



Environmental Justice and Land Issues of Indigenous People

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Introduction

Prior to the arrival of European explorers in the 16th century, the indigenous population of the Americas was comprised of a number of vibrant and varied peoples and societies. Estimates from a number of sources range from a low of eight and a half million to about one hundred and twelve million.¹

After the arrival of European explorers, this population was decimated and by approximately 1692 most historians put the number of remaining indigenous people at about ninety percent of the pre-1492 total. This population loss was caused by a combination of factors including new diseases brought by the Europeans, military actions, and overwork of the enslaved indigenous population.² Today in the United States indigenous populations are at just over 1% of the pre-Columbian total. ³ Estimates from Brazil are just as dismaying. Of the roughly 2,000 separate nations and millions of people that existed in the sixteenth century, only about 300,000 remain, currently grouped into about two hundred nations.⁴ In addition to the loss of life, indigenous people had to deal with a loss of their lands as well.

This unit will allow students to investigate how this loss of life and land constituted an environmental injustice, and how the practice of using and taking indigenous lands continues to this day.

School Information

I currently teach Ethnic Studies and other social science classes at Mt. Pleasant High School in San Jose, California. Mt. Pleasant is a racially diverse school within the city of San Jose but outside of the immediate downtown area. So, it is a cross between an urban and suburban school. According to information found on the California School Dashboard the student population is currently just under 1200 students. Roughly seventy-one percent of the students are LatinX while roughly sixteen percent of the students are Asian. Roughly six percent are Filipino and the remaining students are Native American, African American, Pacific Islander, and White.

Mt. Pleasant is experiencing declining enrollment, as are many schools in the greater San Jose area. This is primarily due to economic pressures in the form of rising rents and other costs that are squeezing lower income families out of the area. About two thirds of the students at Mt. Pleasant are socioeconomically disadvantaged based on the current California guidelines.

Because my students are predominantly students of color and from mainly lower socioeconomic status families they are especially attuned to the idea of individual rights and the inequality of the world around them. They understand that the world they live in is unfair, and are motivated to learn more about the plight of others in similar levels of inequality. They are attuned to environmental issues and how those issues will impact their future.

This unit will be situated at the start of the school year and taught in both Ethnic Studies and World History. It will set the tone for the entire year in both classes, as the discussion of current inequalities will be a jumping off point to study how societies evolved into their current inequitable state of being. While focused on environmental aspects, the research and learning that my students do at the start of the year will be transferrable to other specific units that we study and will anchor both classes in the perspective of identifying and describing the inequalities of the world in which they operate.

Content Matter Discussion

Background

The unit I am going to create will be based on the 2023 Yale National Initiative's Environmental Justice seminar and will focus on the negative experiences of indigenous persons in the Western Hemisphere. My students will be investigating how dominant European culture used their power in actions related to the natural environment as a tool of conquest and control, and will compare actions from the past to present day situations and issues. In taking part in this unit my students will strengthen their ability to use multiple historical thinking skills, their ability to research specific topics and evaluate different sources, and their ability to synthesize information and present findings to a critical audience.

Many of my students can trace their roots to the indigenous people of both North and South America. Exploring how their own people were harmed due to environmental injustice will increase student engagement. At the end of the unit students will be asked to think about how what they have learned about past injustices and compare them with current issues that remain problematic today. Students will look at the Dakota Access Pipeline construction which affected the indigenous population in the present-day United States, and the current land use policies of the Brazilian government which are affecting the indigenous population of the Southern Hemisphere. We will review these issues as a whole class to give students a template for their own study. In the course of their research students will be asked to investigate which groups have power and voice, and which groups do not. Students will comment on how this inequality leads to environmental injustice.

Environmental Justice Defined

What then is exactly Environmental Justice, and what constitutes environmental injustice? Texas Southern University environmental professor Robert Bullard, who has been published widely on the subject, defines environmental justice as the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." ⁵

David Naguib Pellow, the Director of the Global Environmental Justice Project at the University of California,

Santa Barbara, credits Benjamin Chavis with creating the related term environmental racism in 1982. Pellow quotes Chavis “Environmental racism is racial discrimination in environmental policy making, the enforcement of regulations and laws, the deliberate targeting of communities of color,” and more.⁶ Pellow then references Texas Southern University environmental professor Robert Bullard and his definition – Environmental Racism is “any policy, practice, or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color.”⁷

Pellow goes on to note that the environment is commonly thought of within the schools of environmental racism and justice as “everything.” The world in which society operates at large, where we work, where we play, when we are educated; both the physical and natural world. ⁸

Environmental Justice would then encompass the treatment of indigenous peoples and the related loss of their land and their control over the remaining lands. This loss of land came at the hands of European explorers who looked to illegally remove the resources of the lands they colonized, and continues to happen at the hands of governments that do not honor the laws, treaties, and agreements that have been passed to protect indigenous lands.

Pellow’s article discusses the creation and history of the environmental justice movement, and students of this unit will look at excerpts of the article in order to understand the background of the movement and current environmental justice studies mindsets. Embedded within the article on page 424 are a set of seventeen Principle of Environmental Justice. Although not useful to repeat all seventeen here, there are several that specifically relate to the study of theft of and misuse of indigenous peoples’ land. These include:

#3. Environmental Justice mandates the right to ethical, balanced, and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things. (Research done for this unit shows that this does not happen in all cases.)

#11. Environmental Justice must recognize a special legal and natural relationship of Native Peoples to the U.S. Government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination. (A relationship based on broken treaties and ignored agreements does not affirm sovereignty nor self-determination.)

#14. Environmental Justice opposes the destructive operations of multi-national corporations. (Deforestation and construction of oil pipelines that threaten the environment are in fact, destructive.)

The research outlined below will show that not only did the Indigenous People of the America’s suffer from an almost total theft of land and the continued breaking of treaties, they continue to suffer environmental racism based on the actions (or inactions) of the governments that their current lands are situated within. Students will look at examples from both North and South American based on the findings presented here.

North America and Native American Indigenous People

Historical Issues - Treaty of Fort Laramie and the Black Hills

The main group that my students will address in examining the environmental injustices that North American Indigenous people have enduring is the group of plains nations known as the Sioux. Most students already have a vague understanding of the injustice/genocide committed by first European explorers and settlers and then subsequent settlers from the United States moving ever westward. The research bears this out and the

relationship between the Lakota Sioux and U.S. government is similar to that of many other indigenous peoples in the Western United States.

In 1868 the Treaty of Fort Laramie was signed by the Sioux nations and representatives of the United States government. In the treaty ownership of the Black Hills of South Dakota was clearly given to the indigenous people, the treaty grants them “undisturbed use and occupation.”⁹

The area was rich with resources but unfortunately for the Sioux one of those resources was gold. Gold was “discovered” in the Black Hills in the 1870’s leading to white settlers coming onto the land as squatters and then demanding protection from the United States Army. This led to ongoing conflict including the now famous defeat of General George Custer at Little Bighorn.¹⁰ In 1877 the government then seized the land, with Congress redrawing the treaty lines to take the Black Hills land and its resources away from the Sioux nation.^{11,12}

The dispute over the land can definitely be classified as an environmental issue, with a powerful group of people (white settlers backed by the U.S. government) taking resources away from a less powerful groups of people (indigenous nations). In 1980 the United States Supreme Court attempted to offer a solution and compensation to the Sioux nation. Ruling in the case of the “United States vs Sioux Nation of Indians”, the court ruled that while the United States had the right to take the land in an act of eminent domain, it violated the Fifth Amendment because it did so without compensation. A lower court had set the compensation amount at \$17.1 million dollars, in the Supreme Court decision an amount of \$102 million was set aside. That amount that in trust has now grown to roughly \$1 billion dollars, but the Sioux have never collected the money.^{13,14}

The Sioux contend instead that because the land has historical and spiritual meaning then the land itself is what must be returned. Tribal leaders maintain that even with a seemingly large amount of money available, if distributed on a per capita basis it would soon be gone, leaving the members of the nation potentially worse off than they were before. In addition, tribal leaders maintain that the money available represents the value of the land in 1877, not in the present day; and that it also only represents a fraction of the unimaginable value of the resources that have been extracted by the settlers, their descendants, the government, and private businesses.¹⁵

Present Day Issues - Dakota Access Pipeline

Fast forward to more recent times and one observes continued disregard for indigenous people and their land. For a more recent example students will be investigating the issues surrounding the building of the Dakota Access pipeline in the Dakotas, and the protests and resistance mounted by the Standing Rock Sioux.

The Dakota Access Pipeline would travel roughly twelve hundred miles across four states (North Dakota, South Dakota, Iowa, and Illinois) transporting crude oil over state, federal, indigenous, and private lands. The pipeline has generated controversy due to the fact that the Standing Rock Sioux believe that they were not properly consulted, the pipeline endangers their water supply, and will damage spiritually important lands.¹⁶

The Standing Rock nation has filed numerous lawsuits in federal courts that focus on the relocation of the pipeline’s crossing of the Missouri River from just north of Bismarck, North Dakota to a spot only miles away from the Standing Rock reservation that will cross under the Missouri River at a reservoir that supplies much of that nation’s water supply. Ironically the pipeline was rerouted due to concerns about what a spill would do

to the state capital's water supply, ¹⁷ while no such concerns seem to exist for the Standing Rock Sioux and their water supply. ¹⁸

In addition to the concerns about the water safety, the Standing Rock Sioux also contended that the pipeline construction and/or an oil spill from the pipeline could have damaged historic tribal lands. The Army Corps of Engineers approved the pipeline route in July of 2016 with one official, Col. John Henderson stating "I have evaluated the anticipated environmental, economic, cultural, and social effects, and any cumulative effects" of the river crossing and found it is "not injurious to the public interest."¹⁹

The Standing Rock Sioux disagreed, and filed another lawsuit claiming that the Army Corps of Engineers had not consulted with them as required by treaty, and had violated the National Historic Preservation Act because the Corps had "effectively authorized construction of the vast majority of the pipeline in and around federally regulated waters without any provision to ensure against destruction to culturally important sites."²⁰

How Are These Issues Environmental Justice Issues?

At this point students will take what they have learned and discuss whether or not these are, in fact, issues of environmental racism and environmental justice. Environmental Racism, as defined above, involves the deliberate targeting of communities of color and treats people differentially based on race or color.

Environmental Justice is defined above by Bullard and bears repeating here: "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." ²¹

Focusing on the words "fair treatment and meaningful involvement" one can clearly see that treatment of Indigenous people, and specifically the Sioux Nation discussed here, qualifies as Environmental Racism. The Black Hills were taken away by an act of Congress in 1877 without the meaningful involvement of the Sioux Nation, who still believe that the land is rightfully theirs.

Fast forward to today and one can see that these issues continue. Moving the river crossing from just outside Bismarck, N.D. to a place that impacts indigenous peoples' water supply is not "fair treatment" and it definitely shows people being treated "differentially based on race or color." The move of the river crossing also triggers historical issues of mistrust between the two parties. Even if the new location of the river crossing is perfectly safe, the indigenous people have a long history of broken treaties and broken trust that will color their view of this new route.

Environmental injustices are built into the Indigenous peoples' lives due to the long history of removing them from their rightful land and moving them to less desirable places. According to NPR writer and reported Rachel Treisman the problem is much larger than the amount of land that Indigenous peoples have lost, which she notes at about ninety-nine percent of their historical land over time. ²²

More importantly, and germane to the discussion here, is the quality of the land that indigenous people were forced upon. Treisman writes about a study that was jointly conducted by Yale University, Colorado State University, and the University of Michigan. The study finds that indigenous peoples in the present-day United States were moved onto lands that are far more vulnerable to the negative effects of climate change than their traditional lands were. ²³

These effects include increased exposure to wildfires and related dangers, and increased numbers of extreme

heat days. The Mojave nation near the Colorado river now experiences an average of sixty-two more extreme high temperature days per year than it would if they were still on their historical lands. In addition, very few if any of these lands are located in areas that are rich in resources such as valuable oil or gas deposits. ²⁴

This blatant environmental racism is no accident, according to one of the co-authors of the study. Theisman quotes Kyle Whyte as saying "The reason why tribal nations are located in the places they are is because the U.S. tried to remove them and get them out of the way, so that the U.S. could build this massive industrial economy, that we now know contributes to increased concentrations of increased greenhouse gasses in the atmosphere." ²⁵

South America and the Amazon Indigenous Peoples

Portugal, Indigenous Peoples, and Land Loss

European settlement and the loss of indigenous peoples' land was not confined to the North American indigenous population. Starting in the 16th century, Spain and Portugal divided present day South America between themselves and extracted resources, created plantations, and imported slaves throughout the colonial period. This unit will focus on the Portuguese and indigenous people in present day Brazil, examining historical land loss as well as more present-day issues such as the deforestation of the Amazon rain forest. Once again, students will see examples of environmental racism and injustice.

Brazil was "discovered" (not a literal discovery, but the first European contact) in 1500 when Pedro Alvares Cabral landed in Porto Seguro with a fleet of ships. The early goals of the Portuguese were to make money from harvesting and trading coastal trees known as pau-brasil (red wood) that were used for making dyes. Initial relations between the Portuguese and the indigenous people were at least in part cooperative. Freelance environmental journalist Jose Fonseca, writing for the New York Times, notes that evidence exists that the Portuguese and the Indigenous population on the coast worked together to harvest and transport the trees. Once the Europeans began to push inland and claim land however, the situation began to change. ²⁶

Mauricio Abreu, head of the geography department at the Universidade Federal in Rio De Janeiro also notes that a period of cooperation existed at first with both sides benefitting from a barter economy. He also cautions that when studying this period of Brazil's history, one needs to understand that neither the Europeans nor the indigenous peoples all acted exactly the same. When conflict developed it often developed between different villages of indigenous peoples that may have been allied with the Europeans when it suited them to gain an advantage over their indigenous rivals. ²⁷

Abreu supports the assertion of Fonseca that this relationship changed once land became an issue. He notes that the indigenous people at the time were not a society that had moved past the agricultural revolution; that land in their society at that time was something that was freely accessed by those that needed it. In contrast, the Portuguese settlers wanted to establish permanent plantations that required the ownership of land. ²⁸

In establishing plantations, the Portuguese also created a large need for labor, a need that they could not fill since they did not have an excess amount of labor that could be moved from Europe to the Western Hemisphere. Without indigenous people working the plantations the plantations would not have been possible.²⁹

The Portuguese began to enslave the indigenous people, creating/contributing to the ongoing genocide that

was happening in Spanish America, the Caribbean, and parts of North America as well. Accustomed to their own forms of labor which included only subsistence farming supplemented by hunting, fishing, and gathering, the indigenous people died in large numbers once they were enslaved. Estimates of the indigenous population at first contact with Europeans in Brazil sit at roughly three million. Estimates of the indigenous population there today sit at scarcely two hundred thousand. ³⁰

Modern Day Amazon Land Issues - Deforestation

The scholarship tells us that the indigenous people of present-day Brazil not only lost their lands but in many cases were enslaved and lost their lives as well. Just as in the example above of the Sioux Nation in North America, one can see that there are present day environmental issues as well, notably the struggle of Brazil's indigenous population to hold onto their lands and to keep the rainforest intact and producing materials necessary for indigenous people to thrive.

Tim Boekhout van Solinge, a United Nations consultant and expert in environmental criminology from Erasmus University in Rotterdam writes in 2010 about the ongoing issues of deforestation in the Amazon. He notes that the main cause of deforestation is conversion of the land for agriculture, a practice that is mostly illegal. ³¹ Writing some years later in 2021, Katyanne Conceicao of the Brazilian Foundation for Science, Technology and Space Applications writes about the four ways in which Brazilian environmental enforcement has become lax over the years.

She notes that increased deregulation, which has softened environmental laws and standards and have downplayed indigenous rights by, among other things, allowing mining in previously restricted areas. Conceicao goes on to note that many environmental institutions have been eliminated or merged together, reducing the enforcement ability. Next, she states that government focus on equal rights for indigenous people and settlers creates a reduced focus on protecting indigenous land, and finally notes that many different environmental groups have had their budgets cut drastically and even non-governmental groups have had their reputations and methods called into question. ³²

Solinge reminds us that older indigenous societies still exist throughout the globe, mainly located in tropical rainforests near the Equator including the indigenous people of the Amazon. He emphasizes that these people have no interest in the deforestation of their land. "No forest means no food, water, and medicine." ³³ Stephan Schwartzman, Senior Director of Tropical Forest Policy at the Environmental Defense Fund in Washington, D.C. amplifies this by noting that the value provided by the forest, the historical knowledge of the indigenous peoples, and their cultural values are all tied together in the health of the forest and are "mutually interdependent." ³⁴

For this reason, both scholars note that it is not the indigenous people that are causing deforestation, but outsiders looking to take resources. Solinge notes that land for agriculture is cheaply available, and that there are also minerals and precious metals in the soil. Tropical hardwoods are desired as well, echoing the first trading efforts of the Portuguese as discussed above.³⁵

Solinge lists several other examples of modern day taking of land from these indigenous people in the Amazon. A soy export harbor built by American company Cargill in the Santarem region of the Amazon makes the taking of land there for the growing of soy more attractive and profitable. While Brazil has laws that dictate only 20% of the forest may be used for agriculture and the remaining 80% held back for indigenous uses, these laws are rarely enforced on the state level at the places where land is taken away. ³⁶

Another example is the Alcoa company that is deforesting the Amazon to mine bauxite. Alcoa has the approval of the Brazilian government but the environmental impact study done does not even mention the roughly nine thousand indigenous people in the area that are impacted. Alcoa offered minor financial incentives, but tribal representatives maintain that these do not make up for the loss of food and medicinal trees, nor the fears of water pollution since bauxite mining is water intensive. ³⁷

How Are These Environmental Justice Issues?

The definitions above note that Environmental Racism is the differential treatment of groups of people based on race or color. According to Solinge, the indigenous people in the Amazon rainforest have been and continue to be disproportionately affected by deforestation. They are in the clear minority of Brazilian society, and the bottom of the social pyramid, and live in the areas that more powerful interests in society want to exploit. Solinge notes that this "...means that they generally lose out and see their human rights abused...elitist landowners think that it is unreasonable and unnecessary that 'the Indians' get so much living space."³⁸

The indigenous peoples of the Amazon rainforest, like the Sioux nation in the central part of the present-day United States, have suffered both at the hands of historical colonial encroachment and at the hands of modern-day companies that desire to take advantage of resources on land that rightfully should be theirs. Students in this unit will absorb this information and then use it as a launching point to research other examples of modern-day environmental racism and injustice. Students will be tasked to summarize the problem and then outline possible solutions in order to show that progress and improvement is possible.

Teaching Strategies and Classroom Activity Overview

The first part of the unit will provide a **background and framework** for students to think about what makes up the study of environmental justice. Using the Pellow article from seminar in May discussed above, students will get an overview of the history of the discipline and be encouraged to think about the Principles of Environmental Justice as outlined within. Teaching strategies will include note taking and summarizing information. Students will work in groups to explain/describe the written principles using both text and visual communication. This investigation will show students not only what environmental justice is but will give them a sense of what environmental injustice looks like.

The second part of the unit will focus on two specific issues in the Western Hemisphere that involve environmental justice as it relates to land ownership and indigenous populations. The two examples that I will share with students are the deforestation of the Amazon in South America and the construction of the Dakota Access Pipeline in the present-day United States.

Using the strategies of **direct instruction and note taking**, students will first review information about the historic treatment of specific native populations by European colonizers and settlers, learning about the injustice of their land being taken for the benefit of the dominant white population. Students will think about how the removal of land from the indigenous population, or the removal of the indigenous population from their land, fits the definition of environmental racism and environmental justice.

Once students have this background, they will look at specific issues and policies of land use that have

continued into the present day and continue to affect the indigenous people. How and why are these specific groups of indigenous people subject to governmental actions that continue to harm them? Who benefits the most from these policies and who is responsible for the continued appropriation of land and resources? During this part of the unit students will be utilizing teaching strategies of guided reading and inquiry-based learning both individually and in pairs.

The third part of the unit will ask students to dig into other issues around the world that have affected and/or continue to affect indigenous populations and are related to land use (or misuse). Students will use what they have learned to identify and explain other environmental injustices and share that information with classmates, either presenting to the whole class or in small groups. Viewers of these presentations will generate questions and feedback that must be responded to, strengthening everyone's understanding of the issues and sharpening the historical research and discussion skills.

More than just **summarizing data**, students will be responsible for identifying who is responsible for the injustice and who is getting harmed, outlining the power dynamic. Students will also be tasked with suggesting appropriate solutions to the issues that they have researched.

One reason for doing a **culminating project** such as this is to convey the message that while there is still environmental racism and there are still environmental injustices, the possibility that improvement exists. Students will be asked to research positive changes using data available at the Global Change Data Lab and will use the teaching strategy of inquiry-based learning to examine this data.

Several examples may include child and infant mortality. According to their data infant mortality has dropped dramatically throughout the world and has dropped in the United States and Brazil as well (see Figure 1 below). While the data does not specifically reference indigenous populations in the United States and Brazil, students can see that the possibility that improvements in health are attainable.³⁹ Other examples of positive changes also exist, and students will be guided in their inquiries to find, compare, and discuss this information.

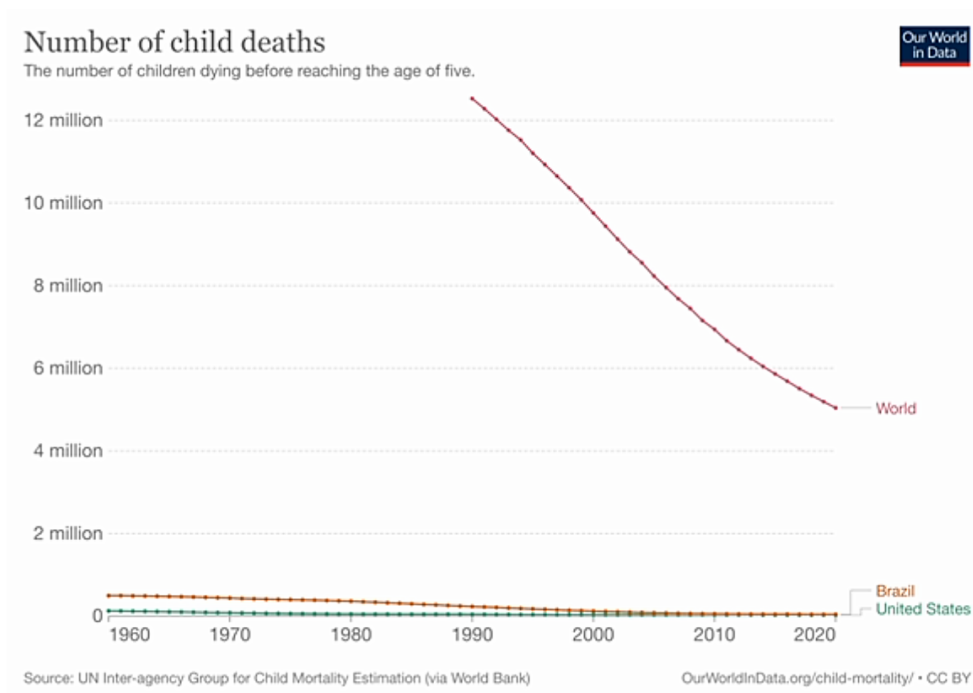


Figure 1. Child and Infant Mortality, OurWorldInData.org/child-mortality/

In order to provide balance, students will also look at the issue of trust, using data from the same website. The data in Figure 2 below shows that the percentage of people that agree with the statement “most people can be trusted” has not risen significantly in the United States in recent decades and has receded in Brazil. ⁴⁰ Again, one cannot make a direct connection between this data and the level of trust that indigenous people in the United States or Brazil have; but the students will still benefit from researching, comparing, and contrasting the data which will aid them in processing the information presented in this unit.



Figure 2 World Attitudes about Trust Source: World Values Survey (2022)

I expect that this unit will be taught in approximately two weeks, roughly 10 - 12 school days. Over the span of the unit students will transition from passive learning to active learning as quickly as possible. Although some **modeling and scaffolding** of the processes will be required, I want students to form their own opinions of the experiences of the indigenous populations and form their own opinions of the sources that they review. In order to facilitate this, I will **create graphic organizers** that students can use for reviewing different types of materials. Students will do some work independently but will also work in small groups to encourage academic conversations about what they are learning. We will review material as a group when necessary and students will be encouraged to review material on their own as well. Students working in small groups will also be given assistance in organizing and formatting the material for sharing with other groups and/or the whole class, once again to foster academic conversations about the material.

The entire unit will be rooted in the Historical and Social Sciences Analysis Skills listed in the California content standards for social studies. These include comparisons of past and present events, determination of the types of change that have occurred and identifying where change has not taken place. These standards also call for students to review multiple primary and secondary sources and integrate that information using it in both written and oral presentations.

Specific Classroom Activities

Activity #1

Learning Objective: Students can describe, using a variety of methods, the history of broken treaties that leads to a lack of trust between indigenous people and the government.

Procedures: Students should be given access to information that will allow them to research specific groups of indigenous people and the treaties that affected them. Students will be given at least three different sources to review and compare, and will receive a graphic organizer that will allow them to take efficient notes. Each teacher should use the graphic organizer that they believe will work best for their students, the goal should be to find and record the main ideas of the source, the specific indigenous nations that are discussed, and the specific terms of the treaties that have been broken.

Students will then be required to research the present-day status of the specific indigenous groups that are discussed within their sources. Students should record as much information as possible about education, employment, standard of living, and other economic and social factors which can be compared against other segments of society.

Once this information has been recorded students will be asked to make a visual display (chart, graph, infographic, etc.) that communicates the information visually as well as textually. A choice between electronic and/or paper displays could be offered to the students depending on the teacher preferences and classroom resources. Students will be tasked with reaching, supporting, and communicating conclusions about how the broken treaties have or have not led to the current conditions of the indigenous people and whether or not the level of trust has been affected.

One possible extension activity would be to create a chart that students can fill in as they review all of the different posters/slides to see whether or not there is any variation between different indigenous groups. Assuming there is, students should be tasked with offering an explanation as to why that may be.

Activity #2

Learning Objective: Students can use informational text to research the restrictions placed upon the Osage people and the reasons for those restrictions.

In this activity students will work in groups and read pages eighty through eighty-eight of David Grann's book *Killers of the Flower Moon*. This excerpt discusses the wealth that the Osage acquired from the oil leases on their land, and more importantly describes the restrictions that the white people put on the Osage in the use of their own money. This assignment gives students the opportunity to practice and present independent research prior to starting the culminating project.

Students will read the excerpt and then create a brief summary within their groups. Once finished with this, students will make a table/chart/diagram that shows the different ways in which the white people limited or restricted the Osage's spending, and the reasons for these actions found within the text.

Students will be asked to present their information to at least two other groups, these groups will provide feedback to the presenters for both content and presentation effectiveness. Teachers should create a

feedback form that ensures that specific useful feedback is communicated. In addition to the collaborative feedback offered these larger groups should also work together to draw conclusions that will be presented to the whole class. It can be left to the individual teacher to decide how the groupings work best in their own classrooms. In my classroom we will start with groups of three, and then move to groups of roughly nine. This will produce about three different sets of conclusions that the class can discuss during the final steps.

Bibliography

Abreu, Mauricio A. "European Conquest, Indian Subjection and the Conflicts of Colonization: Brazil in the Early Modern Era." *GeoJournal* 60, no. 4 (2004): 365–73. <http://www.jstor.org/stable/41147902>.

Abreu writes about the early economic relationship between the Portuguese and indigenous peoples in present day Brazil. This commentary is useful when comparing the issues of the past to contemporary deforestation issues.

Bullard, Robert D. and Johnson Glenn S. "Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making." *Journal of Social Issues* 56, no. 3 (2000): 555-578.

This source is useful for helping students understand what environmental justice is, and by extension what environmental injustice would look like. This will be useful when students are working on the research for their final projects.

Conceicao, Katyanne V. et al. "Government Policies Endanger the Indigenous Peoples of the Brazilian Amazon." *Elsevier Land Use Policy* (2021): 1-12. <https://doi.org/10.1016/j.landusepol.2012.105663>.

This source contains information about relatively recent changes in Brazilian environmental policies that make it difficult for indigenous people to hold onto their land.

Danilo Urzedo & Praticchi Chatterjee (2021) The Colonial Reproduction of Deforestation in the Brazilian Amazon: Violence Against Indigenous Peoples for Land Development, *Journal of Genocide Research*, 23:2, 302-324, DOI: 10.1080/14623528.2021.1905758

Esteban Ortiz-Ospina and Max Roser (2016) - "Trust". Published online at OurWorldInData.org. Retrieved from: '<https://ourworldindata.org/trust>' [Online Resource]

The data and graphs contained on this website will provide information that students can evaluate and analyze when working throughout the unit. Specifically used in this unit is information about trust levels and the ways in which societal conditions have improved over past decades.

Estimated indigenous populations of the Americas at the time of European contact, beginning in 1492. Statista. 2023.

<https://www.statista.com/statistics/1171896/pre-colonization-population-americas/#:~:text=Prior%20to%20the%20arrival%20of,was%20around%20sixty%20million%20people>.

The Statista website contains information about estimated indigenous population numbers prior to European

contact in 1492.

Grann, David. *Killers of the Flower Moon*. New York, NY: Crown Books for Young Readers, 2021.

This work includes the examples of how the natives oil wealth was managed by the white people and is used as the source material in classroom activity number two.

<https://www.archives.gov/education/lessons/sioux-treaty#:~:text=The%20United%20States%20government%20set,a%20treaty%20with%20the%20Sioux.>

"Indigenous People of Brazil." Atlas of Humanity: Exploring the Cultural Diversity. Atlas of Humanity. Accessed 7/14/2023. <https://www.atlasofhumanity.org/indios>

This website provides data about the current indigenous population numbers in present day Brazil.

LeGro, Tom. "Why the Sioux are Refusing \$1.3Billion." PBS News Hour. August 24, 2011. https://www.pbs.org/newshour/arts/north_america-july-dec11-blackhills_08-23

Information about why the Sioux nation have refused to take the money awarded them in their victorious court case.

Max Roser, Hannah Ritchie and Bernadeta Dadonaite (2013) - "Child and Infant Mortality". Published online at OurWorldInData.org. Retrieved from: '<https://ourworldindata.org/child-mortality>' [Online Resource]

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Mohai, Paul, & Pellow, David N & Roberts, J. Timmons. "Environmental Justice." *Annual Review of Environment and Resources* (2009): 405-430. DOI 10.1146/annurev-environ-082508-094348.

Contains useful definitions of environmental justice and racism that will help students understand what falls into these categories and what does not.

Triesman, Rachel. "How loss of Historical Lands Makes Native Americans More Vulnerable to Climate Change." NPR. November. 2, 2021. [https://www.npr.org/2021/11/02/1051146572/forced-relocation-native-american-tribes-vulnerable-climate-change-risks.](https://www.npr.org/2021/11/02/1051146572/forced-relocation-native-american-tribes-vulnerable-climate-change-risks)

This article makes a connection between the historical and cumulative loss of land that indigenous people suffered and current day vulnerability to the negative effects of climate change.

van Solinge, Tim B. "Deforestation Crimes and Conflicts in the Amazon. *Springer Science+Business Media* (2010): 263-276. DOI 10.1007/s10612-010-9120-x.

Solinge writes about the current state of indigenous land holdings in Brazil and comments on the ways that land is still being taken from them even though legal protections exist that should provide protection from land theft and deforestation.

Appendix on Implementing District Standards

Common Core Standards:

Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding the text as a whole.

Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

Content Standards:

Explain imperialism from the perspective of the colonizers and the colonized and the varied immediate and long-term responses by the people under colonial rule.

Notes

¹ “Estimated Indigenous Populations of the Americas at the Time of European Contact, Beginning in 1492,” Statista, 2023, <https://www.statista.com/statistics/1171896/pre-colonization-population-americas/#:~:text=Prior%20to%20the%20arrival%20of,was%20around%20sixty%20million%20people>.

² “Estimated Indigenous Populations of the Americas at the Time of European Contact, Beginning in 1492,” Statista, 2023, <https://www.statista.com/statistics/1171896/pre-colonization-population-americas/#:~:text=Prior%20to%20the%20arrival%20of,was%20around%20sixty%20million%20people>.

³ <https://www.npr.org/2021/11/02/1051146572/forced-relocation-native-american-tribes-vulnerable-climate-change-risks#:~:text=Indigenous%20nations%20in%20the%20U.S.,the%20continent%2C%20the%20researchers%20found>.

⁴ “Indigenous People of Brazil,” Atlas of Humanity: Exploring the Cultural Diversity, accessed 7/14/2023. <https://www.atlasofhumanity.org/indios>.

⁵ Robert D. Bullard and Glenn S. Johnson, “Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making,” *Journal of Social Issues*, (2000) 558.

⁶ Paul Mohai and David Pellow and J. Timmons Roberts, “Environmental Justice,” *Annual Review of*

Environment and Resources (2009): 406,407.

⁷ Mohai et al., *Environmental Justice*, 407.

⁸ Mohai et al., *Environmental Justice*, 407.

⁹ https://www.pbs.org/newshour/arts/north_america-july-dec11-blackhills_08-23

¹⁰

<https://www.archives.gov/education/lessons/sioux-treaty#:~:text=The%20United%20States%20government%20set,a%20treaty%20with%20the%20Sioux.>

¹¹

<https://www.archives.gov/education/lessons/sioux-treaty#:~:text=The%20United%20States%20government%20set,a%20treaty%20with%20the%20Sioux.>

¹² Tom LeGro, “Why the Sioux are Refusing \$1.3Billion.” *PBS News Hour*. August 42, 2011, https://www.pbs.org/newshour/arts/north_america-july-dec11-blackhills_08-23

¹³ <https://www.oyez.org/cases/1979/79-639>

¹⁴ Tom LeGro, “Why the Sioux are Refusing \$1.3Billion.”

¹⁵ Tom LeGro, “Why the Sioux are Refusing \$1.3Billion.”

¹⁶ “The Dakota Access Pipeline,” <https://earthjustice.org/case/the-dakota-access-pipeline.>

¹⁷ Bill McKibben, “A Pipeline Fight and America’s Dark Past,” *The New Yorker*, September 6, 2016.

¹⁸ Ryan W. Miller, “How the Dakota Access Pipeline Battle Unfolded,” *USA Today*, December 2, 2016.

¹⁹ Rebecca Hersher, “Key Moments in the Dakota Access Pipeline Fight,” NPR KQED, February 22, 2017, <https://www.npr.org/sections/thetwo-way/2017/02/22/514988040/key-moments-in-the-dakota-access-pipeline-fight.>

²⁰ Rebeca Hersher, “Key Moments in the Dakota Access Pipeline Fight.”

²¹ Robert D. Bullard and Glenn S. Johnson, “Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making,” *Journal of Social Issues*, (2000) 558.

²² Rachel Treisman, “How Loss of Historical Lands Makes Native Americans More Vulnerable to Climate Changes,” NPR, November 7, 2021, <https://www.npr.org/2021/11/02/1051146572/forced-relocation-native-american-tribes-vulnerable-climate-change-risks.>

²³ Rachel Treisman, “How Loss of Historical Lands Makes Native Americans More Vulnerable to Climate Changes,”

²⁴ Rachel Treisman, "How Loss of Historical Lands Makes Native Americans More Vulnerable to Climate Changes,"

²⁵ Rachel Treisman, "How Loss of Historical Lands Makes Native Americans More Vulnerable to Climate Changes,"

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²⁷ Mauricio A. Abreu, "European Conquest, Indian Subjection and the Conflicts of Colonization: Brazil in the Early Modern Era," *GeoJournal* 60, no.4 (2004): 366,367.

²⁸ Mauricio A. Abreu, "European Conquest" 366,367.

²⁹ Mauricio A. Abreu, "European Conquest" 366,367.

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³¹ Tim B. Van Solinge, "Deforestation Crimes and Conflicts in the Amazon," *Springer Science and Business*, 2010.

³² Conceicao, et al, pg 1,2.

³³ Solinge, "Deforestation Crimes and Conflicts," 265.

³⁴ Schwartzman et. al, pg. 5

³⁵ Solinge, "Deforestation Crimes and Conflicts," pg. 265.

³⁶ Solinge, "Deforestation Crimes and Conflicts," 271.

³⁷ Solinge, "Deforestation Crimes and Conflicts," 271.

³⁸ Solinge "Deforestation Crimes and Conflicts," 272.

³⁹ OurWorldInData.org/child-mortality/

⁴⁰ OurWorldInData.org/trust

<https://teachers.yale.edu>

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