youth assets such as caring, contribution, and competence while incorporating critical thinking and awareness (Delia, Jesse and Krasny, Marianne 2018). Using students’ personal senses of place and their attachment to a locale through the EST program strengthens their educational experience. In their focus upon informed action, EST youth demonstrate that they can use their perceptual senses to draw conclusions. In acting upon their concerns, their connections to place are strengthened.

Educator David Gruenewald suggests that the study of “place” foregrounds “a narrative of local and regional politics that are attuned to the particularities of where people actually live.” He calls for educational approaches that are concerned with context and those that are predicated upon the value of learning from and nurturing specific places, communities, and regions (Gruenewald 2003, 3). Gruenewald challenges the educator to move beyond current place-based (and celebratory) education models to link ecology to critical themes such as urbanization and the homogenization of culture. He advocates for a framework of “eco-justice,” which understands the relationships between ecological and cultural systems, addresses environmental racism, revitalizes the non-commodified traditions of different racial and ethnic groups and communities, and supports reconceiving and adapting our lifestyles in ways that will not jeopardize the environment for future generations (Gruenewald 2003). In using the lens of eco-justice, one recognizes the responsibility

to conserve and restore our shared environments for future generations. Gruenewald calls attention to the skills and talents of ethnographers in his description of a place-based education and ecojustice model that relates directly to student experiences of the world and improves the quality of life for people and communities in all locales—urban, suburban, and rural. His is a pedagogy of place that evaluates the appropriateness of our relationships to each other and to our socio-ecological places. He calls for students to re-inhabit their places—to pursue social action that improves the social and ecological life of places (Gruenewald 2003).

The Process at Work

With the established EST model of youth-driven inquiry, the Amsterdam cultural documentation and videography project was similarly driven by youth. Through a grant from the New York State Council on the Arts, inexpensive but high-quality video equipment was purchased to create two documentation kits that would require the students to work in teams of at least three for the actual recording, with one student serving as the interviewer, one monitoring the sound recording, and one monitoring the video camera. When there were additional students, SLR cameras were provided so no one was left without a role. With two documentation kits, students could actually accomplish a two-angle shoot or record additional footage while one team was engaged in an interview.

Throughout, students were in control of the situation. With guidance from the adult leaders (folklorist Ellen McHale and environmental educators John McKeeby and Scott Hadam), students discussed the water quality problems that they would like to highlight and individuals whom they thought would help them attain the knowledge that was required. Students made lists of the individuals in their community whom they felt it was important to reach. They made the appointments and set up the interview situations, requiring persistence and direct interactions with unknown adults in their community. As the project continued and the students gained knowledge of the issues, their lists of interview subjects expanded. Not surprisingly, they began the project by interviewing their favorite teachers at the high school. An interview with a high school English teacher revealed that not only had he grown up on the Mohawk River, but his father was a foreman in charge of a portion of the canal system from Lake Champlain to Utica. A subsequent interview pointed students to an engineer within the Canal Corporation, and so on. As students followed these leads they also found that the individuals inhabiting their home and school networks could connect them to the wider community in ways that they had not envisioned. Information sources became multidimensional. As their knowledge deepened, so too did their perspectives. An interview with the Amsterdam Water Works supervisor led them to the city engineer, who shared his perspectives on the overwhelming task of tackling the ancient water infrastructure. Empathy began to replace anger, and students' questions changed from "how could they?" to "how can WE make a difference?"

The project's documentary style was organic as the students conducted the research. They developed questions they wished to ask and only then asked adult leaders for approval or input. As the project's headquarters was a public library, research materials were easily obtained and accessed. As students interviewed the adults and asked well-phrased questions, those in the interviewing hot seat often physically changed their manners throughout the interview. As the students shared their own knowledge from prior conversations, or from their own scientific studies on the river, adult experts' answers became more informative. In several instances, there was a



perceptual shift when those being interviewed realized that they were not in the company of an ill-informed student population. Conversations became livelier as students offered their knowledge and illustrated that they were backing their questions with well-done research.

Now in its second year, the Amsterdam Cultural Documentation project is in its final stages. As students have matured developmentally, they have matured in their abilities to empathize with others. They have also matured in their relationships with each other as they work together as a well-functioning team. A watershed moment occurred in this final year. Combing through hours of video footage, they sought the “adult” words that would express what they themselves knew. As they frantically named individuals and quoted statements, Youth FX leader Bhawin Suchak asked them to stop a minute and to formulate their own statements. The students realized that they themselves held the knowledge. That was a particularly empowering moment as student became expert. They had found their voice.

The connections that EST makes—between community and ecosystem, traditional folklife and landscape, culture and environment—provide an opportunity and a pathway for young people to forge an ethical relationship to land and community. Of primary importance to the Amsterdam EST students is the environmental degradation of the waterways and their growing feelings of stewardship for their place. Following Gruenewald, the students are re-inhabiting their community, learning to live well—socially and ecologically—in their “disrupted and injured” place. They are challenging each other, and the adults of the community, to “read the texts of their own lives and to ask what needs to be transformed and what needs to be conserved.” Through folklife and cultural documentation of their community, Amsterdam EST youth are drawing upon mentoring and intergenerational relationships with the adults in their lives. This is an act of ecojustice (Gruenewald 2003). In their pursuit of ecological awareness and literacy, the students have augmented their sense of place and defined their roles as active, informed, and engaged community members able to make a difference.



The Schoharie River Center's Environmental Study Team Program is an award-winning youth development program that is cost effective, successful, and easily replicated. The Schoharie River Center is available to any organization, school, or group interested in initiating an EST program in their community.

Ellen McHale holds a PhD in Folklore and Folklife from the University of Pennsylvania. Since 1999, she has served as the Executive Director of the New York Folklore Society, a statewide organization dedicated to the study, preservation, and promotion of New York's traditional arts and culture. The professional collaboration between the New York Folklore Society and the Schoharie River Center, upon which this work is based, began in 2011 and continues to the present.

John McKeeby is Executive Director of the Schoharie River Center. He holds a Master's in Developmental Psychology (Drexel University) and a post-Master's Certificate in Structural Family Therapy from the Family Therapy and Training Center of the University of Pennsylvania's School of Education. A co-founder (with Ellen McHale), of the Schoharie River Center, the EST program has twice been awarded the Seaworld/Busch Garden's Environmental Excellence Award (2008 and 2011) and was awarded the New York State Department of Conservation's Environmental Excellence Award in 2013.

URLs

My River, My Home film: https://www.youtube.com/watch?v=fneT8uyC_dg

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Supporting Iñupiaq Arts and Education

by Sean Asiqluq Topkok

Uvaŋa atiga Asiqluq. Aapaga Sanguk. Aanaga Aileen-mi. Aakaga Ahnakosoklu suli Mary-milu. Avauraġa Fred-milu suli Edgar-milu. Qawiaragmiuruŋa.

My Iñupiaq name is Asiqluq. My parents are (the late) Aileen and Clifford Sanguk Topkok (from Teller, Alaska). My grandmothers are (the late) Gussie Ahnakosok Topkok and Mary Tweet. My grandfathers are (the late) Fred Topkok and Edgar Tweet. I am a person of the Kauwerak from the Seward Peninsula.

(An authentic Iñupiatun introduction.)

My white fox name is Sean Topkok, and I prefer to be called Asiqluq. The Iñupiat¹ used to have only one name (Craig 1996). When Elders ask us our Iñupiaq name, they know our family tree just by that one name. When the missionaries and first teachers came and were documenting names, they wanted to include first and last names. Since Iñupiat usually had only one name, missionaries assigned another name. In many villages, for an Iñupiaq to get another name, missionaries required that person to be baptized. The price for a baptism was one white fox pelt. Hence, when one refers to an English name, it is also referred as a “white fox name.” I am Iñupiaq, Sámi, Irish, and Norwegian. My father was Iñupiaq and Sámi, and his first language was Iñupiatun (the Iñupiaq language). My mother was born and raised in Teller. My paternal grandfather, Fred Topkok, was a reindeer herder. I was born and raised in Spenard, Alaska. I am still learning the Iñupiaq and Sámi languages, and my family speaks English and Norwegian at home. My wife and I have three sons and currently one grandson. I am the fifteenth Iñupiat to earn a doctorate degree and currently am a faculty member in the School of Education at the University of Alaska Fairbanks (UAF).

The above personal introduction contains key elements for a cultural atlas, a way of documenting cultural heritage. The key elements in my introduction identify *iñuk* (myself as a person), *ilagiiñiq* (family relations), *nunaaggig* (village or community). This article is a case study of my active involvement in two university courses to collaborate with students and community members to

document their place and heritages; improve teacher retention by active involvement through course activities; and provide preservice teachers an opportunity to visit a remote Alaskan village and gain firsthand knowledge from first-year teacher experiences.

Literature Review

In contemporary times, the number of Indigenous scholars researching Indigenous and Western paradigms is increasing, critiquing how Western paradigms tend to be inadequate for Indigenous research and education in their current forms (Dunbar 2008, Jacobs 2008, Kovach 2009, Smith 1999, Topkok 2015, Wilson 2008). Through their initiative, other Indigenous communities worldwide are inspired to grow their own Indigenous scholars. The concept and process of “growing Indigenous scholars” coincide with Marie Battiste’s statement (2013): “Indigenous people are also moving beyond critiques to address the healing and wellness of themselves and their communities, to reshape their contexts and effect their situations, and to create reforms based on a complex arrangement of conscientization, resistance, and transformative action” (69). This theoretical framework connects the Indigenous researcher to existing generational knowledge and nurtures Indigenous scholars to identify their Indigenous knowledge as a valid source. Likewise, Western scientists recognize Indigenous knowledge as authentic: “Numerous authors have demonstrated the profound sense of awareness and place-based knowledge that traditional hunters and their communities have about the dynamic changes in their local environments (Robards et al. 2018).

When dealing with preservice and teaching education, cultural rigor should be taught at the same level as academic rigor. There is an increase of documenting Indigenous methodologies, incorporating Indigenous epistemologies, ontologies, and theoretical frameworks (Dunbar 2008, Jacobs 2008, Kovach 2009, Meyer 2001, Smith 1999, Topkok 2015, Wilson 2008). More papers and books are being written about Indigenous methodologies and cultural values by Indigenous scholars for upcoming Indigenous students. Indigenous scholar Marie Battiste (2002) writes: “As a concept, Indigenous knowledge benchmarks the limitations of Eurocentric theory—its methodology, evidence, and conclusions—reconceptualizes the resilience and self-reliance of Indigenous peoples, and underscores the importance of their own philosophies, heritages, and educational processes” (5). Indigenous theoretical frameworks are important because they offer an Indigenous perspective on research for academia. Our research with our Iñupiat cultural values resonate locally, nationally, and internationally for more Indigenous scholarly resources and will contribute to this growing literature.

Margaret A. Cargill Foundation Funding

Margaret A. Cargill Foundation (MACF) is a private foundation that came into existence upon the donor’s death in 2006 and focuses on several domains, including Native Arts and Culture. The MACF description notes that a “...focus in Native American and folk arts and cultures supports the intergenerational transference of artistic skill and knowledge, where skills and meaning are rooted in longstanding traditions defined by local communities of practice” (MACF n.d.). Each domain requires that three institutions collaborate: a university, a school district, and a nonprofit arts organization. MACF identifies one institution to take the lead and distributes allocated funds over several years.

In 2015, my UAF School of Education colleagues with the North Slope Borough School District (NSBSD) were asked to be collaborators for an invitation-only MACF multiyear grant. The purposes of the grant were to improve the quality of K-12 teachers in Alaska and the graduation rate of qualified students from high-quality preservice teacher programs in Alaska.

NSBSD took the lead for the Supporting Iñupiaq Arts and Education grant, and contacted the UAF School of Education to partner as the university collaborator. Cultural Elders and culture bearers were identified through the Alaska State Council on the Arts, the nonprofit collaborator. All the directives were implemented through the lead organization, the NSBSD, and agreements were formalized.

Under the agreement, the School of Education faculty collaborated with NSBSD in developing and delivering a course that meets Alaska Department of Education and Early Development requirements for three credits in multicultural education.

Cultural Atlases as a Pedagogical Strategy

I have successfully created a new catalog course, Cultural Atlases as a Pedagogical Strategy, which I taught as a Special Topics course in 2006. The NSBSD agreed that the course satisfies the above agreement, and it is recognized by the Alaska Department of Education and Early Development as a multicultural endorsement, one of two requirements needed to teach in Alaska. The other required endorsement is Alaska history. It is now a catalog course. The course description is also a cultural atlas definition, which may be an electronic living document or a written document for future teachers. Ideally, communities will have the opportunity to build and define their own cultural heritage further through a cultural atlas.

Cultural Atlases as a Pedagogical Strategy

Course Description: The content of the course provides an in-depth look at how teachers can utilize technology and academics with oral traditions and offers a vehicle for helping communities define themselves and their unique cultural identity.

Course Focus: Teachers will have an opportunity to guide their students through a positive collaboration with local culture bearers, community members, and educational personnel. The multimedia resources for this course provide numerous examples of cultural atlases and guidance on ways in which the rich oral traditions of Native people can be drawn upon in support of the school curriculum.

Find examples of student and community Cultural Atlases at <http://ankn.uaf.edu/NPE/oral.html>.

The Cultural Atlas course is divided into six modules. Each takes two to three weeks to complete. The modules are Creating a Story, Family Tree Project, Interviewing Elders, Community History, Place Names, and Bringing It All Together. I based the course on an analogy from a Tlingit culture bearer who shared understanding one's cultural heritage with me. He said a cultural heritage is like a forest. You have one single tree, yourself, which needs to be healthy and strong. The surrounding trees are your family members. The whole forest is your community (Topkok 2010). Students are encouraged to explore various Western and Indigenous methodologies to develop their local cultural atlas. The Cultural Atlas course is a method for communities and students to document their own cultural heritage. Students work with Elders, families, and community members to share their personal stories. They identify their genealogy, interview culture bearers, and archive their

community history. The students also identify place names, including Indigenous names of sea and landmarks before colonization.

The following are the modules I require of graduate students, who are usually teaching in rural Alaska, to first do for themselves (creating an example to show their students), and then to teach their students.

Module #1 (My Story). Your assignment for this module is to guide the student through a process in which you will develop a preliminary outline of what a story of your family might look like and then develop an outline of what the story of your community might look like. This is your own creation, so your family and community story should have its own unique quality. When the outline is complete, we will set up a website where you will begin to upload the information you have gathered as the first installment toward your “Cultural Atlas.”

In my introduction, I state who I am and who I am named after. This assignment allows K-12 students an opportunity to inquire how they were named, whether it be their Iñupiaq name or their other name. Rachel Craig (2011) writes very helpfully about Iñupiaq names. This applies to other groups, Native and non-Native, since we all have a story to share about who we are.

Module #2 (Family Tree). When you are gathering and inputting your data, be sure to include Native names where applicable, along with the origins and/or translation, kinship terms, and pictures or any multimedia available, all of which will be examined and critiqued as it relates to issues raised in the readings. Please include all information available—you can decide later what can and cannot be shared. When completed, your family tree will be added to your Cultural Atlas website, along with a journal in which you describe what you learned from the process.

Knowledge of one’s family tree is a cultural value in many Alaska Native groups. Kinship terms vary in Alaska. Yup’ik kinship depends on the gender of the person.² This assignment allows K-12 students an opportunity to know who they are related to. I encourage students to utilize kinship terms from their heritage language. This is educational for Native and non-Native students, allowing them to get to know who their ancestors are.

Module #3 (Tea with Elders). Elders are our culture bearers. They hold deep-rooted knowledge about who we are and where we come from. Much can be learned from listening to an Elder, though it requires respect and patience. Therefore, you must do a chore for an Elder and commit to having tea or coffee with them. It is important to pay attention not only to what Elders say, but also when, where, and how they say it. When possible, tea should take place in the Elder’s home or a natural setting in the community. (The Aleut/Alutiiq Cultural Atlas provides an example of groups of Elders sharing their knowledge at <http://ankn.uaf.edu/CulturalAtlases>.)

I have worked with many Elders statewide, nationwide, and internationally. There are many Elders who state they are tired of people coming to them just to gather information. Doing a chore and

having tea or coffee with an Elder establishes a relationship and trust. Often, spending time with an Elder creates an intimate relationship lasting a lifetime.

Module #4 (Community History). You should choose one of the examples from the readings (or develop a focus area of your own) and begin documenting information about the history of your community, including the contributions of plants and animals in the surrounding environment to the livelihood of the community. Your assignment is to prepare an initial compilation of community history information for a Cultural Atlas, keeping in mind that this can become more detailed and elaborated as an ongoing project in your school and community. (The Marshall Cultural Atlas is an example of this project, see

<http://ankn.uaf.edu/Resources/course/view.php?id=16>.)



Figure 1. Graduate student Celina Swerdfeger pointing to a trading post during a culture camp.

Photo by Asiqluq.

Module #5 (Place Names). Your task will be to develop an interactive multimedia map of your surroundings in which to document the place names of the local area. You should prepare a map and an initial compilation of place names for your area to be added to the local Cultural Atlas. (The Angoon and Kake Cultural Atlases are great examples of Place Names, see <http://ankn.uaf.edu/CulturalAtlases>.)

One year during this course, residents voted to change a North Slope village name from Barrow to its original place name Utqiagvik. Elders expressed a concern about community members getting lost and perishing. One solution they suggested is to emphasize teaching significant landmarks that have place names. In Figure 1, Celina Swerdfeger points to an old trading post built long before Western contact where Iñupiat would gather to trade, dance, and tell stories.

Module #6 (Bringing It All Together). The final project to be completed over a period of three weeks is to consolidate your Cultural Atlas framework and

refine your website to upload and organize the information you have assembled. You should then prepare a how-to guide that you will present to the rest of the class incorporating the Cultural Atlas content and strategies you have developed and describing how you would put the academic, cultural, and technological skills you have learned to use in working with future students in your school.

Mapkuqput Iñuuniagnìgmì—Our Blanket of Life

In 2010, NSBSD adopted an Iñupiaq Learning Framework (ILF) called “Mapkuqput Iñuuniagnìgmì—Our Blanket of Life” (see Figure 2).³ Local educators and community members in the school district developed this framework and continue to add lessons and Iñupiaq assessments to meet cultural and academic rigor for their children. This Iñupiaq framework identifies knowledge and skills needed to be taught in their Iñupiaq curriculum based on Iñupiaq cultural values. They put each skill into four realms: Individual Realm, Community Realm, Environmental Realm, and Historical Realm. Each is tied and connected together with sinew, representing the Iñupiaq language and spirituality. The symbols on the blanket represent the North Slope Iñupiaq Cultural Values.

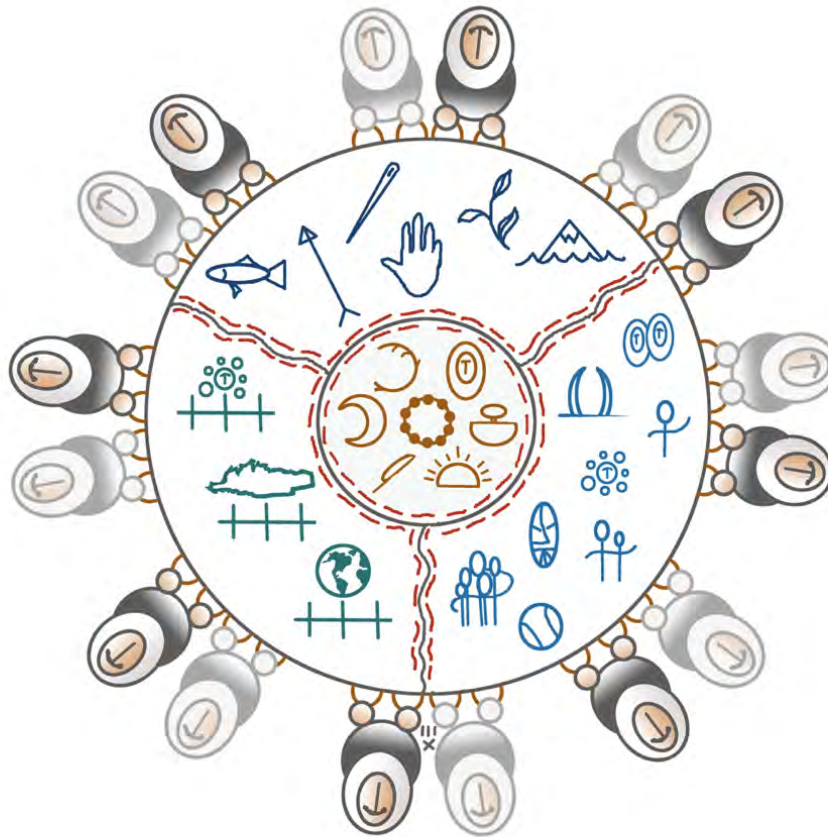


Figure 2: *Mapkuqput Iñuuniagnìgmì—Our Blanket of Life.*

Looking at the cultural atlas as a Pedagogical Strategy course and the ILF, one can see how the modules and realms complement each other (see Table 1). The NSBSD invited 25 first-year teachers to enroll in the Cultural Atlas course for this very reason. Since I am an Iñupiaq professor and familiar with the ILF, I could encourage the NSBSD first-year teachers to develop their school and community cultural atlases based on the ILF. Contemporary research shows teacher retention and attrition depend on how active teachers are in communities and how the educators teach through the culture (Kaden, Patterson, Healy, and Adams 2016).

Table 1. Modules and Realms

Cultural Atlas Modules	Iñupiaq Learning Framework
My Own Story	Individual Realm
Family Tree Project	Community Realm
Interviewing Elders	Historical Realm
Community History	Environmental Realm
Place Names	Language and Spirituality

The NSBSD invited 24 new teachers to take the course. Of the 24 teachers, 11 initially enrolled. Because of various personal reasons, six withdrew. The remaining five passed the course. One teacher wrote in a journal entry:

But what has come now is a deeper understanding that the person sitting [or] standing right next to me, even one that looks like me, may have a completely different orientation to life, upbringing, and deep ancestral history. With that we begin the journey!

This demonstrates the impact the course had on just one student. Others stated that they would make their local cultural atlas a blog, a first-year teacher's manual, and a video series. I encourage students to draw on their strengths to develop their own cultural atlases. One chose blogging (edited for anonymity):

One of those is my Cultural Atlas blog, created for this course. I had vast difficulty trying to upload documents and photographs to [a website] and so was advised to use my strengths in resolving the issue. My response was to create a blog specific for the course where I could post my completed assignments in a written and visual manner that I was greatly familiar with and which would allow both my professor and fellow students to read and view (additionally, as it is a public blog, random Google searchers may find themselves reading one or two of my posts) (personal communication).

This student flourished with their blog, uploading multiple photos of animals, the community, their classroom, and much more. They wrote about various experiences with community members and Elders.

Another student concluded a paper about Interviewing Elders (edited for anonymity) by writing:

In my short time living in the village, I have been fortunate enough to enjoy participating in both hunting and fishing. I will continue to enjoy the fishing and hunting in this vast Arctic paradise, calling upon my own expertise as a fisherman and what little experience I have as a new hunter. More importantly I will call upon the knowledge of the Elders and those in the community who possess a wealth of knowledge on both hunting and fishing, a deep and seemingly endless knowledge that enables them to live at the top of the world in a landscape whose extreme climate is contrasted by its extreme beauty (personal communication).

I have heard several stories about a new teacher arriving in remote Alaska, not stepping off the plane, and leaving the community. The above student's experience shows interaction with Elders and community members, visiting the environment, and acknowledging the sense of place as extreme yet beautiful. This is not an isolated experience. Another student wrote (edited for anonymity):

[My partner] and I have a great relationship with this person [an Elder] already but speaking with her about this place and hearing her ideas that are not shared each day was a great experience. She shared with me a dream she had the night before we visited with her, where I showed up and asked if I could sleep there. She told me yes, that I could. It meant a lot to me that I ended up somewhere in her unconscious thoughts, as she is special to me, and [my partner] as well (personal communication).

Culture Camp

As requested by NSBSD, we solicited and brought a future teacher to one of the Culture Camps. Another class I teach is Alaska Native Education, a required course for students enrolled in the Bachelor of Arts in Education degree program at UAF. I invited all the preservice teachers in my class to visit a remote village for a culture camp experience, paid through the MACF grant. (More preservice teachers were interested in attending, but schedule conflicts made it impossible.)

I was able to travel with one student, Celina Swerdfeger, to one of the NSBSD villages. We were welcomed by school personnel and introduced to the staff. We met with an Elder and the culture camp coordinator to go over the schedule for the two-day visit. There happened to be a potluck scheduled the evening we arrived, giving us an opportunity to meet community members, children, school staff, and borough personnel. We were lucky to meet the first female whaling captain, who successfully fed her community with the whale who gave itself to her. After the community potluck, my preservice student spent the rest of the evening visiting with first-year teachers. Celina and the first-year teachers were enthusiastic about talking with each other. The first-year teachers were sharing their experiences and asked if Celina was interested in teaching in the NSBSD. Celina was curious to experience more about the place. The following day, community members and the culture camp coordinator planned to take us and the first-year teachers on an hour-long snowmachine ride (some people refer to snowmobiles as snowmachines) out of the village to experience ice fishing.



Figure 3. *Kayuqtuq* (fox) visits the culture camp.

Photo by Asiqluq.

There were several first-year teachers in this remote village. This was the first time for many to be on a snowmachine. Community members with snowmachines took all of us out of the village onto the frozen river. All snowmachines were pulling wooden sleds for riders and equipment. We went for a half an hour, warmed up, then continued to the mouth of the river. At the ice-fishing spot, nets were placed between two holes to catch *iqalusaat* (Least Cisco) fish. There were several nets set for us to pull out of the ice and take the *iqalusaat* out of the nets. At our last fishing spot, a *kayuqtuq* (fox) decided to pay us a visit. In Figure 3, you can see the preservice teacher bending down to take a photo and how the *kayuqtuq* did not show any fear but kept its distance. A community member tossed it an *iqalusaaq* as a gift. We then returned to the village, and the Elder and culture camp coordinator had to fly out that late afternoon. The preservice teacher and I left the following morning. My student stated this was an experience they will never forget and encouraged other students to visit a remote village if given the opportunity.

Conclusion

While the initial funded program is no longer being offered, it is clear that the participating first-year teachers built relationships with their communities by participating in the Cultural Atlas course and the culture camps. These opportunities provided firsthand experiences with preservice teachers in the Alaska Native Education course. I feel this was a great partnership and look forward to possibly working together in the future for Alaska's education.

The NSBSD Iñupiat cultural values were observed when the first-year teachers and preservice teacher participated in the Supporting Iñupiaq Arts and Education project. In Table 2, the left column lists the NSBSD Iñupiat Cultural Values, while the right column shows how the cultural value was observed during this interactive experience.

Table 2. NSBSD Iñupiat Cultural Values and Interactive Activities⁴

NSBSD Iñupiat Cultural Values	Interactive Activity
<i>Avanmun Ikayuutiniq</i> (Helping Each Other)	Students learn from each other while they actively participate in the classroom or at a culture camp.
<i>Avilaitqatigiigñiq</i> (Friendships)	Students going through a cohort develop friendships that last a lifetime, encouraging each other to try new things, offer support, and maintain relationships.
<i>Ilagiñiq</i> (Family Relations/Roles)	Community members are actively involved and understand their various roles in the village.
<i>Iłammiuḡniq</i> (Creating Friends)	The culture camp allows an opportunity for preservice and current teachers to engage with community members and create relationships.
<i>Iḡlutuiguniq</i> (Endurance)	Cultural activities happen year-round. It takes perseverance to maintain a necessary subsistence lifestyle.
<i>Ikayuqtigiigñiq</i> (Cooperation)	Supporting Iñupiaq Arts and Education was a collaborative project involving community members, educators, culture bearers, and administrators to make it a positive experience.
<i>Irruaqligñaiññiq</i> (No Mockery)	Respect is highly valued for any cultural heritage. We do not mock people nor their knowledge systems and beliefs.
<i>Kipakkutaiññiq</i> (Respect for Human, Animals, Property, and Land)	During the culture camp, we did not disturb other fishing spots, looked out for each other's safety, fed the <i>kayutuq</i> , and did not disturb the water, land, or air.
<i>Mitaallatuniq</i> (Sense of Humor)	Humor is a shared Alaska Native cultural value. Humor allows us to practice humility, knowing when we make a mistake we should not take it too personally.
<i>Nagliktuutiqaḡniq</i> (Compassion)	While the community members invited others to their fishing spot, <i>iqalusaat</i> was shared to show compassion.
<i>Nakuaqqutiqaḡniq</i> (Love)	An Elder expressed to me, "Everything we do, we should do it with love." Love is reciprocal, which is a universal cultural value.
<i>Piḡaktautaiññiq</i> (Gentleness)	As we were taking the <i>iqalusaat</i> out of the nets, we did so gently to show respect to the animal spirits.

<i>Piqpakkutiqaḡniq Miqliqtunun</i> (Love for Children)	The culture camp and the cultural atlas assignments help the children better understand who they are.
<i>Pitqiksigaṡtaiṡṡniq</i> (Honesty)	Each cultural heritage group has its own cultural protocols. Honesty allows us to learn and respect the Indigenous people who first came from the land.
<i>Qiksiksrautiqaḡniq</i> (Respect for Others)	Not all communities welcome new teachers. Not all new teachers understand village dynamics. Respect for others helps build relationships.
<i>Qimmaksautaiṡṡniq</i> (Patience)	It takes time for teachers to feel comfortable with a community and for community members to get to know new teachers.
<i>Sigṡnataiṡṡniq</i> (Sharing)	Living in remote Alaska can be unforgiving. Therefore, it is imperative to share, whether it is something material or intangible.

Students work with their communities to determine whether to share their cultural atlases with the public, depending on the cultural and intellectual property rights that communities have established. There are some examples of shared cultural atlases available at the Alaska Native Knowledge Network website (<http://ankn.uaf.edu/NPE/oral.html>). Some communities elected to share but want the general public to agree to the *Guidelines for Respecting Cultural Knowledge*, making the cultural atlases password-protected.

One of my students from the Alaska Native Education course earned her teaching certificate and wrote about her experience in rural Alaska:

Anybody who has taken a course with Dr. Topkok knows that he has a passion for education, especially for the underserved Alaska Native populations across the state. He has a profound ability to advocate for the Alaska Native populations in both a powerful and respectful way. His course had a great impact on me as an educator considering a teaching career in rural Alaska. He was a great role model for the type of relationship teachers can have across cultural lines and the collaboration that can occur to improve the quality of education for students. When teachers new to the state ask me about the mandatory Alaska Native Education course, I always recommend they look to the UAF for a course with him (personal communication).

I continue to teach the Cultural Atlas as a Pedagogical Strategy and Alaska Native Education courses. I share the Supporting Iñupiaq Arts and Education experience with all my students, letting them know of the positive collaboration, and allowing a glimpse into the benefits of working with community members, Elders, seasoned educators, and with other classmates.

“Uvaḡa atiḡa Asiqḡuq. Aapaga Sanguk. Aanaga Aileen-mi. My Iñupiaq name is Asiqḡuq. My white-fox name is Sean Topkok. I am Iñupiaq, Sámi, Irish, and Norwegian.” Topkok is Assistant Professor at the School of Education in the graduate programs. His family is from Teller, Alaska,

and is *Qaviaragmiu*. His research interests include multicultural and Indigenous education, decolonization and Indigenist methods and methodologies, working with communities to help them document their cultural heritages, and community well-being.

Endnotes

1. 'Iñupiaq' is singular or an adjective. 'Iñupiat' is three or more.
2. See <http://ankn.uaf.edu/SOP/SOPv4i2.html#yupik>.
3. For more about the Iñupiaq Learning Framework see <https://www.nsbsd.org/Page/4542>.
4. Table is found at <http://ankn.uaf.edu/ANCR/Values/inupiaq.html>.

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2019 Journal of Folklore and Education: Call for Submissions

The *Journal of Folklore and Education* is a peer-reviewed, multimedia, open-access journal published annually by Local Learning: The National Network for Folk Arts in Education. Local Learning links folk culture specialists and educators around the world, advocating for inclusion of folk and traditional arts and culture in education. We believe that "local learning"—the traditional knowledge and processes of learning that are grounded in community life—is of critical importance to the effective education of students and to the vigor of our communities and society.

JFE publishes work representing ethnographic approaches that tap the knowledge and life experience of students, their families, community members, and educators in K-16, higher education, museum, and community education. We intend our audience to be educators and students at all levels and in all settings, folk culture specialists, and those working in community-based organizations. As a digital publication, the *Journal of Folklore and Education* provides a **forum for interdisciplinary, multimedia approaches to community-based teaching, learning, and cultural stewardship**. It is found at www.locallearningnetwork.org.

The 2019 theme is The Art of the Interview. Interviewing is a core methodology in the field of folklore and a technique often used in K-16 education. Folk arts interviews teach important details about cultural context, artistic expression as communication, and the ways stories can help us better understand our communities. The practice of interviewing integrates well with many K-16 curricular areas and education standards so that art and culture can be embedded in additional subject areas. Providing specific curricular examples of interviewing for folk arts education will expand educators' options when using interviewing as a learning tool.

This JFE special issue will include work that illustrates HOW to do an interview, WHY to use interviews as a part of one's curriculum, and WHAT can be done with completed interviews.

Essential questions that contributors may use to inspire their writing include the following:

- ~ How can one best prepare artists, students, and others for interviewing? How can you design an interview project for desired student understanding?
- ~ How might interviewing with an attention to local knowledge enhance other inquiry-based research models being used in learning spaces?
- ~ How can the tools of folklore such as observation, identifying important traditions and rituals, and collecting personal experience narratives through interviews create opportunities for addressing significant social questions? ~ What role can emergent and interactive ethnography play in educational settings? How has digital technology impacted the outcome and approach to interviewing?
- ~ How may interviews be integrated with the arts, be seen as art themselves, or become a part of constructing the idea of who may be an "artist"?
- ~ How can educators from multiple disciplinary areas, including science, social studies, composition, or literacy use interview practices in their teaching?

- ~ How does a folkloristic, ethnographic approach to working with learners in a classroom or community setting connect them with cultural knowledge systems different from their own and deepen their understanding of their own places?
- ~ How can university teacher-preparation programs include ethnography as a key part of their pedagogy?
- ~ How can the field of folklore help address “tough conversations” or controversy found in contemporary discourse surrounding the education achievement gap or structural racism of schools and their communities? How might this help us serve learners with diverse perspectives in our classrooms?

More about Submissions: *We seek submissions of articles, model projects, multimedia products, teaching applications, and student work accompanied by critical writing that connects to the larger frameworks of this theme.* We particularly welcome submissions inclusive of perspectives and voices from represented communities. Co-authored articles that include teachers, administrators, artists, or community members offer opportunities for multiple points of view on an educational program or a curriculum. We publish articles that share best practices, offer specific guides or plans for implementing folklore in education, and articulate theoretical and critical frameworks. We invite educators to share shorter pieces for “Notes from the Field.” Nontraditional formats are also welcomed, such as lesson plans, worksheets, and classroom exercises. Media submissions, including short film and audio clips, will also be considered. We highly recommend reviewing previous issues of JFE (see www.locallearningnetwork.org/journal-of-folklore-and-education/current-and-past-issues). Be in touch with the editors to learn more and see whether your concept might be a good fit.

Research-based writing that theorizes, evaluates, or assesses programs that use folklore in education tools and practice are also welcomed. These research articles may intersect with the theme “The Art of the Interview,” but all submissions with a research component will be considered. We expect that research projects will have appropriate institutional permissions for public dissemination before submission to JFE, including approval from Institutional Review Boards (IRBs) and/or data licensing for the acquisition of existing data, as may be required. See the protocol for publishing a study used by [ArtsEdSearch](#) for guidance.

Format: Articles should be 1,500-4,500 words, submitted as a Word document. We use a modified Chicago style (not APA) and parenthetical citations. All URL links hyperlinked in the document should also be referenced, in order, at the end of the article in a URL list for offline readers. Images should have a dpi of at least 300. Be in touch with the editors to discuss submission and media ideas and to learn formatting, technical specifications, and our citation style template.

Contact editors Paddy Bowman at pbbowman@gmail.com or Lisa Rathje at rathje.lisa@gmail.com with ideas for stories, features, lessons, and media productions. You may also request a citation style template. **Initial drafts of submissions are due April 15, 2019.**

Please share this announcement with colleagues and educators in your community. This endeavor is supported by the National Endowment for the Arts.

The *Journal of Folklore and Education* is a publication of
Local Learning: The National Network for Folk Arts in Education



Local Learning connects folklorists, artists, and educators across the nation and advocates for the full inclusion of folklife and folk arts in education to transform learning, build intercultural understanding, and create stronger communities.

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The Art of the Interview

Journal of Folklore and Education Volume 6 will be published in September, 2019

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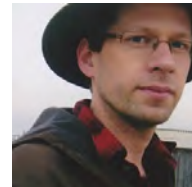
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About the Cover Photo: Students in Thomas DuBois' Snow Challenge class document snow at the University of Wisconsin–Madison with Siftr, a freely available data collection and visualization platform allowing users to upload and geotag images and record and share associated notes and field observations (see “Siftr: A Tool for the Folklore Classroom,” Vol. 5[1]: 13-29).

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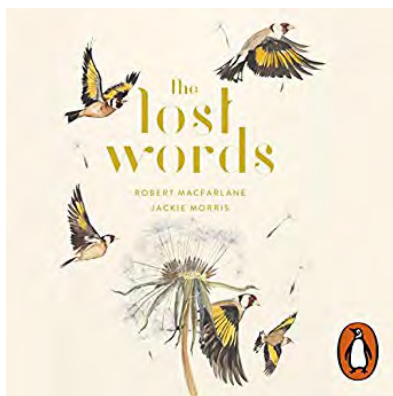
Grounding Ourselves: From Here, This Looks Like Me

by Paddy Bowman

When someone asks, “What is your sense of place, where do you belong?” what do you conjure? Each of us experiences a place differently based on our relationships, interactions, and memories. We call upon different senses as well. Some might recall sights or smells vividly, while others situate themselves through sounds, touch, or taste. Many of us cast back to childhood associations with place. A sense of place may be shared, as in regional distinctiveness and family identity, or acutely individual, a nuanced personal consciousness.

Social scientists such as folklorists, anthropologists, and cultural geographers are attuned to place as a nexus of cultural, economic, environmental, historical, and interpersonal forces. Writers evoke place as a vital element in many literary genres. Visual artists depict place in myriad fashions. Thus, educators may employ a variety of disciplines to teach sense of place. This theme is valuable to students because they can ground their cultural identity more firmly, learn that others have a different sense of place and thus deepen understanding, and connect the local to the regional and the global whether in literature, history, economics, the arts, the sciences, or folklore studies. Calling upon our sense of place also opens us to ecology, nature, special places, and distinctive terms that enrich us and bind us to others more explicitly.

In addition to the many books, articles, and conversations about today’s children in the U.S. being too removed from the outdoors, at the same time the British nature writer Robert Macfarlane is addressing the loss of words relating to nature. In a recent edition of the *Oxford Junior Dictionary*, he found a list of words removed to make room for others (Oxford Dictionaries 2012; Macfarlane 2017, 3). Words like *acorn*, *fern*, *otter*, and *wren*—replaced by *blog*, *broadband*, *celebrity*, and *committee*. Macfarlane writes beautifully, luring readers into arcane categories of words related to what he calls “place-terms,” words that belong to regions, occupations, navigation, agriculture, rambling, weather, science, folklore.



When the head of children’s dictionaries at [Oxford University Press] was asked why the decision had been taken to delete those “nature words,” she explained that the dictionary needed to reflect the consensus experience of modern-day childhood.... The substitutions made in the dictionary—the outdoor and the natural being displaced by the indoor and the virtual—are a small but significant symptom of the simulated life we increasingly live. Children are now (and valuably) adept ecologists of the technoscape, with numerous terms for file types but few for different trees and creatures. For blackberry, read BlackBerry. (Macfarlane, 3)

With the illustrator Jackie Morris, Macfarlane takes on the anti-nature lexicon by writing poems about words lost from that dictionary, poems accompanied by lavish drawings (Macfarlane and Morris 2017).

ivy
I am ivy, a real high-flyer.
Via bark and stone I scale tree and spire.
You call me ground-cover; I say sky-wire.

Terms for elements of nature and geography contribute to sense of place. Such words may be generic—valley or ground hog, for example—and others unique to locals—holler or whistle pig. While a mapmaker may mark a place by one name, residents may know it by another.

Sense of place as a form of inquiry defines our relationships to the environment as well as to others in ways that promote equity. It takes us out of the classroom and into the world, giving young people agency and a voice for what they want for the future of their communities and the world. In addition to calling attention to local geography, landscapes, and ecology, integrating sense of place into formal and informal teaching promotes cultural stewardship. No matter where we live, we have an aesthetic relationship with the land and landscapes, although we may often be unaware of it and the landscape may be vexing rather than idyllic. In the belief that calling upon that relationship to ground young people in a personal sense of place extends our vision into the wider world with empathy and inquisitiveness, we offer three activities to evoke what Robert Macfarlane calls place language, to kindle a pedagogy of place, and to share ways we are alike and different. From here, this looks like me.

Practicing Cultural Stewardship

Culture influences ways of learning and creates and strengthens communities. Understanding the complexity and power of culture gives young people agency. Cultural stewardship teaches students to understand their personal cultural identity as well as that of their families, schools, neighborhoods, and communities. They are encouraged to observe, listen, document, and work closely with individuals and communities. Doing so will help them to identify, protect, and enhance their important traditions, ways of life, cherished spaces, and vital relationships to each other and the world. Cultural stewardship also encourages intercultural skills and tolerance of differences.

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Editors' Note: We would like to share drawings, poems, and other projects that these activities inspire on our Local Learning website. Please contact pbbowman@gmail.com to learn details.

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Classroom Connection: Grounding Identity in a Sense of Place

This lesson helps students and people of all ages ground themselves in a personal sense of place as part of individual and community folklife. The quote below is an apt one to read aloud to students or to paraphrase in opening discussion of *identity* and *sense of place*.

If one pursued the documentary methods and looked at facts in their full particularity, as though for the first time, one found no entity to call America. Instead, there were regions, though again if one looked hard enough, the regions gave way and one had communities—which themselves became, on further scrutiny, classes, factions, groups. In short, documenting America turned up such an abundance of what one educator called “localized information” that no generalization with teeth or vigor held. Each town became so unique that the main thing that joined it with the next was the road.*

Objectives

Students will:

- Explore a process for discovering and writing about connections among identity, place, and experience;
- Use tools of folklife study (close observation, point of view, sense of place, and ethnography) to gather and synthesize information;
- Discover that folklife study inspires self-discovery, identity, and cultural awareness and deepens critical and creative thinking;

The teacher introduces the lesson by telling students about a personal place of significance. In general discussion, students are asked to describe a place of significance to them. Next, the teacher shares a drawing of his or her chosen place and tells why it is important (see example from author below).

After students complete their sketches, they pair off and tell the stories of their sketches to their partners. Optionally, the partners ask three questions about the drawing; the storyteller should chart the questions, but not respond to them. (Questions posed but not answered give the storyteller practice in also being a listener, and they help to build insights via another’s perspective.) Partners switch roles. A group-share follows if time allows.

Through this process, students have used several tools of ethnography: probing sense of place and self-identity, sketching, sharing stories, listening carefully, questioning thoughtfully, and fostering insights.

**Documentary Expression in Thirties America*, by William Stott, 1973, Chicago: University of Chicago Press, quoting a 1934 WPA oral history of South Carolina Gullah communities, 110-11.

My Sense of Place Drawing

Paddy Bowman

Although my family moved away when I was 16, when someone asks, “Where are you from?” I say, “East Tennessee.” Never mind that I’ve lived in beautiful, interesting places since. For many, our sense of place is locked in by late adolescence, and with it visceral memories of sights,



sounds, smells, tastes, and textures. The memories I have of my hometown come from years of childhood walks in our streets and alleys. On any landscape, I look for the low blue-green mountains that lay north of us—and rarely find them. The scent of creosote from our several railroad trestles takes me back to hot summer afternoons when friends and I walked under them en route to daily adventures. I never eat a pear without envisioning the pear tree in our side yard, and the buzz of bees and wasps that beat me to the ripened fruit. The river that bordered the town was often a milky green. I pictured happy fish there, not realizing that the paper mill’s lethal discharges regularly killed off aquatic life. Our lakes were cleaner and plentiful, and the feel of soft lake water holds far more allure for me than any ocean. The sound of trains was a constant night or day, as was the daily noon whistle.

Classroom Connection: Writing Sense of Place Poetry

Poetry provides a creative way to consider place. Darrell Bourque, a Louisiana poet laureate, often evokes place in his poetry. He shares his poem “Holly Beach,” on the next page, with JFE readers.

The teacher or a student may read this poem to introduce sense of place poetry. Afterward, ask some questions:

What do you notice in this poem?

What about the poem suggests a strong sense of place to hold the writer’s experience there?

What sensory references does the writer use to help the reader share his experience?

Where do you imagine yourself at age 10?

Optionally, students may respond to the poem by creating a landscape drawing to fit it or choreographing a dance to tell the story of the poem.

Poetry Prompts

--Students may begin by listing some important places where their memories are strong. Ask them to select one place and brainstorm sights, sounds, smells, textures, activities, thoughts, and feelings they associate with the place. They may call upon these elements as they write a place poem. Students may want to write a poem calling on their personal explorations of place through their sketches from Activity 1 and the process of sharing their stories. For example, did a partner's questions tweak a deeper memory or inspire a new insight?

--Introduce the concept of “place-terms” and brainstorm terms associated with nature and local places. Ask students to choose one term as the subject for a short poem. The teacher or a student may read Robert Macfarlane’s poem “ivy” to introduce this assignment.

ivy
I am ivy, a real high-flyer.
Via bark and stone I scale tree and spire.
You call me ground-cover; I say sky-wire.
—Robert Macfarlane

Invite everyone to read their poems aloud!

HOLLY BEACH, 1952

by Darrell Bourque

I was ten when my parents brought me to the beach for the first time,
and it was somewhat hard to tell what of this greyish brown was sand
and what was water. There was clearly something happening in the line
where the horizon was supposed to be, some curve I knew from land

and how it met the sky. I was not completely unfamiliar with rhymes
the earth itself teaches the young who look and measure, with strands
that finally knit themselves into some kind of rope of meaning, fine
distinctions that merge into larger being. But I had never had to stand

by myself before something I could walk into like this, could climb
into, it seemed to me, as the gulf shaped itself into this bulge, a grand
stilled opacity that did not even look like water. I had surely primed
myself to bravery as parents and aunts and cousins and sisters fanned

behind me in their own play. But when the water finally surged around me,
I was ten, sought someone to put me right again, pull me from this dizzy sea.

From *Call and Response: Conversations in Verse*, by Jack Bedell and Darrell Bourque, Huntsville, TX: Texas Review Press, 2010. Reprinted with permission.

Classroom Connection: Exploring Cultural Perspectives on Place

Folklife, geography, ecology, history, economics, literature, and verbal arts are all entwined in defining regionality—what makes a place unique. Sense of place may be examined through various lenses, or cultural perspectives, listed below. Choose some or all of the categories to develop a worksheet for students to survey how these elements contribute to the local sense of place. Working individually or in teams, students may document different cultural perspectives to combine into culminating projects such as maps, podcasts, essays, poetry, visual art, music, dance, or drama scripts. For each category they might choose one word to summarize what they have captured to serve as a prompt for writing a poem, an essay, or a podcast. (See graphic organizer on p. 122.)

Language and Dialect What languages or dialects are spoken?

Foodways What events take place in which food or food preparation is important? Where are the places where local produce is sold, the local food hang-outs, a locally owned restaurant?

Music and Dance Where do people go to hear music or dance? What events in everyday life or special events include music or dance? Think, for example, about lullabies, campfires, playground songs, school fight songs, weddings, birthdays.

Geography, Ecology, and Environment Where is the place located? What is the population? Climate? What are some important landforms like rivers, ponds, mountains, prairies? What plants and animals are found in the area? What are important human-made features such as roads, bridges, dams, canals, reservoirs, malls? How do these affect plants, animals, and humans?

Landscape and Land Use Where are parks, playgrounds, farms, businesses, industries, neighborhoods, and towns?

Soundscape What does the place sound like? What are the natural sounds, the human-made sounds?

Religions What religions are practiced? Where are religious activities held? What events are associated with places of worship or religious beliefs? What are the places in the community where religious activity occurs?

Crafts, Decorative Arts, and Material Culture How are local buildings constructed and decorated: ironwork, brickwork, terra cotta, murals, etc.? How are gravestones decorated in local cemeteries? How are crafts used within events or how do they contribute to a distinctive sense of place? How are crafts learned and the skills passed on? Are there places where material culture is particularly evident?

Customs, Celebrations, and Festivals What are major events? Is there a festival, homecoming or reunion, fair, pageant, parade, or procession? What about events associated with the cycle of life such as birth, coming of age, marriage, death? What are the places where these events traditionally occur?

Seasonal Round What events always occur at a particular season of the year? Who takes part in events? Where do these activities occur? Whose place is it?

Oral Narrative Genres Are there jokes, stories, tall tales, legends, riddles, proverbs, folktales, and anecdotes about the area? Are there events or places where you can hear these narratives? Are there narratives about local places or events? What about stories of important events in local history, or how national events affected people in the community?

Family Names and Place Names Are there family names common to the region? How did places in the area get their names? What informal names do people use for places?

Ethnic and Other Folk Groups Who lives in different neighborhoods? Are there many newcomers or immigrant groups?

Occupations and Occupational Folklife What are the work-related skills: the knowledge, customs, traditions, stories, jokes, music, and lore of different jobs or occupations?

Settlement History and Patterns Who lived here first? Who founded or named the place? Where did some current ethnic groups in town come from? Where did they/do they live? What brought them here? What did/do they do for a living? What groups are new to the area? Where did they come from?

Adapted with permission from The State of Our Lives: Being a Louisiana Neighbor. Accessed at www.louisianavoices.org/Unit4/edu_unit4.html.

Directions: Select a place and list it in the center hexagon. Select categories of cultural perspectives from the box below and enter them in the remaining hexagons. Brainstorm specific ideas related to the place in each category and list them around the hexagons.

SAMPLE CULTURAL PERSPECTIVES GRAPHIC ORGANIZER



Cultural Perspectives

Language and Dialect
Music and Dance
Landscape, Land Use
Religions
Customs, Celebrations
Oral Narratives
Ethnic and Folk Groups
Settlement History, Patterns

Foodways
Geography, Ecology, Environmental
Soundscape
Crafts, Arts, Material Culture
Seasonal Round
Names – Family, Place
Occupations

Placing Indigenous Traditional Ecological Knowledge at the Center of Our Research and Teaching

by Michelle M. Jacob, Emily West Hartlerode, Jennifer R. O'Neal, Janne Underriner, Joana Jansen, and Kelly M. LaChance



University of Oregon Honors College students with Tribal Elders Myra Johnson Orange, Beverly Beers, Ruth Lewis, and Randall Lewis outside the Warm Springs Museum, Fall 2014.

Photo courtesy Jennifer O'Neal.

As we consider the theme of this special issue, “Common Ground: People and Our Places,” we recognize that we are all living on Indigenous homelands. In our case, our university—the University of Oregon—is on k’alap^huya ili?i (‘Kalapuya lands’, from Chinuk Wawa), the Indigenous homeland of Kalapuya peoples, who were forcibly removed in the fervor of westward expansion that took place in Oregon. We begin with an acknowledgement of place because we have a commitment to honoring Indigenous knowledges, which are place-based wisdom and tied to Indigenous homelands (Jacob 2016). We come together to write this article because of our shared interest in Indigenous Traditional Ecological Knowledge (TEK), an important, growing field of research and methodology that advances educational sovereignty and decolonization efforts (Cederström, DuBois, Frandy, and Connors 2016; Jacob and Blackhorn 2018). While folkloristic discourse typically includes traditional knowledge, cultural expressions, skills, practices, aesthetics, and sensibilities passed on from person to person within folk groups in an informal context, TEK refers very specifically to the issues that emerge when researchers work with Tribes, Tribal councils, Tribal members, Native American knowledge, and First People's heritage traditions. Therefore, TEK projects may be a part of folklore research but may also

This article represents decades of ongoing collaborations with Indigenous peoples. We offer wholehearted thanks to all community members and co-researchers who have helped with these projects over the years. For the Yakama Ichishkiin project, we acknowledge and thank project co-PI Phil Rigdon, and Elders Levina Wilkins and Dr. Virginia Beavert as advisors, co-researchers, and Ichishkiin language and culture specialists. We acknowledge the support of the National Science Foundation (NSF), *Ichishkiin/Sahaptin (yak): Language Documentation of Natural and Cultural Resources*. NSF DEL Grant #BCS-1064459 (Janne Underriner, PI). We also acknowledge support of the 2017 Interdisciplinary Award in the Humanities and Social Sciences (Jacob, PI) funded by the Office for Research and Innovation at the University of Oregon through the support of the University of Oregon Foundation, which funded the Indigenous Traditional Ecological Knowledge (ITEK) initiative that brought us together to collaborate on this manuscript.

emerge across many fields, both academic and public, from History and Linguistics to Environmental Studies and Political Science, from Food Studies to Education and more. Through collaborative authorship, this article provides cross-disciplinary examples of TEK projects to illustrate today's best practices for keeping Indigenous peoples and knowledge at the center of such research and teaching. In doing so, we embrace the common ground that we collectively share as colleagues working with TEK at the University of Oregon. In this paper, we briefly discuss TEK literature and then provide examples of how we place TEK at the center of our work.

Traditional Ecological Knowledge

TEK is inherently place-based, as it draws from the Indigenous knowledges rooted in Indigenous cultures and homelands and is held as a sacred gift from the Creator since time immemorial (McGregor 2004, 390). Traditionalists are hesitant to provide a definition of TEK, which may impose colonial thinking into sacred spaces, which includes many aspects of knowledge and relationships (Ibid.). This acknowledgement of TEK brings forward the creation stories and stewardship of Indigenous peoples in relation to their ancestral land and in solidarity with the natural world (Ibid.). TEK is an ideal way to draw multiple perspectives into solving regional and global issues by weaving together TEK with Western scientific and academic knowledge (Turner and Spalding 2013, 388). Specifically, place-based educational approaches ground students' experiences in their communities and are inherent with TEK by tying into ancestral land. With community at the center, students learn their people's core values as they relate to culture, land, food, religious traditions, history, and language (Smith 2002; Gruenewald 2003; Jansen, Underriner, and Jacob 2013). Cajete (1994) discusses that the purpose of traditional education in Native cultures is to connect young people deeply to their heritage and their physical homelands. Traditional stories are cultural cornerstones in Indigenous societies, and "contain much traditional wisdom, especially lessons about how to be" (Beavert and Walker 1974, vi). Many legends present a lesson or moral and are closely tied to a geographical location or feature. Warm Springs Tribal Elder George Aguilar discusses the relationship between legends and locales: "Nearly every geographical point along the Columbia River Gorge had a legend that told about the rocks, hills, fishing locations, rock formations, talus slides and so on" (2005, 225). As described in TEK, a place-based framework connects learners to what is essential to their community and to the ways of their ancestors.

Each example of our work, detailed in case studies below, models place-based education, which involves "practices and purposes that can be connected to experiential learning, contextual learning, problem-based learning, constructivism, outdoor education, Indigenous education, environmental and ecological education, bioregional education, democratic education, multicultural education, community-based education, critical pedagogy itself, as well as other approaches that are concerned with context and the value of learning from and nurturing specific places, communities, or regions" (Gruenewald 2003, 3).

Data: Examples of Our TEK Teaching and Research

Before we examine individual projects as case studies for using TEK in research and teaching, we must first recognize that documentation is a form of cultural displacement, or what folklorists refer to as *decontextualization*. Recording a traditional story or taking photos of handmade regalia takes the cultural asset from its home place (in the voice of the teller, on the body of the practitioner) and displaces it onto a foreign medium (a magnetic tape, a celluloid strip, an SD card). In this new

medium, the displaced asset gains mobility through its new digital home. Its potential to reach new audiences—public and academic—expands exponentially as it now moves with ease to archives or the Internet. What the asset gains in transience and audience, it arguably loses in relation to less tangible but no less valuable qualities like rootedness, intimacy, lineage, and the controversial concept of *authenticity*. Critical film theorists (e.g., Christian Metz, *The Imaginary Signifier*, 1975) argue that this kind of displacement makes it easier for end users to objectify and marginalize unconsciously what we observe on screen. In the above examples this means cherished heritage assets—a sacred song, a beaded yoke—and the cultural meanings they hold, are at risk of unintentional abuses made possible through documentation and display. This paper steers that kind of philosophical inquiry away from a phenomenological discussion and instead toward the practical steps that academic and public sector professionals can and should take when undertaking TEK research, from planning to collecting, and including control and access, to mitigate risks and foster best practices. Below we share five examples, each from a different perspective, about our approach to TEK research and teaching.

Part 1: TEK and the Oregon Folklife Network

by Emily Hartlerode

The Oregon Folklife Network (OFN), the state's designated public folklife program, is fortunate to work with Oregon's nine federally recognized Tribes in our mission to document, support, and celebrate Oregon's diverse cultural traditions. Situated at the University of Oregon (UO), OFN conducts folklife fieldwork that engages with communities, organizations, and Tribes to increase public awareness about Oregon's living cultural heritage. Through these efforts, we generate primary research materials of interest to our host institution and to other educational institutions around the country and globe. Our partnerships with Tribes and interactions with Tribal members continually remind OFN's non-Native staff about the special steps necessary with regard to ownership of and access to the traditional knowledge we document and/or preserve through our work. Our



2012-2014 collaborations with the Confederated Tribes of Warm Springs (CTWS) laid an excellent foundation for best practices that I refer to here as TEK methodology. This seemingly straightforward digitization project—to transfer existing analog media (reel-to-reel tapes) in the CTWS archives for improved preservation and access—needed special care. The content was priceless: Audio reels contained smoke songs, legends, pow-wows, and Tribal Council meetings in at least three tribal languages. Tribal staff were vital for this work: Indigenous expertise was critical for understanding the content and creating accurate metadata; and considerable content was not appropriate for outsiders to hear. Yet lack of technical expertise had already resulted in errors during prior inventories; some reel tapes had snapped, and one was accidentally recorded over.



Georgitis visually inspects a reel.
Photo by Emily West Hartlerode.

Through many face-to-face conversations and follow-up conference calls with CTWS Culture and Heritage Language director Valerie Switzler, those involved determined that Nathan Georgitis of the UO Libraries should install an audio preservation workstation at the CTWS archives, and then provide a weekend training in audio archives management to Tribal staff person Dallas Winishut. Georgitis remained available throughout the project period for phone and email consultation, and he returned once more for on-site support. As a result of this process, the Tribe hired Dana Creston Smith who far exceeded the goal to digitize 40 hours of reel-to-reel sound recordings.

OFN staff members joined the project to serve as documentarians and to raise public awareness about TEK and digitization. OFN collaborated with UO Libraries to submit two successfully funded proposals from the Oregon Heritage Commission. CTWS earned continued funding and has digitized over 1,000 hours of audio and video to date. However, collaborators' commitment to maintaining CTWS as project lead, and our agreement to channel project resources and ownership to the Tribes was challenged, mostly because of how these priorities diverged from the usual ways the larger bureaucracies involved typically function.



Dallas Winishut, Ichishkin language instructor, threads a test reel.
Photo by Sanna Parikka.

For example, many audio preservation projects outsource technical services to paid providers. This one sought to install the requisite technologies and develop the necessary skills within the Tribes. Doing so made it possible for the Tribes to retain control of the process and its outcomes; this process also created sustainability, building the skills and resources to continue the work. This was problematic for University Sponsored Projects Services, the grant oversight division whose staff were unused to using University-earned grant funds to purchase equipment for non-University entities. Although OFN required little more than an explanation to move forward, I cannot overstate the value of a pre-existing commitment among collaborators to justify clearly and easily the partnership's priority: to respect Tribal authority regarding the stewardship of Tribal knowledge and to empower the Tribes with the resources to continue the project's work once the grant had closed. Without that TEK commitment, the project risked conforming to the standard practices of a university office, not the collaborators' goals.

Public funding brought another kind of contradiction. Publicly funded projects often require public products as outcomes. An access project of this kind would typically improve public access to the newly digitized archival content. CTWS, however, could not guarantee that the collection they prioritized for digitization would be appropriate to share. The grant officer at Oregon Heritage Commission understood the dilemma but could not waive the requirement. With a little creative thinking, we came up with an alternative product, and OFN published a [short video](#) about the project's cultural significance and Georgitis developed two [how-to guides](#) for sound records management and inventory assessment, all useful for other sound archives.

The video allowed Tribal members to protect potentially sensitive cultural content and guarded against the voyeuristic objectification of Native culture that can come from sharing sensitive cultural materials. Without nuanced interpretive context, the value of such materials can be lost on a general public. Instead, Tribal participants themselves spoke about the importance of this historic content being unlocked from the archives; the video enabled them to raise public awareness about the Warm Springs collection, the history that created it, and its value for language revitalization and other cultural efforts.

The project succeeded because it established Tribal leadership early in the collaborative process, a key criterion for endeavors intended to preserve Tribal knowledge. By connecting in person often, naming Tribal participants as project leaders, and articulating Tribal-centric goals, solutions are more readily available to help all of us stay the course. Through these relationships with Tribal communities, public folklorists and others working in collaboration with Tribes learn more about our combined histories and the confluence of cultures in which we live today.



Nathan Georgitis (right) begins training Dallas Winishut (center), and Greg Arquette (left) looks on.
Photo by Emily West Hartlerode.

Part 2: TEK and Indigenous Language Documentation in Linguistics

by Joana Jansen

Language documentation is a subfield of Linguistics concerned with collecting audio and video records of the languages of the world (Austin 2014, Himmelman 2006, Woodbury 2003), making long-lasting resources that can be put to many uses beyond describing and analyzing languages: learning and teaching language and culture; understanding history and natural and cultural resources; preserving and making accessible anything Elders deem important to record and preserve. Language documentation includes making accessible heritage or archival materials that have not been widely accessible because of physical, financial, or institutional barriers. As discussed above, however, to whom materials will be accessible needs to be addressed with every project. For the work described here, important features of language documentation are accountability for the data, an interdisciplinary focus, and involvement of speech community members. Collaboration and access are part of the project design, not a secondary consideration. Particularly when a community has few remaining Elders who grew up speaking their Indigenous language, goals of teaching the language and documenting the knowledge of the Elders go hand in hand, and documentation projects ideally proceed with revitalization as a core value (Jansen and Beavert 2010; Jansen, Underriner, and Jacob 2013; Yamada 2011). In our work, we find that Indigenous language cultivation and revitalization is central to TEK. In this section, I describe how language documentation projects can center Elders' TEK and maintain appropriate distribution guidelines. Local narratives such as legends, recollections of earlier times, or descriptions of places enhance classroom lessons and are rich in TEK. As well, Indigenous languages allow the expression of concepts that may not be possible to express in another language.

A recent project recorded Ichishkiin-speaking Elders of the Yakama Nation discussing the broad themes of places and cultural/natural resource management. Elders spoke about their homeland and the changes they had seen in their lifetimes regarding foods, hunting practices, and particular plant resources. One Elder spoke of growing up in the mountains, near the timberline, with aunts and grandmothers. Their remote living depended on gathering, fishing, and hunting small game. Another Elder spoke of a wetlands, identifying some plants found there and speaking of their uses and importance. Another talked of root gathering and root foods. The project also included previously collected legends and narratives told by Mary Eyley, Sam Eyley, Jr., Sam Eyley, Sr., and Joe Hunt, collected by Melville Jacobs (1929, 1934, 1937). Materials were transcribed and translated, and we compiled mentions of landforms, place names, plants, and animals. This showed the rich interweaving of particular resources throughout texts. For example, *nank* (cedar) is an important resource for basketry made from its roots and bark, and has medicinal and purifying purposes. It is used in constructing shelters and for fires. Nank also plays a role in legends, in one rescuing Coyote as Coyote floats downstream, unable to get out of the river's flow, and in another as an Elder teacher to a young woman.

Via the project, Tribal resource managers can heed Elders' words and use them to be better stewards. The project allows us to describe and understand the Ichishkiin language better. This improved understanding in turn supports curriculum development of materials that are being used in language and Linguistics classes. Recently, students of a University course on language revitalization worked together to document *wák'amu* (camas, a root food) identification, life cycle, gathering, preparation, and preservation and to build teaching materials from their documentation,

including the illustration included here. Elders in a language class for speech community members and Tribal and non-Tribal University students subsequently reviewed and added to what the first class had built. Additional resources to enhance the curriculum come from the previously collected legends from the 1920s and '30s that mention camas locations and preparation.

The language embeds the TEK of those who speak it. Several Elders have said to me that Ichishkiin is a descriptive language, and that the words present a picture or scene in a way that English cannot. This richness is found in part within the structure of the verbs themselves, and the ways the Elders describe places and processes. Verbs have an intricate structure and can include many prefixes and suffixes, each contributing a particular meaning. The verb describing an action such as scraping a hide or sweeping a fishing dipnet embeds the way a person's arm moves as they carry out the activity. An Elder carefully teaches, "*Áchaxwiilhtaam pyaxinan* (You slip the skin off bitterroot)" (Beavert and Hargus 2009, 26), using a verb (*chaxwiilk-*) that contains the pulling and slipping motion needed to take off the skin and prepare the root for eating. The language reflects these important TEK processes. As we are guided by the Elders in what to document, and what of that documentation to share, we have the privilege of contributing to teaching and learning TEK as well.



Wák'amu (camas) teaching materials. Drawn by Kara Romriell.

Part 3: Place-Based Learning Supports TEK in the Classroom or Institution

by Janne Underriner

Place-based learning integrates the traditional, cultural, and ecological knowledge of the local community and facilitates increased involvement by the community in its implementation (Blanchard 1999; Gay 2000; Nee-Benham, et.al. 2000). A traditional or place-based learning approach is collaborative and compatible with the way information was transmitted historically (prior to the 1870s when education in schools became federally imposed) as learning includes Tribal Elders, community members, and leaders, often outside the classroom on the Reservation and ancestral lands.

Place-based learning was introduced to me in 2000 by Tony Johnson, then the Culture Education and Chinuk Wawa Language Program Manager at the Confederated Tribes of the Grand Ronde Community of Oregon. Tony's lifelong expertise in the cultures, languages, arts, and materials of the people of the Northwest Pacific Coast guided our development of place-based curriculum and materials. Most curriculum we had written previously included TEK principles since it was influenced by or written with Tribal Elders and speakers and centered in place and traditional lifeways. But now we were intentional in placing TEK as core to the curriculum. Tony and I engaged literature on place-based education and visited [Neskowin Valley School](#), an independent, nonprofit elementary school in South Tillamook County, Oregon, to learn how this type of learning worked on the ground. We wanted to develop programs for language revitalization that, at their core, would revolve around place-based learning.

In developing place-based curriculum, we keep in mind larger cultural and place-based learning objectives: fostering respect for traditional lifeways; practicing lifeways now and carrying them into future; and integrating cultural processes into one's life. We also align units, lessons, and materials to cultural and academic standards that meet both Tribal and school district requirements. We begin with identifying curricular thematic unit ideas. Curriculum units are centered around traditional lifeways (cedar, juncus, hazel basketry), animals (beaver, elk, deer, condor), Elders past and present in the community, storytellers, roots (camas), fish (salmon), berries (huckleberry, salal), acorns, canoes, and caretaking of land and water.

Next, team members (possibly teachers, Elders, curriculum writers, a linguist, and science, language arts, and cultural specialists) brainstorm ideas to develop a thematic curriculum web that provides supporting interrelated themes, the unit's required language, the scope and sequence of lessons, and accompanying materials and resources (people as well as objects).

Since 2000, the Northwest Indian Language Institute (NILI) at the University of Oregon has partnered with the Confederated Tribes of the Grand Ronde Community of Oregon (CTGR) to develop and implement place-based learning curriculum focused on language arts, ethnohistory, social studies, history, and math skills development at the Tribe and at Willamina Elementary School. Writing for these projects early on was met with support as funding agencies were looking to support educational research that integrated academics, culture, and place or community with Native language. Projects have been supported by the Administration for Native Americans, the U.S. Department of Education, and Spirit Mountain Community Fund. We argue that an interdisciplinary place-based learning experience rich in culture that includes the community supports the well-being and identity of Native youth.

See a developing place- and culture-based curriculum example at <http://nili.uoregon.edu/resources/curriculum>.

For example, the unit on hazel (*Corylus cornuta* var. *californica*) was inspired by a storybook created by Chinuk Wawa learners (youth and Elders) who desired that the processes of hazel basketry be taught and documented for the CTGR community's learning. Of note here is that the curricular hazel unit was developed because of a request to the Cultural Education Department from learners and is an example of a collaborative relationship.

In designing the curriculum, the teaching-curriculum team brainstormed a thematic web that identified the hazel unit's lesson components as 1) plant identification, 2) location, 3) gathering, 4) processing, and 5) weaving and use. Lessons and materials were developed for each component from new and previously collected materials. In particular, Tribal archival photographs and photos and video generated from community hazel basketry workshops and classes formed the basis of how-to pictorial books that teach each process; students and Elders in the Chinuk Wawa Immersion pre-3rd-grade classrooms wrote and illustrated storybooks about hazel identification, gathering, and weaving. Curriculum is taught seasonally so students are easily able to relate their learning to their environment. They learn what hazel looks like at all points during the year and where it grows. Gathering and processing hazel is taught and experienced in the early spring when the sap is running throughout the tree. Basketry patterns are learned as math graphing activities focusing on shape and color; peeling hazel bark can be taught as science lessons on climate and temperature. Learners come to know hazel basketry form, pattern, and function by understanding which basket to weave based on its use: digging, picking, or gathering roots or berries; storing food; cooking food; or collecting or boiling water. Traditional stories, songs, prayers and protocols enrich learning and link learners to weavers in their community past and present, and to ancestral lifeways.

Our achievement of creating meaningful place-based learning curriculum depends upon the collaboration of NILI faculty and Chinuk Wawa teachers, CTGR Tribal administration, Culture Resources Department and cultural specialists, Education and Cultural Education managers, grant writers/administrators; linguists; Elders, ethnobotanists, and cultural lifeways' specialists; science, math, and language arts teachers; Willamina School District administration; and funders. Truly, the project is one of multi-communities and entities working together, and it is this participation and investment of resources that has ensured the authenticity of the curriculum and its relevance to learning and place.

One can say then, the strength of culture- and place-based learning is that it is collaborative and allows for relationship and trust building over a period of years. Projects that hold Indigenous partners at the center must include time for relationship building. Place-based projects "concerned with context and the value of learning from and nurturing specific places, communities, or regions" (Gruenewald 2003, 3) must have at their center relationship building, as they hold at their heart the traditions and teachings of communities and Elders.

Part 4: TEK, Legends, and Teaching

by Michelle M. Jacob

From an Indigenous perspective, Tribal Elders are our most revered teachers. Yet, we rarely see Tribal Elders represented in university classrooms or as authors of textbooks. This means universities too often are perpetuating a trend of ignoring or minimizing Indigenous cultural expertise and Indigenous teaching and learning methodologies. How can we undo this legacy of harm? One way is to place Indigenous Elders' wisdom at the center of curriculum. In this section, I describe how I use legends from Tuxámshish Dr. Virginia Beavert's book, *Anakú Iwachá*, in my university-level Education Studies classes. For example, in Fall 2017, students read and analyzed five legends selected in consultation with Tuxámshish, a Yakama Tribal Elder. Students' final assignment was to work in groups to dramatize the legends in a public performance Tuxámshish attended. Students reflected on their experiences learning and

performing the legends and wrote their reflections in journals. Several students volunteered, via Institutional Review Board (IRB) consent forms with the option to have their real name used or not, to have their journals analyzed for this project, including the two excerpts shared below.

Students gained a valuable TEK education, including an understanding of Indigenous pedagogies, from the experience. For example, one non-Native student wrote:

The first thing that stands out to me...is that our storytelling is necessarily communal. Many, many papers get written that end up being read by only one or two people, often with very little care. Our performances are different in that we will be communicating to an audience and have had to prepare for the performance as a community...This type of assignment shifts the focus from individual attainment of knowledge to a communal production/sharing of knowledge. I appreciate the embodied nature of playacting and the temporary community it produces. It's been really nice to interact with my classmates outside of the classroom and to have someone to share responsibility with.

My goal is to treat the act of storytelling with the same amount of effort as writing an academic paper, but this can be difficult in that I've been conditioned to treat storytelling as less serious than academic work. The great thing about storytelling though is that you can't fake anything. With academic work it's easy to rely on jargon or quotes from sources without really understanding what you are saying...I think the difference between the two projects represents something I've been thinking about with regard to how I might bring a [decolonizing] approach to environmental education. On one hand, educators need to center Indigenous voices and the stories that Indigenous people tell about the land. At the same time, educators need to challenge/deconstruct the harmful logics of capitalism, settler colonialism, and white supremacy. I feel more comfortable in this more critical space, and it seems to fit more naturally in this academic environment. The challenge for me is to be less critical and more productive in terms of establishing relationships with Indigenous communities, learning and centering better ways of being in the world. There is a tendency for me to critique, critique, critique, and then call it a day. In many ways I think it's a way of isolating myself and not being present in my scholarship.

The student's quote above is a rich analysis of the students' experience with Indigenous pedagogies and research methodologies that emphasize the communal value of knowledge production, as well as accountability to Indigenous communities. The student contrasts the "normal" classroom experience of writing a paper with focusing on "critique, critique, critique" without feeling responsible to identify and enact "better ways of being in the world." The student grapples with assumptions that Indigenous stories and storytelling methodologies are "less serious" or less rigorous than "normal" academic work that is sometimes done with "very little care." However, the student draws from personal experiences to identify how Indigenous pedagogies and methodologies are in fact serious and demanding; the student experiences a sense of responsibility and connection that otherwise was not present in the student's academic work.

Another student, James, reflected on the power of Indigenous stories connecting him to place and helping him sharpen his vision for his work as a future teacher:

Each of the stories I read, listened to, or discovered along the way helped me flesh out and begin to feel the history that is lost in most modern education....Each one of these began to weave the tapestry of a people I have overlooked....Learning about proper stewardship of the land and our responsibility not just as citizens but people who want to see a brighter tomorrow, it is our responsibility to look after the land that we have been born onto. These lessons are important for us to pass down to the next generations....

This term I have also sat in on a few talks and school meetings about graduation rates and the real secret behind some of the statistics of minority groups and Native students as to why they are failing or dropping out of school. It has been saddening to see how little regard some people have for these students, and it will be our responsibility to change that. I have met many teachers who are about to retire that are tired of carrying this burden and think that no change will come. I have to reassure them, if and when I meet them, that change is not that far away.

In his reflection, James acknowledges that his educational experience has allowed him to overlook Indigenous peoples and that Indigenous history is lost in modern education. Importantly, James discusses the embodied aspect of education, noting he is beginning to “feel the history that is lost in most modern education.” It is notable that James takes this learning experience, through which he and his classmates are using their bodies to affirm the stories, presence, and history of Indigenous peoples in enacting the legends, not only to *learn* but also to claim *responsibility* to care for Indigenous homeland and continue sharing these teachings with the next generations. Thus, storytelling becomes a pedagogical method that can help decolonize education (Jacob 2013). In James’ reflection, he connects his critique of the status quo education system to an empowered vision that he can make a difference in the lives of his future students as well as to a broader vision of systemic change that shifts the reality of poor educational attainment for Native students. James thus firmly grasps his responsibility to help make change; he connects a valuable TEK teaching that caring for Indigenous homeland and challenging structures that oppress Indigenous peoples are intertwined forms of social justice activism.

Throughout the term, I intentionally included readings and activities that would focus on TEK content and methodologies, including storytelling. Storytelling and close observation are favored pedagogical methods within Indigenous communities and are the methods Tuxámshish discussed most when she spoke with students about her traditional upbringing by her elders. These methods require an interpersonal approach, as students cannot rely on standard methods of cramming in isolation to learn material upon which they will be tested in an exam or paper.

One underlying question to this work was: How do we teach students about developing a respectful relation to place? One of my goals was for students to internalize teachings within the stories and carry them forward in their future work as teachers and environmental educators. All the students in the class I am discussing identify as non-Native; however, I would argue that these teachings are important for all students. For Indigenous students, embracing stories as important scholarly

content as well as a critical pedagogy/methodology is empowering because it affirms Indigenous identity and decolonizes the curriculum by honoring and valuing Indigenous knowledges. Within predominantly white institutions, such as the University of Oregon, I primarily teach non-Native students, and I find that TEK and Indigenous stories in particular help my students learn the value of TEK, Indigenous methodologies, and Indigenous pedagogies. At the center of this work is an understanding of the importance of respectful relation and accountability. In both student journal excerpts, we see that TEK has a powerful impact on students' learning. Students experience TEK as a way to connect with Indigenous place-based teachings, and this informs their ideas of their future work as both students and professionals. Legends and traditional Indigenous stories can be an effective tool for using TEK in the classroom.



Tribal Elder and spiritual leader Wilson Wewa engages students in Northern Paiute history and storytelling during the Fall 2015 field research trip to the Warm Springs Reservation.

Photo by Jennifer O'Neal.

Part 5: Engaging Undergraduates in Indigenous Research Methodologies

by Jennifer R. O'Neal

Over the past five years, my colleague Kevin Hatfield and I have been honored to teach the research colloquium “Decolonizing Research: The Northern Paiute History Project.” This course and multi-year project embody a formal collaboration and partnerships between the University of Oregon Robert D. Clark Honors College and the Northern Paiute communities of the Confederated Tribes of Warm Springs and the Burns Paiute Tribe in the Northern Great Basin of Central and Eastern Oregon. Anchored by the annual research colloquium, the accompanying field research trip to the Warm Springs Reservation, and sustained engagement among undergraduates, Tribal Elders, and community member course partners position students to perform original research, learn new ways of understanding and learning, and create new knowledge with the guidance and knowledge of Tribal community members. The course espouses the values of community-based, intercultural, decolonizing, multidisciplinary research, and authentic discourse among Native and non-Native students, historians, and scholars.

The foundation of our course is a decolonizing research methodology that centers an Indigenous research paradigm within Indigenous Traditional Knowledge Systems. This ensures that Indigenous perspectives are respected, we share our research with Indigenous communities, and we follow appropriate ethics protocols, such as those outlined by Linda Tuhiwai Smith (2012), who explains that:

Indigenous methodologies tend to approach cultural protocols, values and behaviours as an integral part of methodology. They are “factors” to be built into research explicitly, to be thought about reflexively, to be declared openly as part of the research design, to be discussed as part of the final results of a study and to be disseminated back to the people in culturally appropriate ways and in a language that can be understood. This does not preclude writing for academic publications but is simply part of an ethical and respectful approach. There are diverse ways of disseminating knowledge and of ensuring that research reaches the people who have helped make it. Two important ways not always addressed by scientific research are to do with “reporting back” to the people and “sharing knowledge.” Both ways assume a principle of reciprocity and feedback. (Smith 2012, 15-6)

This methodology is further reinforced by one of the many thinkers inspiring the pedagogy of our colloquium—Eva Marie Garrouette and her concept of “Radical Indigenism” articulated in her book *Real Indians: Identity and Survival of Native America* (2003). Garrouette contends:

By asking scholars to enter (rather than merely study) Tribal philosophies, Radical Indigenism asks them to abandon any notion that mainstream academic philosophies, interpretations, and approaches based upon them are, in principle, superior. The demand that researchers enter Tribal philosophies cannot stand by itself. If the adoption of those philosophies is to be something more than mere appropriation and exploitation of Native cultures, it must be accompanied by researchers entering Tribal relations. Entering Tribal relations implies maintaining respect for community values in the search for knowledge. This respect is much more than an attitude, it requires real commitments and real sacrifices on the part of those who practice it. (Garrouette 2003, 107)

With this ethical framework in mind, the instructors explore how, historically, the educational system, and often particularly the writing and teaching of history, has functioned as a site of oppression, assimilation, and ethnocide controlled by dominant culture voices and misrepresentations. Consequently, students examine how the course research projects could challenge triumphalist, military, and imperial paradigms and avoid functioning as an act of appropriation or neo-colonialism—in other words, the practice of extracting, alienating, and distributing knowledge for uses and purposes external to the Indigenous source community. Rather, we wanted students to understand the importance of their academic research to the Tribal communities, the role it fills in the scholarship, and then, as a form of reciprocity, share the papers with the course partners and larger Tribal communities.

Within this context of collaboration, students participated in an apprenticeship in the historian’s craft designed to offer an inquiry-based intellectual space fostering discovery, curiosity, empathy, and reciprocity. The instructors and course partners co-constructed a body of research questions with particular meaning for the Tribal communities, encompassing the broader themes of identity, indigeneity, sovereignty, self-determination, resistance, rights, and restoration. We also established a protocol for shared decision making about research agendas, modes of inquiry, categories of analysis, dissemination of knowledge, and philosophies of scholarship. These

research protocols confronted the dichotomy between the authorized “academic expert” and the “subordinated subject” and worked in good faith in the challenging and promising enterprise of intercultural exploration and the seminal research insights it may yield.

A two-day field research trip then embodies the transformative centerpiece for undergraduate learners and places students in direct dialogue with Tribal community partners. The field research trip physically and intellectually immerses students in the culture and history they are studying and also encourages them to think critically about the way they have conventionally learned history and how their research dovetails with the larger purposes of the course. According to one student, “This trip is an essential part of truly understanding the process of decolonizing history...engaging and interacting with the Tribal community and writing about what matters to them.” Another noted that the experience “made the relevance and importance of our projects come to light...I now feel encouraged to work even more diligently on the research because we have met those whom it is very important to.” The group dialogues also generate new questions such as how to incorporate the multiple viewpoints and truths presented from Tribal members and how to negotiate differences and contradictions between documentary primary sources and oral history testimony and living memory. The course unpacks these questions throughout the term by providing guidance on how to examine and construct meaning critically from often divergent historical evidence—especially for the Northern Paiute history that has been historically misrepresented in secondary sources.

Students work closely with community partners and receive feedback and mentorship on each step of their research papers through sustained contact with the partners via the field research trip, class visits on campus, conference calls, and written correspondence. This community-engaged learning throughout the course helps students understand that, as Wilson Wewa, Warm Springs Tribal Elder and spiritual leader, told us “most of the books and history that has been written that are in libraries ...is not our own history, it has been a diluted history based on writings from the military, from the federal government, from the state government, and the Indian agents. With dedicated researchers and students, they are the ones that want to know the truth, they are the ones that are unlocking those doors of change. The more that we realize that there is a true history out there that needs to be unlocked, the more opportunities we have to go in a positive direction of helping one another and understanding one another” (Wewa 2015). Myra Johnson Orange, Warm Springs Tribal member, Indigenous language instructor, and course partner, similarly reflected, “[The class] puts real the history of our people because you hear the things but you never put it all together like a big puzzle. There’s bits here, bits there...well the puzzle’s coming together now based on the research that I’ve been reading. Ah, now I understand why, or now I see things that I never really understood before. So, I think it’s important for me at this age to finally put puzzles of my history together, based on the research done by this class and the students just gives me thrills and chills (Johnson Orange 2015).



Myra Johnson Orange leads a guided tour through the Warm Springs Museum, Fall 2014. Photo by Jennifer O’Neal.

This integral engagement with Tribal community partners and visiting scholars has propelled students to signature achievements and recognition of their scholarship. Students have received various undergraduate research awards for their papers and have presented at multiple conference sessions across the state and the country. To date, the course has generated 74 original research papers, one documentary film, and four Clark Honors College theses. Over the past two years we sponsored these students through the full IRB approval process with the University of Oregon Research Compliance Office, as well as research approval from the Confederated Tribes of Warm Springs through the Culture and Heritage Committee and Burns Paiute Tribe through their Tribal Research Ordinance.



Tribal Elders Wilson Wewa and Ruth Lewis share Northern Paiute stories with the class overlooking the ancient Northern Paiute site of the legends “Animal Village,” “Monkey Face,” and “Giant Numuzo’ ho,” Fall 2013. Photo by Kevin Hatfield.

After five years of teaching this course to undergraduates, we have learned important lessons that have helped us to refine the course each year. We stand in solidarity with the educational sovereignty recommendations that Cederström, DuBois, Frandy, and Connors (2016) have published and hope that the lessons we share may be useful to others as they begin important meaningful Tribal community-engaged research projects.

Tribal community and course partners must always be at the center of the project guiding the initiative. We see ourselves as the facilitators of the project, but the Tribal Elders and partners have the expert traditional knowledge of their history, lifeways, and people who guide it. In addition, they know the intricacies of their communities, what complex politics may be going on, and with whom we should speak to regarding Tribal history. First and foremost, they should always be in the driver’s seat of the project.

Introducing non-Native undergraduates to an Indigenous research paradigm and Indigenous ways of knowing is challenging and takes time. Often many students come into our classes with little to no knowledge of Native American history, let alone knowledge of Oregon's Tribal history, and how Indigenous peoples understand their history, culture, and community, which are centered around relationality. This is essentially a new way of learning and understanding the world, and it will take undergraduates time to understand this history and ways of knowing and to be confident using this methodology. Thus, ensure that you allow significant time in the term and curriculum to introduce, examine, and engage with this type of methodology and different ways of knowing. We suggest that such research projects be broken down into two courses: one that covers Indigenous research methodologies as a prerequisite and a second in field work and engagement with the community. Taking this additional time and slowing down the process ensures this work is done ethically and provides a more meaningful process for students who are committed to doing this research and making a difference in these communities.

These types of projects should be ongoing and long-term. We entered this partnership with our Tribal community course partners knowing this would be a long-term, sustained relationship that would evolve over numerous years. We knew our purpose was to ensure that the Northern Paiute history did not remain hidden in the margins of Oregon's Native American history. We wanted to bring awareness of their history, lifeways, and culture to the fore. We are committed to taking this project wherever they choose and will continue to do so as long as possible.



Fall 2016 Honors College class with Tribal course partners. Front row third from right, Myra Johnson Orange, James Gardner, and Wilson Wewa (on far right) at the Kah-nee-ta Resort, Warm Springs Reservation.

Photo courtesy Jennifer O'Neal.

Conclusion

Across each of these five examples of TEK research and teaching, we engage the tools of TEK in the diverse fields of Folklore, Linguistics, Education, and History. Underlying each example is a commitment to the following key TEK research principles: 1) relationship building is essential for successful TEK research and teaching; 2) Tribal partners must have the authority to decide the scope and content of TEK used in projects; 3) partnership building takes time, and all projects should be ongoing to meet the needs of Tribal partners. In each example we shared in this paper, we engage these key principles in diverse ways: in thinking creatively about how to meet the demands of funders while privileging the preferences of Tribal partners; assuming the responsibility to document and teach endangered Indigenous languages; following the lead of Tribal partners in determining the priorities of a research or teaching project; using published materials and working with students to create additional resources such as storytelling

performances; or documenting and synthesizing Tribal histories that empower communities and Tribal Elders. Each example allows a different insight into using TEK in teaching and research and upholds Native pedagogies (Cederström, DuBois, Frandy, and Connors 2016) that are rooted in Indigenous cultural teachings, lifeways, and traditions.

In this paper, we have found common ground among a diverse set of colleagues at the same university who are all engaged in ethically researching and teaching about TEK issues with Indigenous communities. In the process of writing this paper, we have learned from one another and gained inspiration in one another's approaches to TEK research and education. Although our projects and experiences are each unique, we find commonalities in our commitments to our TEK principles of building strong ethical collaborations with Indigenous communities through our values of respect, reconciliation, and reciprocity, with the goal of upholding educational sovereignty. To accomplish this work, we focus on centering Indigenous traditional knowledges in our research and teaching to ensure that Tribal perspectives, culture, and lifeways are privileged and rooted in their communities. We challenge ourselves, and others, to continue building strong collaborative partnerships, accessing resources to benefit the TEK visions of Tribal communities, and to support one another in these dedicated efforts toward decolonization. In the end, it's about respecting and building strong relationships with the Indigenous people whose lifeways, culture, and traditions we are honored to help preserve and share.

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Emily West Hartlerode, MA, is Associate Director of the Oregon Folklife Network. She has produced documentaries ranging from women rock musicians to male inmate crochet communities. Her work for OFN is promotional, as with the National Park Service [Honoring Tribal Legacies](#), and educational, as with the [Confederated Tribes of Warm Springs Sound Preservation Project](#), which received an Oregon Heritage Excellence Award (2014) and the American Folklore Society's Brenda McCallum Prize (2015). She writes and manages grant projects, including the [Traditional Arts Apprenticeship Program](#), and serves regularly on grant panels, planning committees, and conference panels.

Jennifer R. O'Neal (The Confederated Tribes of Grand Ronde) is the University Historian and Archivist at the University of Oregon and affiliated teaching faculty with the Robert D. Clark Honors College, History Department and Native Studies Program. She specializes in American West and Native American history, with an emphasis on decolonizing methodologies and social movements. Her research and teaching are dedicated to Indigenous research methodologies, Indigenous knowledges, cultural place-based pedagogy, and collaborative research models with tribal communities. She holds an MA in History from Utah State University and a Master's in Library and Information Science from the University of Arizona.

Janne Underriner, Director of the Northwest Indian Language Institute, has been active with language preservation and revitalization issues in the Northwest since 1996 and co-founded the NILI in 1997. She works with speakers and learners of Native languages to support language teaching and development of cultural and place-based language curriculum and language assessment. As faculty at the University of Oregon, she teaches language revitalization courses in the Department of Linguistics. Her research focuses on the role of academic institutions in teaching Native languages; cultural- and place-based learning; culturally responsive teaching; and collaborative research models originating from Tribal communities and academic institutions.

Joana Jansen is Associate Director of the Northwest Indian Language Institute at the University of Oregon. She works with speakers and learners of Indigenous languages at UO and beyond to support language documentation, description, and teaching goals; pedagogical grammar development; and language curriculum and materials development, particularly place-based curriculum. She works as a part of a team to build Ichishkiin language curriculum and assessments. Research interests include language teacher education, collaborative research models for mutually beneficial work involving academic institutions and Tribal communities, and linguistic description, analysis and revitalization of the Ichishkiin/ Sahaptin language.

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URLs

OFN video: https://www.youtube.com/watch?v=6o_jQOZ2dNw

How-to-guides: <https://blogs.uoregon.edu/toolkit/archiving-and-publishing-your-documentation/archiving>

Neskowin Valley School: <http://neskowinvalleyschool.com>

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A Curriculum of Wonder: An Interview with Mark Wagler

Mark Wagler and Tim Frandy

Mark Wagler is a retired 4th- and 5th-grade teacher, former professional storyteller, folklorist, and now a consultant and writer. Raised Amish-Mennonite in Ohio, Wagler worked many jobs before settling into public school teaching at the age of 43 in Madison, Wisconsin, where he quickly became known as a profoundly engaging teacher. His classroom looked little like conventional classrooms. There were no desks, but rather couches, tables, and an enormous amount of equipment and materials; the classroom didn't face forward, but rather clustered in a number of circles; Wagler didn't primarily teach by instruction, but rather by embracing the power of unknowing and the innate curiosities of his students.

Wagler's innovative pedagogical techniques in the science classroom are rooted in inquiry-based learning, local learning, and interdisciplinary methodologies. None of this would have been possible without his deep training in the humanities. This radical redesign of his own classroom led him to win the 1996 Presidential Award for Excellence in Mathematics and Science Teaching.

As guest editor of this environmental humanities issue of JFE, Common Ground: People and Our Places, I sat down with Wagler in early June 2018 in his Madison home to talk about how he understood the relationship between local culture and the sciences in his classroom. What follows is an abridged and edited version of this conversation. We spoke about his journey, his inquiry-based science curriculum called "I Wonder," how classrooms could be like prisons, and how we as educators can create liberating learning environments.

A student observes purple coneflower in the Randall Outdoor Classroom.

Tim: *Can you say a few words about your professional journey into teaching?*

Mark: My first year of teaching, when I was 19, I taught high school geometry and American literature in a small Amish-Mennonite school, just over the hill from where our family lived out in the country. Since then I've taught in quite a few settings, urban and rural, public and private, traditional and progressive, from preschool to graduate school, and from religious education to artist residencies. That includes a cooperative family daycare, primary grades in an alternative school, college English, graduate education courses for teachers on using storytelling in language arts and the social studies, and working in more than 700 schools as a storyteller. For four years, I did research at the University of Wisconsin–Madison on how and what middle-school students learn when they use augmented reality games played on mobile devices to study local places.



Mark Wagler immersed in prairie plants.

T: *When did you start in the Madison school system?*

M: In 1987, I decided I didn't want to live on the road as a storyteller. I just needed to be home more. Since I already had my degree, I went through a fast-track teacher certification program, which took less than a year. I taught for three years at Glendale School on the Southeast side. From 1990-2006 I taught at Randall Elementary School, which is our own neighborhood school.

T: *Could you characterize your core curriculum?*

M: Folklore was explored everywhere, especially in social studies, where we balanced texts for required study of U.S. and Wisconsin history with our primary focus—extended investigations of what we called “local culture,” an integration of history, geography, economics, political science, and expressive culture. Students documented family and neighborhood culture for homework, and the whole class used classroom interviews, frequent fieldtrips, and design projects for yearlong cultural tours. In science, we combined student investigations based on their questions with observations of their backyards, the Randall Outdoor Classroom, biweekly Mornings-in-the-Marsh, and our Living Machine (a complex classroom system of connected containers that modeled multiple habitats and species in the marsh).

Mornings-in-the-Marsh

Mark Wagler routinely took his students out of the classroom to a Lake Wingra marsh within walking distance of the school. These fieldtrips supported all kinds of interdisciplinary curricula, including scientific observations, drawing plant specimens, service learning, and writing poetry and fiction about some aspect of the marsh. The lake critters they observed during these half-day field labs were regularly brought back to the classroom to incorporate into their Living Machine – and sometimes later used for I Wonder projects.

T: *What did your studies of culture and nature have in common?*

M: In both social studies and science students experienced real-world, place-based learning; in-depth, hands-on inquiries; extended documentation of what we discovered during our inquiries; analyzing patterns and uncovering complex systems; representing our research through many media; and probing areas where nature and culture overlap, such as health, beliefs, and sustainability. Our investigation of the world was bifocal: Whenever possible, we looked at the world both through the lens of STEM (Science, Technology, Engineering, Math) disciplines and the equally important complementary lens that I call LACE (Language, Art, Culture, Experience).

T: *But you had little training in the sciences, right?*

M: When I was getting my teaching credentials, the only science methods class I took was an independent study focused on what was back then called “children’s science.” The idea was that to teach science well, teachers first need to know the concepts their students have, and how they reason with these concepts, before we design curriculum to improve their understanding.

You know, in other fields, I’ve had so many real-life work experiences. Related to the social studies, I researched history articles for *Encyclopedia Britannica*, worked as a folklorist and community organizer, did neighborhood planning. In language arts, I’ve taught writing at a community college and have been a storyteller, freelance writer, and co-editor of a newsletter for alternative schools. Relevant to mathematics, while writing sections of a parks and recreation master plan, I immersed myself in statistical data collected from an extensive community survey. But with science, I didn’t know where to go.

I was already in the habit of creating curriculum in my storytelling residencies, but I just didn’t see that I could create anything lively in the sciences. So, in my first few years of teaching in Madison, I used standard science textbooks, with their “cookbook” experiments. They were the least lively thing I taught!

So very quickly, I began to focus on science ... first just to learn for myself. I really wanted to work with the idea of students as scientists. I created an exercise in which students looked with curiosity at the natural world and wrote sentences beginning with “I wonder ...” “I wonder what causes the breeze that’s blowing in the window, and why sometimes the breeze will come and then pause and then come again.” “I wonder why something falls when I drop it.” They were emerging questions about nature, really. Then students used these sentences to form questions that can be answered by collecting data and developed procedures that generate relevant data. There was an engaging quality to all of this: Kids liked creating experiments to answer their own questions.

Gradually the “I Wonder” curriculum emerged, replacing our textbooks. Student engagement and learning flourished. As I transferred methodologies from disciplines I was fluent in—especially social studies and language arts—to the area in which I felt most inadequate, I reframed my ignorance about science to experiencing my curiosity as a strength.

“I wonder what causes the breeze that’s blowing in the window, and why sometimes the breeze will come and then pause and then come again.”

T: How did your students respond to this kind of learning? It's certainly a different way of learning from the "cookbook" approach.

M: When it comes to "I Wonder," the most coherent thing I can say is that kids *loved* doing this. They loved being able to muck around in their own questions, and they loved the time we devoted to this practice. We're not talking about a day or two; this is a month after month kind of practice.

Now, I'm teaching both 4th- and 5th-graders in the same room, and working with these students for two years. Very often on the first day of school, the returning students would come back, and one of the first questions they would ask is, "When can we start working on our 'I Wonder' projects?" These are the 5th-graders saying this. Picture yourself as a 4th-grader, and these 5th-graders are there who already know this space, this learning style. In many ways it's not very much about me. I'm helping to create this space, but these kids come in with this huge drive and desire to be engaged. If you're a 4th-grader and you're watching this, you immediately are curious: "I wonder what the hell is going on here."

Imagine students working on long-term investigations based on their own questions, reflecting all areas of the curriculum. Conjure up classrooms of students working on multiple projects: here a survey, there an experiment, data everywhere. Picture kids doing interviews in the community, puzzling over algebra, or analyzing media.

Fancy those children working together, reporting on research, brainstorming strategies, drafting, and peer editing articles. Suppose they could publish what they've learned in a journal distributed to many hundreds of students and adult educators. Contemplate the pride kids will feel after all their hard work. Dream of the vast potential of student wonder and performance.

And open your eyes to Great Blue.

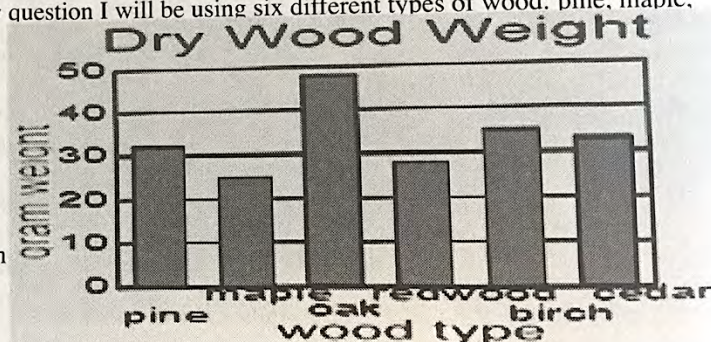
(Wagler 2002, 120-21)

Wood in Water: A Study of Absorption

By Ava Kay
Randall School

Introduction

My Great Blue question is, What type of dry wood soaks up the most water in 19 days and how quickly does the wood absorb water? To answer my question I will be using six different types of wood: pine, maple, oak, redwood, birch, and cedar. In this experiment I am weighing the wood in grams before and after the soaking. To determine which wood absorbs the water fastest I will be weighing a second set of wood samples in shorter time periods. I thought of this question after an hour of thinking with my dad. I picked this question because I wanted to do something on science that involved nature. This article



Fourth and fifth grade students published their research in the journal, *Great Blue*.

T: *Your classroom itself was unconventional, with couches, plants, and an unorthodox layout. You almost need that sort of disruption to help students unlearn how they are encultured into formal education...and how they presume that real-world learning actually works.*

M: It was almost as if it wasn't school. We had a lab space by the windows where plants would grow, a presentation space by the blackboard, a studio space for creating, a reading space, and a variety of nooks and tables for collaborating. Things were different in this space, so when kids walked into this environment, at first, they're like, "Wait, wait, wait... where's my space? What am I doing?"

As they got used to it, and they start talking about things like their Great Blue projects (that would be published in our student research journals), then they started thinking and behaving differently. It's not your volcano project; it's not your states project. It's your Great Blue project; it's your great imagination.

Even our journal used different names for disciplines. We had five sections: "I Wonder" for science; "Kid-to-Kid" for cultural inquiry; "It Figures!" for mathematics; "Critics & Fanatics" for reading; "The Gallery" for art.

T: *This sort of framing is so important. We frame ideas, methodologies, knowledge production, and transmission in cultural terms...in cultural terms that reflect privilege and power. Challenging what a classroom is, what a classroom can be, seems to be essential in this educational model.*

M: One time we were talking about different cultural uses of lines and circles, between Native and Western cultures. In Western cultures, I told them, we're born in the hospital, in rows of rooms with straight hallways. They take us to the nursery where all the bassinets are lined up in rows. We get to school and line up to do things. We line up at the grocery store, and when we die we again are put in rows in a cemetery. Everything is in rows. And if we do something wrong, we might get put in prison. Of course, that's all rows—the rows of bars, and every cell is identical. Now, when I first told students this, I remember I said, "You know, doesn't it feel sometimes like school's a bit of a prison?"



Everyone is usually on task during Lab Time, as individual students and teams plan, observe, record, and interpret results.

The Great Blue research projects, student investigations at the core of Wagler's curriculum, were published annually in *Great Blue: A Journal of Student Inquiry*. Students from the entire Heron Network (a group of teachers using similar place-based, student-centered, and inquiry-based pedagogical methods) contributed to this journal. Like adult researchers, Wagler's students figured out what they wanted to learn, devised research protocols, presented their progress in classroom lab meetings, and published their findings in the interdisciplinary *Great Blue* journal.

“Oh, yes, yes, yes, Mr. Wagler! School’s like a prison.” “Why is it like a prison?” They talked, and decided it was because it could be boring. “So, when we’re bored,” I asked, “Whose fault is it?” Some got a little bolder: “Well, it must be your fault, Mr. Wagler!”

“Being bored feels really imprisoning, doesn’t it?” I said. “You have to be here, and here we are in this room and we can’t get out. Even when we go to Phys. Ed., we just can’t go and play. It’s structured by someone else. You know, sometimes I even feel like I’m your jailkeeper...like I’m the one that’s got to make you do all this stuff.” And then I said, “Well, so how in the world could we get out of this? How could we have a jailbreak?”

This metaphor resonated with my students, so I used it over and over, even though in hindsight it’s maybe somewhat problematic—corrections and especially jailbreaks really aren’t the same as elementary education, you know. Sometimes it’d just be a tiny reference, like when kids would be arguing with me over things like not wanting to do a particular assignment. “You know, I don’t have a choice of whether I teach you writing. I am also constrained. The one choice that I have is that I could work with you to find the best writing experiences that we can come up with together. But if you feel that I’m making you do it, and there’s nothing that you’re going to be interested in, I probably can’t accomplish it. We’re going to stay stuck. So, what would it be like to have jailbreak?”

At the end of the day on Fridays we would even yell “Jailbreak!” Which is so interesting because we didn’t totally think our classroom was a jail, but we realized how trapped we could be. So, it worked as a metaphor for us. It had multiple levels of meaning, and a community feeling. And it was a release, a chance to scream together.

T: Can you talk us through the “I Wonder” curriculum a bit? What does it look like in practice, on the ground?

Though it differed year by year, a typical way to start might be pulling out all our student-research journals from the year before, the *Great Blue* journals, which had a section called “I Wonder.” I would assign them to read certain articles. And we would discuss the research questions, the procedures, and especially whether we trusted the conclusions—and how could we continue this research, or improve upon it. The returning students liked us reading their articles, but they were also ruthless on their own work, saying how they were limited, or that they didn’t have enough time to collect sufficient data. So that was a reading and discussion exercise.



Using past issues of *I Wonder* (in later years incorporated into *Great Blue*) to generate new research ideas.

From there, we'd often use the set of *Great Blue* journals, have students take a question raised by one of these student-scientists, and then change something in the procedure to see if they could improve on the results. That's valuable because that's what real-world scientists do. They're not always making up their own research questions. They're working within a community of other scientists, and they're working together. We'd start asking, "Is this research replicable?" We're using big words, grounded in practice. "Replicable" was not an abstract word on a spelling test, but a precise word used repeatedly in lab meetings. It established the idea that when we do research we present results to other scientists who may repeat and thus confirm or improve our research.

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Helping them come up with research questions and developing methods of inquiry was the core experience of "I Wonder." The meat of "I Wonder" is kids just getting in way over their heads. In the beginning, I'd allow students to work on any question they wanted—like, "Is my male or female guinea pig smarter?" How will a student answer that question? And how will it teach us anything of value? But eventually I began pushing back against that question, as if I were a professional scientist. We always had students wanting to work with pets, or wanting to figure out which tastes better, Pepsi or Coca-Cola. But if we can't learn anything about the sense of taste with our experiment, we'd need to keep talking. I would be constantly trying to help them get to a question that has a real potential. After we negotiated a question and a method of inquiry, we had students report to the class, and the class worked as a team to troubleshoot, to help Sara or Martin with whatever challenges they were facing this week. And that's how we learned, and how we met curriculum standards, with everybody working together trying to solve problems across multiple fields of study.

T: Treating students as young scientists must shape their identity, and their identity in relationship with learning.

M: I would sometimes ask, "How many of you think of yourself as scientists?" In many classrooms, you might get a few hands going up, wagging a bit. But for us, their hands would shoot up high toward the ceiling. What informed their practice was not mostly me, or this classroom environment, but it was their own identity. They're working out of a rich identity here. Because I am a scientist, now I'm doing science differently and I'm thinking differently.

T: And it seems that asking questions is essential in this process. Often classrooms are much more oriented toward having the right answers instead of asking the right questions. It seems very artificial, linear, and top-down. It doesn't model the way that knowledge is produced in the real world.

M: Exactly. One time I was presenting with my students at a series of workshops that brought K-12 science teachers together with university professors and staff. I was asked if I would present on my work with "I Wonder." So, we gave a presentation about our process, and one of the professors asked us how long we would be working on a project if it's not being successful. So, students

talked a bit about that... about being stuck. Then I flipped the question back to the university scientists: “How long might *you* be stuck?” And they said, “Well, sometimes for years.” And we went back to our classroom, and realized, “Oh my God. Being stuck is not a bad thing.” It was such a revealing insight.

T: What sort of projects came from your students?

M: Well, there were plenty. One project that led me to the idea of publishing a journal started with two 4th graders who wanted to know about E.S.P. and if it was real. So, they devised a few methods to test this, and before I knew it, they were testing people at recess, after school. They just wanted to do this all the time, and the kids who participated would do it over and over. Eventually they ended up with more than two thousand bits of data.



Students record observations in their “I Wonder” notebooks.

Another project involved my daughter, Cassie. She was actually in 3rd grade at Randall School, and she wanted to do a project a year early. She wanted to do something about nearby Lake Wingra. We got in a canoe that summer, and we paddled around the lake, trying to figure out what she was interested in. And she was looking at things. She started with surface level things. There was trash in one spot, and she wanted to clean the trash. But we kept pushing forward and eventually she noticed the foam. She wanted to know what caused it. Now, this was so much fun for me because I had more time with her than any other experiment that I ever did in my classroom. But it was still part of my own growing and learning how to support student inquiry.

So, we had this foam. And we’re looking at it, and we’re trying to figure out what caused it via observation. And we just don’t get anywhere. She’s totally lost. Frustrated. I mean, that’s one of the things that happens with “I Wonder” is a lot of frustration, and then breakthroughs. It’s the emotional aspect that makes this model so captivating. I say, “Well, Cassie, what do you want to do? Do you want to find out what that foam is? What would grown-up scientists do if they’re stuck?”

Eventually, she decided to talk to a limnologist, a nationally acclaimed one at the University here. And she interviewed him. So, here’s this 3rd grader, and she’s asking the questions, interviewing him. And he says it’s most likely caused by the proteins in the water, and the action of the waves and the wind by the shore. Now, Cassie was totally intrigued by all this. He said we could actually test this by speeding it up, by using a blender to break up lake weeds.

Then we came home. We came home, and Cassie was peeved. She said, “Why would I want to continue doing this experiment when Professor Carpenter already knows the answer?” “Okay,” I said, “so what are you going to do next? He thought there was some more that could be done here.” So, we got different kinds of lake weeds, we blended them at different rates, and we measured the amount of foam. And that fall Cassie entered my classroom as a 4th grader, and she still had all

these gallon jars with all this mushy stuff in them. And so, what did she want to do? She wanted to observe these different jars with this blended sludge in them and see what happened to them. And they just got smelly in the classroom closet, so eventually we had to get rid of them. This was early in my discovery process. I was more open-ended in those years.

T: So, we've already spoken a bit about the culture of classrooms and how it figures into learning. Are there other ways you have seen culture figuring into the sciences, or the science classroom?

M: Well, I can tell you a story. This would have been 1990, my first year at Randall. Before I began at Randall Elementary, I had spent time living with a Hmong family, and I'd done lots of research on Hmong stories and culture, and I immediately had put up this huge Hmong story cloth in my classroom. Lo and behold, walking into my door that fall, there were seven Hmong students. Two girls, five boys. So, this was the first time that I started teaching "I Wonder" by myself, not as a student teacher. I explained the idea and modeled it a bit. I said you need a question, you need to know how to answer it, you need materials, and so on.

We spent a few days going through this process. With 25 students, some kids were struggling, and trying to think of things to do. So, I said, "On Friday we're going to begin our first science experiments. Everyone who has their research question and a method that's approved by me, you can set up your research materials and begin." Lab time Friday, the students were sitting, and I asked, "How many of you are ready to start?" Fifteen hands went up. "You can go ahead, but there are ten kids here I need to talk with still. Are you able to begin without interrupting us?" I always had to manage this—kids who were ready, kids who weren't—so we could all stay focused.

So, 15 kids are off working. And I sit down with the other kids. "Let's collect some data," I said. "Let's just look at who's already working on 'I Wonder,' and who's sitting here struggling. We don't yet have topics, right? Is that fair?" I asked, "So what do you notice about us, and what do you notice about them out there?" It didn't take long to realize that they were all boys. All ten of them were boys. There were two other boys who were already out doing science projects. Two out of 12 boys... I wrote that on the board. "So, is it harder for boys to do science?" We were kind of puzzling over this. Of course, they're not going to say that they're not as smart. And it wasn't a put-down in this context. We were just trying to ask a question. I thought let's have some fun with this. "Do boys follow directions differently than girls do?"

So, we're thinking, and somebody noticed and said, "Well, half of us are Hmong." There were five Hmong boys there. Now, remember all these kids know I've lived in a Hmong home. They feel comfortable giving Hmong words for spelling tests for all the students to learn. They see that huge story cloth in front of the classroom, and we talk regularly about Hmong culture. I said, "Oh? So is it particularly hard for Hmong students to do science?" And someone immediately noticed that the two Hmong girls had their projects going. "So, is it something about Hmong boys?" We really started digging into this.



Creating an experiment with a pulley.

Well, then, I asked the Hmong boys, “What’s the Hmong word for experiment?” They didn’t know. I said, “You know, the strange thing is, my first language is a dialect of German, and we didn’t have a word for experiment either.” I said, “What’s the Hmong word for science?” And they’re quiet. “You guys speak Hmong at home, right?” They said they just didn’t have a Hmong word for science. I said that I didn’t either in my German dialect. “Well, what’s going on here?” I asked. I said, “Maybe people like you and me, we had a way of growing up, where we didn’t have this kind of background experience of people doing science like these other kids. Their parents studied science and experiments. They at least know about it. But you and me, we don’t really know about it.”

I said, “Let me tell you about my dad. My dad was a farmer. And, boy, he knew all kinds of things about plants and animals, irrigation and soil, and all that. This one time I had to do a science project, and

I was totally stuck. I had to classify trees, and it was winter. I couldn’t do it, and I was so frustrated. And my dad asks if he can help me. And I wondered how my dad could help me. He only had a 7th-grade education. What does he know about classifying trees? He said that, sure, he knew kinds of trees. So we got a gunnysack, a handsaw, and a hatchet, and we went walking off in the woods.

“We’d come to a tree, and he asked if I wanted this one. Sure. So, we would cut off a piece that I’ve got to display later on for the assignment. ‘What kind is this?’ So, he’d tell me, ‘This is hickory.’ ‘So, what’s hickory good for?’ ‘Well it’s good for spokes of a hay wagon wheel, which we made when I was a boy.’ Then he’d ask, ‘Do you want this one?’ It was a smaller tree. ‘Well, what’s that?’ He said, ‘Wild cherry. The bark is good... you can make a tea for a cough.’”

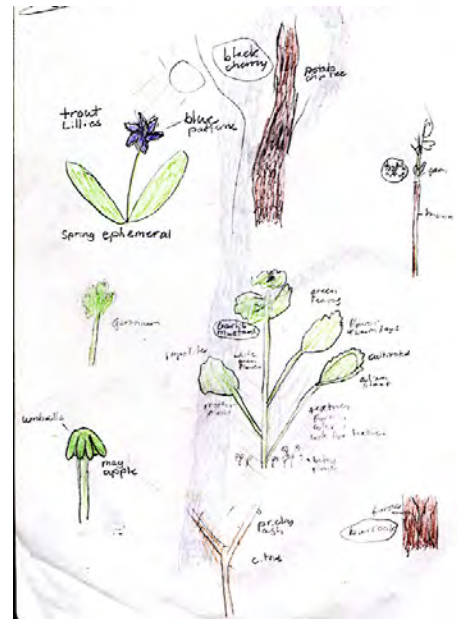
“My dad knew all these trees. I never knew before how much my dad knew about trees! He knew which one was good for the tongue of a hay wagon, and which was good for a handle for an axe.” And I said, “I know this about Hmong people in the mountains of Laos, and they know so much. And they knew plants that none of us know anything about. They knew plants for healing, plants for thatching.... Your parents know all kinds of things about nature, but you don’t have a Hmong word for experiment.” Well, by the next lab day, all of the Hmong boys had projects that were approved, and they were off doing science.

T: I’ve long considered science to be a cultural practice. The kinds of questions we ask, the methods we use, the conclusions we draw as we interpret data, they express the nature of the relationships we have with the so-called objects of the study. They express how authority can be constructed through certain types of knowledge. They express how we perceive separation between disciplines that seldom exists in real life. Reframing “science” as “nature” seems to open up a lot of possibilities.

M: I might mention another type of homework we did, called their Places-in-Nature, or PINs. I had them choose a natural place close to home that has a maximum number of different plants. So, a lawn would be less interesting than an environment that is at the edge of another, for instance, a place where native flowers meet a garden. There are more species to observe in these kinds of

places. I'd give them a variety of observational assignments, scaffolded up from simpler to more complex. One of my favorite assignments is the first time we are expecting a frost. On the morning after this first frost, I'd have them go out and see where Jack Frost had been in their Place-in-Nature.

We would do the PINs as practice, and then we'd go out here to the marsh, which was within walking distance. We'd walk down a hillside into a drainage area. There are some deciduous trees up on top, a kind of classic succession of older trees. And we can even go across the road, where there's a different kind of wooded area. And then we can walk down until we're in a floodplain, with its trees and smaller plants, and then walk right up to the cattails and the lake weeds. We can go out on the pier, and we can dip down, and pull up lake weeds and critters. We discovered a spring back there one year. So we have water, we have mucky spaces, we have trees and cattails, and with all of that diversity of plant life, there's a vast variety of animals also. So we had this whole gradation of species. And we can watch bugs, squirrels, hawks, and how they exist within and interact with their habitats. And all the time they are observing, they are writing and documenting what they see.



Student sketches from biweekly Mornings-in-the-Marsh.

T: *It's interesting how you describe this. As you're discussing these models of inquiry, these models of engaging students, it certainly seems that student learning is rooted in the same process in both the sciences and the humanities. I'm seeing ethnographic observation, I'm seeing the interrelationships between individual cases and complex systems, I'm seeing how dialogue and discourse among peers are crucial to the learning process. I'm even seeing how these Place-in-Nature exercises support almost a relativistic approach to the sciences. You're not just studying a plant or its cells; it's as if you're studying the way some animal views that plant, what water and soil might mean to that plant, or what different kinds of frost mean to some plants but not others. Do you see similarities here as well in methodology?*

M: I totally do. We did the same types of projects in our "Kid-to-Kid" notebook, where they'd record all their cultural fieldwork. We made studies of culture at home. We'd start with the very simple, like mapping outdoor and indoor spaces, or documenting the processes of doing the laundry, or setting the table. But then we'd get far more complex: objects in their home that are meaningful, their own family's foodways, their gardens. Then we'd expand outward, looking toward their neighbors, their neighborhoods, and our communities.

T: *How has this inquiry-based model changed with increased emphasis on standardization in education over the last 15 years?*

M: In the 1990s when we were doing this work, the downtown science coordinator (for the Madison Metropolitan School District) really loved our inquiry science projects. He'd come to conferences with us—not just me, but with everyone from the Heron Network (the local network

of teachers interested in locally based, inquiry-driven education). There was so much excitement. We'd be asked to do workshops, to talk to new teachers. We were respected for doing this kind of work. By the time I stopped teaching in 2006, I was never asked to do anything by the downtown administrators. Nothing that we did was of interest anymore. Sure, it was at the university, but no longer in the school district.

I remember, one time in the 1990s I had a principal who was doing classroom observations, as he did every few years. He'd write up an evaluation, you know. I said, "I realize I must be a bit challenging for you, since I keep asking you to do things differently." He said, "Actually, I think that what you're doing"—this is not personally about me but the kinds of things teachers in our network were doing—"that's where I expect us all to be in 20 years."

I had several supportive principals at Randall. But with my last principal, I was in tears. I was so worn out, because she took away multi-aging in my classroom. It was a physical and emotional gauntlet. She belittled my teaching, not by saying it but by constantly distorting and disrupting it. The Heron Network is now done. A bunch of the core teachers are retired. It's extremely difficult now to use real-world, inquiry-based learning. For example, one of my former student teachers has to fight so hard to do anything outside the mainstream.

The good teachers keep doing it nonetheless, at least in little ways. But to do it in this large systematic way, I think that it happens mostly right now in places like tribal schools—because they care so much about their local land, and they take care of their local culture. I think that's the absolute best that we have in Wisconsin right now. There's way more support for environmental education today than for cultural inquiry. It gets harder when the curriculum gets tighter or broken apart into pieces. It gets harder to show that it's one world that's an amazing place to be learning in. And still, I continue to have a great commitment to this practice, and I still have hope.

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In 2015 in this journal, I presented a short article called “Pen Tapping: Forbidden Folklore” with a short collaborative film made by my undergraduate students titled, “Making Beats.” A taboo practice in elementary school, making beats with a pen was outlawed both in music class and in free time. It was considered “noise” and often linked to punishment. As a response, we at NEUARTS, Neighborhood Engagement at the University of the Arts, secured funding to support children’s rhythmic practice by bringing in three sets of professional artists for afterschool workshops in tap dancing, Latin percussion, and dance lines, all at no cost to our institutional partners in the Point Breeze neighborhood of Philadelphia. It was our attempt to show the lineage of various rhythm genres and legitimize the practice of rhythm play in a predominantly African American neighborhood.

Performers included Tap Team Two, a traditional hoofing dance group, led by Robert Burden, Jr., and Corinne Karon, both trained in the Philadelphia style of tap by the great LaVaughn Robinson. Robinson was recognized as a National Heritage Fellow by the National Endowment for the Arts (NEA), and Tap Team Two is faithful to his legacy and to honoring the lineage of tap.¹ Arturo Stable, a two-time Latin Grammy Award winner, brought young friends, a vocalist and a jazz guitarist, to give the children a geographic tour of Latin rhythms.² And from our university, the UARTS Royals, a student group started by Marques Furr, brought a band dance line tradition associated with Historically Black Colleges to our elementary afterschool partnerships.

About the photo: This screenshot from the *Sound Ideas* video shows students learning band dance line tradition.

These afterschool programs, the Dream Academy of Philadelphia and Vare Recreation Center, are geographically close to the University and have been in a long-term institutional relationship with our program for over four years. Both locations have 100 percent of the children in these K-8 programs receiving free or reduced-priced lunch. In Philadelphia, one of America's poorest big cities, not all children have access to art or music.



According to my communication with the School District of Philadelphia Office of Arts and Academic Enrichment, in 2016-17, with 151 elementary schools in the district, 114 had visual arts, and only 108 had music instruction; 43 had no music or rhythmic instruction at all, a situation considered a legitimate social justice issue.

The *2016 Nation's Arts Report Card* stated, "schools with a higher concentration of students in poverty were less likely to offer arts education, which prompted the U.S. Department of Education to declare the status of arts education 'an equity and civil rights issue.'"³ So, the restriction of the arts in general is doubly constricted among school programs in under-resourced minority neighborhoods, and triply constricted when the children's own folk traditions are criticized. Where does the obvious joy of participation in traditional arts enter in the idea of aesthetic education? What does the folklore literature on rhythm games and stepping have to offer in our search for legitimation? What tensions emerge in the reshaping of past narratives, and how does a folklorist reconcile the roles of documentarian, historian, educator, and curator?

The Residencies

At the end of Tap Team Two's workshop, led by master tappers Robert Burden, Jr., and Corinne Karon, a student asks, "Can you give us a beat, and I'll rap?"

Burden leaps into the air and with his feet offers a classic hip-hop beat:

Boom, chhh, BOOM (pause) chh chh
 Boom, chhh, BOOM (pause) chh chh

And a boy calls:

My name is Rodney
 And I like to eat chicken
 Boom, chhh, BOOM (pause) chh chh
 Boom, chhh, BOOM (pause) chh chh

The room giggles. The child simultaneously echoes rap phraseology with a playground singing game. Students had just heard and practiced the rhythms of an entire abbreviated history of American tap in an hour's time. Robert Burden and Corinne Karon recognized that their rap play is a variation of the beats that have preceded them.

The children had just practiced the seven basic steps of tap, learning their names along with technique, a motif of labeling repeated throughout the workshop:

- 1) Step (walk, whole foot step)
- 2) Toe Beats (walk on toes)
- 3) Heel Beats (rock on heels, catching balance and walk on the heels)
- 4) Brush (kick floor forward or back)
- 5) Shuffle (brush forward and brush back in sequence)
- 6) Brush and Step

The children brush and step faster and faster until they fall down laughing.

- 7) Hop. They picked “their favorite leg” and hopped on it and then hopped on both.

The master teachers ask for questions, and a student wonders aloud, smiling, “How much pain is the floor in now?”

When Burden posed the question, “How many know the two places tap comes from? One is a continent and one is a country,” the children had hollered a variety of offerings:

Europe?
Africa!
Greece?
India?
Ireland!



Burden and Karon explained that in the 1920s and 1930s in the U.S., tap emerged from two traditions, Irish and African, and that tap, a truly American art form, was also called “hoofing.” Karon gave a brief history of dance in Ireland. There were three styles of dance taught by a dance master who travelled from town to town: jigs, reels, and hornpipes. Then, she told students, in the 1300s people would take the doors off their homes and place the doors on the floor for solid wood to tap on. Tap Team Two also taps on portable small wooden doors, amplifying their sounds, and the children crowded around the planks to have their turn at being loud. In Africa, Burden explained that different nations and tribes used drums to talk to teach other. They respected the drums, and they respected their ancestors. Drums were like their cell phones, and the children nodded at the concept. Burden then began tapping on his chest, patting Juba, and then a complex series of footwork on wooden doors made the elementary school children’s eyebrows rise up to the ceiling.⁴ Tap skill, no matter the body part, was based on technique and pure speed. The children immediately respected both.

The artists took the children on a lineage tour, introducing the three of the most famous American hoofers: King Rastus Brown, who is said to have invented the first time step, or rhythmic tap combination; Bill Bojangles Robinson, who danced up on his toes and danced with a little girl named Shirley Temple; and John Bubbles, who created his own time step, but they say it is now

“lost to history.”⁵ Karon and Burden then recreated a famous routine, almost a hundred years old, called the Shim Sham. Legend has it, the Shim Sham was created by Leonard Reed and Willie Bryant, but it probably came after a version invented by Frankie Manning, a swing dancer and competitive Charleston performer and also an NEA National Heritage Fellow.⁶ Karon performed the 1927 Shim Sham version while Robert Burden did a 1970 version, created by their mentor, LaVaughn Robinson. They asked the children, “Did anyone feel or hear anything different in the two versions?” (Her step started on 4. His, the 1970s version, started on 1.) Then, they did both their Shim Sham at the same time. The children noted that the 1970s Philly style version had more beats per bar, recognizing what tap historian Brian Siebert called, “what the eye hears” (2015). The children exited the class improvising beats, making raps while they attempted to tap with their feet.



When Arturo Stable taught his Latin rhythms workshop, he brought with him a young jazz guitarist, a vocalist, and his own *cajon*, a box drum that he sat on while he played. The drum has its roots in the shipping crates of Peru, and from there he demonstrated samba rhythms from Brazil, and *la clave*, the classic rhythm associated with his native Cuba. The music morphed seamlessly into jazz, and some children were so mesmerized by Coltrane’s “Afro Blue” they were almost lulled to sleep. One girl who was new to the program, angry and often in trouble, raced up to the performers and spoke in rapid-fire Spanish, beaming. We would reference her happiness in our conversations with her over the coming weeks, as her anger visibly dissipated.

The connections between the Latin rhythm traditions were left unspoken, and Stable thought it best to let the children play with rhythm in a call-and-response style and try their hand, literally, at songwriting. At Vare Recreation, they first set a rhythm together after a display of options and then chose a chord progression, A, B, C. One boy offered a theme:

Chicken and hot sauce 123,
Chicken and hot sauce ABC,
SOCA!

For Dinner? Arturo called. They answered, Fried chicken!
For Lunch? Fried chicken! For Breakfast? Fried chicken!

The children shouted “Soca,” intuitively recognizing the “Soul of Calypso” rhythm that Stable played on his *cajon*, although they did not know what the term meant. Rooted in a fusion of calypso, African, and East Indian rhythms, their bodies recognized the beat before they knew its definition.

When the Royals Band Dance Line arrived at the Dream Academy, children were intrigued by the recordings of a loud marching band. One dancer faced the audience and performed a standing undulating movement phrase, which was repeated by the team in variations based on her hand signals. The children were taught to stand like royalty, with imaginary crowns on their heads, their spines elongated and proud, and then practiced strutting and following the leader. Some participated under pressure, and it was unclear whether it was the crossing of the cafeteria stage that made them shy, or their difficulty in connecting to a tradition so southern, and so collegiate. The adolescent boys enjoyed watching the female college students perform and were happy to follow them across the room. At one point a group marched across the room playing imaginary horns and drums. I noted the irony of invisible instruments in a district with insufficient funding for its music programs.

The staff of the Dream Academy connected most directly to this tradition and were seen strutting and stepping on the sidelines, much to the pleasure of the children who noticed. We invited the staff to join the front lines instead. The program director, Maurice Williams, said that he had attended Morehouse College, a Historically Black College in Atlanta, and loved seeing the band dance team there—Mahogany in Motion, he recalled with a smile. For him, the memory of this type of dance was embedded in the memory of college itself, something his program advocates for these young children. Few have relatives who have attended college.

The children were indirectly invited to picture themselves in these various roles: as an early hooper, as a dockworker with a *cajon*, as royalty, as a college student, and as a composer. The approaches: historical, geographic, and bordering on the ethnographic. An appreciative set of audiences, the children engaged most when invited to play: play with their own feet, with their own hands, with speed, with composition, with inhabiting new postures. I wonder about the role of play in this dialogic, two-way version of “the ethnographic imagination” (Willis 2000).

Play, Resistance, Aesthesis

Embedded in the play of these young children are the beginning stages of social critique. Content too remote? Let’s add chicken. Process too slow? Do it faster. Activity too passive? Let’s do it where we sit. Play is fundamentally about exaggeration, about the play of boundaries. No wonder schools find it threatening, although it does not have to be perceived that way. The point of bringing in Robert Burden was not just to create future tap dancers, but also to legitimize the idea of constant bodily rhythm play. Arturo Stable bears the tradition not just of Latin percussion, but also of percussive experimentation. Known for tapping their cutlery at mealtime, for drumming on signposts, and for scat singing in public, Burden and Stable embody the physical joy of movement, so criticized during the school day. Playing with rhythm in public is a much needed dose of aesthesis. Noted by Henry Glassie, anesthesia is for sterile places like the surgical table; we would

argue it has no place anywhere near children (Glassie 1989, Beresin 2014). Children need these artists to model vibrancy, aesthetic history, and a playful passion for learning.

Film and video allow us to freeze time and offer the media back as a gift to both practitioners and scholars. When the children of the Dream Academy saw the “Sound Ideas” video embedded in this article, five months after it was filmed, they were shocked by their own physical changes, by their thoughtful and attentive faces. “When was this filmed? It was sooooo long ago.” A follow-up performance, initiated by a Dream Academy staffer, led three 8th-grade girls to step, holding an American flag, while gunshots rang as a soundtrack, and the children dropped to the floor. Their words before they fell: Trayvon Martin. Amadou Diallo. Manuel Loggins, Jr. Ronald Madison. Kendra James. Sean Bell. Eric Garner. Michael Brown. Alton Sterling. They were echoing the motifs of Kendrick Lamar’s 2018 Grammy Award Ceremony choreography. All of this time is still current, from King Rastas Brown to Kendrick Lamar, and we folklorists deconstruct the layers of time and place, just as the children combine it through play and choreography.

Rhythm Literature

Academic rhythm literature is divided by genre: There is a tap dance history literature (Valis Hill 2010; Siebert 2015) and a rhythm game literature (Gaunt 2006; Jones and Lomax Hawes 1972; Beresin 2010). For a sophisticated history of marching step history, tracing its roots from Africa through minstrelsy, see Malone’s *Stepping on the Blues: The Visible Rhythms of African American Dance* (1996) and Fine’s *Soulstepping: African American Step Shows* (2007). There are encyclopedias of rhythm traditions in the ethnomusicological tradition (Murphy and Pearsall 2016) and the equivalent in dance, Shay and Sellers-Young (2015) *The Oxford Handbook of Dance and Ethnicity*. The overall evolution of the field itself seems to be reflected in Shay and Sellers-Young’s four sections: “the construction of ethnic identity,” “choreographing the nation,” “performing the other,” and “dance as a form of ethnic resistance.” As such, the encyclopedic approach reflects the academic trends in folkloristics as it reflects the meta-analysis of folktales and material culture (Landis and MacAulay 2017; Noyes 2016). In our own Sound Ideas program, we can see these concepts emerge organically, framing ethnic identity, nationhood, the other; but where is resistance? Where is critique?

We need both the formal critique like the dances of the Dream Academy, and the informal critique of play and game traditions to make sense of our current senseless present. Play and art, expression and practice, and with them, the focus and discipline required for all rhythmic play are the same kinds of tools needed for critical thinking—observation, analysis, and reflection. Play itself keeps the material relevant, flexible, and necessary. As play scholar Brian Sutton-Smith noted in conversation, play is children’s answer to the hypocrisy of the adult world. Through their play, the children remind us of the artificial boundaries of all these subjects, and of the absurdities of our budgetary allocations, as they play with their own sound ideas and fantasize about being fed.

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To contact Anna Beresin about supporting an inaugural Pen Tapping Rhythm Festival, contact her at aberesin@uarts.edu. We thank you in advance.

Endnotes

1. See <https://www.arts.gov/honors/heritage/fellows/lavaughn-e-robinson>.
2. See https://en.wikipedia.org/wiki/Arturo_Stable.
3. See <http://www.aep-arts.org/wp-content/uploads/NAEP-Frequently-Asked-Questions-3.pdf>
4. For more on patting Juba, hambone, or slap jazz, see the Master hambone artist Danny “Slapjazz” Barber here <https://www.youtube.com/watch?v=6BCzIjY-taY>.
5. See http://www.danceheritage.org/treasures/bubbles_essay_morrison.pdf and <http://www.atdf.org/awards/bubbles.html>.
6. See <https://www.arts.gov/honors/heritage/fellows/frankie-manning>.

URLs

Sound Ideas: https://drive.google.com/file/d/1ZYQoIINWNH1lq_SbpKx4F1zoiLJCoJa5/view

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A Pedagogy of Making Do

by Danielle Henn

A woman with aching feet sees a five-gallon bucket, turns it upside down, and sits on it.

A man who needs quick cash goes into the woods, digs up a dogwood tree, and sells it on the side of the road.

A researcher wanders into an unfamiliar field of study, finds its approaches useful, and adopts them.

These vignettes are from Gadsden County, Florida, a rural pocket of North Florida where using resources in creative ways is an everyday practice. I am an art teacher and doctoral student in Tallahassee, but Gadsden County is where I grew up. In this article I examine how growing up in Gadsden County culture influenced my teaching philosophy with regard to what Gadsden County residents call *making do*. What does it mean to make do, and how might it inform the ways we teach? To answer these questions, I investigate the theoretical concept of making do and empirical literature examining its practice. I then approach research as bricolage (Kincheloe 2001) layering folklore, ethnographic methods, and local learning techniques to create a thorough picture of making do in Gadsden County. Finally, I share how my findings inform recommendations for a pedagogy of making do.



Map of Gadsden County, Florida

As an art educator I want to understand how to provide a learning environment for fostering manifestations of culture, and making do is one process that generates cultural expressions. Studying the art of making do may deepen our understanding of how and why customs and culture come into existence, change, and evolve. This work may simultaneously inform the formation, permutation, and evolution of a pedagogy of making do.

Making Do as a Theoretical Concept

Making do has various definitions and connotations, but for our purposes, to make do is to make something do what you want or need it to do. The use of the word *make* in this definition implies the subversion of a product's official purpose so it may be of service to one who wishes to use it in a new way. This theoretical concept was formally analyzed by Michel de Certeau in *The Practice of Everyday Life* where making do is defined as the "surreptitious and guileful 'movement'" (Certeau 1984, 34) of consumers, through their consumption, becoming producers. The introductory examples illuminate how this happens: how a woman consumes a bucket in such

a way that it produces a chair, how a man seizes and commodifies a tree to turn it into petty cash, and how an art educator employs folkloristic research methods, transforming their lessons to produce pedagogy.

In addition to discussing making do, Certeau (1984) explains the differences between strategies and tactics. Strategies are formal plans executed in plain sight by institutions in positions of power. Strategies found in a classroom may include official policies regarding behavior management and the scope and sequence of curriculum. Tactics, however, are informal and often covert actions carried out by individuals who are not in positions of power. Classic student tactics in the classroom include note passing and class clowning, yet the cleverest tacticians may invent new and endless ways of subverting the powers that be as an enactment of personal sovereignty. Students rarely have strategy on their side, yet they possess a plethora of tactics, one of which is the art of making do.

Making do is not to be confused with the do-it-yourself (DIY) movement. Making do and doing-it-yourself are both ways of producing something for oneself, yet making do has a more creative and immediate connotation. Making do is a creative practice born out of the constraints experienced by a producer. Alternatively, doing-it-yourself usually requires an absence of constraints to complete a project. A DIYer may need to purchase special materials and tools. They may also require spare time. For example, building a DIY chair may require lumber, saws, and a free weekend. In contrast, a make-do chair may be created immediately out of anything one can sit upon. To DIY is to exercise a privileged power over your resources, to bend resources to your will. To make do is to design creatively, to allow whatever resources are available to shape your creative output, and to do so in a way that serves your own needs and desires. Doing-it-yourself is composed. Making do is improvised.

Empirical Literature on Making Do

The art of making do is often used as a lens for researchers who are interested in folklore, culture, or entrepreneurial efforts that are illicit, underground, or difficult to detect. For example, to explore the creation and distribution of pirated music, ethnographer Jason Pine (2011) considers phenomena through an entrepreneurial lens of making do “positively [referring] to the alertness, adaptability, and celerity that are awakened by a challenge” (Pine 2011, 23). In a similar spirit, *The Amazing Crawfish Boat* by John Laudin (2016) investigates the resourcefulness of the Cajuns and Germans in Louisiana who use whatever is available to improve their fishing vessels. This ability to innovate creatively is key to their survival and to gaining advantages over their competitors.

The art of making do is also informative in pedagogical contexts. In “Pen Tapping: Forbidden Folklore” (2015) Anna Beresin discusses how students in a K–8 public elementary school entertain themselves, negotiate social status, and transition from one activity into another by tapping their ballpoint pens, turning the pens into percussion instruments. Pen tapping only happens on the sly because teachers find the tapping disruptive and have banned it. This make-do recreational activity is an example of what Michel de Certeau (1984) calls *la perruque*, a tactic for using time or resources officially allotted to working for someone else and using them to pursue one’s own desires instead. In “Steps Toward a Pedagogy of Tactics” Lankshear and Knobel (2002) argue that by becoming familiar with student tactics, instructors may also learn how to operate tactically and

use this practice to improve the quality of their students' learning. Using a lens of making do is a generative way to recognize and value creativity in everyday life (Laudun 2016, Pine 2012, Westin 1976), and developing an understanding of making do and tactics makes them easier to recognize and use in pedagogical contexts (Lankshear and Knobel 2002).

A Methodology of Making Do

As an art teacher I find the ability to use limited time and resources tactically invaluable, yet it is a skill I was never formally taught and, until recently, had not given much thought. Every teacher I know is engaged in the art of making do, yet we rarely explicitly reflect on this practice. To understand the origins of my own practice and how it may inform the development of a pedagogy of making do, I turn to the folkloristic approach of local learning. I research how folks are making do where I grew up, Gadsden County, Florida, using Kincheloe's (2001) bricolage approach. This bricolage approach to research involves collecting various types of data from a wide array of sources. Then the researcher considers the relationships between these different types of data to generate nuanced, holistic understandings. I am practicing this approach by gathering data through a layering of autoethnography, oral history, observational fieldwork, and photography. This interdisciplinarity allows for "the synergy of multiple perspectives" (Kincheloe 2001, 686) and reflects my philosophy of making do as both a pragmatic and constructivist approach to learning.

The *Kids' Guide to Local Culture* (Wagler, Olson, and Pryor 2004) and the *Teachers' Guide to Local Culture* (Wagler 2004) produced by the Madison Children's Museum in Madison, Wisconsin, served as excellent resources for guiding bricolage research, prompting me to engage in ethnographic local learning by conducting observational fieldwork, collecting oral histories, and digging deeper into traditions present in my own culture. This research is also autoethnographic as I wrote narrative reflections about my past and present experiences with making do in Gadsden County and allowed themes to emerge.

A methodology of making do is especially useful when examining the culture and practices of everyday life, for everyday life is often a slippery concept resisting formal capture and study (Certeau 1984). To understand daily life it is necessary to consider both rhythms and idiosyncrasies, the shared culture of a community and individual practices as well. Using a layered, bricolage approach provides footholds for understanding that a single method could not offer.

To understand the art and work of making do better I gathered oral histories from Gadsden County residents and relied upon my observations of the county, as well as my own knowledge of the area as a resident. I focus on four oral histories from participants Aaron, Barbara, Bill, and Jim who each provide a unique glimpse into what it means to make do in Gadsden County. Aaron is creative in the ways he finds food and makes money. For Aaron, making do is about survival and not calling too much attention to himself. For Barbara making do is about making the most with what you have and an attitude of gratitude. Bill offers an evolving definition of making do. When Bill was growing up, making do was about survival, especially putting food on the table, yet now he thinks about making do as complacency, a way of "just getting by" or maintaining one's status quo. Jim's family invested in Coca-Cola in the early 1900s and profited greatly. Jim looks back on the eccentric ways rich residents of Gadsden County made do with fondness.

Findings

Acts of making do are motivated by one or more of Glasser's (1986) five basic needs that drive human behavior: to survive and reproduce, to belong and love, to gain power, to be free, and to have fun. My neighbors in Gadsden County meet these needs by making do in boundlessly creative ways. To survive, Gadsden County residents fry squirrels for supper, grow and preserve their own food so they do not go hungry, and recycle scrap metal for just enough money to make rent. To find belonging and love they relish spontaneous porch gatherings with one another, sneak into the woods with their sweethearts, exchange kind greetings over cash registers, linger in parking lots after church functions, and offer warm smiles to complete strangers. To satisfy their need for power, people in Gadsden County join committees, gossip to increase their social standing, and hunt wild game. To live freely they work for cash paid under the table as soon as the job is done, walk or bicycle so as not to have to fool with a car, and avoid any arrangement with too many strings attached. Gadsden County residents make their own fun at fish fries, swimming holes, lawnmower parades, cow tipplings, and hog killings. Making do is a practice that serves our most basic needs, and it is motivated by making a life worth living, one full of love, power, freedom, and fun. This illuminates a link between making do and creativity, a relationship captured by the old adage *necessity is the mother of invention*. We create what we need to create by using the resources available to us. This is an important connection for the field of art education because it implies that if art educators wish to nurture and elicit student creativity and inventiveness they must create curriculum designed to meet student needs.

Making do takes countless forms and thrives when it is unobserved and unregulated. As such, trying to understand making do by formally tracking, documenting, and analyzing it is difficult. It is like trying to shine a light on a shadow. In my research, I experienced this as the observer's paradox, for even when I succeeded in identifying a prime example of making do, catching and studying it always felt a bit like killing it. Even so, to give an idea of the breadth of this practice in Gadsden County, I offer the following examples and how they inform a working definition of making do.

When I first met Aaron, he was strolling away from downtown Quincy with a bundle of bamboo shoots on his shoulder, many over 15 feet long. He said folks were clearing out cane behind the local Dollar General, and he was taking advantage of the opportunity to make some cane fishing poles. He took the poles home, dried them out, varnished them, strung them with fishing line, and has since used them to catch many a catfish dinner. **Making do is being flexible enough to recognize and seize opportunities when they present themselves.**

When I was a girl in Havana, I shot squirrels to keep them out of my grandmother's garden. A few



Photo by Danielle Henn.



Photo by Danielle Henn.

blocks away there lived a woman who knew how to clean and cook squirrel, so we disposed of the dead rodents by giving them to her for her supper. **Making do is forming and maintaining symbiotic relationships.**

A little further into town there is a make-do sign advertising La Formula, a small grocery specializing in Mexican and Central American goods. The sign once had interchangeable letters; however, instead of replacing the letters, the owners decided to paint their message directly on the sign. **Making do is using what you have to be a producer instead of a consumer.**



Photo courtesy Chaires United Methodist Church.

The curb in front of a local gas station and convenience store serves as a makeshift place of business for all kinds of illicit transactions. **Making do is learning how to use public space for personal purposes.**

In rural Concord, colloquially known as Coonbottom, there used to be a massive chicken pilau dinner, pronounced *perlow* in North Florida, and it served as an annual fundraiser for the local cemetery. Volunteers boiled chicken and rice in cast iron wash pots over open fires, stirring them with wooden boat oars. Folks sat on upturned bean hampers at plywood tables. The whole event was the epitome of making do. However, it grew in popularity, attracting over 5,000 attendees and the attention of the Florida Department of Health. In 2007 the state attempted to regulate the pilau dinner, and that shut down the whole affair. **Making do means operating on the sly, for with detection you risk the limitations of regulations.**

Aaron complains that young folks do not know how to cook with what they have in the kitchen. When I asked him why he thinks this is the case he says, “They ain’t learnin’. They got so much to do in their lives where they ain’t got time for it. . . . You got a lot of young people that eat out nowadays. They don’t have time to sit down and cook a good country meal.” In Gadsden County, those who do not have money to spend figure out how to make their time profitable instead. They keep gardens, go fishing, and learn to fix their belongings or scavenge for new ones. Sometimes they wait patiently to see whether they can do without before making a purchase. Canning and preserving food is very time consuming, but the practice is still alive and well in Gadsden County

as evidenced by all the shelves devoted to Mason jars and pectin in the local grocery stores. **Making do is spending time instead of money.**



Photos by Danielle Henn.

In the art education classroom my students and I also make do in these ways. I am flexible in my lesson plans when more exciting opportunities present themselves. Once after teaching paper sculpture to a group of first graders they were inspired by a cityscape mural another class was working on and wanted to create their own city. Instead of adhering to my plans for the rest of class we moved the tables aside and created a paper city in the middle of the classroom. My students often choose to be producers before consumers by creating the things they need and decorating their belongings with supplies from my classroom. For example, one student found her hair was getting in the way of her work, so she created a hair tie.



Another student struggling to get a clean print of her linocut found she had more control over the stamping pressure when use her body as a printing press.



We use public places for personal purposes by creating works of art on sidewalks, playgrounds, and in hallways. Once after a unit on weaving I found pine straw designs and messages woven into chain link fences during recess. We often take to the playground and use natural materials to leave patterns for passersby to discover.

I form and maintain symbiotic relationships with thrift stores to secure supplies for my classroom. For example, whenever a large painting on canvas comes through The Lucky Duck Thrift Store they call me,

and I trade donated goods for the canvases. I apply gesso to these canvases and most end up as substrates for large-scale collaborative projects. My students and I often operate on the sly when creating especially messy or controversial works of art, and I whisper that we will ask the principal's forgiveness instead of permission. My students also operate on the sly by hiding messages in their artwork, stealing glue to make slime at home, or slipping chalk pastels into their pockets to color their hair after class. Like many other art teachers I am notorious for spending time making, fixing, or reusing what my class needs instead of spending money to purchase something new. This makes the art room a magnet for piles of strange donated materials and students with broken belongings. This practice of making do is foundational to the way my classroom operates.

Steps Toward a Pedagogy of Making Do

Through studying local culture I have broadened and deepened the resources available to me as a pedagogue. My findings about making do in my community encourage an informal, tactical approach to applying the art of making do in the classroom. By developing a deeper understanding of making do as well as student and teacher tactics, an educator may more readily recognize and build upon a pedagogy rooted in this practice. Pedagogues may also bear in mind the spirit of the song "Mama Don't Allow":

Mama don't allow no washboard playing round here.

Mama don't allow no washboard playing round here.

Well we don't care what Mama don't allow,

Gonna play that washboard anyhow.

Mama don't allow no washboard playing round here.

(Pierce and Pierce 1971)

In this song, whether or not Mama allows washboard playing, the players will find a way to continue making music. Making do is many things as my interviews and personal experiences have taught me, from forming new, symbiotic relationships to producing instead of consuming to doing so on the sly. In the classroom, I make do myself, by using what I call a pedagogy of making do. Turning making do into a pedagogical practice requires teachers to be on the lookout for similarly unregulatable, uncontrollable passions so we may work with or around them rather than against them. In doing so, I have identified four crucial steps to creating a classroom reliant on a pedagogy of making do. They require the teacher to:

1. Value enabling constraints
2. Recognize and value the countless ways of making do
3. Make time and space for making do
4. Investigate and respect student motivation

Value Enabling Constraints

Although we should watch carefully for and encourage student behavior that strives to meet any of Glasser's (1986) needs, that is not to say that the classroom should be an unregulated environment. The creative practice of making do thrives on structure, and a pedagogy of making do affirms the need for constraints, limitations, boundaries, and order in the classroom. Rather than wondering only how to create more choice for students, a pedagogy of making do considers how to limit

choice in a way that frees the student to work intensely toward desired learning outcomes. In the art room this sometimes means limiting choices of colors or materials so students are not overwhelmed by endless options. Then, once a student's needs and desires have an opportunity to crystalize, the instructor may encourage the student to pursue those desires. These enabling constraints help students work creatively toward their learning objectives by requiring them to use limited resources in new, inventive ways (Fendler and Hamrock 2018).

Of course, not all constraints that students and teachers face in their classrooms are constructive. A lack of administrative support, insufficient funding, and excessive school duties beyond teaching do not enable students and teachers to do their best work. We must not confuse a pedagogy of making do with asking teachers and students to figure out how to teach and learn no matter their lack of resources or the excessive responsibilities heaped upon them. Sufficient resources are essential for a classroom to thrive, and we must advocate for the removal of harmful constraints in the classroom.

Recognize and Value the Countless Ways of Making Do

Recognizing the ways that students make do may help teachers view student behavior from the perspective of the student rather than of the teacher or educational institution. Behavior management may take new shape for teachers who are able to negotiate relationships with students as accomplices rather than as looming enforcers of institutional policies. To notice a student finding ways to grow in the cracks of a concrete policy and be able to say to that student "I see what you are doing! How can I help you?" may prove to be a powerful tool for building rapport and strengthening student agency. Returning to the example of a bucket-turned-chair, if students were to use a bucket as a chair, we would do better to acknowledge their resourcefulness than to admonish them for improper use of a bucket. When students use their educational environment to satisfy their own desires, we would do better to recognize and encourage their cleverness than to punish them. More often than not this behavior is not impertinence. It is survival.

Make Time and Space for Making Do

In a pedagogy of making do, educators must allow time and space for students to approach learning resourcefully and independently. This means encouraging student input on the design of certain projects and assessments as well as allowing class time for students to work toward academic goals as they choose. Encouraging the practice of *la perruque*, the reclaiming of class time as time to pursue personal interests, bolsters motivation. Many educators already make space for this by allowing students to choose books and topics for reports and projects, yet I argue educators should explicitly encourage their students to practice *la perruque* in educational settings whenever possible.

Making time for making do also means building in time for students to approach a problem in a variety of ways and to struggle and experiment toward success. Students who know they have time to go about their learning may take more creative risks than those pressured to get the correct answer right away.

Investigate and Respect Student Motivation

To encourage the development of student agency and personal sovereignty, educators must take care not to focus so intensely on their own goals for students that it drives student goals

underground. Educators must bear in mind that students are constantly held accountable for outcomes and goals chosen by others. This is disheartening when a student is unable to find a way to work simultaneously toward achieving their own goals, to work for themselves while working for others. As such, we must be careful not to assume that we understand the motivations for student behavior before doing the work of investigating those behaviors and the motivations behind them. Students operate within educational systems they often seek to subvert, sometimes in the pursuit of personal sovereignty. This is why a lens of making do is valuable for understanding what students do, how they do it, and why they do it.

In addition to investigating student motivation, educators must bear in mind that students do not always understand why they do what they do. Students need opportunities to think about how they decide what they need and want and to reflect on how they go about achieving these aims. Explicitly discussing the art of making do with students may provide a window for students and teachers to practice metacognition, an opportunity to think about their own thought processes and to better understand their own desires and needs.

The art of making do is both something that informs my fieldwork and a pedagogical practice I employ in the art classroom. Although making do comes in many forms, as teachers we all learn how to make do in countless ways. Investigating my personal culture of making do in Gadsden County enriched how I think about making do as an approach to education. Using making do as a specific pedagogical practice has the potential to create a more inclusive, understanding, and beneficial environment for our students.

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Creating Stewardship for the Chauvin Sculpture Garden in a Coastal Louisiana Fishing Town

by Gary LaFleur, Jr., and Dennis Sipiorski

Kenny Hill was a bricklayer who divided his time between Branson, Missouri, and Chauvin, Louisiana, for several years (1988–2000) while Branson was experiencing a construction boom. On the site that he rented in Chauvin he began to use leftover construction materials to create life-sized sculptures. In 2000, Hill walked away from the sculpture garden leaving several pieces unfinished. The exact reasons he left remain a mystery, although an eviction notice was found among his belongings in his house. Soon after his departure, a series of events occurred to rescue the unique art site (Mason et al. 2002, Cibelli 2005, Stone 2007, Eberhardt 2008). Dennis Sipiorski, then head of the Nicholls State University Art Department contacted the Kohler Foundation, which quickly set about rescuing the art, purchasing the land, and eventually gifting the site to Nicholls State. The advisory board Friends of the Chauvin Sculpture Garden was established shortly thereafter to aid in the preservation, public awareness, and programming of garden events.

Here we describe some of our strategies to build a cohesive team of collaborators who offer a sense of stable continuity to the educational mission of the garden. Some of our most successful projects include establishment of our weekend Artist-Docent program, partnership with students of the Nicholls Honors Program, and hosting our annual Chauvin Folk Art Festival and Blessing of the Fleet. While the specter of Louisiana's coastal land loss looms on the horizon, we currently take advantage of the synergy among several cultural narratives that converge at Chauvin for increasing the visibility of the visionary art of Kenny Hill at the Chauvin Sculpture Garden. Twenty years since we came together as a board, we are looking back at some of the practices that allowed us to thrive and maintain a successful relationship with the Chauvin Sculpture Garden. We hope that sharing some of our experiences may be helpful to others targeting similar outcomes.

About the photo: Aerial view of the Chauvin Sculpture Garden.

Photo by Dylan Maras.

Early Challenges and Setting

The Chauvin Sculpture Garden lies 30 minutes south of the city of Houma and an hour south of the Nicholls State main campus in Thibodaux. Being off the beaten path contributes to the ambiance of the garden, but it also leaves the garden in danger of being on the back burner of a small university with the typical budget constraints of any small university. Chauvin lies along an interesting path between the city of Houma and the fishing village of Cocodrie. Traveling south from Houma, the landscape transitions from a bustling modern city of strip malls, to the family-oriented fishing town of Chauvin, to a long line of raised camps for weekend visitors at the end of the highway in Cocodrie. Because of its proximity to the brackish marshes of the Louisiana coast, Chauvin is feeling the effects of an ecological phenomenon designated “coastal land loss,” which differs from the more commonly encountered “beach erosion.” In coastal land loss, large portions of brackish marsh are transformed to open water, so what was land 30 years ago is now shallow bays (Reed 1995). The lack of marsh leaves Chauvin more vulnerable to coastal storms, flood inundation, and a loss of habitat that tangibly changes the diversity of traditional occupations and culture.

Although the Louisiana Office of Coastal Protection and Restoration Authority is leading substantial efforts to restore the coast, there are also government-led plans to offer assistance for citizens to migrate north to higher land that is protected from storm surge by a large levee system (CPRA 2017). The recognition of these struggles to combat coastal land loss has gradually led to a quiet, yet palpable feeling of despair about the future of Chauvin and nearby coastal villages. Through our efforts to help the Chauvin Sculpture Garden thrive, we offer a point of pride in the community and a reason for guests from faraway places to visit.

Our Strategies for Sustainability

Establish a board with a diversity of expertise.

Our board membership currently includes four members who were raised in the Chauvin community who ensure that our activities remain consistent with the traditions and rhythms of Chauvin residents. Educators are vital contributors, including two K–12 teachers and six college faculty from three universities. The teachers incorporate the garden’s artwork into their art classes and host receptions at the garden. University faculty insert the site into their curricula, helping maintain the site as a unique gem of academic study. We have established a practice in collaboration with the Nicholls Art Department to offer a gallery show at the Garden Studio, located across the street from the Garden, as a post-exhibit venue for artists who exhibit on the Nicholls campus. The Art Honor Society Kappa Pi uses the garden for induction ceremonies, creating a deep connection between students and the garden. Local professionals on the board are also important, giving us a strong network of ambassadors who publicize our activities throughout the community.



Early meeting of the Friends of the CSG board members, when the mission and goals were defined, 2004. Photo courtesy Gary LaFleur, Jr.

Organize programs relevant to the community.

The Friends of the Chauvin Sculpture Garden take their inspiration from some of the few things that Kenny Hill said about the garden, one of which was that he “built it for the community.” Hence, we never charge admission for entry to the garden or events, although we always welcome donations. As a board we have created and maintained several ongoing projects that allow us to fulfill a wide range of mission objectives, reaching a cross-section of visitors and increasing awareness and appreciation of the garden.



Artist-Docents Loreli Bergeron and Kelli Champagne touch up sculptures in preparation for the 2018 Chauvin Sculpture Garden Picnic.

Photo by Chris Heller of the *Houma Courier*.

We created the weekend Artist-Docent Program in association with the Bayou Regional Arts Council to ensure that the garden has personnel on site every weekend. We recruit college students and young artists to serve as Artist-Docents. We conceived of this position as a person who could act as host, tour guide, and protector of the art, but in contrast to a conventional museum docent, we expect these Artist-Docents to repair, repaint, and conserve the art. They actively engage visitors as stewards, requesting that they help repaint and, in essence, become part of the garden, a collaborator with Kenny Hill in the maintenance of his sculpture garden.

One of our favorite collaborators is the South Louisiana Wetland Discovery Center (SLWDC). Each summer SLWDC brings a group of 40 children to the garden, where we teach them to make fish prints (*gyotaku*) and about the geography of the bayou region. We introduce them to the visionary art of Kenny Hill and use the site to encourage the students to offer their own interpretations of the art. We have found that these young students are enthusiastic about bringing their parents and family members back to the garden for future visits.

Although Nicholls State University owns the garden, recruiting faculty to involve their classes is challenging. One solution was creating a long-term relationship with the Nicholls Honors Program, whose faculty coordinator is art historian Deborah Cibelli, who has published her own work regarding the art of the garden (2005). Honors students adopted the site as a service-learning project, committing to at least one workday per semester, bringing ten students for a day of gardening, cleaning, repairs, and repainting. Students receive an on-site lecture about Kenny Hill and his artistry and training in how we gently preserve the pieces. They must submit a report offering feedback about their experience in the garden.

Through our board members who are Chauvin residents, we interact with several community groups such as the Terrebonne Advocates for Possibility and the Li'l Caillou Volunteer Fire Dept. As a manifestation of this partnership, we host paddlers at the garden as their halfway point rest stop. Every year we receive new visitors who are paddling, along with family members who come to the garden to cheer them on.

Our premier annual event is the Chauvin Folk Art Festival. Created by the Sculpture Garden coordinator Michael Wyshock and Dennis Sipiorski, the festival purposefully coincides with the traditional Blessing of the Fleet organized by the Shrimpers of Chauvin and St. Joseph Church through the Diocese of Houma-Thibodaux. The Chauvin Folk Art Festival attracts artists, entertainers, filmmakers, and visitors from larger Louisiana cities as well as from other states. The event has three objectives: highlight the art of Kenny Hill, offer a venue to exhibit the work of other Louisiana folk artists, and provide a show of support for the traditional fishing community of Chauvin by paying homage to a day that they have celebrated for decades. The Chauvin Sculpture Garden has quickly become recognized as a great place from which outsiders can watch the Blessing, including politicians, filmmakers, and the press.

Lessons Learned

The most important element of our board's success has been that we maintain strong friendships as we collaborate to host garden activities. Neither the academic merit points, nor the site notoriety, nor the sale of artistic work are enough incentive to bring board members together. But the joy of staying in touch, introducing new students to the work, and creating a successful festival together led to a strong commitment that survives over many years of life transitions, including moving to different schools, changing jobs, and surviving coastal storms.



Nicholls Honors Program students Megan Boudreaux and Chelse King volunteer to conserve garden sculptures.

Photo by Dylan Maras.

The Cajun residents of Chauvin are generous, cooperative, and tolerant of our site, which was built in the middle of their town. Neighbors often volunteer as tour guides for visitors who show up at odd hours when no docents are working. They provide an informal rapid-response force to report storm damage and clear away fallen trees before university maintenance workers can arrive. We struggle with the conceptual conflict that bigger is better. For instance, we would be able to apply for more festival funds if our festival attracted a crowd of 1,000, rather than a core of 200 visitors, but our site is too small for a bigger crowd. While more funding and more guests would be attractive at one level, we appreciate our tradition of maintaining a smaller, more intimate, more meaningful experience for visitors. Rather than competing with the New Orleans Jazz and Heritage Festival, which sometimes occurs during our Chauvin Folk Art Festival, some visitors find us an attractive antithesis to the jazz fest since our free event brings visitors to meet the people of Louisiana in low-key setting steeped in local culture, with the added value of experiencing the visionary art of Kenny Hill where he created it.

Finally, we acknowledge the contributions of our board and docents. Although the garden is open every day from sunrise to sunset and many visitors explore the garden without the aid of a docent, some of our most important connections are through our Artist-Docents on site. Our garden personnel have been featured in several documentaries, including work by filmmakers Godshall (2009) and Evans (2017). Through the continuous work of our board to increase the visibility of the garden, we received the designation “[12th Most Amazing Sculpture Garden on Earth](#).” By

hosting our annual festival on the bayou and opening our garden to the community for viewing during the Blessing of the Fleet, many people have made the garden their favorite destination and a permanent part of their yearly calendar.

Other Resources to Learn More

- <https://www.nicholls.edu/folkartcenter>
- <https://www.facebook.com/Chauvin-Sculpture-Garden-308926650045>
- <http://www.kohlerfoundation.org/preservation>
- <https://www.ncptt.nps.gov/blog/expression-of-faith-and-fear-the-chauvin-sculpture-garden-by-kenny-hill>

The Future

The Chauvin Sculpture Garden is situated in a region suffering from a gradual ecological catastrophe where an average of one acre of marsh is transformed to open water every hour. The amount of land loss has been documented as one of the most accelerated rates measured anywhere on earth. Yet the town of Chauvin perseveres, and we are committed to maintaining the garden in this environment. The sculptures of the garden receive occasional damage from strong winds and high waters, but this is currently only an inconvenience, not an immediate threat. We are considering a method to increase drainage and keep water from Bayou Petit Caillou from seeping into the garden. At the same time, there is a synergy in offering visitors the opportunity to tour the garden, meet Chauvin residents and artists, and continue south to sites where coastal land loss is more apparent, leading down to the [Louisiana Universities Marine Consortium](#) (LUMCON) lab. We have recognized that keeping our site open to the public contributes to the larger community efforts to remain resilient in the face of coastal land loss. For now, these elements work together to attract a diversity of visitors ranging from art pilgrims, to social scientists interested in community migrations, to academics seeking firsthand examples of coastal land loss. In this way we believe that we are not only preserving a world-class visionary art environment but also giving back to a community that we love and support.

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URLs

- <https://www.bestvalueschools.com/25-most-amazing-sculpture-gardens-in-the-world>
- <https://lumcon.edu>



Classroom Connection: Teaching Resources on Art Environments
by Anne Pryor

For some artists, their canvas is their home—literally. Called by various titles—visionary artists, outsider artists, intuitive artists, environment builders—these creators transform their personal space in extraordinary ways that transcend cultural norms. Through spectacular material means, these artists integrate their work with their local environment, resulting in highly unique forms of place making.

The art forms that these artists use vary widely and might range from [two-dimensional written tracts on plywood](#) to [metal sculptures of recycled “junk”](#) to [concrete buildings with embedded mosaics](#) to unusual [decorative additions made to a home or yard](#). Often the artists rely on inventive techniques to achieve their visions, including reworking their technical methods, revisiting existing pieces, and evolving their process of creation. The resulting installations might be immense, in size or quantity or both. They are personal statements, reflecting both the place where they are situated and the person who created them.

The Chauvin Sculpture Garden in South Louisiana is such an art environment, but it is not alone. Dotted across the U.S. and the rest of the world, these environments are considered treasures of creativity by some and neighborhood embarrassments by others. They are a type of cultural landscape worthy of study and preservation but typically quirky enough to fall outside the purview of regular heritage preservation or cultural resource management efforts.

Luckily for art environments and their artists, the Kohler Foundation and the John Michael Kohler Art Center (JMKAC), both of Sheboygan County, Wisconsin, are committed to preserving

About the photo: An intern does preservation work at the Wisconsin Concrete Park.

All photos by Anne Pryor, courtesy Wisconsin Teachers of Local Culture.

extraordinary art environments nationally and internationally through education, conservation, and creative exchange. Educators will also appreciate that JMKAC has developed a series of lessons on the art environments curated by the Kohler Foundation.

Educators can approach the JMKAC materials through the biographies of 11 different artists or through eight cross-curricular [big ideas](#): story, transformation, place, devotion, identity, healing and well-being, nature, or objects. There also are nine beautifully designed and sometimes extensive [lesson plans](#) available for download as PDFs.

Another resource for educators is SPACES (Saving and Preserving Arts and Cultural Environments), an organization that maintains an expansive archive on art environments and self-taught artistic activity around the world. The SPACES team has digitized and made available online documentation of sites on six continents and all 50 states. Educators can use the available artist biographies, photos, videos, and maps for student exploration and inspiration. Searchable by [site name](#) or [location](#), the online archive can also be searched by [types](#) of art environments, such as Homes Fully Transformed, Figures and Animals, Kinetic Environments, or Smaller-than-Life—all concepts that are intriguing to young imaginations.

Folkvine.org has a highly artistic design and is less straightforward to navigate than more contemporary sites. Nevertheless, its material is valuable. Created by an interdisciplinary team at the University of Central Florida, Folkvine features ten traditional artists in Florida, among whom are several who have transformed their environments in monumental ways. Each featured artist has imagery, video and audio clips, and text. One example is [Taft Richardson's garden](#), which includes many of his visionary bone sculptures and evokes both a community that has been displaced and the spirituality he learned from that community when it was vibrant.

Art environments can be sourced as curriculum by educators in multiple ways.

- They can serve as a jumping-off place for hands-on art making for young artists and an engaging pathway into curriculum organized around big ideas, such as “Transformation” (See JMKAC lesson plan, “Kinetic Collaborations,” pg. 178).
- A focus on art can pair with a focus on creative writing, as many visionary art environment builders concoct elaborate narratives to accompany their material creations. Upon leaving the salvage and wreckage business, Tom Every became [Dr. Evermore](#), builder of the Forevertron, a 50-foot-long and 120-foot-tall “space capsule,” as well as many other scrap metal machines with fantastical imagined purposes. Intuit: The Center for Intuitive and Outsider Art offers a [Scarecrow Flamingo Sculptures](#) lesson plan inspired by Dr. Evermore's Forevertron.
- STEM educators can expand into STEAM by exploring the engineering aspects of visionary sculptures, as in this lesson plan from TeachEngineering on [different types of forces](#) or this lesson from STEAM Art Room on [aerodynamics](#).
- Place-based educators can have their students employ ethnographic research to explore the local culture, history, economy, and environment that influenced the production of the visionary environment. [The Kids' Guide to Local Culture](#), produced by the Madison Children's Museum, can provide conceptual grounding and specific queries for students studying the cultural ecology of extraordinary artistic (or everyday ordinary) places in their own communities.

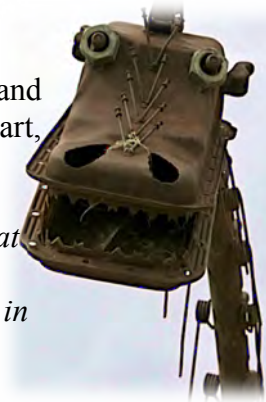
A folkloristic approach to visionary art environments sees them as a form of place making by individuals in dialogue with their natural and cultural environment. Folkloristic principles require focus on the artist as much as on the artwork itself, with interviews being a primary methodology for understanding the context of the creation. For example, interviews conducted with Fred Smith, the builder of the [Wisconsin Concrete Park](#) in rural Phillips, Wisconsin, reveal that some of the Park's 237 embellished concrete statues represent community members Smith admired for occupational skills in homesteading or logging, two occupations practiced by Smith himself and key to the area's economic identity of the 20th century. Other statues represent Native Americans, which might raise contemporary questions of appropriation for visitors to the site. In interviews conducted by Stephen Beal and Jim Zanzi in 1975, Smith explained that he was upset with racist treatment of the Ojibwe of Wisconsin and defended their right to live in their ancestral homelands not far from Phillips (Friends of Fred Smith, [Wisconsin Concrete Park](#)). The larger-than-life statues are meant to convey Smith's belief that Native Americans should be looked up to.

Folklorists look for expressions of cultural identity in artistic creations, including visionary art environments. Visionary art environments often push up against the boundaries of what a community finds acceptable, and by exploring that prickly edge we learn about what matters most to the locality regarding its self-representation. Often, a visionary art environment becomes a safe and accepted place only after the artists' death, when they are no longer a threat to the norm. Some members of the Phillips community found the Wisconsin Concrete Park an eyesore and hoped it would be destroyed. The Kohler Foundation, and then the nonprofit organization The Friends of Fred Smith, helped to prevent that outcome and eventually turned the site into an anchoring point for touristic and cultural activities in the community.

A similar struggle has occurred since the 2001 passing of artist Mary Nohl of Fox Point, Wisconsin, who was so ostracized during her life as to be labeled "[The Witch of Fox Point](#)." Local critique of Nohl derogatorily reflects sexist disapproval of a single woman who eschewed social norms. Over four decades, Nohl transformed her childhood home and yard on a bluff above Lake Michigan into a [visionary art environment](#) filled with statues, paintings, carvings, assemblages, and other artistic designs inspired by the wind, sky, water, and land of her locale. Her visionary place making stood in contrast to the refined tastes of an exclusive neighborhood that grew up around her cottage, creating a conflict in the community about its identity. Since 2015, the John Michael Kohler Art Center has been leading [preservation efforts](#) of the site and working to find resolution with the local community.

Visionary art environments can be of interest and value to educators and folklorists as they can reveal fascinating intersections between design, art, engineering, physics, culture, environment, society, and place.

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ART CURRICULUM

KINETIC COLLABORATIONS

AGE GROUP: early childhood, elementary, secondary

ARTIST CONNECTIONS:

Emery Blagdon
David Butler
Tom Every

David Butler, LA
1898-1997

David Butler brought a garden of color, form, and motion into being in the front yard of his home in Patterson, Louisiana. Based on images that appeared in his dreams, he created magnificent animals and scenes that appeared to come to life in a dynamic installation where whirligigs added sound and motion. Butler began his yard show, an African-American tradition, in the late 1960s, making what is widely regarded as one of the most important art environments ever made in the United States.

Tom Every, WI
1938-

Through an alter ego he calls "Dr. Evermor," artist Tom Every created a sculptural environment that includes The Forevertron, an immense iron structure that reaches skyward some 50 feet and spans approximately 7,200 square feet. Every inherited a family ethos of "save everything and make do." From youth, he learned the value of cast-off materials and gained an interest in recycling that spurred an artistic course that has culminated in a series of "mechanical fantasies."

jmkac.org/learn/educator-resources

BIG IDEA: TRANSFORMATION

Transformation is an important and inevitable part of life. It can also result from active engagement. Art-environment builders are compelled or even driven to transform themselves and/or their environments. Art offers a medium for exploring transformation that allows for the reconstruction of the ordinary into the extraordinary.

ESSENTIAL QUESTIONS:

- What is transformation?
- Why would someone transform themselves or their environment?
- How does transforming something change its meaning?

LESSON OVERVIEW:

Students work in teams to transform ordinary mechanical objects into an extraordinary kinetic sculpture.



David Butler with his sculptural bicycle, Patterson, LA, c. 1980. Photo: Richard Gasperi.



Tom Every (Dr. Evermor) on his Forevertron. Photo: Ron Byers, c. 1995.

OBJECTIVES:

(Organized by National Core Arts Standards Artistic Processes)

Connecting: Students will demonstrate an understanding of the idea of transformation as it applies to art and everyday life.

Responding: Students will analyze and discuss artists like Emery Blagdon, David Butler, and Tom Every, who transformed ordinary objects.

Creating: Students will effectively use a variety of tools and materials to take apart mechanical objects and reassemble into a new kinetic sculpture.

Presenting: Students will present challenges and successes of object transformation.

2016.13.102

KINETIC COLLABORATIONS



Tom Emery, *Isis*, 2000, metal and mixed media, 104 x 72 x 64 in. John Michael Kohler Arts Center Collection, gift of Kohler Foundation Inc.

VOCABULARY:

assemblage, functionality, kinetic, repurpose, transformation

ART MATERIALS:

- Found mechanical objects: bicycles, motors, appliances, electronic equipment, musical instruments, toys, wagons, pulleys, propellers, various scrap metal, etc.
- Materials for assemblage: wires, various hardware, zip ties, duct tape, rubber bands, rope, etc.
- Variety of tools

RESOURCES:

- Umberger, Leslie. *Sublime Spaces & Visionary Worlds*. New York: Princeton Architectural Press, 2007.
- Music Video: OK Go "This Too Shall Pass" <https://www.youtube.com/watch?v=qybUFnY7Y8w>
- Children's Books: McGough, R. (2004). *Dotty inventions and some real ones too*. London, UK: Frances Lincoln Children's Books.

Spires, A. (2014). *The most magnificent thing*. Tonawanda, NY: Kid Can Press.



David Butler, *untitled (bicycle)*, n.d., steel, paint, and mixed media. John Michael Kohler Arts Center Collection, gift of Kohler Foundation Inc.

DISCUSS:

- Discuss the idea of transformation with the students.
 - "What do you already know about transformation?"
 - "How have you experienced transformation?"
- Introduce, view, and discuss the work of David Butler, Tom Emery, and Emery Blagdon. All of these art-environment builders transformed the ordinary into the extraordinary.
 - "What objects and materials do you recognize within these works of art? In what ways have they been transformed?"
 - "Why do you think the artists selected these objects?"
 - "How has the meaning or purpose of these objects changed?"

CREATE:

1. In small groups, have students investigate a variety of materials and mechanical objects and use a variety of tools to disassemble.
2. Teacher will demonstrate various techniques of assemblage and discuss various aesthetic choices (e.g., balance, composition, scale).
3. Students select a variety of deconstructed objects to repurpose into a kinetic sculpture.
4. Each group will sketch a design of their proposed assemblage incorporating concepts of engineering, mobility, functionality, and aesthetics.
5. Using a variety of tools, students collaboratively construct their design using problem-solving skills.

REFLECT:

- Students will discuss challenges and successes of object transformation.
 - "What was the most difficult part of this process?"
 - "What challenges emerged and how did your group work through them?"
 - "How did your final product compare to your original design?"
 - "How does your piece address the concepts of engineering, mobility, functionality, and aesthetics?"

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Learning in Schools about Traditional Knowledge Systems in the Kumaon Himalayas

by Sameer Honwad

People in the Kumaon region of the Himalayas have used traditional knowledge and cultural practices to manage and conserve natural resources for generations. For example, rivers like Ganga and Yamuna are considered goddesses. By regarding sources of water as entities worthy of worship, locals have cared for these water bodies and protected them from pollution and overconsumption. Although people still consider water bodies and other natural resources as sacred, over the last several decades mismanagement of natural resources has reached alarming levels because of pressures from industrialization (Basant 2013). Likewise, education focused more on a Western value system is viewed as a vehicle that prepares youth to make a life outside their village community (Shiva 2000). This knowledge system based on Western values does not hold the traditional knowledge system in high regard. Western influxes have created a belief that traditional knowledge is unscientific and backward (Gupta 2007), and the system of transferring traditional knowledge from one generation to another has fallen apart.



Formal education has become more classroom-focused, and the gap between community-based knowledge and school-based knowledge is on the rise (Niraula 2007; Goonatilake 2001). As Pande points out, “In their haste to run away from the village, the young men and women do not seem to have the time to understand their own village and their own people, neither do they receive any orientation towards this in school” (2001, 48). For example, in Maichun village in the Kumaon region, *Palta* was a community activity that involved the entire village community coming together and making compost for their agricultural fields. The practice not only strengthened community bonds but also provided high-quality fertilizer for agriculture. Yet, Jackson observes,

The young youth in the village do not see compost as a resource for sustainable agriculture. In fact, they are ashamed of working on the land: the girls for aesthetic reasons (*nail paint would be spoiled* and the *compost stinks*—were some instant remarks from girls) and the boys for livelihood (*what will we do in the village? We go to the city, earn money and live comfortably*—the boys say). Several families in the village now complain of declining agricultural yields, so much so that “food is not even enough for six months in a year. (2004, 96)

The example points out that since the traditional knowledge is not passed on to the next generation and the formal educational system does not focus on traditional knowledge practices, the sustainable livelihood in the village is affected. Pande adds, “These impacts were too small to be noticed in the village in the early stages and when they became apparent and obvious for everyone to notice them, it requires resources, the time, and knowledge to regenerate or improve them—a task that nobody in the village can do alone” (2001, 51). Thus there is an urgent need to bridge the gap between content provided by the school curriculum and community-based traditional knowledge.

To help bridge this gap, the Uttarakhand Seva Nidhi Paryavaran Shikshan Sanstha, a local nongovernmental organization (NGO) working in the Kumaon ranges of the Himalayas, introduced an environment education curriculum into the school system. *Our Land Our Life* (OLOL) focuses on local issues, and the embedded pedagogy within the curriculum tries to address the concerns of rural people in the Kumaon Himalayas. OLOL seeks to connect classrooms with actual environmental problems, identifying links between issues that reflect real-world situations and relating environmental education to the local community. The curriculum addresses not only environmental science but also environmental education for sustainability more generally. The curriculum was developed in a unique partnership with local villages and has a focus on traditional knowledge.

The course runs in all the state government schools (public schools) and is implemented from 6th grade to 10th grade. The curriculum tries to connect livelihood issues related to land, water, fodder, crops, trees, and other ecological elements to formal education in schools. The OLOL curriculum is the only course in the entire schooling system that focuses on local environmental issues and discusses these issues within the context of local empowerment. Thus, understanding the impact of this curriculum on students’ lives is important. This article discusses how youth in rural communities of the middle Himalayas use traditional knowledge to support environmental decisions; examines how the youth negotiate a balance between traditional and Western/outside knowledge; and addresses how youth apply knowledge from the OLOL curriculum in decision-making processes.

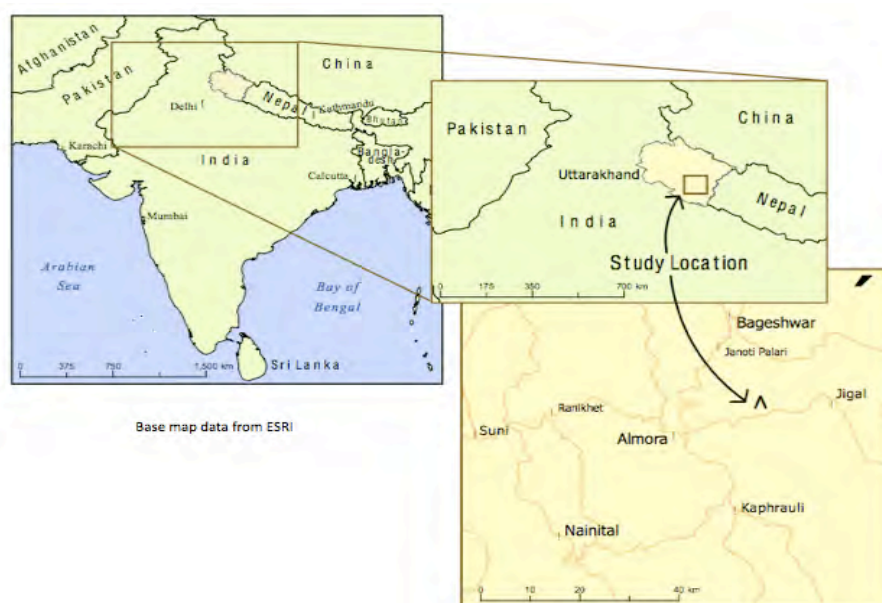


Figure 1. Map showing the location of the study area.

***Our Land Our Life* and the Educational Context in the Kumaon Himalayas**

The Kumaon Himalayas is a region within the Himalayan mountain range that is bordered in the South by the plains formed by the river Ganga and by Tibet in the North. The population is rural, and people mostly live in small clustered villages spread across valleys and slopes. Farming is the main occupation that supports people's livelihood and is done along terraces made on the slopes of the mountain range (Figure 2).

Regional schools provide an education geared to an urban lifestyle, not on preparing youth to lead a future in their villages. For example, textbooks illustrate computer concepts and instruct how to make PowerPoint presentations and use Word and Excel. Yet, when these books were introduced into the school system, most villages did not have electricity and the state-supplied generator was extremely noisy, therefore any computer use had to be conducted after regular school hours. Thus, computer education had very little application for village communities living in the Kumaon Himalayas. Since schools have mostly an urban-focused system, most youth (particularly boys) leave the villages and migrate to more urban areas. Thus, most villages these days consist of women who engage in agriculture and take care of homes.



Figure 2. OLOL students document Kumaon Himalayas terrace farming.

OLOL takes steps in addressing some of these issues. The course focuses on the idea of the village as an ecosystem (Figure 3). The course not only discusses local problems such as land degradation and water scarcity, it also connects these problems to the broader issues of livelihood such as health and economics. For example, as a part of the course youth learn how the water supply system in their villages work and how the water system affects residents' health. The course was designed with community input. The local women's group was actively involved in the process and supplied examples that highlight environmental issues within the context of empowerment for women. The course includes case studies of how village women address and negotiate environmental issues along with issues related to empowerment. Finally, the course actively connects youth to their communities, requiring them to engage community members at various levels. In one unit, the youth work with community members to make a map of the village and its environmental resources. The main topics covered every year in the course are listed below (Table 1).

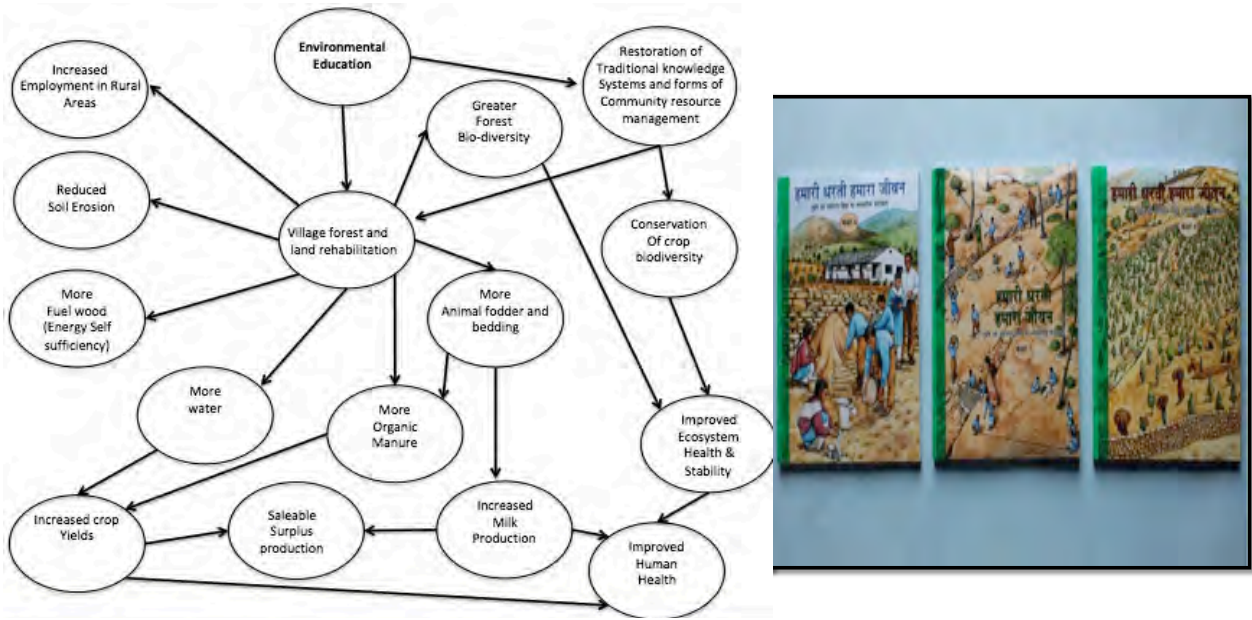


Figure 3. Our Land Our Life design (Jackson 2008).

Table 1. Overview of OLOL Course Design (Jackson 2008)

Grade	Topics Covered
6	Construction of study village map. Measurement techniques and mathematics involved. Introduction to plant-soil-water relationships. Introduction to principles of good land management. Growing tree seedlings. The natural vegetation of Uttaranchal. Learning the history of study village and traditional management practices for land and animals.
7	Study village support area rehabilitation project, including tree seedling production, begins. Geology of Uttaranchal. Soil formation and erosion. Rainwater runoff and infiltration. Measuring spring flow and domestic water consumption. Support area land classification. Measurement of rainfall and analysis of data.
8	Support area rehabilitation project continues. Measuring crop yields, compost application rate, use of animal bedding, and fuelwood consumption. Measuring land area. Concept of slope. Population dynamics. Introduction to ecological concepts. How to build fuel-efficient <i>chulhas</i> (stoves) and sanitary latrines.
9	Support area rehabilitation project continues. Enumerating human and animal populations of study village. Measuring fodder consumption and wood production. Further ecological concepts. Introduction to national and global environmental problems. Formulation of draft plans for study of village support area rehabilitation and water use. How to build a water storage tank.
10	Support area rehabilitation project continues. Estimating future productivity of study village and future carrying capacity. Population stabilization. Discussion and finalization of draft plans in village meetings.

Prevailing Traditional Knowledge Systems and OLOL

The issue of identifying knowledge types—Indigenous Knowledge (IK), traditional ecological knowledge (TEK), or exogenous—is a complex process. There is rarely a single instance that can be one knowledge type or another. In most instances there is an overlap. Semali and Kincheloe (1999) address this complexity by pointing out that “Indigenous knowledge is an ambiguous topic that immediately places analysts on a dangerous terrain. Not only are scholars unsure what we’re talking about but many analysts are uncertain who should be talking about it.” Thus, it is important that community members get to define what is traditional knowledge and how they use it in their everyday life.

Kumaon Himalayas villagers define traditional knowledge as knowledge that their ancestors pass on to them and that evolves over time. It is knowledge that is attached to a certain place. This knowledge is also embedded in the practices that have been conducted over several generations.¹ Understanding IK in traditional communities is fundamental to the design of any learning environment in the Kumaon region of the Himalayas (IIRR1996). The importance of out-of-school learning becomes clear when one examines the relatively small amount of time spent in school compared to other settings. Activities in homes, community centers, and after-school clubs can have important effects on students’ academic achievement (Bell et al. 2006; Bransford 2001). In the Kumaon region, learning also takes place when youth work on family farms, take cattle out for grazing, and do landscape-related work. Thus, effective instruction begins with taking into account what learners bring to the setting; this includes cultural practices and beliefs as well as knowledge of academic content. There are many studies that have shown that what people learn and how people learn is context-dependent (Mertl et al. 2007). Therefore, a learning environment that takes into consideration the context should help learners link ideas from ecology and formal science to their own lives (Burford et al. 2005). Finally, an educational initiative on sustainability that embraces IK would help learners negotiate different worldviews and value systems about development and livelihood (Palmer 1998).

To understand indigenous knowledge/traditional ecological knowledge that would be used in the classroom for water and land management better, we used the Delphi technique. The purpose of the Delphi technique is to facilitate information, opinions, and judgments from a panel of community experts to gain consensus on an issue (Dunham 1996). The usual objectives for a Delphi assignment are as follows:

1. To understand the process of delivering judgment on an issue that may need deliberation,
2. To look at commonalities between different opinions to generate a consensus among the respondents,
3. To synthesize information about a topic that spans multiple disciplines, and
4. To inform respondents about the various different facets of the topic (Turoff 1970).

This Delphi focused on what type of IK is used for water and land management related to agriculture, forestry, and soil.² By focusing on the types of knowledge people use to manage land and water, we were able to make suggestions toward designing better environmental education programs for helping communities in the region better their quality of life.

Some practices for addressing environmental issues that the community members identify as based in traditional knowledge using the Delphi process follow.³

- Water is the basic necessity for life.
- A community traditionally manages water through *naulas* (groundwater springs). There is traditional knowledge associated with how to build a naula. The structure is very important because it helps groundwater come to the surface and then stay above the surface.
- To keep water sources clean, often they are designated religious and thus people must go into them barefoot, which helps keep the source clean.
- Collecting rainwater is another way to manage water traditionally.
- People plant native species (oak and deodhar cedar) to ensure maximum seepage of water into the soil. Planting these trees helps hold soil together, leading to more seepage and increasing the groundwater table.
- Digging trenches (*khals*) is another way to manage the water.
- People also build small dams (*choys*) to stop flowing water
- To keep soil together and help stop water runoff, people build depressions (*guls*) around their farms.
- There are traditional devices (earthen pots) to store water and keep it clean.
- There is encouragement to use running water rather than stored water because running water has a natural filtration system.
- Using organic compost is important.
- Seed saving is traditionally considered good land management practice.
- Mixed farming and crop rotation practices keep land healthy.
- Healthy forests keep farms healthy by providing more organic litter for decomposition to make good compost.
- Not cutting an entire tree for fodder, cutting only lower branches, for example, preserves the tree—the healthier the trees, the healthier the soil and thus higher yields from the land.
- Sharing labor for agriculture is a good land management practice because there is community participation, ensuring everyone keeps their piece of land healthy and bad practices do not spread.
- Organic pesticides and insecticides such as walnut leaves and neem leaves are better for the land and water than industrial chemicals.



Figure 4. Youth studying the water system as a part of their course.

These traditional practices are embedded in the OLOL curriculum. For example, some schools in the region studied existing water systems and then designed and built their own rainwater harvesting facilities using local materials (Figure 4). Thus, the course not only involves the use of the traditional knowledge systems used by the local communities but also blends it with current best practices to facilitate the evolution of the knowledge system and optimize benefits for local communities. Our research discussed below describes the effectiveness of this curriculum on decision making.

Preparing Youth for Environmental Decision Making: Study Design

Study participants were recruited from two villages east of the city of Almora, Chanoli and Maichun. The youth were recruited from two schools, Panvanaula High School and Inter College and Garudabanj High School and Inter College. (In India, high school runs through 10th grade, while inter college includes grades 11 and 12). Both schools are run by the state government. Participation was voluntary.

To understand how youth used traditional knowledge in their decision-making processes, we conducted interviews and focus groups. The youth also participated in a role-play activity that revolved around youth assuming the role of stakeholders involved in environmental decision making and acting out case studies of community-based environmental problems. A total of 29 interviews and seven focus groups were conducted with youth from both schools. Transcription of the interviews and focus groups helped identify youths' use of traditional knowledge.⁴

Results and Conclusion

When asked how they would go about solving water-related problems in their community, almost all the youth said that planting native tree species is the most important step.⁵ Their explanation was that the trees would hold the soil, which in turn would stop water runoff and increase groundwater tables so that springs and rivers have more water. This explanation corresponds to that given in their OLOL environmental education curriculum. The youth also mentioned using naulas, harvesting rainwater, using proper water storage, and keeping water sources clean as other ways to resolve water-related issues.

In terms of land-related issues, most youth thought that not cutting trees in their entirety was the number-one solution.⁶ The explanation was that cutting trees would lead to deforestation, which would cause soil runoff and be harmful to the land. A few youth mentioned mixed farming, crop rotation, organic insecticide, and seed saving as solutions for resolving land-related problems in their community. Thus, most youth indicated that currently they would use practices based on traditional knowledge to resolve some of the water- and land-related issues in their community.⁷

It also appears that they are aware of and recommend certain practices based on traditional knowledge that they learned in school. Based on their answers it appears that the OLOL curriculum is a major source of this knowledge; 72.4 percent of youth mentioned that they learned most of these practices in school, and 13.8 percent indicated that they learned some practices at home and some at school.⁸ However, the findings also indicate that although they mention that most practices they would use are traditional, it is not guaranteed that they would use them to resolve these issues in reality. This observation is supported by the data that indicate that when asked whether they prefer tap water or water from the naula, 95 percent said that they would prefer tap water. Thus, it may be possible that OLOL presents them with solutions that do not fit their reality. It is also possible that youth gave the answers they learned in school since the interviews were conducted in the school.

Therefore, a question arises about how well the environmental education curriculum fits the changing nature of the communities. The demographic of the village community has changed over time. Men often go to urban centers to seek better economic opportunities (Pande 2001). There is a need within these communities to urbanize, since that is recognized as being developed (Agrawal 2005). Thus, traditional knowledge practices are often adapted to the needs of development and urbanization. However, in the school, youth are learning about traditional knowledge systems and how these knowledge systems are sustainable because they fit the context. So on one hand, at home, there is a push toward being more urbanized, while on the other hand, at school, there is a push toward traditional practices. This struggle shows in the data as the youth are not voicing the actual changes experienced within their communities.

Thus, the OLOL school curriculum needs to fit the changing face of knowledge. The curriculum needs to recognize that people move through time and space and knowledge itself will evolve over a period of time. If the curriculum hopes to revive traditional knowledge systems among the youth without acknowledging the evolution of the knowledge base, then we think there is a fair chance of it being rejected, especially since teachers (who come from an urban area) think of this curriculum as not up to date (field observations 2005, 2006, 2007, 2008). By not recognizing the changing landscape of the traditional knowledge systems, any curriculum focused only on traditional knowledge could be seen as working against intergenerational knowledge transfer, especially since the knowledge the adults are bringing into the village from the urban centers is new and different than the traditional knowledge. Thus, even when the youth read about traditional knowledge in OLOL they continue to get a different message at home than the knowledge they are learning in school.

Tradition and Innovation When Teaching IK and TEK

Along with changing communities, knowledge also changes. With immigration and emigration of knowledge, the complexity surrounding what knowledge is traditional for a particular generation remains a question yet to be answered. Although the study does not directly ask these questions, they become more pressing as communities move in time and space. For example, men in the village are often employed in the urban areas and interact with urban resources such as water taps. When they come back to the village, they seek these urban conveniences and try to adapt these conveniences to their context and culture. Thus, in the process they add to the existing traditional knowledge systems. These adaptations are not always sustainable, but once in a while an adaptation such as a water tap next to a house becomes a sustainable practice. So, when should we identify the water tap as traditional? This is a complex question beyond the scope of this study, but like a restoration ecologist struggles with how far back in time one should go to restore the ecosystem to its “native” state, similarly there is a struggle here as to how far back in time we should go to identify a knowledge practice as traditional. The way traditional knowledge evolves, and what constitutes traditional knowledge, is a complex study that will require a different set of probes. But as we acknowledge the complexity of this issue, we would also like to state that we have tried to address the complexity of what is traditional knowledge by gaining consensus from local experts. The Delphi panel does not address every single complexity of how these knowledge systems are constructed but provides a starting point and good insight into the traditional knowledge systems.

Although OLOL is a powerful curriculum that focuses on local traditional practices, it needs to take into consideration the evolving nature of traditional knowledge and the applicability of this knowledge. For example, newer ecological problems have arisen during the past 20 years. With problems such as climate change looming over Himalayan communities, the curriculum needs to focus on adaptability rather than only traditional knowledge. It is important to answer how the people in the Himalayas will adapt to the changing climate and how they can collaborate with the global community in order to address newer environmental problems. Collaboration is particularly important because climate change is a global problem and actions conducted by non-local populations (urban areas in India, China, and the U.S. are the highest emitters of CO₂) are affecting the local level environmental processes. The curriculum may outline a pathway toward local and global engagement of environmental problems.

In summary, the data and observations suggest that the youth are aware of traditional practices and some scientific reasons behind these practices, but they are less likely to use them in reality. There is evidence that youth are learning about different practices at the school and at home, but at this time they are unable to build bridges to integrate carefully the knowledge that they gain in these different settings. They seem to be thinking that the knowledge from home is not useful in school, and that in school they should only discuss things that they learn in the school curriculum.

It is important to bridge the gap between formal and informal learning as learners are constantly making sense of their environment in formal as well as informal environments (Bransford et al. 2006). Thus, if youth do not connect in-school (formal) learning to what they learn at home (informal), then youth are going to find it difficult to construct scientifically sound and meaningful knowledge (Hewson 1992). The youths' underdeveloped conceptual ecology with respect to environmental problem solving is certainly going to hamper their decision making. Thus, to close the gap between formal and informal learning and empower youth to make environmentally sound decisions about their local environment in the future, OLOL curriculum designers need to realign some of the content in the curriculum with the current environmental situation of the Kumaon Himalayas. This can be achieved by the following:

- Evaluate the current environmental situation in the villages. This has to be done, as problems such as climate change are starting to create severe water problems in the Himalayas, and these new environmental problems need new strategies of adaptation and survival drawn from traditional and emergent knowledge.
- Restructure some of the content in the curriculum *Our Land, Our Life* based on the environmental evaluation.
- Conduct long-term ethnographic research with youth to assess long-term learning and application of knowledge.
- Prepare iterations of the curriculum based on these long-term studies.
- Connect the curriculum to other subjects and make it a truly interdisciplinary curriculum. This would also involve organizing teacher trainings to have subject teachers collaborate with each other.

As the climate changes, water and land resources in the Himalayas are changing at a rapid rate. There need to be strategies in place to help people in the Kumaon region cope with these changing times. The recommendations above are just a start, and there is plenty of more research and action

needed to help the mountain environment and the communities that reside in the Kumaon Himalayas cope and adapt to the changing ecology of the Himalayas.

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About the photos: All photos courtesy of research personnel associated with the mountain project.

Endnotes

1. This definition of Indigenous Knowledge came directly from the Delphi procedure described in Endnote 2.
2. Thirteen participants/experts were identified and invited to participate in this consensus-building exercise.

Participation was voluntary, and no compensation was offered. The participants/experts were chosen by consulting with the officials of the Uttarakhand Seva Nidhi Paryavaran Shikshan Sanstha (Uttarakhand Environment Education Center–UEEC). The criteria for selection were that the individuals have experience working with the local communities on social, agricultural, economic, and related environmental issues. The Delphi procedure was carried out in three rounds. In the first round the participants were asked three sets of questions. These questions were asked in interview format in Hindi and in English and were recorded on video. The questions were as follows:

1. What is your definition of indigenous knowledge?
2. What are some practices that use indigenous knowledge for water management? What is the specific indigenous knowledge used within these practices?
3. What are some practices that use indigenous knowledge for land management (as related mostly to forests and agriculture)? What is the specific indigenous knowledge used within these practices?

Participants were free to answer in Hindi or English: All were fluent in at least one of these languages (although the local language is Kumaoni, all schooling is conducted in Hindi and/or English and almost all local media are in Hindi or English).

In the second round, results of the first round were transcribed and translated into English. Then both the Hindi and the English versions of all interviews were given to the participants. Thus, each participant got to see 13 answers along with his/her own. They were then requested to review their answers and change/modify them if they felt necessary.

The modified transcripts were collected, and participants' changes were incorporated into new transcripts. Since two participants dropped out of the protocol in the last round, only 11 answers were circulated for round 3. Participants were asked to choose the five best answers. They were then asked to rank those answers from 1 to 5 with 1 being the one they liked most and 5 being the one they liked least.

3. It is important to note shortcomings of the Delphi panel. Although the Delphi panel identified indigenous knowledge and practices, we do not believe that they have identified all the practices that are indigenous to the region. An example is the practice of community discussions to resolve issues faced by the community as a whole. The Delphi panel has not identified this practice as indigenous, but village communities are often known to get together to resolve an issue faced by their community. The Government of India, in an attempt to restore traditional practices in village communities, encourages *Panchayat Raj*, a form of local government that involves community discussions and resolving issues at community level (Armstrong and Mangal-Joshi 2004). While this specific form of community discussion forum (Panchayat Raj) may not exist in the Kumaon region, other forms of community discussion forums may exist. The issue is thus nuanced and complex. The practice of using formal community discussions to resolve issues may have existed in the past (before British rule). It is documented that community discussion forums or *village sabhas* were part of society until 600 BC (Mathew 2000). After this, the subcontinent was broken up, and different rulers/kings governed different parts (Mathew 2000). During the British rule (which lasted about 150 years) all forms of local problem-solving mechanisms were dismantled (Mathew 2000). It was only after India regained independence that local village governing systems were put back into practice. Thus, the local community discussion forums exist in a different form than those that existed in pre British India, which brings up the issue of how indigenous practices evolve over time.

For the purposes of this study, we have identified complex practices such as community discussions as non-indigenous practices, not only because the Delphi panel did not identify them as indigenous knowledge or practice but also because the practices themselves do not exist in their original forms. There is documentation (Shiva 2000) about how the caste system has hijacked the practice of community discussion forums, where upper caste members have an upper hand in decision-making processes. Thus, since they do not exist in their true indigenous forms, I have identified them as nonindigenous practices.

Also, some practices that the panel has identified as indigenous can also be identified as a part of the modern conservation movement that has been based on Western ecosystem science. One prominent example is the practice of planting trees. The Delphi panel identified planting trees as an indigenous practice. This practice can be seen in the modern conservation movement and stems from excessive deforestation that took place for developmental purposes. As industrialization took priority, deforestation took place at a rate that was unsustainable and thus it gave rise to the need of tree planting (Govinda and Diwan 2003). However, this is also an indigenous practice and is suggested to be a part of the sacred grove concept, where communities planted trees to appease the gods (Bhagwat 2005). Thus, for the purposes of this study, we have identified this particular practice of planting trees as indigenous knowledge.

We recognize that the issue of “what is indigenous and what is not” is far more complicated than the scope of this particular study, but the Delphi panel does provide a means to construct a reasonable list of indigenous practices within the region.

4. Once all the interviews and focus groups were transcribed, every utterance was coded for the use of indigenous knowledge as identified by the Delphi.

Table 1. Coding for Subcategories for Interviews and Focus Groups

The participant is aware and thinks that the particular solution is viable.	1
The participant is aware but does not think of the particular solution as viable—for example will prefer tap water	2
The participant supplements No IK with IK. For example, will take initiative to use naulas along with tap water and not just use the naulas when tap water runs out.	3
Did not mention at all.	4
Interview failed due to equipment problem.	0

Thus, the following is an example of the complete coding system with main and subcategories:

Participant: If the tap water runs out we go to the village leaders or government official and get them to fix the problem and in the meantime use the water from the naulas.

This utterance was coded for the main traditional knowledge category as **Use of naulas** and the utterance was further coded as **aware but do not think of as a viable solution to resolve the problem – 2**. The reason this utterance was coded as **2** is because although the participant is using the naula, he/she feels like the solution to resolving their problem is that the government should fix the tap. A category **1 Aware and think of as a viable solution** utterance is “*We should use the naula water and take care of the naula*” and a category **3** utterance is “*We use the naula and the tap water as the tap water is convenient but we cannot use it for drinking, we prefer the naula water for drinking.*”

After coding for traditional/indigenous knowledge use, the data was coded for other solutions. These solutions were called exogenous or nontraditional solutions. The youth offered several with the main categories as follows:

- 1 Educate community members.
- 2 Sit together for a meeting and collectively solve the problem.
- 3 Since youth study these issues in school, adults need to listen to them.
- 4 Manage cattle grazing.
- 5 Petition the government/village chief to resolve the water issues.
- 6 Stop corruption.
- 7 Build hand pumps and wells.
- 8 Maintain and repair existing pipelines.
- 9 Distribute/ration water.

Since all participants who mentioned these solutions thought of them as viable, the utterances were sub-coded as **1-Aware and think of as viable solution** or **4-Did not mention at all**.

There were not many nontraditional solutions presented by participants to resolve some of the land management issues. Some were:

- 1 Stop pollution.
- 2 Control human population.
- 3 Stop migration toward the city.

5. Focus groups: N= 7.

Table 2. Indigenous Solutions Presented by Youth during Focus Groups to Resolve Some Issues Related to Water

IK	Aware and think is viable solution (n)	Aware but does not think of as a viable solution (n)	Participant use both IK and non IK (n)	Did not mention at all (n)
Use of naulas	2	3	0	2
Keep water resource clean	4	0	0	3
Rainwater harvesting	3	0	0	4
Planting trees	7	0	0	0
Proper water storage methods	2	0	0	5
Trenches	1	0	0	6
Use of running water	0	0	0	7
Guls	0	0	0	7
Choys	0	0	0	7

Interviews: N = 29

Table 3. Indigenous Solutions Presented by Youth during Interviews to Resolve Some Issues Related to Water

IK	Aware and think is viable solution (n)	Aware but does not think of as a viable solution (n)	Participant use both IK and non IK (n)	Did not mention at all (n)
Use of naulas	1	14	2	11
Keep water resource clean	1	0	0	27
Rainwater harvesting	4	0	0	24
Planting trees	24	0	0	4
Proper water storage methods	3	0	0	25
Trenches	0	0	0	28
Use of running water	0	0	0	28
Guls	0	0	0	28
Choys	2	0	0	26

* One interview was not recorded due to equipment failure.

6. Focus groups: N=7

Table 4. Indigenous Solutions Presented by Youth during Focus Groups to Resolve Some Issues Related to Land

IK	Aware and think is viable solution (n)	Aware but does not think of as a viable solution (n)	Participant use both IK and non IK (n)	Did not mention at all (n)
Using organic compost	1	0	0	6
Seed saving	1	0	0	6
Mixed farming	1	0	0	6
Healthy forest leads to healthy farms	1	0	0	6
Not cutting entire trees for firewood	6	0	0	1
Sharing labor for agriculture	0	0	0	7
Organic pesticides	0	0	1	6

Table 5. Indigenous Solutions Presented by Youth during Interviews to Resolve Some Issues Related to Land

IK	Aware and think is viable solution (n)	Aware but does not think of as a viable solution (n)	Participant use both IK and non IK (n)	Did not mention at all (n)
Using organic compost	1	0	0	27
Seed saving	0	0	0	28
Mixed farming	2	0	0	26
Healthy forest leads to healthy farms	1	0	0	27
Not cutting entire trees for firewood	24	0	0	4
Sharing labor for agriculture	0	0	0	28
Organic pesticides	1	0	0	27

* One interview was not recorded due to equipment failure.

7. The other relevant observation is that the youth were much more confident in presenting solutions to resolve water problems. When it came to answering questions related to land issues, most youth seemed like they did not know as much and thus used the information from their OLOL curriculum to answer the question. This could be because most of the youth who go to school do not go into the fields with their parents (or their parents are not farmers). However, they use water daily and are much more aware of water-related issues than land-related issues.

8. Table 6. Where Youth Get Their Information

Where youth get their information	(%)
School	72.4
Home	13.8
School and Home	3.4

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Student: What new challenges do you face now that didn't exist prior to the storm?

Bayman Tom Jefferies: After Sandy, as Freeporters, we all know things changed. There was a lot of pollution, a lot of debris. It took quite a while for the bay and the ocean to spring back. I was out of work for several months. My heart was broken. But Mother Nature is very resilient. Right now we're almost at 100 percent back to normal since Sandy.

Bayman Michael Combs: A lot of the species disappeared, different kinds of crabs and fish disappeared after the storm.

Documenting Disaster: A Student and Teacher Learning Experience

by Nancy Solomon

In Fall 2012, Superstorm Sandy struck Long Island, New York, and was one of the worst hurricanes ever to strike the region. The folklife nonprofit [Long Island Traditions](#), with the assistance of a National Oceanographic Atmospheric Administration (NOAA) Preserve America Grant, implemented a maritime traditions documentation project in the Freeport School District during the 2015-16 school year. The project looked at how Superstorm Sandy affected the seafaring community, its residents, and its maritime traditions. Freeport is a diverse community of recent immigrants and established residents. Many students were displaced into alternative schools and homes following Sandy because Freeport was one of the hardest hit communities on Long Island. As a result, the fishermen could relate to the challenges that the students faced after Sandy.

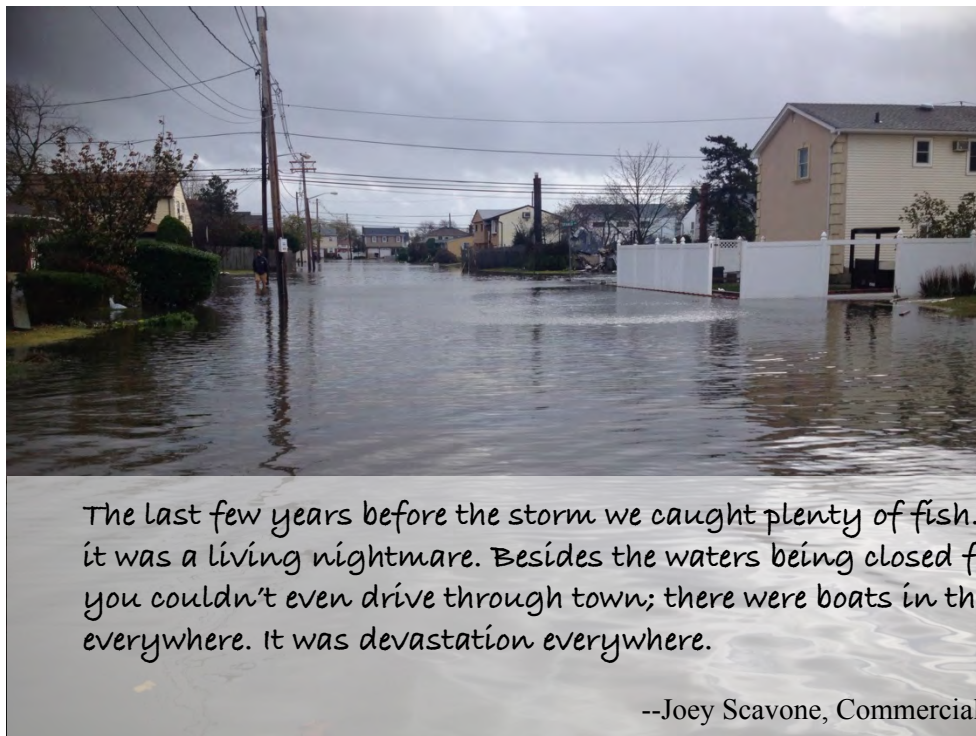
We chose to design our project with teachers so that they and their students could share their experiences with the fishermen, who were also devastated by the storm. The goal was to examine the history of this waterfront community through the eyes of tradition bearers—fishermen, baymen, boat builders, and decoy carvers—who learned these traditions within their families and communities. Freeport was once home to dozens of maritime tradition bearers who harvested finfish and shellfish in the western bays of Nassau County, using traditional rakes, nets, and flat-bottom boats. They harvested clams, oysters, menhaden, fluke, flounder, eels, and other species.

After World War II, recreational fishing became a major industry for fishermen and baymen, who harvested bait fish for the new recreational sportsmen. Although new regulations affected the commercial fishing industry, an active group of fulltime commercial fishermen worked until Superstorm Sandy.

Long Island Traditions began our school programs in the district in 1988 to bring students, their families, and the community together. Since then, we have featured master maritime tradition bearers identified by our staff and consulting folklorists through fieldwork that began in 1987 and continues. Fieldtrips to the commercial fishing district and maritime educational tours for the general public helped bridge the geographic and informational gap between waterfront residents and school-age families.

Our program has provided important opportunities for traditional fishermen to teach students in their communities about the ecological changes in Freeport, based on their personal observations over decades of experience. Through interviews, hands-on workshops, and fieldtrips with local fishermen, students came to understand how the traditions of commercial fishermen and baymen changed over time. After Sandy, many of our longtime program participants were unable to work with us because of the closure of the bays and the need to restore their severely damaged homes, docks, and boats. Thus, we began this new project in Fall 2015—with substantial funding and support from the school district—to incorporate stories of Sandy and the effects of this disaster.

Fifteen 4th-grade classes with 700 students from three elementary schools participated. Many came from established African American families and Latino families who were first-generation Americans. We began with a planning meeting that all participating teachers attended to discuss potential student projects, curriculum approaches, tradition bearers, and resources. As people who



The last few years before the storm we caught plenty of fish. After the storm it was a living nightmare. Besides the waters being closed for clamming, you couldn't even drive through town; there were boats in the road everywhere. It was devastation everywhere.

--Joey Scavone, Commercial Fisherman, Freeport

Photo of Freeport during Sandy by Ben Jackson.

experienced the storm, we felt the program should respond to teachers' perspectives on how Freeporters survived and coped with the storm. The teachers suggested creating a maritime magazine with a variety of writings, including stories that Long Island Traditions had collected from storm survivors, photographs of the tradition bearers at work, and vocabulary terms commonly used by the tradition bearers.

Teachers and school staff, including the librarian and curriculum specialists, decided to begin with two class presentations by baymen Tom Jefferies and Michael Combs of Freeport. Both suffered from Superstorm Sandy on a personal and an occupational level. Using photographs, the two discussed their harvesting activities, their backgrounds, and how Superstorm Sandy affected their occupational culture. The photographs came from Long Island Traditions fieldwork journeys with each of the baymen prior to and after Sandy and from public archival collections including NOAA and the Federal Emergency Management Agency (FEMA). After asking questions of the baymen, students shared their own experiences of Sandy. Next, students recorded interviews with Tom and Michael that became the basis for a video production. They had developed questions beforehand and conducted the interview using an iPad and a microphone. Questions focused on occupational experiences, Superstorm Sandy, and changes in the bay.



Tony Sougstad demonstrates net mending.
Photo by Nancy Solomon.

The second project component was a hands-on workshop the week following the baymen's presentations. There were also 20-minute interview sessions with more tradition bearers on creating a traditional maritime object or using a traditional skill such as net mending, trap building, and decoy carving. Students conducted interviews with 12 tradition bearers during the workshop. Students were split into small groups, allowing for personal interactions with participants, including commercial fishermen who worked inshore and offshore, decoy carvers, boat builders, model makers, net menders, and trap fishermen. Students recorded interviews

with the fishermen during the workshop and in the school library. One teacher worked with the students to produce a finished video based on their interviews and research.

Since fishing in the winter is severely limited in the mid-Atlantic, these school-based activities took place in the winter months when tradition bearers are more available. In addition, schools have more time for extended school residencies such as this one, enabling us to offer an immersive experience. The project also helped teachers prepare their students for English Language Arts exams by offering engaging alternative written materials reflecting local culture other than those typically used for test preparation. One alternative resource we provided was *Maritime Magazine*, a student-oriented collaboration between our staff and the teachers. The magazine features first-person narratives that we collected, photographs, drawings, and a glossary of common local maritime terms.

The final program element was a fishing trip onboard the *Miss Freeport*, a charter boat that specializes in educational experiences. Students learned to fish in the bay and near the inlet.

Additionally they developed knowledge about the different species in each habitat location, changes to the habitat since Sandy, and different kinds of bait. For many this was their first time fishing or being on a fishing boat. Students and their teachers documented the trip through video that was incorporated into the final production.



View [A Time for Change](#), a grade-wide presentation of the video was the culminating element of the program at the end of the school year.

The following year the school librarian stepped in to help students create a PowerPoint presentation about their experiences. This presentation can be [viewed here](#).

To edit a final video, teachers first asked students to identify passages in their recordings that had special significance to them. These generally fell into the categories of occupational culture and storm experiences. Students worked in groups and reached consensus on the final excerpts. They also worked with one of the classroom teachers who had special training in school-based film production to develop an engaging video, *A Time for Change*, which highlighted their experiences as well as the knowledge of the tradition bearers.

In 2017, Long Island Traditions produced an exhibit about storms and hurricanes, [In Harm's Way](#). Professionally produced videos using our archival materials accompanied it. One video examined fishermen's experiences during Sandy and became part of the curriculum for the 2018 program. The eight-minute film featured fishermen from the

South Shore of Long Island, where the storm hit hardest, and included segments from inshore and offshore fishermen.¹ This year the video introduced new students to the project and served as a starting point to develop questions for tradition bearers, for example: Where are their boats docked? What are challenges to their occupation? And, which skills helped them before and after Sandy?

This project was feasible because of our longstanding relationship with the school, the students, their teachers, and the fishermen. Since 1987, we have been working with the school district and local tradition bearers. We had long-established relationships prior to Sandy. As a result, we were able to conduct interviews within the community shortly after Superstorm Sandy. In addition, we had worked with the school district, so there was respect for our program and we could design this new project collaboratively. Enough time had passed since the storm that students and teachers were no longer coping with the immediate trauma of the storm, yet there were still important memories that could connect the participants to the event.

Other factors helped. We had robust funding from a variety of sources, including NOAA, the National Endowment for the Arts, the New York State Council on the Arts, and the school district. In addition, the school district allocated sufficient staff development time so that teachers could work directly with us in planning and executing the program. As noted earlier, the district also had technological resources to develop the multimedia materials, and each classroom had appropriate equipment to develop and present the materials that students created.



Tom Jefferies in the classroom.
Photo by Nancy Solomon.

Student: What major lesson or underlining message can people learn from natural disasters such as Superstorm Sandy?

Bayman Tom Jefferies: I learned about myself and how I could spring back and rectify the situation, since so much did go wrong. You learn about your neighbors and friends and family. People who you never spoke to in the street would sometimes help you. You learn that there's a lot of compassion.

Documenting disasters like Superstorm Sandy can be full of challenges and rewards to the community. Such programs provide a safe space where community members who have limited contact with one another can establish close relationships across many boundaries. The program helped participants learn from one another, in a multidisciplinary environment that encouraged reflection and creativity. By focusing on local ecological knowledge and occupational traditions, the project opened new doors and ways of looking at their community for all the participants. While we hope the ravages of natural disasters spare our hometowns, tornadoes, superstorms, and hurricanes unfortunately seem to be growing more common. We offer this program as an educational tool that may help people in other places cope.

Nancy Solomon received her MA in American and Folklife Studies from George Washington University. She is the Executive Director of Long Island Traditions, which is dedicated to documenting, presenting and preserving the architectural, ethnic, and occupational traditions of the region. She is curator of In Harm's Way, author of several books and articles, and a columnist for Voices, a publication of the New York Folklore Society.

Endnotes

1. The video can be seen at

https://www.youtube.com/watch?v=FlaUOTyj8Qo&index=3&list=PL_pPoNArok3uqIvI2V9IfJQl6HjyLPhOE.

URLs

<http://www.longislandtraditions.org>

Student film: <https://youtu.be/FChSLCyVo9E>

Student powerpoint: <https://freeport.edu.bunce.com/bunce/aaa3ae4313cb4bfab01ae4a69174f947>

In Harms Way:

https://www.youtube.com/watch?v=FlaUOTyj8Qo&index=3&list=PL_pPoNArok3uqIvI2V9IfJQl6HjyLPhOE

Resources

FEMA Media Gallery <https://www.fema.gov/media-library>

Long Island Studies Institute https://www.hofstra.edu/library/libspc/libspc_lisi_main.html

NOAA Image Gallery <http://www.photolib.noaa.gov/index.html>

NOAA Voices from the Fisheries <https://www.voices.nmfs.noaa.gov>

NOAA Voices from the Fisheries: LI Traditions Climate Change and Sandy Collection

<https://www.st.nmfs.noaa.gov/apex/f?p=213:6:::NO:RP::>

Freeport School District Project Video <https://youtu.be/FChSLCyVo9E>



*A fisherman of the shallow sea uses only a short line; a fisherman of the deep sea has a long line.
A person whose knowledge is shallow does not have much, but he whose knowledge is great does.*
—Pukui 1983

Cultivating Aloha 'Āina Through Critical Indigenous Pedagogies of Place

by Maureen K. Porter and Nik Cristobal

Deeply embedded traditional wisdom flourishes in an organic relationship with the stunning places that Native Hawaiians call home. From the highest jagged peaks to waterfalls that plummet down to beaches, which in turn buffer fragile tidal pools, the islands' ecosystems attest to the interconnections of all life. Millennia of hard-won experiences living with and upon the seas and lands have shaped Indigenous senses of place and their creative expression in folklife. Native Hawaiians' resulting depth of knowledge has contributed to sophisticated scientific, theological, linguistic, and artistic ways of living, generating the enduring folkways that create a unique sense of place. Folklore, education, and place are one.

Learning to thrive in harmony with this landscape, to steward and learn from the forests and waterways, and to enact love for others all combine in aloha 'āina, the active devotion to one's place and the concern for the well-being and shared wisdom of one's people and homeland. As authors, we use the Native Hawaiian commitment to aloha 'āina as the fundamental guiding principle that orients our approach to place-based education; thus it opens our discussion and leads to the sections that follow. After situating aloha 'āina as part of a Critical Indigenous Pedagogy of Place, we look at how teachers, both Native and non-Native, can make this goal, and the larger political and cultural practices necessary to achieve it fully, more vibrant and relevant for their students.

Note on Terms: Common words in 'ōlelo Hawai'i (the Hawaiian language) will be used throughout. The English translation will be provided upon first use. The "I" in "Indigenous" and the "N" in "Native Hawaiian" are capitalized, and words in 'ōlelo Hawai'i are not italicized as a way to remain centered on Native Hawaiian worldview. This is congruent with our overall liberatory stance toward Critical Indigenous Pedagogies of Place.

To these ends, we offer curricular building blocks that derive from Indigenous Hawaiian senses of place and purpose, but that can also find resonance in other settings. We examine *lōkahi* (unity or holism) as key to place- and culturally-responsive education that can foster such a love of places and people. Done well and in conjunction with a Critical Indigenous Pedagogy of Place, it provides teachers and learners an anchoring *piko* (center) on which to establish the foundation for cultural survivance (Vizenor 2008). Like the *kalo* (taro) plant that offers both literal and symbolic sources of nourishing strength, place-based education rooted in cherished Indigenous folklife provides an ecological model of education for social transformation. This responds to David Grunewald's (2003) call for an entwined model that affirms human beings' responsibility for and relationship to the environment. The concepts of *lōkahi* and *piko* combine in our synthesis curriculum example about *kalo*, modeling for other teachers how to build multi-year, interdisciplinary, and thus in the long-term transformative, curricular arcs.

As a writing team, we are multiracial, Indigenous Hawaiian and White Midwestern-raised, women with strong ties to homeplaces and people who continue to shape our commitments to social justice. We speak as educators, writers, advocates, and allies of others who are part of an international discourse about culture, place, and power. We offer this article as part of our work to challenge the consequences of the prevailing U.S. colonial systems of power and disenfranchisement. We see ourselves as connected to local struggles as well as to global movements of engagement and education for social justice. Both senses, of having something unique to steward and something in common to protect for future generations, propel us as teachers to seek out frameworks for better understanding about how to take action. We believe that cultivating a love for our earth and greater care for one another is the place to start.

Aloha 'Āina

Our intentional selection of *aloha 'āina* as the orienting goal provides the rationale to select several best practices in place-based folklife education for our readers. In this, we act in concert with proven "high-leverage teaching practices" that meet the American Council on the Teaching of Foreign Languages' call to link cultural practices and products with the underlying perspectives that give them meaning and significance (Glisan and Donato 2017). For Native Hawaiians, *aloha 'āina* provides that all-encompassing perspective.

Aloha 'āina is a shared *kuleana* (responsibility) that we all have to the land. It is collective and deeply personal at once. As educators, we aim to nurture the gut-level sense of connection students have with their homeplaces. *Na'auao*, translatable literally as enlightened intestines, is used in everyday speech to mean wisdom or a deeply held, personalized conviction. For Native Hawaiians, *na'auao* is gained through being in conversation with their particular location, via connections to ancestral knowledge and values, and through understanding how to reconcile the tensions between mainstream ideals and their own. Native Hawaiian folklife and place are one, since knowledge is acquired through experiences and connections between culture, space, and language. Meyer (2001) prompts teachers to offer multi-modal pedagogies that engage the whole person, noting that feeling is knowing and intelligence is function. This enhances the longevity of lessons and their tangible value. Triangulated with body and mind, spirituality works on multiple levels, connecting Native Hawaiians to their past and holding them tight to their present while laying the future in the palm of their hands (Meyer 2003).

In her pivotal ethnography of an 'āina-based Native Hawaiian charter school, Hālau Kū Māna (HKM) in urban Honolulu, Noelani Goodyear-Ka'ōpua (2013) states, “Aloha 'āina expresses an unswerving dedication to the health of the natural world and a staunch commitment to political autonomy, as both are integral to a healthy existence. Although it is often imperfectly translated to ‘love for the land’ and ‘patriotism,’ the aloha part of this phrase is an active verb, a practice rather than as merely a feeling or belief” (32). We adopt this understanding of aloha 'āina as a living, dynamic practice, just as both folklife and place are living, dynamic entities. They require active cultivation and care to survive, even thrive, in a global economy in which gentrification and tourism are just the most recent forms of exploitation of the āina and people.

Just like folklife, a sense of place is internally diverse, reflecting the complex variety of ways that people in a region can understand and express their relationships with one another and with the land and seas. For example, some of the greatest triumphs of Pacific Islander navigation, astronomy, canoe crafting, and commerce systems grew out of the challenges and allure of travel around the vast Pacific Ocean. Some legacies have made it into formal school history and science textbooks; other forms of Indigenous wisdom thrive primarily in informal apprenticeships, at family gatherings, and in informal youth leadership programs. At their heart, even if Hawaiian senses of place and purpose have been less visible to (or were strategically devalued by) outside audiences, they remain fundamental to Native Hawaiians' identity and understanding of their place in the universe. This article highlights some promising best practices of educators working together across the strengths of their respective fields to show, through their praxis and scholarship, the important contributions that a folklife orientation makes to place-based education.

We recognize that for Indigenous teachers and students, the risks and immediacy of leading in a culturally- and place-conscious manner are much different than for non-Indigenous colleagues. However, we see this as a call to continue to join forces and to honor wisdom from Native Hawaiian practitioners. These efforts model respect and justice. Teaching about the interplay of power, culture, and place is the Commons (Theobald and Curtiss 2000) where we can meet productively. Whether framed as part of ecological education, bioregional education, outdoor education, or community-based education (Knapp 2005, 278), the concept of “place” serves as the hub for organizing pedagogies and policies that locate 'āina within the contested contexts of development, commerce, and tourism. For example, when covering history, teachers on or off island can show clear connections between the growth of mono-crop pineapple or sugarcane plantations and the overthrow of the Hawaiian monarchy by U.S. business owners. Teachers can guide students to (re)connect with the cultural, political, and social aspects of their place, which includes both naturally occurring and built environments (Smith 2002).

A'ohe pau ka 'ike i ka halau ho'okahi

*“All knowledge is not taught in the
same school”*

We find this last point particularly important for students living in the larger cities in the islands who need to see their traditional folklife is still integral and inspirational in these new places. Urbanization is not the antithesis of modern Native identity, despite outsiders' erroneous stereotypes of Native peoples as living primarily in rural areas. Dynamic Indigenous movements address both the challenges and opportunities of urban life. It can propel modern artistic and cultural expressions of a transnational

sense of place, adapting to new artistic surfaces, materials, sports, pastimes, and topics. For example, we recently saw an 'ōlelo no'eau (proverb) inscribed within a mural on the wall of an urban scuba shop in Honolulu, O'ahu: "A'ohe pau ka 'ike i ka halau ho'okahi," or, "All knowledge is not taught in the same school" (Pukui 1983). In the mural, a hip trident-wielding neon pink octopus was guarding a treasure in the deep sea, while a boat above plied the waves. This syncretic image and proverb merged both traditional and urban aesthetic sensibilities to show that place-based education can, and needs to, happen at home, in the neighborhood, out on the sea and on land, and in formalized places for learning such as schools.

This anchoring concept of aloha 'āina also prompts us to consider problematic aspects of teaching about someone else's homeplace, and how non-Native teachers can help students to appreciate, rather than to appropriate. Elements of Native Hawaiian material culture, such as hula skirts or canoes, are widely circulated as commercialized, even caricatured, items. They could be used flippantly as stereotypical classroom décor, or they can be presented with the great respect and honor due those who have earned the right to perform in or navigate with them. Because of their ubiquity in party stores as gaudy plastic favors, non-Hawaiian students are likely well aware of their surface forms, but it is important for place-based educators to be able to share the deep, often political folklife practices that sustain these practices today. For example, hula is the human body moving in synchrony with mele (songs) and rhythms of the 'āina, a fully embodied experience that is alive on several concurrent levels that are symbolically nuanced and metaphorically powerful. Tradition bearers can come in and talk about the meaning that being a hula practitioner has had for them over the different stages of their lives. While tourist kitsch makes use of this stereotypical image as a profitable form of cultural commodification, for Native Hawaiians, sustaining the rich tradition of hula as a deep practice can be both a lifeway and mode of resistance and cultural survivance (Lipe 2014). Tracing the "long lines" that plumb deep meaning helps non-Hawaiian students see beyond the form to the underlying function. Such contested symbols and practices are fascinating junctures that provide teachable moments to talk about exotification and Othering. As part of a critical transformative education, discussing the interplay of folklife and place provides a poignant moment for students to see that global tourism and commodification—of both 'āina and people—can get in the way of truly appreciating what others bring from their homelands and home cultures.

The Hawai'i state motto, attributed to King Kamehameha III, is "Ua mau ke ea o ka 'āina i ka pono," that is, "The life of the land is perpetuated in righteousness." We believe that educators are critical to the

A Legend

In Hawai'i long ago, the Goddess Ho'ohōkūkālani and the God Wākea birthed a stillborn son named Hāloanakalaukapalili. When night fell, they buried him to face the rising sun. Ho'ohōkūkālani grieved at his grave, her tears making their way from her eyes, down her cheeks, and falling to meet the soil that shrouded her son. One day, from Hāloanakalaukapalili's burial spot rooted the kalo plant. To honor his deceased son, Wākea named the stalk of the kalo, hā and the length, loa. The corm, he named, 'oha. When the 'oha is removed from the mother plant and replanted, another plant will grow. It is, thus, from Hāloanakalaukapalili that the 'ohana (family) was named, rooting human genealogy in the 'āina. Ho'ohōkūkālani went on to birth another son who she named Hāloa after her first son, who became the first Native Hawaiian. Native Hawaiians are said to be keiki o ka 'āina (children of the land). It is from the 'āina that Native Hawaiians grew, and it is through the 'āina that Native Hawaiians will be sustained. (Lindo 1980)

greater civic project of aloha 'āina, one that has resonance far beyond its special imperative on the islands. For Indigenous educators the struggle for sovereignty and survivance is immediate and inclusive. It grows out of a deep, sustained relationship to and responsibility for Native Hawaiian homeplaces. Jeff Corntassel and Cheryl Bryce remind us that for nation peoples, which they define as “place-based communities whose relationships with their homelands (both land and water) govern their roles and responsibilities” (2012, 151), both right relationships and responsibility are more important, and, in the longer term, contribute more to decolonization and sovereignty, than justification by calling upon human rights discourses that largely capitulate to settler regimes, government oversight, and foreign systems of jurisprudence. Their persuasive argument is continually grounded in place-based and folklife sensibilities, noting that a well-integrated “Indigenous resurgence is about reconnecting with homelands, cultural practices, and communities, and is centered on reclaiming, restoring, and regenerating homeland relationships” (153). Whether we are talking about where each of us works and lives, or about the Earth that we share, a commitment to aloha 'āina can connect us. Wherever we engage in this parallel, and often converging effort, we benefit greatly by taking a grounded, place-conscious stance of advocacy and engagement. The life of the land, and therefore the people, is indeed perpetuated in righteous relationships to, with, and for places and one another.

In rounding out this introduction to dedication to place, and in seeking a theoretical framework that will enable us to gauge our progress to those ends, it is useful to recap the resources at hand. In her concordant, multi-strand analysis, Mehana Blaich Vaughan (2016) points out that kuleana for aloha 'āina depends on weaving together three strands into one strong, holistic braid. We agree that this provides a useful metaphor with which to conclude what it means to live out aloha 'āina. One strand is protecting the physical 'āina, thereby ensuring ecological well-being and sustaining natural resources. The second strand is empowering the community through political activism so that aloha 'āina can be fully enacted across generations. The third strand is spiritual, incorporating the 'ike kūpuna (knowledge of and from ancestors and elders). This strongly woven braid cannot easily be unraveled; it provides a lifeline for deep praxis that exemplifies, and perpetuates, pono (righteousness/goodness).

Critical Indigenous Pedagogies of Place

This pedagogical project of reinhabitation and decolonization requires a sophisticated theoretical framework. Critical Indigenous Pedagogies of Place (CIPP) provide a framework for questioning some underlying assumptions of typical place-based frameworks; our article therefore aims to extend and enrich place- and culturally-conscious education with place-based wisdom from Indigenous Hawaiian worldviews. Adding CIPP to our theoretical toolbelt provides a radically different measuring stick against which to assess progress toward achieving aloha 'āina, one which we assert would significantly reorient standards for place-based discourse and praxis to the benefit of all people. This theoretical framework offers priorities and core practices. It boldly suggests priorities for those who would act with pono and civic courage on behalf of the places that and people whom they love. It also focuses our energies on high-potential curricular practices that can be used by anyone, whether Native advocate or global ally, to appreciate Native Hawaiian sovereignty and survivance and to recommit to live out aloha 'āina wherever they dwell.

Before we introduce curricular illustrations of teaching for aloha 'āina, we need to spotlight the essential elements that such a holistic curriculum contains. Alma Trinidad most concisely

identifies means to achieve this end: critical pedagogies, a reconceptualization of place, and Indigenous epistemologies (2011, 191). These inform our selective review of the literature and our choice of curricula that we feel are models of best practice. Native reinhabitation, decolonization, and sustainability are the priorities necessary to live out aloha 'āina on their own terms. By re-centering Indigenous ways of knowing and stewarding, this grounded, Critical Indigenous Pedagogy of Place attempts to address the disproportionate adverse educational outcomes affecting Native Hawaiian students that occur as a result of the hierarchal misalignment of the Eurocentric educational school system with Native Hawaiian ways of knowing. Incorporating this deeper agenda into place-based education could help teachers more effectively reach out to potentially disenfranchised students, to make the curriculum richer for all students, and to make the value of folklife-infused education more apparent for their colleagues, whether in primary or graduate school.

First, CIPP builds on critical place-based pedagogies that link the reclamation of close ties to the physical landscape to the challenge of overcoming socio-political barriers and hierarchies put in place to legitimize settler economies. David Grunewald (2003) calls for two principled strategies. Especially salient for Indigenous peoples reasserting their sovereign rights to 'āina, is reinhabitation, “learning to live in a place that has been disrupted and injured through past exploitation” (9). Decolonization is the process of exposing the ways dominant systems systematically silence cultural and historical ways of knowing and being by intentionally obscuring past and current injustices. Put succinctly, CIPP “...aims to (a) identify, recover, and create material spaces and places that teach us how to live well in our total environments (reinhabitation); and (b) identify and change ways of thinking that injure and exploit other people and places (decolonization)” (Ibid). CIPP challenges schools’ place-based curricula that would normalize or legitimize histories of “settling” the frontier or “civilizing” Natives; narratives that are used to advance systems of domination on the basis of identity politics (Cravey and Petit 2012, 102). The net benefit is a call to active resistance and a critical pedagogy in which youth actually demonstrate agency and advocacy on behalf of the places they each love.

A fundamental principle guiding some place-based education is a view of 'āina as subject to human intercession, an object to be marketed, a park to be preserved, or living things to be archived and scientifically conserved. Indigenous wisdom speaks back to this characterization of “place” as inanimate or rationally separate from humans, even dangerous to them. Secondly, CIPP therefore asks us to reconceptualize what place means and how we come to care about places. Keiki (children) today tend to be exposed to Nature as a TV channel, a foreign entity full of wild, fierce, dangerous things best seen from a safe distance as a spectacle and as entertainment (Louv 2005). As place-based educators, we need to re-center the importance of firsthand relational experience of being one with, in, and of a place. The examples show how teachers and students are infusing school life with outdoor education and civic engagement rather than offering those activities as part of an optional club outside of the sanctioned school day. That way, everyone is engaged in direct contact. But, CIPP further warns, we need to act humbly, reframing “place” not as an external object to be subjugated and sold, but rather as a living entity in its own right. Prolonged, personal immersion leads to deep understanding, not of what we wish to see or seek to use, but as it is. Nature needs to be “...taught and understood *in* and *on* its own terms” (Cajete 1994, 39). Awe and inspiration can be even more powerful motivators than a rationalistic, utilitarian understanding of nature. They inspire connection, the basis for action.

Relationships and responsibility underscore a Critical Indigenous Pedagogy of Place. Therefore, reconceptualizing what place means and how we can relate to it and one another is key to pono. As it relates specifically to Native Hawaiian epistemologies, place consists of entwined elements woven into one lei. These interwoven aspects of place are 'āina as source, 'āina as people, and 'āina as connection and care. “ 'Āina as source is that which feeds. It is the physical place itself. 'Āina as people refers to those who are connected to that place” (Vaughan 2016, 47-8). “ 'Āina and the people in it are one and the same. People do not own the 'āina; they are in relationship with it, a relationship so deeply personal that mo'olelo (narratives/stories/histories) of human connection with 'āina tell of how people became the 'āina “...by melting into the rain of the area and by becoming a tree and wind of that place” (Nāone 2008, 319). Connection and care are additional elements of Native Hawaiian epistemology of place-consciousness; one's kuleana is actualized through being immersed in connections and having something to care for and about. This is the strand of action: the practicing, living, and experiencing of culture through aloha 'āina. It is not enough to know, think, and feel; one must also do (Meyer 2001, 129).

CIPP contextualizes community cultural and ecological assets within a framework of resistance and survivance, engaging youth, and their teachers, in pedagogies that speak to the whole person and foster active connections to living places in their fullest senses. Therefore, it is equally important to engage students formatively with applied experiences of ethnographic ways of knowing. The *Standards for Folklife Education* assert that it can be transformative for youth to learn to use the tools of folklore studies (e.g., careful and open-minded observation, appreciation of enduring rituals, discernment of nuances in language, listening to elders' and tradition bearers' modes of storytelling, and learning by guided practice) (Sidener 1997). Linda Deafenbaugh's (2018) careful study of what and how urban students actually learned about cultural processes via structured folklife education details how teens can also gain awareness of the workings of local cultures and spaces and, as a result, develop their capacity for tolerance. Wherever they live, this is an important capacity, one particularly salient when it comes to putting their newfound awareness into action when they join new communities, professions, and places of residence. Learning to see the promise and issues in one place leads to the capacity to work with others to care for other places.

Teachers can help students conduct their own ethnographies, thereby gaining a firsthand awareness of the significant webs of relationship that contribute to their well-being as well as the sustainability of local cultural and ecological worlds. A particularly good illustration of an Indigenous-centered curriculum that emphasizes active stewardship and conservation is Project Aloha 'Āina, which has grade-level curricula for grades 3–7, including a conservation unit for 6th graders. It takes an activist stance of building on a meritorious, sustainable heritage, one in which people made needed objects out of renewable resources, rather than a modern society driven

Selected Teacher Resource Links

Connect Culture with Learning: Lōkahi Wheel.
www.cds.hawaii.edu/heupena/strategies/connect/strategies/strategy04.php (He 'Upena o ke A'o 2008)

Developing the Capacity for Tolerance through Folklife Education.
<http://d-scholarship.pitt.edu/id/eprint/33691>
 (Deafenbaugh 2018)

Project Aloha 'Āina.
<http://ulukau.org/gsd12.81/cgi-bin/cbalohaaina4?l=haw>
 (2009)

by consumerism and waste. Through a community audit, outings, and structured lessons about garbage, students see ways that they can reclaim Native modes of research and conservation in local, regional, and pan-Pacific contexts. Through their publications, network, and Nature Activities for Learning and Understanding (NALU) Studies, the authors provide a valuable hub for teachers looking to blend folklore, education, and place-based studies (Project Aloha 'Āina 2009). We recommend that readers investigate our curated sources in the bibliography, many with free links to their model curricula.

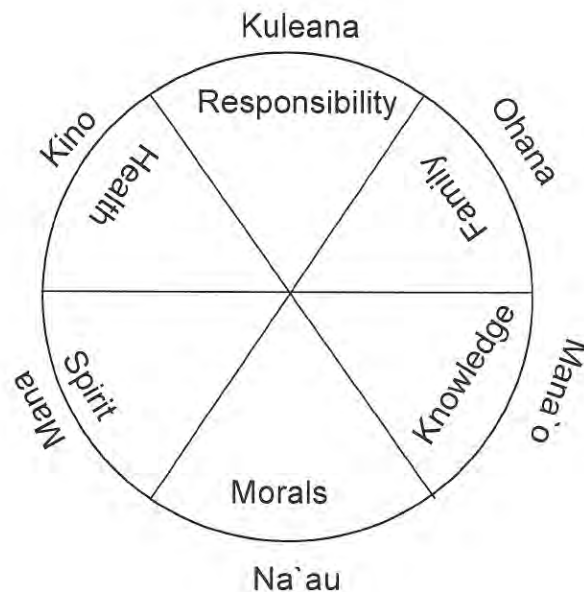
One strength of the plethora of excellent Native Hawaiian resources is that many educators have taken particular care in preserving and actively integrating oral traditions and personal testimonies. This includes honoring the mo'olelo of kūpuna (elders/ ancestors) as teachers and as originators of the spirit of 'āina and Native Hawaiian being (Vaughan 2016, 45-9). CIPP incorporates many sources of spiritual sustenance such as crafting mo'olelo into counter-storytelling as a purposeful act of resistance (Solórzano and Yosso 2002). Critical-race methodologies not only center the experiences of people of Color and empower them to speak their truths, but can also be used to build theory, to ask new questions, and to investigate a wider range of mo'olelo as legitimate forms of research. All these contribute to an overall “strategy of survival and a means of resistance” (37).

Our next sections feature just such testimonies from praxis, pointing readers to two foundational concepts that anchor CIPP in Hawai'i: lōkahi and piko. Then, as a further illustration of the cumulative advantages of linking these multifaceted folk concepts, we apply these concepts to a synthesis curriculum that has intermediate-level lessons about the kalo plant. This set of applications illustrates how CIPP works in harmony with place-based and folklife education to connect and involve youth, thereby cultivating a sustainable commitment to life-long aloha 'āina.

Lōkahi

We aimed to select illustrations that are substantive *and* affirming. A fundamental orientation of CIPP is the shift away from a deficit model emphasizing students' relative inadequacies to acknowledging the assets that students bring to school from their 'ohana, 'āina, and kūpuna. The dominant assimilationist approach to schooling normalizes European, white, middle-class ways of being as superior (Paris 2012, 94). This leads Native Hawaiian students to experience consistently lower academic achievement, higher rates of absenteeism and attrition, and a higher rate of behavioral difficulties than their non-Native Hawaiian peers (Kana'iaupuni et al. 2010, 2).

In contrast, strengths-based approaches to education, such as those celebrating folklife and place, locate instruction within contexts that reflect the sets of values, beliefs, practices, and language within a specific culture (Kana'iaupuni et al. 2010, 3). The emphasis is upon affirming multiple resources, and drawing on complementary sets of skills and orientations. As a result, culturally responsive education that values collective wisdom enables students to move boldly from a shallow sea to dare to explore deeper seas, taking along those long lines of knowledge cumulatively woven by kūpuna over the ages and handed over to them as their cultural legacy. Rather than abandoning their heritage, a place- and culturally-sustaining education fosters learners' senses of legitimacy, belonging, and holistic well-being. This emboldens them to achieve the balance that they need to mālama i ka 'āina (sustain or care for the Earth). A primary depiction of this underlying principle of balance is the Lōkahi Wheel, which is why we selected it as the first of our two applied examples of foundational, concept-based units.



Lōkahi Wheel courtesy of He 'Upena o ke A'o: Culturally responsive classrooms.
www.cds.hawaii.edu/heupena/strategies/connect/strategies/strategy04.php

The Lōkahi Wheel is a heuristic tool that brings together six domains into a unified view of the balanced person. It offers a simple, practical means of envisioning this living principle. “Lōkahi refers to balance, harmony, and unity for the self, in relationship to the body, mind, and spirit” (He 'Upena o ke A'o 2008, np). Culturally responsive pedagogies that honor these aspects of living on the islands, “foster and shape the development of students in Hawai'i to become responsible, capable, caring, healthy human beings who have a strong cultural identity and sense of place” (Ibid). Further, the Lōkahi Wheel can be a prompt to make visible a major lesson of CIPP, namely that the individual, community, and environment are parts of a balanced whole, and do not need to be rivals in a competition for loyalty or resources.

Interestingly, the parts of the wheel also parallel major domains in the field of folklife studies, prompting teachers to point out to students the deep ways that Indigenous wisdom can enrich studies of ethics, spiritual expressions, concepts of health, responsibility for people and places, different kinds of families and kinship systems, and what counts as important traditional knowledge and how it can be transmitted. In a wider sense, the equally sectioned Lōkahi Wheel can also be an impetus to folklife scholars to broaden and balance their inquiries into what matters in the world.

Based on our presentation of the Lōkahi Wheel in classes in the University of Pittsburgh School of Education, we have seen that our adult students respond well to use of the Wheel as part of a dialogic classroom space. They have loved the critical pedagogies that engage the whole person, questions that prompt them to think about their integral place in the wider world, and affirmations of the diverse ways of knowing that they bring to the class. The following elaborations illustrate

how both those in Hawai'i and those elsewhere could use this tool in a respectful, multilayered way that enables students to honor meaningful local relationships and to identify actions that they could take. They see that they already have something to bring to the table, classroom discourse, or town hall meeting.

Teachers can ask students to fill in each wedge of the Wheel with a word, image, symbol, icon, color, or by sharing another illustration of what that element means to them. (They can also encourage kinesthetic learners to act out a scenario or experience, another creative pedagogy that is engaging at any age and accommodates many different kinds of intelligences.) We have found that teaching with this heuristic tool helps to make underlying cultural wealth visible. For example, encouraging students to draw a symbol or picture of how one of the components manifests itself in their lives, can activate their working knowledge of folkloristic icons and symbolically potent material culture artifacts. This can reinforce Native Hawaiian students' ranges of insight about, for instance, the rainbow, a potent symbol used on and for everything from drivers' licenses to sports team mascots to a flavor of shave ice (Hawai'i snow cone). Moving it from the realm of something devalued and taken for granted in popular culture to something valued in the formal classroom is CIPP in action. Taking the time to replicate, and then to explain, a symbol is integral to the process of meaning-making as well as to learning how to read one's local environment ethnographically. Furthermore, professors should not negate the kind of communal enjoyment that coloring with markers can have when graduate students playfully create—and then share—pictures in their Wheels, a pleasure too often relegated to early grades, but at least as satisfying to adults who usually deal in the currency of words, not images.

Blended into vocational career counseling or incorporated into pre-service teachers' personal counter-storytelling, a Lōkahi Wheel exercise would help youth to see what they have gained from growing up in a certain place and time. It encourages them to see their 'ohana and community's living folklife as an asset rather than a liability, as a modern form of powerful expression rather than a quaint or long-lost practice. Reclaiming symbols, heroic figures, or ways of referring to nature (e.g., Native Hawaiian Goddess of Fire and Volcanos, Pele, is mad and erupting) is a means of reclaiming power. It speaks back to U.S.-imposed colonization and occupation that cause Native Hawaiians to be subjugated in their own land (Trask 2000, 103). Understanding one's active place as part of a complex, interdependent ecosystem is a lesson worth reiterating at many critical junctures in life.

Further, teaching about the concept of lōkahi provides an opportunity to present a unified and sophisticated, versus a superficial, lesson about Indigenous holism. Rather than non-Natives supplementing a Western-framed "scientific" unit with a "quaint" or "legendary" Indigenous story as an amusing anecdote of an animate worldview that has been replaced, teachers can show the complementarity, and divergences, of these worldviews. Both have modern relevance and provoke deep, essential questions about the world and each provides popularly accessible visualizations of underlying ideas of continuity, interdependence, and the consequence of our actions.

How peoples have represented wisdom varies; therefore it is worth making the circular folk schematic embodied in the Lōkahi Wheel explicit to our students and peers. Place-based models often invoke layered boxes, pyramids, Venn diagrams, and other means of showing the cumulative or mutual relationship of domains. In many Indigenous epistemologies, circles are favored

visualizations that demarcate humans' right relationships with the movement of the sun, seasons, and year. They help convey the cyclical or nonlinear nature of natural and human life. (Porter 2015, Jacob et al. 2015, 265). By showcasing how Indigenous peoples have long seen their world as coherent and harmonious, students have a tangible illustration of how the parts of their lives can fit together. Explicitly citing Indigenous authors and looking to their visualizations for contemporary insight contributes to the analytical repertoires of all scholars. Teachers can also think of a local Wheel as nested within concentric circles of influence. Extension of the Lōkahi Wheel tangibly demonstrates how living pono reaps interrelated rewards, not just by giving back to one's homeplace but also by rippling its lessons outward to contribute positively to the larger global Commons. This example is not only an ancient intangible cultural heritage, but it lives on as a message with contemporary relevance.

Beyond its value as an example of circular, nonlinear ways of understanding the world, the Lōkahi Wheel is also a good pedagogical tool because it lends itself well to many K–12 subjects. From health and wellness to STEAM to civics, it reminds us that we need different kinds of community tradition bearers because they each model different ways of knowing. Each offers lessons in different ways of gaining expertise and contributing to a functioning community. The equal sizes teach that each domain is important, and that complex ideas like “the spirit of a place” depend upon legends as much as upon lagoons or leeward winds. Furthermore, this coordinated Wheel shows that we need to invest in many forms of community cultural wealth to foster well-being: familial, aspirational, linguistic, resistance, and navigational (Yosso 2005). It reaffirms a central tenet of folklife education, that is, respecting local wayfinders and pathbreakers and inviting them into schools to present as partners in the classroom.

In summary, lōkahi can be a particularly beneficial foundational concept in place-based education. Its value starts with the simple elegance of its most common representation, the Lōkahi Wheel. Using this encourages students to engage with modalities other than just prose writing and asks them to become ethnographers who can recognize meaningful symbols and tradition bearers in their local environment. Sharing their creations in a larger critique about interpersonal differences—and similarities—allows them to see one another, and perhaps their families of origin, in a new light as assets rather than deficits. Stepping back and considering all the wedges as part of a unified whole encourages them to see how their affiliations and skills can add up. Incorporating this deeper agenda into place- and culturally-responsive education could help teachers more effectively reach out to potentially disenfranchised students, to make the curriculum richer for all learners, and to make the contributions of CIPP more apparent to their colleagues, no matter in which level of schooling or where they teach.

Place, education, and culture are one. As a foundational concept, lōkahi encourages a holistic approach to appreciating spaces and cultural practices as integrated elements necessary for well-being and thriving. A shared principle of many place-based folklife programs is that youth must form a passionate and daring relationship with their immediate surroundings and cultures of origin to understand other neighborhoods that they might later inhabit. Lōkahi reminds us that we are all interconnected, and that starting where we are makes a big difference. That is why this is a good lesson for both Native advocates and non-Indigenous allies. We all have important work to contribute, starting where we each live. It is in our specific locations, cultures, and communities where we learn to look out by first looking within.

Piko

Piko is another robust concept that encodes many layers of significance in Native Hawaiian worldview and language. It points to the center, or the nexus, of mo'okū'auhau (genealogy, ancestral linkages, intergenerational connections) that span place and time. Having a strong piko enables students to remain centered within webs of relationships that can sustain and uphold them as learners and future community leaders. That is why we have chosen it as our second foundational concept.

A curriculum that honors piko situates youth within a human 'ohana. It also charges them with the kuleana of assuming their rightful, even righteous, place in an ongoing history of stewardship, which is itself a key tenet of most place-based programs. This sense of piko (McGregor et al. 2003) evokes the opening 'ōlelo no'eau, reminding listeners that they belong to an expansive, intergenerational chain of spiritual and emotional bonds “linked to a long line of progenitors, descendants and unborn future generations” (119). The piko aumākua (ancestral center) is the link to one's heritage, piko 'iēwe (placenta) represents first the bond between mother and infant and later the 'ohana, and one's connection to future generations is represented by piko'iwi kuamo'o (genitals). Since it can also be seen as an individual's generative center, at the crown of one's head where one's 'uhane (spirit) resides (Pukui, 1983), piko can provide a multidimensional approach to folklife grounded in specific places and committed to intergenerational survival. It highlights their rich inheritance and youthful, generative energy, asking the next generation to be initiators, not just observers and creators, not just consumers.

Just as with lōkahi, piko reveals dimensions of place-based folklife education in which the medium is also part of the message. Lessons about “centering” complement lessons about “balance.”

In charter schools across the islands, Native Hawaiian ways of knowing are at the piko. (Re)connecting mind, body, spirit to see, know, and act fosters a unified sense of purpose and place, of working for aloha 'āina (Meyer 2003, 57). We have chosen two extended examples that illustrate this point. They each embody CIPP's best practices: they model creative, critical pedagogies of learning by doing, challenge students to form a personal relationship with places, and offer hands-on ways of knowing.

A Case Study for Indigenous-Inspired Science Education

At Hālau Kū Māna (HKM) charter school, young students work in the lo'i kalo (taro patches), voyage in their handmade wa'a (canoes) using traditional Native Hawaiian navigational techniques, and use 'ōlelo Hawai'i in authentic daily tasks. They learn from tradition bearers, not only from those teachers deemed qualified based upon Western, state-sanctioned criteria (Goodyear-Ka'opua 2013). They use Indigenous modes of scientific learning from kūpuna and tradition bearers out on the land and seas. As in other place-based programs, they spend time during the school day dwelling with the 'āina to expand their knowledge by testing and observing (planting a garden to see how certain plants grow) and by caring for the ongoing well-being of the ecosystem (picking up trash or eradicating invasive species) (Smith 2002, 589). These practices and products help students to feel, at a deep personal level, the meaning of aloha 'āina. Indigenous-inspired science education works in ways that surpass the constraints of standardized tests or measures. They make place and culture come alive, and thus truly matter, to the next generation.

Offering students authentic STEAM applications relevant to their local environment enables them to see that traditional skills can be valuable part of a scientific repertoire. As B. Marcus Cederström et al. (2016) found, they can also provide teachable moments of discontinuity and negotiation when Native educators and their allies work together for the complementary goals of critical scientific literacy and cultural sustainability. Like the wa'a built and paddled by students and tradition bearers at HKM, educators and their allies at the Lac du Flambeau Public School and the University of Wisconsin–Madison worked together as part of an extended residency to pass on the living traditions of canoe building and wild rice harvesting. Developing this curriculum taught the collaborators important lessons about how allies can honor Indigenous modes of doing science and how Native teachers can remain centered in tribal lifeways and worldviews. They learned that they needed to present canoe-based harvesting as an important legacy, one intrinsically tied to the prophecy that led Ojibwe to make their home in the land of wild rice, as well as a practical skill worth perpetuating. The project demonstrated to Native and non-Native communities that the folkways that grew out of this special location are of great value, and that both place and culture would survive only if both remained together at the center of the educational project. The authors provide wisdom about the savvy ways in which they designed the residencies, co-curated the off-season resting place of the canoe, and taught in culturally responsive ways. Their lessons about creatively co-documenting the process and the end products show how use of social media at each stage can leave lasting benefits for all involved, especially media-oriented new generations. By centering their praxis on educational sovereignty, they model the ways in which CIPP work can become empowering catalysts for decolonization “when returned to Native communities in ways that facilitate their reappraisal, re-adoption, and revitalization” (np).

The foundational concept of piko also highlights other relational ways of knowing that can enrich our application of CIPP as a centering praxis. In this, we are particularly drawn to Marit Dewhurst et al.'s (2013) illustration of how the concept of the piko can be incorporated into teaching via folklife apprenticeships. Their article is a second poignant illustration of the intersections of place and praxis, again both for the folklife practitioners and the practitioner researchers. Making pāpale (hats) woven of lauhala (pandanus leaves) is a heritage skill that grows from a practical need to shelter wearers from the bright tropical sun. Novices in this community of practice learn, as the title proclaims, that “in weaving you begin at the center.” They discuss that teaching, and writing the synthesis article, about the right way to weave pāpale “allows us to cultivate knowledge, nurture meaningful relationships, and participate in a rich cultural legacy” (144).

Again, we see that humility, while investing in building right relationships and patiently glimpsing bits of traditional wisdom, goes a long way for novices, whether cultural insiders or non-Native allies. Using principles from folklife education, such as respect for others' ways of knowing and the importance of intergenerational communities of practice, helps students recognize the layers of deep knowledge tacit in such social activities. Incorporating Native Hawaiian cultural knowledge systems into lessons offers non-Indigenous students the opportunity to consider others' worldviews and cherished ways of knowing. Infusing hat-weaving sessions with mo'olelo about places, plants, and key people teaches students about the folksonomies that explain how the world is organized. By creating their very own material cultural artifacts, hats, that embody a centered, circular worldview, they have a tangible manipulative to illustrate how to see the world and their place in it. Such place-based, folklife lessons can help all students develop the capacity for

acceptance; by considering others' sense of place, they are prompted to think about the places that they also care about, and the practices that sustain these lifeways.

Critical Indigenous Pedagogies of Place affirm the importance of welcoming youth into nested communities of practice (Lave and Wenger 1991), those intergenerational circles of active practitioners who offer them a place in relationship to the Commons. They can see that they are part of a "long line" of local tradition bearers whose futures are connected. In tying off, we turn to Davianna McGregor et al. (2003) who provide an ecological metaphor that draws connections between individual well-being and the thriving of 'ohana, the wahi noholike i ka po'e (community, or the place where people live together), the lāhui (nation), and, ultimately, to the 'āina (106). These are interdependent; coming to know one's self and one's place within an 'ohana and a larger community offers lessons about how to relate to the larger world. Teachers who share this sophisticated Native Hawaiian concept share an important lesson. We begin at the piko, and, having a clear anchor, we then have the strength and supportive safety net to expand to reach out and weave our efforts with those engaged in intersecting efforts elsewhere.

Kalo

*...the lo'i is my home
Up above is the sunshine, oh the sunshine
And the rain that helps us grow
And if I am transplanted
My 'ohana will remain*

*That's why I say,
Plant the seed today
Watch it grow tomorrow
Give the keiki love and they will grow up strong
Just like kalo...*

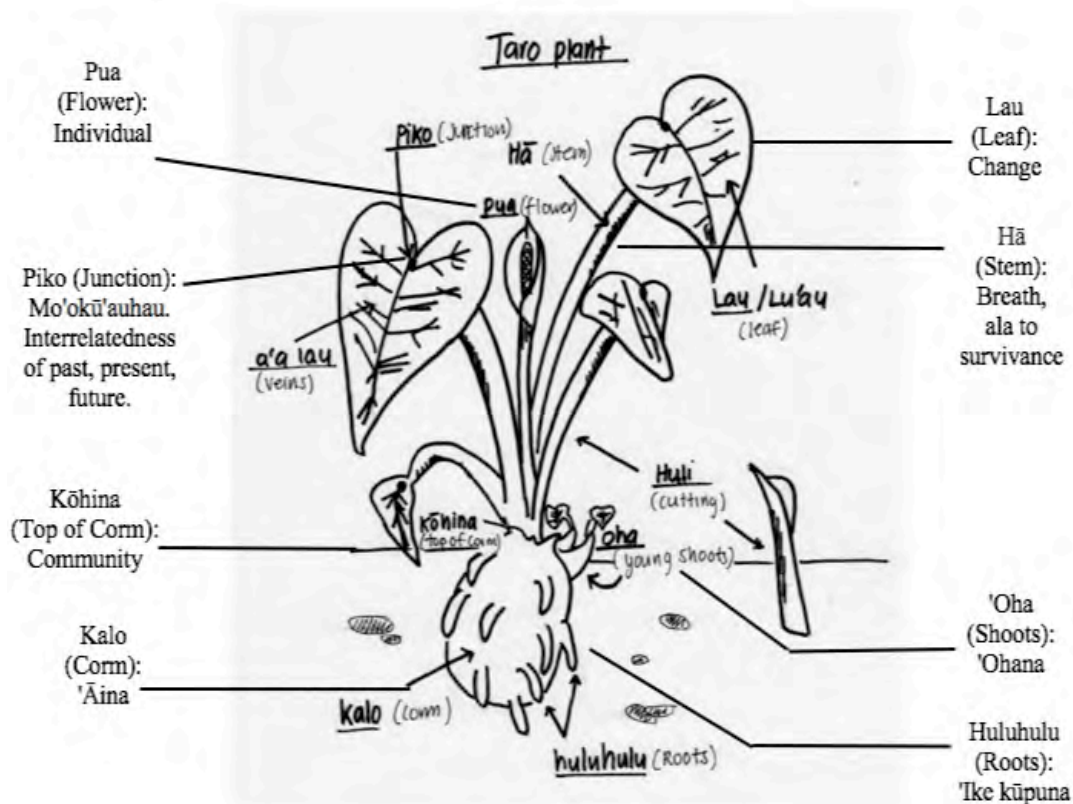
—Mele by Ryan Hiraoka (2016)

Now that we have presented the components of balance and centering as key to working toward aloha 'āina, we offer a useful pedagogical illustration that we believe will help teachers make the cumulative benefit more visible, literally and metaphorically, to learners. One of the most potent manifestations of living out aloha 'āina is the Native Hawaiian relationship with the kalo plant. Creating a cross-grade, interdisciplinary curricular arc that showcases the multiple layers of this essential foodstuff enables us to blend the two foundational concepts into a synthesis lesson about how to live pono with the 'āina.

Cultivated areas of kalo (*Colocasia esculenta*) are ubiquitous throughout the Islands' physical, symbolic, and educational landscape. It is a staple of extended 'ohana subsistence gardens. Hardy patches thrive in the face of capitalistic monocrop (e.g., pineapple or sugar cane) plantations, and in places they are being reintroduced where these export crops have been abandoned as no longer profitable. Schools, such as HKM, intentionally reclaim overgrown fields and rebuild extensive irrigation systems as part of their interdisciplinary STEAM curriculum (Goodyear-Ka'opua 2013). Noted institutions also carry on educational outreach programs that dovetail with schools' efforts, thus extending the impact of coordinated efforts to protect Native plants and lifeways. Botanical

gardens on Kaua'i such as the National Tropical Botanical Garden and the Limahuli Garden and Preserve use kalo to educate visitors and school groups about the legendary Canoe Plants and how we all can mālama i ka 'āina. These partnerships exemplify ways that formal and informal educators can join forces to decolonize spaces, moving sustainability and reinhabitation from the margins to the center.

We use the kalo here in the final section as a culturally perceptive way of illustrating consequential connections: those between the element to the balanced life, the center to the balanced whole, the individual to the community, the lessons from this one place to their applications in the global village. It brings together the previous two curricular building blocks of lōkahi and piko, illustrating how educators have intentionally created a multifaceted curriculum that cumulatively engages the whole learner in actively tending aloha 'āina.



The Kalo Plant.

Adapted from Anaina Hou and Kumu Kēhaulani Kekua (2018), <http://anainahou.org/rooted-traditions-of-ohana>

In form and function, cultivating kalo is akin to the larger project of cultivating aloha 'āina. Learning to nurture this iconic foodstuff teaches transferrable life lessons about the value of folk wisdom in reinhabiting endangered, exploited places. It is a deeply symbolic plant essential to the collective cultural livelihood of the Native Hawaiian people, the form of its various parts each contributing a functioning, interrelated system. Kalo nomenclature and cultivation embody the co-development of a sense of belonging and a sense of being an integral part of something larger than oneself.

Each kalo plant is a complex living organism, a form that Native Hawaiian place-based educators have used effectively as a teaching model for the healthy person grounded in community. Our diagram is a synthesis of several of these representations. Please note some of the etymological continuities across word-stems. The corm we label as 'āina, the foundation for Native Hawaiian existence and survivance. The huluhulu (roots) embody the 'ike kūpuna; it is through storing knowledge of genealogy, ancestors, and elders that the other parts of the kalo receive the cumulative nourishment needed to thrive. The 'oha (shoots) represent the 'ohana, the life source from which keiki and future generations begin to flourish. The kōhina (the top of the corm) is the community, where the stems of the kalo grow, collectively springing from one source. The word hā (also stem) literally means “breath,” alluding to Indigenous insights into the flow of energy throughout a living system. Hā is the breath that carries energy from the huluhulu, 'oha, kōhina into the lau (leaf), the external manifestation of a healthy cultural and ecological substructure. Leaves (by extension, offspring) further collect energy from the sun, in turn restoring and replenishing the cultural roots.

Lo'i kalo (irrigated taro terraces) also provides lessons about function, modeling the diverse elements needed for thriving intergenerational communities. Just as growing keiki learn to embody their folklife traditions, George Kanahale calls for Native Hawaiians to reclaim their places, to know the oli (chants), inoa (names), and range of mo'olelo of the 'āina they are connected to, to love the parent 'āina as one would love a person (1986). Part of this sensibility is being able to sense the literal and metaphorical kinship that one has with the kalo, which represents Hāloa, the origin and resilience of Native Hawaiians that becomes implanted into Native Hawaiian consciousnesses. This is a special heritage that transcends physical space, accompanying Native youth wherever they go for work or further education.

Goodyear-Ka'opua discusses how nurturing kuleana in students is an efficacious form of teaching and learning, even one that is an essential act of cultural survivance. Mahi'ai kalo (harvesting taro) is an act of resistance. At an environmental and physical level, restoring the waterways that feed the lo'i kalo ensures self-sustainability and self-determination that counters the dominating overreliance on corporate, imported food. Mahi'ai kalo, secondly, creates hands-on “epistemological space, providing sources of theory, metaphor, and multidisciplinary, cross-cultural inquiry” (134). Last, kuleana at an individual as well as collective level, with peers, communities, and school-'ohana partnerships, gives students a holistic sense of lōkahi while working alongside others toward revitalization, all the while being pushed to a critical awareness of their own position and place within the broader movement of Indigenous survivance. This is CIPP in action.

There are additional lessons to learn from the kalo that teach keiki about the role of individuals within their homeplace and their community. Each person is an outgrowth of what has come before as well as the means for cultural continuity. The piko (leaf junction) is representative of mo'okū'auhau, or the genealogical linkage that represents the interrelatedness of the past, present, and future. This is where all parts of the kalo come together to enact change. Likewise, youth are offshoots of a larger ecosystem of people in motion. While non-Native students cannot lay claim to an Indigenous heritage, their teachers can show them that all kinds of people are needed as contributors, allies, and partners, and that their own unique sense of place already provides the strength that they need to be good neighbors.

This iconic Native Hawaiian plant also challenges Western, individualistic ideas about what makes something valuable. As such, it also provides teachers an alternative view of the importance of individual achievement or flowery test scores relative to the health of the community of origin. It suggests that we should widen our criteria for what counts, and refocus our attention on who matters. The pua (flower) represents the blossom of the unique individual. However, it is useful to note that in contrast to ornamental plants grown in Hawai'i for their showy flowers' value in the international floral trade, the kalo's primary contribution is as a nourishing staple for local consumption. It is a renewable resource, not just for display and disposal. The corm is ground up to make the hallmark purple poi. As a starch, it served as a main life source for the ancient Native Hawaiians and continues to be widely used today for poi and for kulolo (poi based desert), bread, chips, and so on. It is also a common diet for infants because of its rich vitamin content and digestive qualities. Kalo is reproduced through transplantation of the corm, as the pua cannot naturally pollinate. In fact, sometimes the pua can be seen and sometimes it cannot. Although we may be inclined to value a plant based on its pua, for the kalo it is common for the pua to be visually absent. The pua, or the individual, is not the focal point of the system. Rather, the pua is just one part of the whole.

As authors we have chosen to feature this synthesis curriculum to show how an extended set of units, even an entire orientation toward education based on hands-on lessons in cultivating an identity-defining plant, can nurture a critical, appreciative stance toward heritage and home-making. Building on both balanced and centered lessons featuring lōkahi and piko, and nesting these under an overarching thematic arc of caring for kalo as living aloha 'āina, teachers can show that pono is not about a special week or guest tradition bearer, but that righteousness is an ongoing responsibility.

In sum, Noelani Goodyear-Ka'opua's ethnography (2013) vividly illustrates how a place-based curriculum designed around intentionally cultivating kalo folklore has helped students learn to respect themselves, their traditions, and Native Hawaiian ethnobotany. At HKM, students learn to enter a kalo field with respect, linking their labors with their (human and kalo) ancestors' resilience (129). Using the kalo to teach in schools, as well as in this synthesis, offers us opportunity to draw parallels between cultivation of this plant and nurturing keiki who will be capable, and proud, to malama i ka 'āina. We have learned that aloha 'āina is a collective effort. CIPPs that are linked to folklife remind us that na'auao is relational, rooted in 'ohana and community. How we contribute to learning and knowledge processes grows, like the kalo, out of the privileges, skills, and talents that we each bring from our kūpuna (Goodyear-Ka'ōpua 2013). Teachers are the caretakers, nourishing the tender offspring until they are sturdy enough to be transplanted and thrive elsewhere.

We need to honor our Native colleagues and to be good partners. No one individual can sustain the system alone. Quite the opposite, the system must sustain the pua. Even when a pua is not visible, the lau is gathering energy, the product of all the other parts of the kalo working together to ensure the cultural rootstock maintains its full potency and potential. The lau is the tangible juncture where efforts coincide, visible evidence that carrying out one's kuleana for the 'āina leads to empowering results. Native Hawaiian epistemology and ecology converge; place, folklife, and education are in harmony.

Conclusion

Aloha 'āina is a sense of love and connectedness to the land; it is the inspiration and aspiration of a place- and culturally-responsive education. For Native Hawaiians, this traces back to the 'āina hānau (birthplace or source) of Indigenous physical, spiritual, and relational being. Prior to colonization and occupation, 'āina was not something that could be owned. Rather, it was something one belonged to (Kanahele 1986, 129). We assert that this relational love has great value beyond Indigenous communities; indeed, it has much to teach learners living in many homeplaces. CIPP has the potential to develop sociopolitical consciousness for Native Hawaiian students, bridging awareness with action (Trinidad 2001, 188). It points to constructive ways to enact education for a more just and collaborative future. We need to be humble allies in sustaining and transforming our collective relationship to lands, seas, and other people.

Sustaining change requires us to have a shared goal of cultivating aloha 'āina. Our examples demonstrate the benefit of a balanced vision of lōkahi and of intentional practices of building on one's piko. As teachers we can use these concepts to help students identify a lasting, personal anchor point within a balanced circle of family and community. We can help them do this by offering critical pedagogies that are creative and fun, acknowledging Indigenous ways of knowing, and reconceptualizing the varied personal meanings of places. An ongoing spiritual and emotional relationship with the 'āina is the basis for being at home in the world. In the words of David Sobel (1996), "If we want our children to flourish, to become truly empowered, then let us allow them to love the earth before we ask them to save it" (39). Aloha 'āina is certainly about preserving, but more accurately and taking cues from Indigenous epistemologies, it is about sustaining. It can be more—reclamation and perpetuation, reinhabitation and reinvention.

Transforming requires us to add to, even replace, the repertoires that we bring to the classroom. We need to know and to share those stories and proverbs from Hawai'i that are public so that they are appreciated as sophisticated expressions of place-based Indigenous knowledge. Mo'olelo carry traditional wisdom forward across the generations, and although they have been threatened, or intentionally replaced, by political and historical narratives of "development" and "success" imposed by neocolonial agents, there are ways to enact kuleana rooted in 'āina to transform our educational systems (Kana'iaupuni and Malone 2006, 297). We can sincerely learn and appreciate, with full acknowledgment of their sources, traditional forms of testifying, dancing, singing, and legend telling. As teachers, we are in important spaces where we can re-center these living traditions in order to speak back and to contribute to decolonizing lands and minds.

Our article is a lau that grows from the kalo; it is our hope that this will provide even more energy for offshoots that will take root in multiple places. As a multidisciplinary approach that integrates social sciences, humanities, and natural sciences, CIPP points to best practices that can be strategically beneficial for both Native advocates and non-Native allies. Ethnographic studies demonstrate that Indigenous place-conscious education works in tandem with folklife to reframe critical spaces of contestation and survivance, calling for both individual and collective efforts to cultivate a comprehensive aloha 'āina.

The authors wish to acknowledge the profound ways in which the places where they grew up and the people who steward those places have shaped their orientations toward culture, folklife, sustainability, social justice, and the larger purposes of education.

Maureen K. Porter grew up along the banks of the Sugar River in rural Wisconsin between the Mighty Mississippi and the Great Lakes. Generations of strong and innovative women crafters, farmers, 4-H leaders, and teachers continue to model community building and investing in education that is deeply tied to beloved places and social justice. She is Associate Director of the Institute for International Studies in Education at the University of Pittsburgh and Associate Professor studying culturally responsive and sustaining pedagogies around the world, particularly in partnership with Indigenous communities.

Nik Cristobal's lineage stems from the islands of Kaua'i and O'ahu, Hawai'i. She was born and raised on Kaua'i, one of the strongest factors that shapes her worldview. A PhD student in the Social and Comparative Analysis in Education program at the University of Pittsburgh, her research interests include critical race, ethnic, and gender studies, decolonizing methodologies, and minoritized student experiences in higher education.

Glossary of Terms*

Aloha 'āina: Love, care, devotion to the land	Lōkahi: Balance, harmony, unity
'Āina: Land	Mālama i ka 'āina: To sustain or care for earth
'Ike kūpuna: Knowledge of and from ancestors and elders	Mele: Song
Kalo: Taro Plant	Mo'okū'auhau: Genealogy, ancestral linkages, intergenerational connections
Keiki: Children	Mo'olelo: Stories/ narratives/ histories
Kuleana: Responsibility	'Ohana: Family
Kūpuna: Elders/ ancestors	'Ōlelo Hawai'i: Hawaiian Language
Lau: Leaf	'Ōlelo no'eau: Proverb
Lo'i kalo: Taro patches	Piko: Center

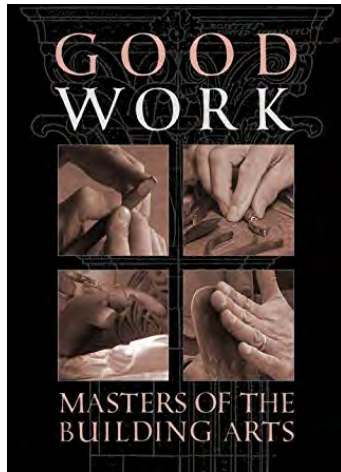
*This glossary provides basic translations that are incomplete as the full meanings behind these words are difficult to translate. However, this glossary is intended to be a quick reference for terms that are used frequently throughout the article.

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Journal of Folklore and Education Reviews



Good Work: Masters of the Building Arts, by Marjorie Hunt and Paul Wagner

(2016. 65 min. DVD format, black and white, and color. Smithsonian Center for Folklife and Cultural Heritage and American Focus, Inc., Washington DC.)

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Good Work: Masters of the Building Arts is an insightful documentary film that captures the skill, commitment, and quest for excellence of master craftworkers within a variety of building art traditions. The film features artisans from the 2001 Smithsonian Folklife Festival program, Masters of the Building Arts, as they show the astounding precision, technique, and reverence that go into their work.

The documentary uses personal interviews alongside footage of the artists at work and historical photographs to curate eight vignettes, each focusing on a different tradition. The sit-down interviews with the masters take place in their workspaces, while the filmmakers also interview the artists as they work (although we don't hear the interviewers' questions). As the artists explain the techniques and processes that guide their craft, we see their hands cut, paint, mold, and shape their art. This approach is effective for helping viewers get a sense of the intricacies of the work—both within “high style” and vernacular traditions—but without overwhelming us with too many technical details.

The first vignette features Earl Barthé, a plasterer from New Orleans whose family has been in the business since the 1850s. The second vignette centers on Dieter Goldkuhle, a stained glass artisan who spent over 30 years fabricating and restoring stained glass windows in the National Cathedral in Washington DC. The third vignette follows third-generation stone carver and calligrapher Nicholas Benson of Newport, Rhode Island, as he designs lettering and carves inscriptions onto the World War II Memorial in Washington DC. The filmmakers then travel to Boston where the father-daughter decorative painting duo John Canning and Jacqueline Canning-Riccio work to restore the interior paintings of Trinity Church. Next, the film takes viewers to Lincoln, California, with Phillip “Pete” Pederson, an architectural terra cotta specialist with Gladding McBean & Co., a company that's been crafting ornamental façades from fired earth since 1884. The sixth vignette follows Joe Alonso, head stone mason at the Washington National Cathedral in Washington DC, as he and his crew work hundreds of feet in the air, setting stone blocks weighing several hundred tons with exacting precision. The film then turns its attention to Patrick Cardine, an architectural blacksmith in Chantilly, Virginia, who crafts intricate designs out of hot, glowing metal. Finally, the filmmakers travel to Abiquiú, New Mexico, to document adobe builder Albert Parra and his fellow craftworkers during their annual ritual maintenance of their adobe *morada*, a chapter house for the *Penitente* fraternity that was built in 1700.

Good Work: Masters of the Building Arts excellently captures the featured artisans' relation to their craft tradition. The craftspeople interviewed demonstrate a great reverence for the masters who came before them; in several cases we see the sense of import they feel as they teach their craft to the next generation. Viewers are left with an understanding of how the artists find joy in their never-ending plodding toward unattainable perfection and how they express a sense of satisfaction from a job well done. Additionally, the filmmakers illustrate how these artists find meaning in perhaps unexpected aspects of the craft traditions—such as how tools can carry stories, and the way that restoration work connects present-day artists with past masters as a continuation of vernacular traditions.

In an educational context, this documentary would be great for challenging students to shift how they think about their built environments, prompting them to consider the stories and experiences of the often anonymous individuals who create the structures in our everyday lives. This film is also useful for demonstrating fieldwork techniques, such as what topics to discuss in an interview or how intangible aspects of belief and community can be expressed through material culture. Instructors could pair a screening of the film with an examination of buildings or with visits from craftworkers. The Smithsonian Center for Folklife and Cultural Heritage also has a free activity guide that can be used in conjunction with a film screening (<https://folklife.si.edu/masters-of-the-building-arts-activity-guide/smithsonian>). The structure of the film creates flexibility, too; one or two vignettes can be screened if time is limited. The only weakness of this documentary is the minimal inclusion of female voices. While it would have been nice to see more non-male representation, the felt absence perhaps points to the gendered nature of this work and could open the door for conversations about the role of gender in craft and occupational traditions.

Overall, Hunt and Wagner have created a thoughtful and thought-provoking presentation of master artisans within an array of building art traditions. This beautifully shot film is sure to inspire a deeper appreciation for and curiosity about the processes that underlie our built environments.



The Pleasures of Metamorphosis: Japanese and English Fairy Tale Transformations of "The Little Mermaid," by Lucy Fraser
(Detroit: Wayne State University, 2017, 221 pp.)

Shannon Branfield is a PhD student in the Department of English, University of Kentucky.

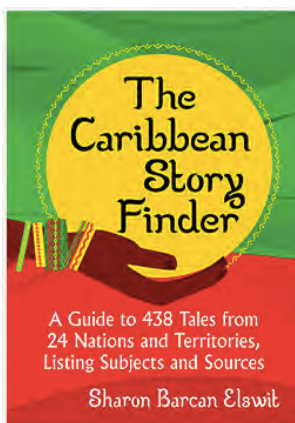
In *The Pleasures of Metamorphosis: Japanese and English Fairy Tale Transformations of "The Little Mermaid,"* Lucy Fraser explores adaptations of Hans Christian Andersen's "The Little Mermaid" across different cultures, focusing on the portrayal of gender and how these adaptations highlight the pleasure of transformation. She examines both the transformations characters undergo and the transformation of the story as part of a rich intertextual framework that audiences bring with them. Her attention to pleasure as a theoretical framework allows her to draw connections between disparate texts, bringing together stories ranging across the globe, from 1891 through 2008. With her focus on a cross-cultural analysis, she is careful to avoid a Western-centric approach, engaging with texts and scholarship from Japan. She notes the problematic Orientalizing of framing texts in terms of "West" and "East," and avoids

such categorization. Throughout her study, Fraser's attention to the knowing audience and their informed enjoyment of fairy-tale adaptations adds a valuable dimension to understanding the uses and effects of transformation in this tale. Although this book focuses on "The Little Mermaid," a study of transformation has wide application across other fairy tale types.

For readers who may be unfamiliar with the multitude of adaptations of Andersen's "The Little Mermaid," Chapter 1 provides a history of the story, its reception, and its adaptations, in Japan and Anglophone countries. Chapter 2 focuses on two of the most well-known adaptations in those worlds, Miyazaki's *Ponyo* and Disney's *The Little Mermaid*, respectively. Chapter 3 continues the cross-cultural approach by examining literary stories from Japan and England that use familiar fairy-tale conventions, an approach that is contested in the Japanese feminist revisions of Chapter 4. Chapter 5 uses a girls' studies approach to understand the knowing audience of these retellings, while Chapter 6 further diversifies the analysis of these stories by incorporating postmodern engagements. The range, and sheer volume, of adaptations included make this a useful study for both fairy-tale scholars who want to expand beyond Anglophone fairy-tale retellings, as well as those with an interest in adaptation theory, gender theory, and global literature.

Given the number of tales that readers will likely be unfamiliar with, Fraser is diligent in her explanation of story and context. Her translations are particularly well done, including both the denotative and connotative meaning, so Anglophone readers can understand the nuances in these texts. At times, however, the expanse of the project seems to limit the depth of the analysis, as Fraser raises many points that are not fully explored. This is most noticeable in Chapter 2, as discussions of gender performance, and issues of voice, silence, and writing are cut short. Whether this is due to the difficulty of addressing two such long and influential adaptations in one chapter, or a desire to save space for less familiar texts, the familiarity of Disney's *The Little Mermaid* and Miyazaki's *Ponyo* make a detailed and attentive analysis of these texts more necessary.

In all, however, Fraser has compiled an impressive collection of stories from a variety of countries, time periods, and media. Incorporating literature, film, and television, her texts well represent the multimedia web of contemporary fairy tales and the way they influence and are influenced by other adaptations. She is careful to trace lines of influence from text to text, based on known encounters, not surmise, a precision that strengthens the connections she draws between retellings. The varied theories Fraser uses to engage with the texts gives this book applicability to a range of fields beyond folklore, such as film studies, gender theory, and narrative theory, and she ensures that the material is accessible to those not familiar with the source material.



The Caribbean Story Finder: A Guide to 438 Tales from 24 Nations and Territories, Listing Subjects and Sources, by Sharon Barcan Elswit

(Jefferson: McFarland & Company, Inc., 2017, 308 pp.)

Tricia Ferdinand-Clarke is at Indiana University, Bloomington.

There are any number of reasons to tell a story. They can be meant simply to entertain, to teach, to subvert those in power, or all of the above. As

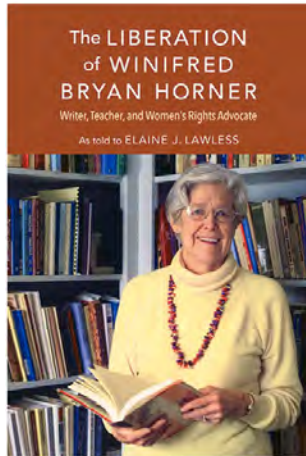
Sharon Barcan Elswit observes in her introduction to *The Caribbean Story Finder: A Guide to 438 Tales from 24 Nations and Territories, Listing Subjects and Sources*, for some people “storytelling, and wordplay may be powerful tools to keep their spirits alive” (3). This was certainly the case for those people who were taken from Africa, enslaved, and sent to various parts of the Caribbean region. For these people, and for the generations of people who came after them, storytelling held (and still holds) immense cultural significance.

The Caribbean Story Finder, one of several story guides written by Elswit, is a classification system of tales found in the Caribbean region. Elswit’s first story finder book was developed as a tool to help her locate tales that were often located in larger collections, and as a way to assist with educators who needed help “find[ing] the right story for the right time” (7). She originally intended to include Caribbean tales in her *Latin American Story Finder* but observed that despite their common origins, many Caribbean tales were so distinct that she decided to create a separate guide specifically for tales found in the Caribbean region. Elswit includes a very cursory history of colonization and creolization in the Caribbean and the resultant cultural production, and also briefly discusses the social and historical contexts of the tales. The 438 stories collected here come from a range of print and various online sources, including recordings and storytelling performances on the web. Elswit chose stories that were readily accessible to her in the U.S. and that were recorded either in English or in a creole that was easy for English speakers to understand. She included no sources that had not already been written or recorded somewhere. The large majority of the stories come from Jamaica, Haiti, Cuba, Puerto Rico, and Trinidad and Tobago, but there are a few stories from places like Belize and the U.S. Virgin Islands as well.

The book is separated into eleven different categories or subjects, which are then further subcategorized into related stories. For instance, under the subject “Musical Tales” there is a story titled “The Singing Bone.” Each story is numbered and under the title lists the author, the name of the source from which the tale was collected and, depending on the story, in what format it could be found (some are available both in print and online). For many of the stories, the guide also lists the ethnic group most associated with the tale as well as its country of origin. Each story is summarized, preserving the local spelling, grammar, and creole dialogue found in the source. Elswit also includes at least one variant for most of the featured stories. Some variants are what she calls “reappearances,” stories re-printed in new collections, while others are new versions of the same basic plot. The guide lists both kinds of variants, if applicable, under each featured story. Each entry also features a section called “connections,” which are essentially key terms that more resemble the folkloristic concept of motif. Elswit has also included three different appendices: Appendix A helps to identify and explain the geographic locations some stories originate from (for example stories from the Greater Antilles versus those from the Lesser Antilles) and to help differentiate between the terms “Caribbean” and West “Indies.” It also outlines some of the historical, cultural, and/or political connections between Caribbean islands and outside nations. Appendix B contains references for those interested in finding more tales in various creoles and Appendix C is the Glossary and Cast of Characters.

While not strictly a scholarly resource, this book readily references a number of scholarly sources as well as several important titles and collections from the fields of Caribbean literature, cultural studies, linguistics and folklore. Elswit was limited in her access to some collections, as some materials were out of print and others were only accessible in published form by local publishers

in the Caribbean. Furthermore, the fact that some stories are strictly relegated to oral tradition and have no written records also meant their exclusion from this guide. Nonetheless, Elswit acknowledges that *The Caribbean Story Finder* is not an exhaustive list of tales found in and around the region. While I am not entirely convinced that this guide is any more accessible or useful to educators than the Aarne-Thompson-Uther Classification system, it is particularly useful as a starting point for those interested in Caribbean oral narratives.



The Liberation of Winifred Bryan Horner: Writer, Teacher, and Women's Rights Advocate, as told to Elaine J. Lawless
(Indiana University Press, 2017, 232 pp.)

Lisa L. Higgins, PhD, is Director of the Missouri Folk Arts Program, a joint program of the Missouri Arts Council, a state agency, and the Museum of Art and Archaeology at the University of Missouri.

Readers of Elaine J. Lawless's bountiful scholarship in folkloristics might find *The Liberation of Winifred Bryan Horner* to be a departure from the acclaimed folklorist's usual themes in the sociolinguistics of belief, the transformative power of narrative, and the utilization of performance theories toward social justice. Lawless's seventh book is the unexpected result of a decades-long friendship between two feminist educators. The book is decidedly the life story of Winifred Bryan Horner, "as told to" Elaine J. Lawless, especially during Horner's final months, when they recorded stories and conversations that Horner intended to share in her autobiography: *I want to tell this story because from my present vantage point it seems unbelievable as I look back* (xviii). After Horner died in 2014, Lawless "liberated" Horner's narratives from her friend's extensive personal archive, many hours of recorded interviews, and a deep well of memories. In the research and writing, Lawless remains true to her folklore training and theory of reciprocal ethnography. In their collaboration, Winifred Bryan Horner fulfilled her desire to author her memoir. The rhetorician's stories are foregrounded, while the folklorist has framed the composition.

In eight chapters, organized chronologically, Lawless has assembled Horner's life story, from precocious young "Wini's" childhood in St. Louis, Missouri, to Professor Horner's illustrious career in the field of Rhetoric and Composition studies—a life and career that were fraught with challenges not atypical for a female (and a feminist) educator of her era. Upon retirement from her prestigious endowed chair at Texas Christian University, Horner returned to Columbia, Missouri, at age 76 to live out her days with that which she always loved the most: family, friends, and writing. In "retirement," Horner continued to teach, and she intended to write her autobiography. In effect, Horner hoped to age creatively, writing a memoir and teaching adult learners the art of crafting their own life stories. Teaching came more easily than writing, and Lawless eventually convinced her friend to sit for conversations that Folklorist Darcy Holtgrave video-recorded. All hoped that telling the stories aloud and working from transcriptions would surmount Horner's uncharacteristic writer's block.

Horner and Lawless fatefully met in 1983 in Columbia, Missouri, when the latter came for a campus visit at the University of Missouri (MU) during a job search. Lawless soon accepted an

offer for the tenure-track position in Folklore in the Department of English, and their friendship took root. Perhaps it is only in a university's Department of English that an expert on Scottish rhetoric and a scholar of Pentecostal folk beliefs can forge a lasting relationship inside and outside the halls of academia. When English departments are homes to Rhetoric *and* Folklore, as well as the more standard literary and linguistic studies, the departments may tend toward internal, interdisciplinary approaches to narrative and writing. In that academic "home," Lawless credits Horner, then a full professor in Rhetoric and Composition, as a key mentor at MU who provided relentless encouragement and distilled wisdom in all things, including departmental politics. As a folklorist myself, I read the book as a documentation of occupational folklife, via both written and oral personal experience narratives, of a female professor navigating academia in the second half of the 20th century. By extension, these two feminist educators also document a cohort of their predecessors, their peers, and their mentees—the next generation of female and feminist scholars who bridge the 20th and 21st centuries. In fact, I studied both Folklore and Rhetoric at MU (and worked as a graduate assistant briefly for both Lawless and Horner) at the turn of the century and count myself a member of that cohort and a beneficiary of their legacy.

When Horner died somewhat unexpectedly at 91 in 2014, Lawless inherited the project with Horner's family's blessing. Lawless, ever a narrative scholar, worked to cull the most salient stories from Horner's repertoire and to position them chronologically and strategically. She placed Horner's voice verbatim, written or spoken, extensively in long quotes cut from childhood diaries, personal journals, and their recorded interviews. Lawless consulted Horner's family members to choose twenty-eight photos that illustrate Horner's life, from a St. Louis childhood through World War II, life on a rural Mid-Missouri family farm, and decades of persistence as she achieved recognition as a writer, professor, and ground-breaking scholar.

The Liberation of Winifred Bryan Horner is part Bildungsroman and part operation manual. Lawless and Horner offer a window into piecing and stitching a life story from primary and secondary sources. The final product is a complex ethnographic negotiation between two writers, teachers, and women's rights advocates. I plan to recommend and share the book with my colleagues, especially those in folklore, rhetoric, and women's studies. Additionally, the book would be an engaging and inspiring text for courses in Educational Leadership, or simply in job search workshops for professional and graduate students, especially in the humanities and education. Win Horner's story is also one that I hope to share, perhaps in a virtual book club, with friends and family members who strive to forge their own paths amidst staid cultural traditions and persistent patriarchal challenges in occupational settings and personal relationships. In Horner and Lawless's pages, I hope readers recognize the progress that ensued since Horner launched her career and the power of narrative to displace the barriers that remain.

2019 Journal of Folklore and Education: Call for Submissions

The *Journal of Folklore and Education* is a peer-reviewed, multimedia, open-access journal published annually by Local Learning: The National Network for Folk Arts in Education. Local Learning links folk culture specialists and educators around the world, advocating for inclusion of folk and traditional arts and culture in education. We believe that "local learning"—the traditional knowledge and processes of learning that are grounded in community life—is of critical importance to the effective education of students and to the vigor of our communities and society.

JFE publishes work representing ethnographic approaches that tap the knowledge and life experience of students, their families, community members, and educators in K-16, higher education, museum, and community education. We intend our audience to be educators and students at all levels and in all settings, folk culture specialists, and those working in community-based organizations. As a digital publication, the *Journal of Folklore and Education* provides a **forum for interdisciplinary, multimedia approaches to community-based teaching, learning, and cultural stewardship**. It is found at www.locallearningnetwork.org.

The 2019 theme is The Art of the Interview. Interviewing is a core methodology in the field of folklore and a technique often used in K-16 education. Folk arts interviews teach important details about cultural context, artistic expression as communication, and the ways stories can help us better understand our communities. The practice of interviewing integrates well with many K-16 curricular areas and education standards so that art and culture can be embedded in additional subject areas. Providing specific curricular examples of interviewing for folk arts education will expand educators' options when using interviewing as a learning tool.

This JFE special issue will include work that illustrates HOW to do an interview, WHY use interviews as a part of one's curriculum, and WHAT can be done with completed interviews.

Essential questions that contributors may use to inspire their writing include the following:

- ~ How can one best prepare students, artists, and others for interviewing? How can you design an interview project for desired student understanding?
- ~ How might interviewing with an attention to local knowledge enhance other inquiry-based research models being used in learning spaces?
- ~ How can the tools of folklore such as observation, identifying important traditions and rituals, and collecting personal experience narratives through interviews create opportunities for addressing significant social questions?
- ~ What role can emergent and interactive ethnography play in educational settings? How has digital technology influenced the outcome and approach to interviewing?
- ~ How may interviews be integrated with the arts, be seen as art themselves, or become a part of constructing the idea of who may be an "artist"?
- ~ How can educators from multiple disciplinary areas, including science, social studies, composition, or literacy, use interview practices in their teaching?
- ~ How does a folkloristic, ethnographic approach to working with learners in a classroom, museum, or community setting connect them with cultural knowledge systems different from their own and deepen their understanding of their own places?

~ How can university teacher-preparation programs include ethnography as a key part of their pedagogy?

~ How can the field of folklore help address “tough conversations” or controversy found in contemporary discourse surrounding the education achievement gap or structural racism of schools and their communities? How might this help us serve learners with diverse perspectives in our classrooms?

More about Submissions: *We seek submissions of articles, model projects, multimedia products, teaching applications, and student work accompanied by critical writing that connects to the larger frameworks of this theme.* We particularly welcome submissions inclusive of perspectives and voices from represented communities. Co-authored articles that include teachers, administrators, artists, or community members offer opportunities for multiple points of view on an educational program or a curriculum. We publish articles that share best practices, offer specific guides or plans for implementing folklore in education, and articulate theoretical and critical frameworks. We invite educators to share shorter pieces for “Notes from the Field.” Nontraditional formats are also welcomed, such as lesson plans, worksheets, and classroom exercises. Media submissions, including short film and audio clips, will also be considered. We highly recommend reviewing previous issues of JFE (see www.locallearningnetwork.org/journal-of-folklore-and-education/current-and-past-issues). Be in touch with the editors to learn more and see whether your concept might be a good fit.

Research-based writing that theorizes, evaluates, or assesses programs that use folklore in education tools and practice are also welcomed. These research articles may intersect with the theme “The Art of the Interview,” but all submissions with a research component will be considered. We expect that research projects will have appropriate institutional permissions for public dissemination before submission to JFE, including approval from Institutional Review Boards (IRBs) and/or data licensing for the acquisition of existing data, as may be required.

See the protocol for publishing a study used by ArtsEdSearch (http://www.artsedsearch.org/about/submit-a-study#Review_protocol) for guidance.

Format: Articles should be 1,500-4,500 words, submitted as a Word document. We use a modified Chicago style (not APA) and parenthetical citations. All URL links hyperlinked in the document should also be referenced, in order, at the end of the article in a URL list for offline readers. Images should have a dpi of at least 300. Be in touch with the editors to discuss submission and media ideas and to learn formatting, technical specifications, and our citation style template.

Contact editors Paddy Bowman at pbbowman@gmail.com or Lisa Rathje at rathje.lisa@gmail.com with ideas for stories, features, lessons, and media productions. You may also request a citation style template. **Initial drafts of submissions are due April 15, 2019.**

Please share this announcement with colleagues and educators in your community. This endeavor is supported by the National Endowment for the Arts.

The *Journal of Folklore and Education* is a publication of
Local Learning: The National Network for Folk Arts in Education



Local Learning connects folklorists, artists, and educators across the nation and advocates for the full inclusion of folklife and folk arts in education to transform learning, build intercultural understanding, and create stronger communities.

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The Art of the Interview

Journal of Folklore and Education Volume 6 will be published in September, 2019

Our advisory committee for Volume 6 issue includes:

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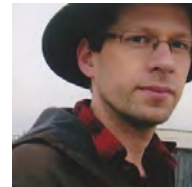
About the Editors



Paddy Bowman is Founding Director of Local Learning and creator of numerous folklore and education resources. She co-edited *Through the Schoolhouse Door: Folklore, Community, Curriculum* (2011) and co-wrote a chapter in *Folklife and Museums*. She was awarded the 2013 American Folklore Society Benjamin A. Botkin Prize for Lifetime Achievement in Public Folklore and in 2016 was named a Fellow of the American Folklore Society. Reach her at pbbowman@gmail.com.



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