Cooperative Learning through Storytelling and the Plant World

Emma Hathaway
Portland State University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/honorstheses
Let us know how access to this document benefits you.

Recommended Citation
https://doi.org/10.15760/honors.453

This Thesis is brought to you for free and open access. It has been accepted for inclusion in University Honors Theses by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.
At a time when young people are disengaging in school, how do we begin to acknowledge that we, as a nation have failed them and how might we look at storytelling and the plant world to establish more inclusive practices in education? Data from a 2015 American Community Survey suggests that in the state of Hawai‘i, 40% of public school 8th graders do not meet the Department of Education (DOE) standards in mathematics. This fall, the National Center for Educational Statistics noted that over half of the country’s public schools reported incidents of criminal activity. As a way to address gaps of learning in the American education system, let us engage in alternative ways by welcoming lessons from the Plant World. Matika Wilbur, of the Swinomish nation in Washington state, and award-winning photographer, teaches us that, “In the beginning, everything had a spirit.” Mayan people come from corn. Hawaiian people come from taro. We are all indigenous to some place and those places have stories of creation and how we came to be. Regardless of your beginning, these are compelling stories that teach us lessons of how we should live and share in the lands we occupy. Historical events and policies fostered by capitalism and colonialism and their consequences have marginalized youth. Metaphysical philosophies from eastern traditions conflict with western methodologies and pedagogy. Plants and their creation stories invite us to be: patient, responsible and respectful and to cultivate collaborative relationships.
Many of us experience education through the American public school system and of these folks, imagine how many have been challenged by the monotonous curriculum? More so, how many students have been told, “If you don’t do well in this class, you won’t make it college?” We live in an industrial and technological society where it is assumed at the national level that everyone learns the same way and we are witnessing the consequences of such systems, as more young people are not doing well in school. The ways in which we are expected to perform as individuals contradicts the agenda that has been pushed upon us. Each of us are placed into categories defined by race, age, gender, etc., and these have been designed to justify our own capacity to comprehend material and therefore, define how well we will do in our adult life. This is problematic because when a person’s self-esteem is damaged, their identity becomes damaged, and they no longer want to learn, explains Dr. Cornel Pewewardy, Indigenous Nations Studies instructor of Portland State University. In turn, they stop doing well but we continue to hold them to the same standards as everyone else. This correlates with problems of exclusivity in terms of success because we rely on a reductionist methodology of learning styles. We expect answers now and often ignore the experiential process (realms of experience) that bring us to our conclusions. When we give answers that do not fit the criteria, we’re labeled incorrect and unable to comprehend formal material.

What sets America apart from other places is that we have a high culturally diverse population. Perhaps the idea of diversity is a myth, as we do not currently cater to the needs of different people. More so, we do not respect the needs of different people. Language and pedagogy cannot be translated, so when we push a singular model of learning upon different types of individuals, it is not surprising that young people don’t pursue the kinds of careers they’re told to. Learning happens through various ways of being and knowing. This analysis
seeks to acknowledge that this phenomenon is what makes our world a special place to live, learn, and grow. It explores ways in which to stop holding expectations to one standard and begin to listen and learn from the differences we bring. This is not a romanticized way of looking at differences, but rather it recognizes that differences among individuals are okay and they are good, as they lead to productivity and contribute to the wellbeing of communities everywhere.

Diane Ravitch (2010) argues that education is the key to developing human capital, which we rely on to sustain our democratic society, the economy, and civic and cultural life (p. 223). There’s many reasons why folks are not doing well in school, whether related to socioeconomic status, the mental and physical differences among us, built and natural environmental conditions, or ways in which we are socialized. There is and has been for a long time, a need to fill learning gaps in education. By bringing in materials, tools, and techniques into the classroom, we might learn how to achieve democracy, economic (resources) success, and intellectuality.

Education is pressured to keep up with the changes of the modern world, explains Ranjani Balaji Iyer (2015). Throughout the world, education systems work to encourage students to be good citizens and help them learn how to be creative problem-solvers. The way these systems are designed is to recognize social and cultural context in creativity as important. The eastern and western worlds do not meet at the same place on the political and historical spectrum: each offers a fundamentally different approach to teaching and learning. The practice of education perpetuates a particular notion of civilization through means of teaching modern metaphysics. Heesoon Bai et al (2009) suggests that this conception saturates our understanding of what is of value and what is not, creating a disconnect between all dimensions of life. We experience this disconnect within our own bodies and senses, and ways in which we look at the
world. By including holistic and experiential approaches to learning, we are able to reconnect with our bodies and all of our senses. Doing so, we develop a contextual awareness, which allows us to be good members of our communities and we are able to approach situations in a more interconnected way.

Humans, animals, and plants learn with their own senses and intelligences. We know that we learn the most when each of our senses are engaged: taste, smell, hear, touch, and see. Among human beings, there are 3-known times of learners: auditory (learn what they hear), visual (learn what they see), and kinesthetic (learn what they do). Dr. Howard Gardner (1983) proposed a theory of multiple intelligences, where he asks, what kind of smart are you? He explains that Intelligence Quota (IQ) testing is far too limiting and reducing as a way to measure our abilities to understand information. He suggests that each of us are born with at least one intelligence and that it helps us navigate our way through the world. Educators know that students learn in different ways and some try to cater to needs of our senses but the problems in education go back further.

Metaphysical philosophies of eastern and western worlds suggest multiple perspectives on ways in which human beings are alike and not like and how this affects our approaches to solving problems. Vine Deloria, Jr. (2001), of the Standing Rock Sioux nation defines metaphysics as being the interconnections between science, religion, and education. An
indigenous perspective of metaphysics is described as having a strong sense of time and place of the world, recognizing the ethical relationships of things. A western perspective might be understood as being the separation between science and religion, that they are codependent, a process of breaking down concepts, and removing the self from both, the equation and consequences (p. 79). These two perspectives contrast and highlight the duality between facts vs values. Deloria argues that the goal in modern education is socialization and we are more concerned about the content and not the process of learning.

Angayuqaq Oscar Kawagley and Ray Barnhardt (1998) write about indigenous education related to place and how native peoples interact with western science. They synthesized a comparison between eastern and western perspectives, adapted from Knudtson and Suzuki (1992) in relation to ecology and educational application. See if you are able to identify the original perspective:

- Need for reciprocity between human and natural worlds—resources are viewed as gifts;
- Natural resources are available for unilateral human exploitation
- Wisdom and ethics are derived from direct experience with the natural world;
- Human reason transcends the natural world and can produce insights independently
- Time is circular with natural cycles that sustain all life;
- Time is a linear chronology of ‘human progress’ (p. 120).

The differences between these perspectives helps us consider the benefits of reconnecting educational practice with indigenous ecological understandings. This means thinking long-term, across many generations of watching and doing, rather than short-term of quickly watching and doing. Kawagley and Barnhardt summarize the differences in educational application from an indigenous point of view:
<table>
<thead>
<tr>
<th>Indigenous View</th>
<th>Educational Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term perspective</td>
<td>Education must be understood (and carried out) across generations</td>
</tr>
<tr>
<td>Interconnectedness of all things</td>
<td>Knowledge is bound to the context in which it is to be used (and learned), and all elements are interrelated</td>
</tr>
<tr>
<td>Adaption to change</td>
<td>Education must continuously be adapted to fit the times and place</td>
</tr>
<tr>
<td>Commitment to the commons</td>
<td>The whole is greater than the sum of its parts (p. 134).</td>
</tr>
</tbody>
</table>

This analysis can be used in the classroom to better accommodate the differences in learning and understanding among youth. The Eurocentric system of putting kids through a factory model of learning (i.e.: standardized testing, gifted and talented programs, etc.). trains professionals but not people, argues Deloria (p. 43). Looking at the word epistemology, which is how we know the world and what counts as knowledge, we might begin to think about the circular motions and cycles of life, how things and beings are related. Calculations of these kinds of relationships are beyond western comprehension and as a result, are often ignored in academia, furthering the separation between what is considered truth and what is myth. Ravitch suggests that our current education system primarily focuses not on the how, but what is being taught (p. 225). Public school failures tie to capitalism and colonialism as structures and systems are put in place to categorize levels of intelligences, reduce methodologies of learning styles, and identifying what counts as ‘official knowledge’ in mainstream education, as a way to simplify
the learning process. Each of these elements further marginalize youth who already experience the effects of historical trauma. School reform will not solve the issues we currently face. Ravitch suggests that we begin to identify elements of good education (p. 226). This can be accomplished through inclusive practices of engaging with the storytelling and the plant world.

How might we adopt practices that work alongside the government but also fill in gaps of learning? Storytelling and lessons from the plant world offer a bottom-up approach of collective action and generating of solutions. In doing so, it is necessary to frame strategies based on the kind of scale we want to work with, a spectrum of education and knowledge. Most importantly, we must identify resources that are useful in operationalizing engagement. Since time immemorial, we have been telling stories to explain how things came to be and how they work. Stories alter our perspectives by shifting our ways of knowing from a binary way of thinking to a spectrum. Judy Blue Horse Skelton, instructor of Indigenous Nations Studies at Portland State University describes this as incorporating a both/and mentality, where both kinds of thinking are respected and validated. Storytelling is a fundamental method of communication. Our brain speaks in narratives throughout the day and when you simplify a story, it becomes a cause and effect—who, what, when, where, why, how.

Working with plants and trusting their teachings encourages us to remember the old ways of life of permaculture. Judy reminds us that, “What seems new is actually very old.” Permanent agriculture is not a new concept; our ancestors relied on this method of sustainability for food, shelter, and medicine. These are lessons of restoration and ecology. Plants offer various kinds of medicine, such as food and drink, herbs, aromatherapy, and utilizing the scent of each plant encourages memory recall and strengthens mental maturity. Smell and aroma is the strongest link we have to our memory. The scent of lavender revitalizes our senses and balances dominant
emotions, allowing us to relax and listen closely. Plants help us and our wellbeing. We rely on them for survival and for pleasure. Our industrial society separates us from the land.

John Mohawk (2008), of the Seneca nation, explains that the land informs who we are and how we will live here. Time isn’t enough to restore and create the relationships we need to sustain ourselves and our communities. We should be eating seasonally and learn about plant deficiency and soil quality, to know what is going in our bodies and why it is good for us. We look to plants to teach and guide us. Robin Wall Kimmerer (2013) teaches of the Honorable Harvest and lessons of reciprocity: take only what is needed, never pick the first you see, leave a gift of thanks. You are where you eat is a teaching from, *The Original Instructions: Indigenous Teaching for a Sustainable Future* (2008), which makes connections between people and the land—food and medicine we gather and with and from it. The lessons we gain from these teachings help us understand that everything is related. We begin to reconnect to identity through these sustainable practices. Deloria speaks of the old ways and says that, “human personality is derived from being a member of society” (p. 44). Having a keen sense of power and place in relation to identity guides us ways that we might be better stewards of the land.

These techniques come from processes of healing of land and healing of people, as a way to recognize differences among us, to honor them, and to allow ourselves to learn in ways we’re each meant to. Listening to the teachings of plants and their stories, we remember who comes before us and those who will come after us. Upon addressing gaps of learning, it is necessary to note that social media and access to internet has revolutionized communication and the sharing of cultural stories of place for historically marginalized voices, so I have included links in this paper to bring those voices into the classroom, to be listened to, recognized, and validated.
A note on this research process: Rather than scanning unfamiliar articles in support of my writing, I chose to analyze academic material I have gathered during my four years of studies at Portland State University. Books, articles, charts, and data came from courses through the Indigenous Nations Studies program and the Community Development program. A question to ponder as you explore potentially new ways of engaging in education: do we, as a nation and system, offer good pathways for youth to be good students?
## Bibliography


Wildcat, D. R., & Deloria Jr., V. (2010). *Power and Place: Indian Education in America*. 
Works Cited

http://www.butterflyenglish.it/chi-siamo/metodo/howard-gardner/

Mayan Creation story
https://www.youtube.com/watch?v=Jb5GKmEcJcw

Hawaiian taro with Daniel Anthony
https://www.youtube.com/watch?v=HOBQ43sI5VQ

Demigod, Maui Taught Trees to Fly
https://www.youtube.com/watch?v=E01TxBFZji0

Vandana Shiva, on sustainability
https://www.youtube.com/watch?v=HTkAfpYeG0k
https://www.youtube.com/watch?v=UOfM7QD7-kk&feature=email

Australian Aboriginal seed saving
https://www.youtube.com/watch?v=CPZwgjJW5xs

Decolonize Your Diet
http://decolonizeyourdiet.org
Indigenous Permaculture

http://www.indigenous-permaculture.com

Food Sovereignty

https://www.nativeharvest.com/collections/harvested-food