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# I'll Be Goldenrod and You'll Be Aster: The Case for Revolutionizing Western Methods of Teaching Using Indigenous Ontologies

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## Master of Arts Thesis, English Department SUNY Cortland

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An interesting facet of living as a human in the 21st century is contending with the end of the world. It's been imagined in a thousand ways over the past twenty years. Will it be zombies? Aliens? An AI revolution? Or will it perhaps be something more mundane, more "down-to-Earth"? The floods, the droughts, the famines, and all the rest of the cataclysmic global events that occur every year have taken center stage in the world-ending debate, parading under a name as threatening and expansive as the Boogeyman: climate change. A recent article from NPR covered the United Nations' 2022 Convention on Biological Diversity, in which the major talk of the town was "humanity's senseless and suicidal war with nature" that has us currently marching towards the downfall of most of all the life on the planet (Ross). However, despite the conference being about biological *diversity*, the focus of the conference was entirely on humanity and humanity's survival, despite mankind being only one of the millions of different species that is facing extinction in the face of climate change, a mindset that is decidedly undiverse. At the conference, Rebecca Shaw, chief scientist at the World Wildlife Fund, said that,

Fundamentally, we need to safeguard our life support systems in the face of accelerating nature loss. Inaction is absolutely not an option because it will put us only at greater risks of pandemics, which none of us want, it undermines our efforts on securing our climate, and it makes our food production systems much more vulnerable. (qtd, in Ross)

Her statement encapsulates the inherent issue with the current Western understanding of human's relationship with the world around them. It is not that we should save the planet because every species deserves the respect and dignity to exist in a world that they did not destroy, but rather that we need to save our "life support systems." The species that we share the planet with are "food production systems" rather than neighbors, cohabitors, and friends. This statement belies a human-first, everything-else-second frame of mind that is largely to blame for the global climate

crisis that we're facing today. Even though Shaw is an activist herself, and so her politics are more progressive and planet-focused than many Western thinkers, this Western ideal still pervades the ethos she was presenting in her speech, highlighting how human-focused the discussion around climate change is even at the most progressive level. This perspective, which pervades understandings/teachings of the world on all levels in the West, is something that must be revolutionized in order to successfully save all beings on planet Earth, not just humans.

Using the Indigenous ontologies, stories, and memories from Robin Kimmerer's Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants (2013), this essay intends to critique the current Western education system, taking a specific interest in the English classroom, and suggest ways for the education system to rectify some of its inherent issues by re-narrating our relationships and connection with the world around us. This will be achieved by first identifying some of the factors that influence Western thought, most specifically that of Western Scientific perspectives. I analyze the ways these perspectives inform K-12 education, and the different ways that these perspectives have produced a Western populace that is decidedly human-centric and why this has led to a destructive relationship with our environment. From there, Indigenous ontologies and educational practices will be introduced and examined, making note of different positive relationships that have been made by introducing Indigenous thought and practices into certain Western classrooms. The paper concludes with the case for combining Western and Indigenous thought to create a K-12 classroom experience that is more focused on the relationships humans share with all other beings, and the suggestion of two different ways this combined education could be applied to English Language Arts classrooms. The West's Eurocentric understanding of human importance, ownership of ideas and land, and hierarchy of beings has led the world to

environmental catastrophe, and it is only through an understanding that creates a cohabitation between humans and everything else on the planet that we will be able to pull the brakes on our rapidly approaching destruction.

As an aside, as a settler graduate student, it is necessary to clarify that I don't have the cultural background or heritage to begin to comment on the stories or histories of Indigenous peoples outside of what Indigenous scholars have presented themselves. Though this paper will be working with the teachings of Indigenous scholars such as Kimmerer and using them to make arguments about the current world, and any mention of Indigenous concepts and ontologies are the result of research, it's also necessary to clarify that any misrepresentations of Indigenous traditions are misinterpretations, not reflections of the knowledge itself.

#### **Keywords and Ontologies**

This paper finds itself situated amongst a centuries-long debate on the issues with Western scientific understandings of the world, and will thus adopt some of the concepts and key terms that have emerged from this debate. Before diving into the main argument, a brief overview of these key terms is necessary.

One key term that this paper will use is "Traditional Ecological Knowledge." The definition of this term is borrowed from Sibyl Diver, in which traditional ecological knowledge refers to "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment" (Diver 2). This is another term that adopts inherent Indigenous areas of expertise into its scholarship.

Beyond that, it is important to define whom this paper refers to when it invokes the word "Indigenous." Robin Kimmerer is herself a North American Indigenous woman, so *Braiding Sweetgrass* focuses on the North American Indigenous experience and knowledge base, specifically from the present day northeastern United States. While the framing of the story is guided by Kimmerer's knowledge base, this paper also uses international Indigenous communities to structure its argument, including those from Australian, Taiwan, and Canada. With that in mind, "Indigenous" refers to the peoples native to their land, such as the northeastern United States or Southwestern Canada. However, the idea of indigeneity will also be explored, as "one [can] become indigenous to a place," which means that settlers can have indigeneity if they treat the land as if it is both their home and their brethren, though they cannot be indigenous, as this a marker of ethnic identity (Kimmerer 189).

#### **The Western Understanding**

Much of the ethos that surrounds the way Westerners interact and view the world around them is through a scientific lens, one that sets up all that is unhuman to be dissected, studied, and plundered without remorse. The unhuman is devalued through this world view, and perspectives that look to give agency to the nonhuman are considered false. Audrey Smedley writes that:

Contemporary science comprises those ways of knowing and understanding that theoretically exclude the supernatural and the mystical; that is, science is based fundamentally on empirical knowledge, independently and objectively acquired through normal human sensory faculties or through mechanical techniques. It is guided by a body of concepts, formal procedures, particular rules, methodologies, and perspectives that carry the presumption of objectivity and neutrality. We are conditioned to view it as a

separate sphere of culture and its findings as products of strict empiricism and rigid procedures. (155)

Though science is surely not the only pillar of Western cultural ideologies, it is the lens that is often positioned when one brings up topics of climate change, human responsibility to the natural world, and simply ecology in general. This obsession with "truth," which can only be defined by that which is objective, neutral, and empirical, is often cited as the reason that Indigenous ontologies and practices shouldn't be allowed in scientific or Western spaces, as it engages with the "supernatural and the mystical" that Western science finds so unseemly. This same obsession with the objective, the neutral, and the empirical has also made its way into the K-12 classroom. Where "hard" subjects, such as math and science, are being promoted in school, as they are "neutral," empirical, and downright marketable, the humanities are coming under fire for the fact that their fields cannot fit into these same logical, empirical boxes. Examples of this perspective is often seen when schools go through book banning scandals and debates, with "concerned parents" often using the framing of "rational thought" to bolster their arguments as to why a certain book/genre of books shouldn't be included in the school curriculum or be available in their library. The concept of "rational thought" is a common Western framing of reality, that promotes ideas of "logic" and "basic common sense," as well as

[Helping] to explain some of the intensity of challengers' actions and their position regarding the targeted books. Their discourse concerning interpretive strategies of text is grounded in a particular understanding of how one views text, wherein "rational thought" is coupled with a view of "common sense" that elevates a monosemic rather than a polysemic interpretation of text. (Knox 46)

Though the argument that certain books should be banned because their contents are "irrational" and therefore useless is, in and of itself, irrational, the seeping of Western scientific ideologies and vernacular is present all the same. Those that look to ban books posit themselves on the side of logic and reason, and believe that the inclusion of books that are counterculture, unquantifiable, contrarian, or subversive in any way is an affront to the almighty American value of strict empiricism and logic. This mindset reflects the idea that anything that is not testable, provable, or "valid" isn't worth exploring and, in fact, should be kept out of schools for fear of disrupting impressionable young minds. The Western scientific values of cold, hard facts and quantifiable existences are brought to the table to stymie aspects of the education process that might otherwise encourage ways of thinking that fall outside of these Western values. With this in mind, this paper will focus on these Western scientific values and their assimilation in Western academic culture as one of the first areas of critique to be made using Indigenous ontologies.

Since Robin Kimmerer is herself a scientist, *Braiding Sweetgrass* is, naturally, a mix of both Western and Indigenous scientific ideas and perspectives. The audience of *Braiding Sweetgrass* is largely introduced to the Western world of science within the chapter "Asters and Goldenrod," in which Kimmerer is being questioned by her advisor as to why she wants to enter into forestry school. In response to Kimmerer's statement that she wanted to join so she could "learn why asters and goldenrod look so beautiful together" the advisor scoffed and said "Miss Wall,"... fixing me with a disappointed smile, 'I must tell you that that is not science. That is not at all the sort of thing with which botanists concern themselves" (Kimmerer 39-40). Although a relatively short interaction, this statement combined with the statement by Rebecca Shaw draws into stark detail the boundaries science draws between itself and the natural world around it. Just

as Shaw draws an impenetrable divide between humanity and all other life that could fall under the category of "life support systems," Kimmerer's academic advisor draws a line in the sand between the science of nature and nature itself. Beauty, the sublime, the natural human reaction to the resplendent color of flowers isn't scientific. In fact, it's so opposed to the very nature of science that Kimmerer's advisor enrolls her in General Botany so that she can "learn" the true nature of what's important to Western science.

Outside of Kimmerer's academic advisor and the study of botany, the scientific world reflects much the same values. It is a world driven by the need to conquer, to force nature to take a knee in the face of human intellect, to build a world designed for men rather than cohabitate in a world meant for all (Diver 4; Behl 1). These are values adopted from Western histories of colonialism and capitalism, in which the West was continuously called to dominate for the sake of the almighty dollar. Michelle Kopes writes:

It is these military-industrial needs and colonial histories that have defined [science] ever since [the West colonized America]. It is also these values and perspectives of "collecting facts and figures so that mankind may more widely use resources" that have most contributed to the environmental and ecological challenges that we are currently facing. Perhaps, then, it is safe to say that the discipline of geomorphology as commonly practiced in the Global North is ill-suited to address the crises of the Anthropocene, as it has been a primary tool in creating these crises in the first place. (Kopes 1682)

Though Kopes is focused around the study of geomorphology, it is not a stretch to apply this same logic to the field of science in general. The tenets of scientific discovery were grounded in advances that necessitated humanity's curiosity over the health of the world around us.

For example, Charles Darwin, the acclaimed "Father of Evolution" and the builder of many of the ways we study science today, approached the natural world with all the candor and grace of an unsupervised five year old in a candy store. On his infamous tour of South America, Darwin saw things previously unknown or largely mysterious to the European population, experiencing peoples, creatures, and plants that were extraordinary. Rather than harboring the safety and posterity of these beings, Darwin and his crew subjected them to various forms of unethical testing and hypothesizing, disrupting the ecosystems of marine and terrestrial life all for the sake of science (Darwin 50, 53, 56). Though these beings were treated with wonder, they were never treated with respect or consideration. Rather than observe the life and times of the aquatic lizard, through which he would have understood the natural patterns and predatory/prey behaviors of the species, he instead decided to throw specimens into the ocean multiple times to see how they would react, kill them and dissect them to make conclusions about their eating habits, and antagonize them in various other ways (Darwin 53). Though it is true that the crew of the Beagle didn't have advanced tools for analysis of the specimen they interacted with, the degree to which they antagonized and disrupted habitats highlights the disregard the crew felt for the beings that lived there. This behavior is indicative of the larger perception that the West has for the creatures that it interacts with. Rather than cohabitate, the West prefers to conquer.

These values are reflected in the way the West educates their students as well. The K-12 education system in Western schools (and also schools in non-Western nations that have adopted the Western teaching pedagogy) value facts and figures, "unbiased" reality, and that which can be explained or encapsulated using theories and phenomena that the West deem acceptable (Lee et al. 1185). These Western schools also often employ many layers of strict, methodical pedagogy that center around quantifiable tracking, progress grouping, and test-based success

(Kumashiro 3). These rigid standards stand in opposition to Indigenous-informed modes of education, as well as the rising tide of pedagogical researchers who find these strict standards to be doing more harm than good (Lee et al. 1189; Kumashiro 5). A study done in Taiwan based on the natural conflicts that exist between Indigenous and Western scientific culture found that "today the scientific community's descriptions and explanations of natural phenomena are taught in school curricula worldwide, but often differ from those found in non-Western cultures" (Lee et. al. 1182). This type of education teaches students that the world around them is full of specimens primed for dissection, investigation, and invading. When students dissect the piglet or the toad in their tenth grade biology classroom, the questions that are encouraged deal not with the agency of the animal or the way to best grant them respect for their sacrifice, but rather where to find the bladder or how to properly drain the fluid from its preserved, coagulated corpse. This isn't to say that the latter type of questions aren't valid or useful in their own right. But if the students are taught that the delicate remains of the baby pig in front of them simply exists for their own scientific discovery, then there will be no thought put into the life that died so that they might pursue that discovery. Or, when given a piece of art or writing that is unquantifiable, that questions their world view, they are asked to reduce its potential to a fiveparagraph essay, easily packed and graded. The teacher will then grade on grammar, concision, and strength of argument, and the student moves on from the text, unaffected and unquestioned by its rhetorical power. This blasé approach to the world around them will encourage these young minds to treat the world around them as if it was as unagential as the baby piglet on their dissection tray, or as straightforward as a five-paragraph essay on some topic that they couldn't care less about. In the current education system, students are never asked to consider the gifts

given to them by the world around them, encouraged to simply take and take with no regard for what's around them until there is no more left to give.

However, since the classroom works as a reconstruction of Western society and its values, then it seems reasonable to infer that reform and revolution that starts in the classroom would ripple out to change society as it stands in its larger state. Dororthy Lipsky hypothesized that school reform would lead to dramatic social reform within a handful of years of the school reform's introduction (Lipsky 342). Though their hypothesis revolved around studies of different types of school reform and not an introduction of Indigenous ontologies, the base message is still the same. When students are introduced to alternative ways of seeing the world and shown the benefits that are possible, they're able to enact change. And even if reforming curricula or changing the way Western school boards function isn't the end-all, be-all guide to saving the world, starting the social revolution among young people is an effective way to get the ball rolling. And so, if introduced to Indigenous, reciprocal ways of viewing their surrounding world, there's a high likelihood that these ideals will be carried with them through the years and made manifest in the world outside of the classroom.

#### **Indigenous Understandings of the World**

Before getting into how one might go about incorporating Indigenous ontologies into the classroom, it's necessary to pay homage to where these ontologies and practices came from.

Though Indigenous cultures and practices are multifaceted and varying, with cultures changing depending on where they originated in the world, they often share connections with the planet that is missing from Western culture. North American Indigenous culture, as described by

Kimmerer, attributes these connections to certain stories and ontologies that exist within their shared history.

Kimmerer starts the very first chapter of *Braiding Sweetgrass* with the Indigenous creation story of Sky Woman, who fell from the heavens and was saved by the animals who existed in the waters below. They eventually gave her soil of which she formed Turtle Island, and the population of the Earth was able to use this island to grow to be the world we know (Kimmerer 3-5). Because of the sacrifice and compassion of the animals that saved Sky Woman as she fell, Sky Woman's human ancestors learned compassion towards all other beings as time moved on. Her ancestors understood that their ability to live on Turtle Island was a gift, and that they'd need to pass gifts forward to properly thank all other beings for their gift of life (Kimmerer 26). This relationship with the non-human is also the likely foundation for reciprocity in Indigenous cultures across North America, as the belief that all non-human beings -- whether they are rocks, muskrats, or trees -- have power and share relationships with each other links itself to the story of all things coming together to save Sky Woman from her freefall.

Kimmerer contrasts this creation story with that of Eve from the Bible, a creation story that could be attributed to the West and the foundation of their values. Kimmerer comments on the way that Eve was taught not to live in harmony with the surrounding natural world, but rather bend it to her will: "In order to eat, she was instructed to subdue the wilderness into which she was cast" (Kimmerer 7). Even the atheists, agnostics, and those who practice other religions in the West bear the weight of this instruction, with Western cosmologies "inevitably [shaping us] no matter how distant they may be from our consciousness" (Kimmerer 7). The sharp contrasts between the two creation stories belie the sharp contrast between the two cultural understandings of humanity's place on the planet. It is no wonder then that the one that sees our time on Earth as

the "rough road" that we must traverse before we reach our real home in heaven doesn't cherish the gifts that we've been given (Kimmerer 7). If our goal is to save the world from climate change, it is necessary to shift away from the understanding that our time on Earth is fleeting and that we bear our surroundings no allegiance while we're here.

One of the other core Indigenous beliefs that weaves itself into *Braiding Sweetgrass'* narrative is the sweetgrass itself. The sweetgrass, along with other non-human characters such as the maple tree, algae, and the white man's footstep, teaches the audience the gifts of cohabitation and the importance of reciprocity. Warren Cariou writes about the relationship humans share with sweetgrass, saying:

To braid the earth's fragrant hair is to treat it in the most intimate way, as a family member or a beloved. It is this human activity of braiding that clarifies the kinship aspect of sweetgrass, showing us that it is not a thing, but a relation. The reciprocity of this relationship shows an Indigenous ethic of engagement with the living material world. (Cariou 338)

This reciprocity is echoed consistently throughout the book; the gift-giving that happens between humans and non-humans highlighted as one of the most important aspects of Indigenous life. Kimmerer writes that "the exchange relationships we choose determine whether we share them as a common gift or sell [plants] as a private commodity. A great deal rests on that choice" (Kimmerer 31). For Indigenous peoples, they chose to accept the offerings of the Earth with grace and "bestow their own gifts in kind, [in order] to celebrate our kinship with the world" (Kimmerer 31). This methodology is apparent in every aspect of their society, from their willingness to treat non-human beings as equals, to their distaste of claiming ownership of the land, refusing to do so until settlers forced their hand (Kimmerer 28). Although the introduction

of Western culture made it difficult to uphold Indigenous values, as Western influence forced notions of property, capital, and ownership onto "Turtle Island," Indigenous ideas and cultural touchstones still exist today, primed to be applied into a world worn weary by Western values and concerns.

#### **Ontologies in the World Today**

It is widely known that the Western scientific community bears little consideration or respect for that which exists outside their realm of understanding: with spaces such as the UN Convention on Biological Diversity, which are meant to encourage and facilitate human's relationships with the world around us, "dominated by legal and scientific experts, who often question the authenticity of Indigenous knowledge and cultural identities" (Diver 2). Although Indigenous ontologies and understandings need not acknowledgement or approval from the Western world in order to be true, in order for Western world to borrow the understandings of the world with their Indigenous counterparts, they must first be willing to understand them as a valid way of interacting with the world.

One of the biggest issues Westerners have with Indigenous ontologies is that the latter is "unreliable" and "unsubstantiated." The reliance on traditional ecological knowledge is scoffed at, because it is information learned from living harmoniously with the Earth rather than from forcing it from its grasp. An example could be found in *Braiding Sweetgrass*, in which Kimmerer contextualizes the knowledge of pecan trees that the Potawatomi people have known for centuries. The Potawatomi elders knew that the trees would "speak" to each other to decide when to flower, when to store nutrients, and when to prepare for an attack from a third-party invader (Kimmerer 18-19). Though this has been a part of traditional ecological knowledge for

centuries, Western scientists scoffed at this idea up until recently, when they decided that pheromones could be used to explain the "talking" (Kimmerer 19). This knowledge has been a part of traditional teachings in the Potawatomi for generations, but for those in her audience that might still doubt the validity of these Indigenous teachings, Kimmerer "points out that the two modes of inquiry lead to the same conclusion" (Cariou 346). By doing so, it is made clear that traditional ecological knowledge is sometimes even more advanced than their Western counterparts, and doesn't need the backing of Western findings to make its knowledge any more valid.

Though it might seem like Western and Indigenous approaches to living within the world are inhospitable to one another, as different as oil is to water, they can yet reach harmony.

Kimmerer writes on the prospect of combining Western and Indigenous science:

It's a testable hypothesis; it's a question of science, a question of art, and a question of beauty... Science and art, matter and spirit, indigenous knowledge and Western science—can they be goldenrod and asters for each other? When I am in their presence, their beauty asks me for reciprocity, to be the complementary color, to make something beautiful in response. (Kimmerer 47)

Though Western science is the very thing that first urged Kimmerer to abandon the search for beauty in the first place, she is able to take a step back from this biased history and observe Western science for all the positive qualities that it brings to the table. Though it's not perfect, and must be changed at a fundamental level to stop prioritizing mankind's hubris, it can still play off of Indigenous traditional knowledge, creating something beautiful and new from their intersectionality.

By promoting conversations between Indigenous and Western ways of viewing the world, we can "co-produce solutions. Co-production not only builds trust in data, processes, and partners but also diversifies and democratizes science" (Behl 5). This diversification will help remove century-old biases from the practice of Western science, allowing breakthroughs and thought processes to form that had been previously stymied by an inaccurate representation of what makes "good" science. Arthur Adolph, a former chief of the Xáxli'p tribe located in southwestern Canada, acted as a spearhead to save the Xáxli'p Community Forest using a combination of both Western and Indigenous practices. He commented on the choice to pursue both approaches, saying:

I think having cultural and ecological components within this [the Xáxli'p Community Forest project] is really important, so that we are able to ensure that we still have a culture that's going to continue for generations. Because, basically, what we have is our culture and traditions that depend on a healthy environment. (qtd. in Diver 5)

Adolph understands that, in order for the Xáxli'p Community Forest to continue to flourish in the modern day, the combining of Western technologies and breakthroughs and Xáxli'p traditional ecological knowledge is necessary. Before bringing in Indigenous knowledge, the forest health was lagging. Though the practice of clear cutting was ceased, the Western botanists had a difficult time repopulating the forest (Diver 5). They had gaps in their knowledge base, and needed Indigenous ecological understandings to fill the gaps. Though there were some initial bumps in the road as the two cultural sides figured out how to cohabitate, the Xáxli'p Community Forest is now doing better than it has in generations, benefitting from both Western and Indigenous sciences in equal measure.

Possible Results of Teaching Students with an Indigenous/Western Frame of Pedagogy
Although cases, like the Xáxli'p Community Forest, of Western and Indigenous ontologies
working together aren't as common as they should be, and are often focused on smaller batches
of populations, the results from these experiments show favorable statistical trends for
implementing these ideas on a larger scale. One such positive result would be found in K-12
classrooms with a high population of Indigenous students, which suggests that "by creating more
supportive and inclusive environments" educators can open doorways to welcome more
educational diversity within the classroom, as well as prepare students for a variety of future
careers (Behl 5). Along the same lines, Glenn. S. Aikenhead makes the assertion that Indigenous
students, who often find themselves feeling culturally misplaced in classrooms that cater to strict
Western understandings of science, were able to grasp a deeper understanding of learned
material when able to approach it from a perspective that combined Indigenous and Western

The positive effects of creating an Indigenous-informed curriculum for Indigenous students have also been documented in English classrooms. Krsitina Bidwell and Adar Charlton created and led a course designed to explore

view points (Aikenhead 34).

how relationalism offers an alternative way of thinking about Indigenizing the classroom—through relational processes rather than through content—and designed a project that puts this thinking into pedagogical practice. While this project centered on a text by an Indigenous author, its focus was not on bringing any particular or fixed form of Indigenous culture into the classroom. Instead, we worked from the assumption that Indigenous cultures were inevitably present in a class that included Indigenous students,

and that those cultures were relational and continually recreated. (Bidwell and Charlton 186)

The results of this project were overwhelmingly positive. Since the class wasn't centered on any specific Indigenous tribe but rather the way Indigenous existence and identities are able to weave in with each other, the Indigenous students, who were from a variety of different cultural backgrounds, were able to dive deeper into the assigned material, using it to relate to both their own cultural background and also find common ground with the other students in their class. This allowed their writing and critical analysis to strengthen in the class as well, since these classic Western English expectations, like critical and rhetorical analysis, were being bolstered by the relational thinking that was supported by the class structure. Bidwell cites the idea that "...the primary reason for this approach is not to tell simplistic or positive stories of encounter, but rather to focus on deeply divisive relations between communities" (Bidwell and Charlton 188). By being asked to move beyond surface levels of "encounter" and explore the deeper levels of relationality that the students experienced with both the text and those around them, the Indigenous students recounted a clearer, more engaged relationship with the class itself (Bidwell and Charlton 191). Though the two researchers concede that the project wasn't perfect and that they experienced a few bumps along the way, and the fact that it centered around undergraduate students rather than K-12 students, the implications of this project are still relevant (Bidwell and Charlton 194). If Indigenous students are given the opportunity to engage with Indigenous work in the Western classroom, even if it's through a relational context, it's likely that they'll be able to engage with the context and themes of the class at a deep, unique level.

However, it is not only Indigenous students who benefit from a combined understanding of Indigenous and Western understandings. In Taiwanese schools that adopted Amis

understandings of time and cyclicality, whose populations consisted of a mix of Indigenous and settler students, the entire population displayed a clearer understanding of periodicity due to their interaction with Amis teachings (Lee et al. 1196). These students also exhibited a higher level of proficiency with Western elements and techniques in the classroom, such as "the development of Western technology and scientific ideas related to time, [and] comparing their practical activities of time-keeping methods and in using the science process skills of comparing, generalizing, and drawing on ratio relationships" (Lee et. al. 1197). It's true that Taiwanese schools represent merely a fraction of the students who experience Western schooling, and it's difficult to map 1:1 whether or not Taiwanese successes could be replicated on a larger scale. However, the possibilities that this study might lead to are hopeful. If Indigenous practices can be used in many different instances across education to complicate, re-narrate, or draw attention to gaps in Western knowledge, then it will become more widely accepted and implemented. From there, these Indigenous practices can be used to curtail the destruction to the planet that has been brought about by the West and their current approach to viewing the world.

#### Localized Classrooms and Braiding Sweetgrass for Young Adults

One of the biggest hurdles that stands between us and a fully realized combination of Indigenous/Western methodologies is figuring out different ways to apply it, both in and out of the classroom. The Taiwanese school system and the Xáxli'p Community Forest serve as useful models of the different ways classrooms and communities can combine Indigenous and Western influences. For example, one of the most prevalent suggestions stemming from the Taiwanese example is that an Indigenous/Western classroom should always provide "culturally relevant education and mentorship, and [engage the students] in intriguing local problems" (Lee et al.

1199). When a teacher, mentor, or professor is crafting materials for the class that's looking to engage in an Indigenous/Western conversation they need to be sure their teaching materials are developed "to suit that particular group because [the students'] knowledge is place-based, not universal" (Greenwood 208). In doing so, learning and working environments can be facilitated that encourage diversity in both the people doing the studying and what is being studied, allowing for a culture in which more influences than just the Western one can be felt within the classroom. Doing this has been found to directly correlate to improvement in educational outcomes, performance, and retention across all levels of education (Behl 5). However, localizing education, by definition, isn't a homogenous process. It's something that requires time and effort to understand the nuances of a certain location and culture, as well as a willingness to engage with local history. To this end, this section will think through what localizing education might look like in a few different scenarios, using questions posed in Robin Kimmerer's Braiding Sweetgrass for Young Adults to create activities that might be used to facilitate localization within English classrooms and beyond. As Kimmerer's book is marketed for "young adults," the focus of these activities will be with 7-12 English classrooms in mind, but they can be modified to fit younger, and older, audiences as well. The intent of both these lessons is to get the students to interact intimately with the multifaceted understanding of community and relationships that Kimmerer weaves throughout her book, with the ultimate intention of the students recognizing their own community as being multifaceted as well.

Though both units that I have prepared are mostly unique, they do share some commonalities. One such commonality is the activity that starts off both units, which I have named "Audience Discussion." "Audience Discussion" starts with an explanation of the New

York State learning standards that this unit is designed to address, specifically those within the "Craft and Structure" portion:

9-10R5: In literary texts, consider how varied aspects of structure create meaning and affect the reader. (RL) In informational texts, consider how author's intent influences particular sentences, paragraphs, or sections. (RI)

9-10R6: Analyze how authors employ point of view, perspective, and purpose to shape explicit and implicit messages (e.g., examine rhetorical strategies, literary elements and devices). (RI&RL) (NYSED)

It might seem antithetical to start the unit in this place, since one of the facets of this paper's argument is that the standardization of the humanities is a reflection of a Western world too preoccupied with standards, testing, and trackable data. However, using these standards will open up the conversation of the different ways the West defines "audience," and how many modern teachings of rhetoric and analysis retain the formalist expectations of removing oneself from the narrative. Due to the nature of this unit, the students reading of *Braiding Sweetgrass for Young Adults* will subvert these rules, as they will be asked, by both Kimmerer and the activities within the unit, to move beyond the vague, relatively non-agential role as "audience" and become a willing participant within the novel's ideas. Before the students even touch the book, they will discuss the benefits and drawbacks of reading a novel through both the formalist lens and a lens that expects the audience to directly interact with the book. This will prepare the students for stepping out of their comfort zone when building a relationship with *Braiding Sweetgrass for Young Adults*, as well as expand their understanding of what role an audience can and should have with a text.

From there is where the units will begin to branch away from each other. As an English educator, the first scenario that I will work through is one that I am, myself, most familiar with. I went to a very small, rural school in upstate New York for my entire K-12 education, and a majority of the schools that I have taught in have been quite similar; towns surrounded by small farms, local history that revolves around agriculture, and a relatively high rate of poverty. It's worth noting that many of these towns in the northeastern United States are at least 75% white, so discussions of racial identity and racialized history would be necessary when engaging in conversations of indigeneity (Rowland). It is within this context, a high school of about 400 students situated in a relatively impoverished New York farming community, that the first suggestion on how to fuse Western and Indigenous teaching practices will be created.

The activity that follows "Audience Discussion" for the rural audience will also be a prereading activity, one named "Identifying Community." The instructor would ask their students to
list all the ways that their local environment has shaped their upbringing (for example, the
careers their guardians participate in, the activities available to them after the school, the types of
food that are readily available to eat, et cetera) in a think-pair-share activity that should take
about half of a period to complete. The instructor should lead the "share" portion of the activity
as a large-group discussion, one that focuses on the similarities and differences present among
the class. The instructor should bring the students' attention to these similarities and differences,
the purpose being to lay a groundwork of a classroom identity that centers around community
and joint experiences. Human-to-human relationships are the types that Westerners are most
comfortable creating, and so building a strong community bond among the classroom early on
will allow the students to, slowly but surely, open up their community for non-human
participants as they make their way through the book. And since agriculture is often a large part

of what shapes these towns' identities, the students should have a background that caters to a connection with their environment, even if these connections are based around purely economical factors, such as farming for a living. The "Identifying Community" activity was semi-inspired by the activity Kimmerer describes in *Braiding Sweetgrass*, in which she gives her ecology undergraduate students a survey that asks them to "rate their understanding of the negative interactions between humans and the environment" -- interestingly, this portion isn't present in the version of the book for young adults (Kimmerer 6). Though the reason for this exclusion isn't stated, I thought it prudent to start the unit on an activity that identifies human connections to the planet, similar to the survey that Kimmerer handed out, but doesn't sway the answers to be simply about negative interactions. The purpose of this activity is to bring the students' awareness to all the ways their environment impacts their lives, but also to show how their surrounding environment isn't just a thing that passively "impacts them, but something that has actually shaped and guided their lives.

From there, the rest of that class period would be the teacher handing out the copies of the book to the students and explaining a brief synopsis of the authors' Indigenous backgrounds, as well as an explanation of Kimmerer's connection with upstate New York. Many of the activities that Kimmerer describes in her narratives -- picking wild berries, tapping maple trees for syrup, working on a farm, mucking around in local swamps -- are activities that would be quite familiar to many of the students in this rural setting (myself included). This familiarity would work to make Kimmerer feel like she was an extension of their community, connecting through their shared experiences. Already, their circle of community should be widening to include someone not present in the room: the author of the book.

Once they've begun to read, this unit falls into three different activities that take place as they make their way through the novel. The first is called "Story Keeping," and centers around the first portion that they'd be reading, approximately pages 1-49. "Story Keeping" is the first activity to actively engage with the questions and materials that Kimmerer presents to her audience. This activity is also one that could be used in an urban setting, though some of the specific details might need to be modified to fit the community the book is being taught in. The reading will have been done as homework outside of the classroom, and so when the students come in the first thing they will be asked to do is engage with a few selected quotations, the first being:

Stories lead us inward and outward. Inward to reflect on how the story resonates with us and our life and outward on actions we may take from the lesson or lessons in the story. Lessons that guide us in our own well-being and the thriving of all living beings. Our kin. (Kimmerer et al. 31)

The students will be asked to create a two-to-three sentence response to this quote, including stories that have guided their life, whether those be religious, personal, anecdotal, fantastical, et cetera, as well as answer the question "In what way can stories be medicine?" (Kimmerer et al. 27). These responses will facilitate a large-group discussion focused around the role of stories within the students' lives, and the ways the stories of their community might differ from the stories of other communities in other parts of the world. The purpose of this activity is to define how location breeds unique stories that affect them, and how these stories, though their telling and subject might differ, affect the students' identities all the same. This will lead to one of the larger projects that guides this unit: the field-note journal.

The field-note journal is an activity that combines a common English Language Arts classroom device (the journal) with expectations/functionalities that the students will likely have never experienced before. The basic guidelines for this journal will be to hold the students' responses to the questions Kimmerer has added in the marginalia of Braiding Sweetgrass for Young Adults as they progress through the book. As many of these questions are designed to make the audience actively engage with both the material being discussed in the book as well as the reader's personal narratives, a journal is an accessible way for students to engage with these questions. The "field-note" portion is where this activity diverges from what the students have come to expect from an ELA journal. In the interest of continuing to grow the students' understanding of what a story is and the different ways they can contribute to the purposeful action of story keeping, the students will be asked to combine non-traditional elements of storytelling into their journals. For example, in response to the question "How can we shape our lives in such a way that the land might be grateful for us?" the student may choose to illustrate their response through a collection of doodles, or, in response to the question "Where do you see Windigo footprints in the community or city where you live?" the student might respond by gluing in a piece of litter found on the ground from a nearby Dollar General, or an ad in the newspaper for a new industrial pig farm being put in one town over (Kimmerer et. al. 89; 254). A student might respond to a question by pressing flowers within their journal's pages, or by collecting various berries with which to make natural ink to stain the pages. As the students continue to read the novel, their journals should become collections of written, scavenged, doodled, picked, and painted stories, growing their understanding of what local stories and storytellers might be. Though this activity should be graded on participation rather than the contents of their storytelling, the instructor should continue to ask questions throughout the unit

to ensure that the students are understanding the purpose of the journal assignment -- for example, "How has your understanding of storytelling changed as we've continued through the book?" or "Which of the stories that you've addressed in your journal did you find the most impactful? Why?" Through the personal nature of the questions that both Kimmerer and the instructor pose, as well as the unique, personal ways the students will craft their own journals, the hope for this activity is to have the students connect emotionally with both their own personal stories and the stories of their community. The creativity behind the activity will likely also subvert the students' expectations of what an English assignment might look like, expanding ELA outside of the standardized box that Western influence has placed upon it.

The next activity is called "Homemade Ceremony," and it focuses on a specific question that asks its audience:

What else can you offer the earth, which has everything? What else can you give, but something of yourself? A homemade ceremony, a ceremony that makes a home.

What homemade ceremony or honoring could you create in your family, school, or workplace that cultivates a sense of respect and gratitude for the land and water where you live? (Kimmerer et al. 55)

This activity, which should be administered when the students have finished reading the next portion of the reading (pages 50-102), will be an in-class activity. The students will be asked to think through the above passage, thinking through different parts of their community both as a class and as a town/location that deserved to be honored. The students will then compose posters detailing ceremonies that honor something local within their community, creating and detailing simple one-five step ceremonies and briefly explaining how they honor the local community.

These should then be hung up around the classroom, and each day spent on the unit should include starting class with one of the homemade ceremonies. By doing so, students will be able to see their ceremonies put into action and honor will be given to that which the student deemed important enough to honor. This not only reinforces that the work students do is encouraged and appreciated within the classroom, but also has the students actively participating in honoring their communities every day that they have class. The students will begin to engage not only with the idea that they are involved in a type of community, but also that there is an expectation and requirement for honoring and respecting that community as well. This activity is when students truly begin engaging with the idea that the world around them deserves respect, and, by being involved in this type of relationship, they are expected to participate in reciprocity. Though engaging with these posters every day that the unit is taught is a good start, instructors might also consider continuing on with this tradition for the rest of the school year. This would remind students that reciprocity doesn't stop just because it is no longer the center of discussion. By continuing it onward, an instructor could hope that the students might begin to mirror these homemade ceremonies in their private lives as well. This is another activity that would do well in both rural and urbanized communities.

The final activity for this unit would be worked on as the students engage with the rest of the book (page 103-293), and would take multiple days, both in-class and as private work, to do properly. This activity is titled "Lateral Learning," and requires the participation of instructors outside of the ELA subject area to be most successful. This activity is structured around the quote:

His teachings remind us that half of the truth is that the earth endows us with great gifts; the other half is that the gift is not enough. The responsibility does not lie with the maples alone. The other half belongs to us. We participate in its transformation. It is our work, and our gratitude, that distilled the sweetness. (Kimmerer et. al. 73)

This quote highlights why it's not enough for students to simply be aware of their cultural history and locality, but they must participate in it, and be thankful for it. Though they would have started broaching this conversation with the "Homemade Ceremony" activity, it is with the "Lateral Learning" where this point will be brought to a head. As its name suggests, this activity is meant to involve lateral participation among the different subjects and, depending on the instructor and the community culture, this activity will look differently. Perhaps, if the school has an agricultural class or a greenhouse, the students could work with the agriculture instructor/within the greenhouse to grow their understanding of local crops, as well as research the history of why these crops are grown in their area. Perhaps the class can work with science instructors, who might host a joint field trip where students go out and identify plants/animals that thrive around their community, the English and science teachers preparing lessons on the different ways these species form relationships with each other as well as the humans in the area. These students might also spend this time foraging, conscientiously collecting natural ingredients to bring back to the school. These ingredients might be used in their field-note journals to expand their storytelling, or perhaps this instructional collaboration can extend into the art room, where the students might use these natural and local ingredients to create art supplies, as inspired by the Indigenous peoples local to the area. Or perhaps, if working only with the art teachers, the class community could work together to create an art installation that gives back to the community in some way -- for example, a statue made of organic materials that spreads wildflower seeds as it decomposes. Or, if the book is being taught during the winter months, the class could work with

the social studies instructor to rewrite two-three pages of a history textbook using purely localized knowledge. If doing this last suggestion, it's encouraged that students expand their understanding of local history past the timeframe of America and consider Indigenous histories as well.

No matter how the ELA instructor chooses to execute this activity, they will want to incorporate certain key quotes into their discussions of the activity. For one, Kimmerer's question of "How does one become indigenous to a place while upholding the rights, dignity, and teachings of those indigenous to the land?" (Kimmerer et al. 189) should be very prevalent in any concluding discussions of this text, especially in communities made up of a majority of settler students. Students in small, agricultural communities often feel like they have a deep connection and history with the land, with some students being able to track their farming lineage back hundreds of years, and so it's important to both acknowledge that these settler students are indigenous to the place where they live, but that doesn't mean that it gives them the right to ignore or claim the title as "indigenous to the land" as their own. It might be a difficult discussion for some students to have, as they might have reduced their scope of who exists within their community to acknowledge only those sitting within the classroom. This is exactly why the "Lateral Learning" activity encourages projects that embrace locality through engagement with the local ecology or history, as it forces these students to acknowledge the additional knowledge the surrounding community can teach them. This activity should connect students even more with their local community, and give them a deeper look into the way some knowledge is best learned through a relationship established among things which might have been considered previously unconnected, such as ELA and science.

For the activities that focus on a more urban environment, it's important to keep the following quote by Kimmerer in mind:

It takes real effort to remember that it is not just in a wigwam that the earth gives us everything we need. The exchange of recognition, gratitude, and reciprocity for these gifts is just as important in a Brooklyn flat as it is under a birch bark roof. (Kimmerer et. al. 206)

There exists a sort of cultural touchstone that those that live in the country are closer to nature. One hears of people who move out of big cities into more rural environments say that they just "needed to unwind and reconnect to nature," or some variety of that sentiment. Many people consider cities, with their sprawling skyscrapers and miles of concrete, to be where mankind's influence can be felt the most and nature's felt the least. This mentality allows for people to feel disconnected from their environment, as if they are exempted from reciprocity and generosity for the world around them simply because they live in an area without much visible flora or fauna. With that in mind, an activity unique to the urban environment would be "Roots of Community." Like "Lateral Learning," this activity was designed to be the final activity for the *Braiding Sweetgrass for Young Adults* unit, and can be executed in any number of ways. The end goal for this activity would be to encourage "recognition, gratitude, and reciprocity" in ways that are entirely unique to the students' urban community, so they are given elements of their community that they can be agentially grateful for.

The instructor of the class would have to make decisions on what this activity might look like based on their knowledge of their community's culture. One of the ways might be having the students create "Community Family Trees." These would mirror a traditional familial history web, but instead of tracking the family history back a certain number of generations, you track

connections made within the city. For example, if a student's mother frequents a certain deli, the student would add the deli onto the web, and then perhaps look into the history of the building, finding the company that constructed it, and then see how long that company was in the city for, maybe then tracking the family life of one of the workers, et cetera. By centering this "family tree" around members of the community, whether those be human or non-human, this activity provides the student with a more intimate understanding of what a history of a place might be, and how these different elements worked together to form the community culture of the present. Another option might be for the instructor to collaborate with the science department to see what types of biomes were present where the city was developed before the city was created, then have the students devise ways they could support these native plants in their urbanized environments. The instructor might even consider growing some local wildflowers/plants in the classrooms, which would help provide a more concrete understanding and appreciation for the life that existed within their community's past. Engaging within the ecological history of their community, and then devising ways of reincorporating these plants back into their community gives the students a way to show reciprocity to these beings, as well as encourages thoughts of cohabitation with these species. A final recommendation would be to have the students go outside and make observations about the sights/sounds/smells that exist around them, both natural and manmade. They would be asked to consider which, if not all, of these observations contribute to the feeling of their community being a "home," and why. This is an adaptation of a technique often used in rural settings to meditate by absorbing the peaceful sights and sounds that surrounds a person. By applying this technique to an urban environment, the students are asked to identify what parts of their community brings them peace. To make this a gradable exercise, perhaps it could be added into a poetry unit, in which the students create a poetry

anthology dedicated to the city they live in. In engaging with any or all of these activities, students will be asked to identify in detail what makes their community special to them, and encourage ways to protect and cohabitate with the community of humans and non-human beings that they live with.

The end goal for all of the activities listed above is to create students who are more aware of their community, more thankful for their non-human relationships, and more aware of the ways that they themselves can bring peace and equity to the community that surrounds them. In doing so, the instructor will encourage students to experience new feelings of gratitude for the non-human elements that exist within their community, with the ultimate goal of supporting students who are more driven to protect and honor these non-human elements. These students will grow to love and protect their community. Though this might start within small, localized contexts, if these practices are adopted all over the Western world the impact will be swift and lasting.

#### Frankenstein and Braiding Sweetgrass for Young Adults

The beauty of implementing reciprocity and generosity into one's classroom by reading *Braiding Sweetgrass for Young Adults* is that, once introduced, these ideals can be used to interweave through all other texts that the instructor has lined up for the school year. Indeed, if wanting to truly grow these attributes in their students, it's necessary for the instructor to continue to weave these ideals throughout the teachings of the rest of the texts the class interacts with, especially those that are traditionally regarded as touchstones of Western ELA classrooms, such as *Animal Farm, The Great Gatsby*, or Mary Shelley's *Frankenstein*. To highlight how an instructor might do this with their other units, I found a *Frankenstein* unit plan online that was created by an ELA

teacher in Oxford, New York, who posted it online for other instructors to use. This unit plan will act as an example of the ways an instructor might take a pre-existing unit and weave the importance of reciprocity into their lessons. This specific unit plan was selected because it uses Western ELA activities that are often utilized in traditional unit plans, such as character trackers and reading questions. By using a traditional unit plan that is also easily available to instructors all over the Western world, it will be easier to highlight the ways Indigenous influences can be worked into these activities to create learning experiences that are more reciprocal in nature.

The unit plan packet starts off in a place familiar to most Western English teachers: unit objectives. The syntax of the packet places a rather large amount of importance on these objectives, as they are the first thing the students interact with in the packet that actually pertains to the text. It is not the desire of this paper to have any of the following unit objectives be removed. Rather, the assertion will be made that these unit objectives will be made stronger with the addition of unit objectives that remind students of the importance of maintaining reciprocity, and the dangers of not doing so. The unit objectives are as follows:

Through class activities and readings, students will not only become familiar with the genre of Romanticism & the Gothic, but also be able to recognize the challenges that humans negotiate as they develop into mature, self-aware adults. This unit will include an exploration of ethics, philosophy, and man's quest to define "self," and it will, through Victor and his creation, help to stress the students' very important attempts to define themselves. We will explore looking at big ideas and values, discussing literature as philosophers and scholars, and how to analyze a novel through a critical lens.

(Frankenstein Unit Packet 1)

These unit objectives are, traditionally, very fair goals for the instructor to present to their students. Frankenstein is a novel that certainly deals with questions of the self, ethical dilemmas, and the many pitfalls that can occur on a person's journey to find their life's meaning. However, these objectives are almost entirely centered around the "self," a construct that echoes the individualism that is often centered in Western education and society. The objectives are concerned with how one man's unethical scientific choices created a "monster" hellbent on punishing Victor Frankenstein for his past misdeeds, and yet the objectives don't take the next logical step into how Frankenstein's mistreatment of the relationship he has with the nonhuman Creature is why the Creature begins punishing Frankenstein in the first place (Shelley). Perhaps an objective that could be added to rectify this oversight would be: "We will also explore the different ways humans make relationships with nonhumans, and the dangers of breaking or not maintaining these relationships." This would fit into the other unit objectives, specifically the one about having students "define themselves," as it reminds them that, though they're on a journey to determine their own selfhood, this journey doesn't happen in a vacuum. They must also be aware of the different relationships that have shaped them along the way, and that these relationships aren't something to simply be relinquished, or, in Frankenstein and the creature's case, ignored, as breaking this natural order has disastrous consequences.

One of the first interactive activities within the unit packet is a "Frankenstein Character List" (Frankenstein Unit Packet). This is another traditional ELA activity, in which the students fill out character descriptions for the main characters of the novel, adding in additional information as they work their way through the novel. The character list within the packet follows the traditional path of this type of activity by including only human characters to be tracked, with the notable exception of the Creature. This again mirrors the Western infatuation

with only that which is human (or human adjacent). To rectify this, and expand the limited definition of what might be considered a "character," the instructor could expand this list to include some of the settings of the novel, as they often had as much influence on Frankenstein as his human companions. For example, the Swiss Alps could be added as a character. The Alps in this novel experience character development, as they go from "Alpine valleys, [in which Frankenstein] sought in the magnificence, the eternity of such scenes, to forget [himself]" to "a sea of ice" and "bare perpendicular rock" (Shelley 89; 115), and the students could analyze the impact this change has on the other characters. Or the Arctic Ocean could be added as a character, so the students can pontificate on how the ocean's agency might be influencing the relationships that Frankenstein and Walton are able to create (Shelley 189; 6). Adding in nonhuman elements to the character list, such as the landscape or the mountains, acknowledges their agency and forces the students to consider how different aspects of the novel/its characters are shaped by the natural world around them. This would also help cater to one of the other unit objectives: "students will... become familiar with the genre of Romanticism" (Frankenstein Unit Packet). With the Romantic fascination of nature, or, as the packet puts it, that which "[maintains] a strong connection with nature," acknowledging different aspects of nature as being characters within the novel would work to reinforce this understanding. When filling in the nonhuman slots on the character sheet, they would be doing the work of establishing the connection that nature shares with the other human characters, which reinforces the moves that the Romantic movement was trying to make (Frankenstein Unit Packet). This layers within the pedagogy an inherent connection between Western and Indigenous teachings, strengthening the students' understanding of both at the same time.

The last section of the unit packet is a variety of questions that are divided up into two sections: essential questions and those that are focused around chapter-by-chapter details. The essential questions that are listed ask the students to consider "What consequences do we face when we don't take responsibility for our actions?" and "How can scientific advancement and exploration be both good and bad?" (Frankenstein Unit Packet). These questions can lead to discussions that cater to the packet's original unit objectives, as well as those brought into play by the revised, Indigenous-influenced objectives. When students are asked "What consequences do we face when we don't take responsibility for our actions?" the instructor can guide the conversation to not only encompass the string of consequences that Frankenstein faces from the Creature, but also to broaden the conversation to talk about the responsibilities that humans in general have to their surrounding ecosystem, and the variety of consequences that mankind is already facing due to the lack of responsibility that has been taken thus far. Since the students will have gone through the Braiding Sweetgrass for Young Adults unit prior to the Frankenstein unit, they will already have participated in these types of discussions and will, ideally, be able to participate in the conversation with more maturity and committedness.

Topics of reciprocity, interconnectedness, and human responsibilities to nonhumans can be interwoven into many, if not all, traditional ELA units. The themes of justice, family, honor, and sacrifice are popular in many books within the teaching canon, such as *To Kill a Mockingbird, Tom Sawyer*, or *The Things They Carried,* which are all themes that lend themselves to conversations about community and the types of responsibilities that humans share with the beings around them. By carrying these conversations throughout multiple units, by emphasizing how many of the critical issues within these texts might've been solved by

interweaving Western and Indigenous values, the instructor can reinforce how important it is to keep ideas of reciprocity and interconnectedness in the way one views the world.

#### Conclusion

The incorporation of Indigenous ontologies into Western classrooms would lead to effects that, though are unprecedented, can be assumed based on the conclusions drawn from smaller-scale incorporations of Western and Indigenous thought, such as with the Amis classroom or the Xáxli'p Community Forest. By creating classroom experiences that engage with both Western and Indigenous practices and schools of thought, Western schools will be able to encourage students who are more engaged and proactive about protecting their community, whatever that community might look like. The consequences of this sort of communityconsciousness extend well beyond the school walls. Students who have been exposed to unique cultural traditions, such as those introduced in the "Homemade Ceremony" activity, are much more likely to apply these traditions into their daily lives outside of school, as the activity predisposes them to consider ways they can honor their community. As the students move past their K-12 education, they will ideally view the various other communities that they develop and interact with in their adult lives with the same honor and gratitude. Perhaps when they enter their future workplace, they will introduce homemade ceremonies there, establishing a work environment that takes into account all the things that they are grateful for. Though this student's fellow workers might have never been exposed to the Indigenous thought in their education, if the student brings this knowledge with them and spreads it to this new community, the effect and gratitude will increase tenfold. Perhaps then this new awareness of relationships and community will impact the way these workers might vote, or influence the types of activities or purchases

they make in the future. If these workers are made aware of their relationship to their fellow community and their responsibility for protecting their nonhuman companions, the goal is that they would choose to hold up these relationships and become the protectors that Indigenous thoughts teaches us we can be.

Or perhaps, if a student was particularly moved by the "Community Family Tree" activity, after they leave school they might be motivated to start a community garden that fosters local plants for the community to tend to together, or a local organization that facilitates community outreach, clean-up, or some other form of appreciating and caring for the world that surrounds them. The positive effects that the creation of any one of these options might have are innumerable, as it gives the community beyond the classroom the chance to discover, operate within, and reap the benefits of a community that appreciates its neighbors, human and nonhuman alike. Similarly to the student who brought homemade ceremonies into their workplace, a student who turns the "Community Family Tree" into a program for their fellow community will hopefully inspire more mindful, proactive relationships for all those that interact with the program who hadn't previously experienced Indigenous influences.

Even if the students who experience Indigenous/Western practices don't start community programs or create workplace ceremonies, having them experience a new way of viewing humanity's interactions with the nonhuman will likely lead to positive effects. Western classrooms, and indeed, Western society in general, places too much emphasis on the importance of the self, steamrolling the importance of creating a community and maintaining relationships outside of the self. Western students might never understand the importance of these relationships, since they would have never been exposed to an alternative way of viewing the world. When given the exposure to ontologies that counter the West's supreme interest in the

self, these students will ideally choose to follow a path that places importance on both the individual and their community, quietly making small choices in their day-to-day life that encourages cohabitation of these two ideas. Not every student needs to create outreach programs. Even if most students just show their appreciation for the Earth and their community in small, discreet ways, the combined effects of these actions would lead to changes that are tangible.

Students of the modern day are being handed a world that is facing environmental catastrophe due to the shackles of avarice and self-interest -- an obstacle that seems near impossible in its enormity. This is why it's imperative to show these students that there are workable, tangible alternatives to simply ignoring the issue or contributing to it. By encouraging attributes of reciprocity, generosity, and general respect for communities of all shapes and sizes, these students are able to make small, but powerful, ideological changes in the way they treat their environment. Though this certainly isn't the end-all, be-all fix for Earth's climate catastrophe, encouraging Western students to become more conscious of the role they play in their community and start actively participating and upholding these relationships will result in a large populous of people who are interested in upholding their role as carers of the world, a shift that will sow positive benefits for all members of our global community.

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