The Culture of Sustainability

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Introduction

Sustainability is a term that has likely become a part of your vernacular in recent years. You may have heard people talking about sustainable practices, or even done so yourself. However, could you write a definition for the term? Often, we think being sustainable means recycling, but neglect to expand on that cursory explanation. Talking about sustainability with my students yields the same results - they may also be able to share the definition of sustainability from their textbook or reference the UN's Sustainable Development Goals,[1] but would be hard pressed to demonstrate a thorough and comprehensive understanding of what sustainable practices truly are. Even Merriam-Webster's definition of the term, "of, relating to, or being a method of harvesting a resource so that the resource is not depleted or permanently damaged," paints an over-simplified picture of sustainability[2].

Understanding the nature of sustainability is becoming increasingly important, as environmental concerns come to the forefront of the consumer, social, and political choices we make. We have reached the point where you would be hard-pressed to find a credible source that does not attribute global warming to human activities[3] and sustainable practices are being seen as the antidote to these problems. Regard for the environment is causing people to consciously choose to change their behaviors in favor of those that have less of a negative impact on the planet, purchase products that are labeled as sustainable (although there are no universal criteria for such), and elect leaders that share these values. Sustainability can be directly related to nearly every part of humans' lives, meaning that it is also relevant to each of the units that I teach in my Advanced Placement Human Geography course. The prominence of conversations around sustainability in our daily lives piques students' interest and provides a unique opportunity for demonstrating the connections between content they are learning with their lives once they leave the confines of my classroom.

Demographics

William Penn High School, the school at which I teach, is the largest high school in the state of Delaware and is comprised of a very diverse student population that comes to us from a range of backgrounds. Since ours is the only high school in the Colonial School District, our 2200 students come from a range of areas in the eastern portion of the county. Our students that live in the southernmost portion of our district's boundaries live in area that is generally more rural and affluent, while those that live in the northern section of the district mostly come from poorer neighborhoods that are in the city of

Wilmington or just along the outskirts, and those in the middle part of the district live in a very working-class suburban area. During the 2018-2019 school year, seventy-six percent of students identified as part of a racial/ethnic minority, with nearly forty percent of our students coming from families that have been identified as earning low incomes. This means that all students in the school receive free breakfast, lunch, and meals if they stay after school for sports or extra-curricular activities. In addition, nearly one-fifth of our students receive special education services and nine percent are identified as English Language Learners.[4]

William Penn has recently gained recognition on both a state and national level for revamping the high school experience our students receive and increasing the level of college and career readiness they have upon graduation. At the start of their high school careers, each of our students choose one of over twenty degree programs, which are divided into three different colleges. Our business college offers career pathways such as Air Force Junior ROTC, Culinary Arts, and Financial Services. Students in the humanities college take classes towards Education, Legal Studies, or Visual and Performing Arts pathways. STEM college students participate in degree programs such as Agriculture, Engineering, and Health Services. The courses that students take in their chosen degree program are top-notch and have served as a model for other high schools throughout the state that want to implement a similar career pathway program.

The goal of these programs is to set students up for success whether they choose to attend college or enter the workforce following graduation. This can be seen in the fact that our Culinary students graduate with the foundational knowledge that will help them succeed if they choose to go to culinary school but also have catering experience, ServSafe certifications, and restaurant management exposure gained during internships, which makes them marketable for jobs in the restaurant industry right out of high school. The same holds true for our Health Services students that graduate as certified phlebotomists but have also learned the perseverance that will be necessary for medical-related classes in a post-secondary setting, and our Engineering students that participate in a certification program at the local community college for half a day throughout their junior and senior years.

The heartiness of these programs has created a school environment that looks towards the future and strives to demonstrate the connections between classroom content and students' actual lives, as well as the interconnectedness of various content areas. On any given day in William Penn High School, you are likely to see Culinary students preparing meals for sale in the Bistro from foods that our Agriculture students raised or grew at Penn Farm, Construction students assembling and finishing guitars that our music students will be using in next semester's guitar class, or Legal Studies and Forensics students working together to recreate accident scenes with dead deer. Our students are experiencing the fact that what they learn in high school does matter and will be used in their lives.

Rationale

While at training to teach my Advanced Placement Human Geography course, it was suggested that students are generally more successful at learning and remembering the content when common themes, such as gender, are woven across units. This enables students to develop an understanding of the fact that the discipline of human geography is a series of interconnected systems and ideas, none of which is entirely independent from all others, much like our lives. It also provides an opportunity for students to connect a topic that is predominant in their lives with the content, thus understanding the relevance of and internalizing new information. This past year, I incorporated some of the suggested thematic materials into my instruction, but students seemed to grow tired of conversations about gender inequality quickly, and I knew that weaving the concept into each of my units was not going to generate any additional interest in the content. Initially, participating in a seminar focused on sustainability was not on my radar because it seemed too "science-y", but the further I got into this new curriculum, the more frequently I found myself using the term sustainability with my students. Their interests were piqued as we talked about sustainable agricultural practices and the sustainable goals of New Urbanism, and I realized that this would be a concept I could use to create multi-unit connections in the course. This showed me that sustainability had the potential to serve as an incredibly relevant and useful theme to reference throughout the course.

Originally, the unit I planned to write was going to capitalize on the direct connection between the concept of sustainability and each of my units. Our unit on Global Development includes many theories of why countries develop the way they do and the differences between those that are developed and those that are developing. This idea connects sustainable practices to countries' stages of development and other measures such as infant mortality rate, levels of education, and life expectancies. Having this information provides the background knowledge necessary for conversations about why less developed countries engage in less sustainable practices. Our unit on population and migration connects to sustainable practices through migration patterns, since both sustainable and unsustainable practices are acting as factors that push and pull people between locations. Political geography can be connected to sustainability as students use what they are learning about government structures, political entities, and the site and situation of a country in order to compare regulations on the consumption of natural resources, pollution, and sustainability, in order to find and map patterns of where governments are more supportive of sustainable practices. The next unit in the course is economic geography, which incorporates information about why economic activities are located where they are and focuses on the costs of economic activity. This sets the stage for making connections with the "environmental cost" of unsustainable practices and examining how changing consumer preferences for products that are made using sustainable practices (at least in the United States) could cause companies' profits to fall.

When thinking about sustainability, it would be beneficial to examine various supply chains for products students regularly use, in order to determine how much of an impact the shoes and iPhones they are purchasing have on the environment. The course also includes units that focus on rural and urban land use, which enable students to explore sustainable shifts in agricultural production, such as Eat Local movements and the backlash against Monsanto, and sustainable practices that are being incorporated as urban areas are planned and revitalized, such as walkable cities and alternative waste solutions. The more I thought about sustainability, in terms of my AP Human Geography content, the more connections I found.

However, the more we discussed sustainability and tried to establish a definition for what the term means, the more I realized that students need to develop an understanding that what is deemed sustainable is explicitly tied to culture. In the United States, our ideas about what constitutes sustainable practices vary significantly from other developed countries, such as those in Europe, as well as countries that are less developed. In order to have a conversation about sustainability, it is essential to understand the geographic location that is being discussed, as well as the cultural features that dictate the beliefs, values, and norms of the people that inhabit it. The potential for engaging students with a topic such as this was evident when I presented them with the question of which was more sustainable- paper or plastic, following a conversation on the same topic in seminar. My students were intrigued, inspired to do further research, and made connections with their daily lives, which demonstrated the potential for generating student interest when connecting sustainability to the actions they engage in each day.

The topic of sustainability has many connections to culture, due to its dependence on the values of a group of people. When understanding the relationship between sustainability and culture, it is useful for students to examine the values of different cultures and how ideas of sustainability differ between them. This could be an opportunity to explore habits of consumption and aspects of material culture, and to compare the practices of more traditional folk cultures with our own. However, as I began to think through ideas for this unit, I realized that I was seeing facets of sustainability in all parts of my life, and that it has truly become a part of our popular culture in the United States. There are examples of it everywhere I look – in the woman that was upset when the grocery store was out of Impossible Burgers, in the advertisements for shoes made from recycled water bottles on my social media, and in the bathroom soap that was made from a zero-waste biodiesel production process at a conference I went to this summer. Creating a unit that helps students understand the integration of sustainable practices in mainstream America and evaluate their outcomes, makes explicit connections between the required course content and students' lives. These connections are likely to have an impact that spans beyond what they will need to remember for the Advanced Placement exam. This will hopefully also lead to students making choices that have a more positive impact on the environment- at least by American standards.

Learning Objectives

As students work through this unit, they will gain an understanding of the fact that there is not one single, global definition of sustainability. They will develop an understanding of the fact that practices that one cultural group considers sustainable, may contradict the values of another culture. This difference in beliefs and values does not necessarily mean that the practices are "wrong" or unsustainable.

In learning about the factors that influence a person's perceptions of sustainability, students will compare what they are learning to practices that are considered sustainable in the United States in order to understand that living a lifestyle that is deemed sustainable has become a part of popular culture in the United States.

Content Objectives

Cultural Overview

A person's culture is made up of the practices, ideas, and items that appear in their daily lives, specifically those that are unique to a specific group they belong to. Culture can be simply defined as peoples' "shared understanding of the world".[5] Cultures have developed based on the needs and circumstances of people living across time and space. Although various groups may have similar motives, their practices and traditions are likely to evolve and be passed from generation to generation differently. The amount of interaction a particular group has with others will determine whether similarities or differences emerge.[6]

Comparing culture to an iceberg, as Edward T. Hall did in his Cultural Iceberg Model,[7] may be a useful analogy to use with students. The Cultural Iceberg details surface-level material aspects that you are able to see and touch, much like the portion of an iceberg that is above the water's surface, as well as non-material components that cannot be seen, which are represented by the portion of the iceberg below water. The material portion of culture provides the physical representations of human culture. The houses that we live in, as well as the items that you would find within these houses are all important parts of material culture[8] because they provide a look into the things we value and our daily routines. The way groups of people interact with these items provides information about their daily lives and the roles various people take on in their lives. Students are likely to have some degree of familiarity with looking at material culture artifacts from non-Western societies, as a means of learning about people that lived in the past, but probably have not made the connection that the items they use every day could be used by people from different cultures, to learn about them.[9] These "mundane artifacts of contemporary living" are often overlooked by the general public, as well as anthropologists. However, examining the material items used by cultural groups through

the lenses of cognitive science, anthropology, psychology, and sociology enables us to understand the various networks of human and non-human items that make a culture unique.[10]

The non-material characteristics of a culture are made up of things you cannot see about them, such as how members of a group identify themselves, what they value, and their customs.[11] It also includes the group's spiritual beliefs, decisions they make about how to spend leisure time, their customs for socializing, and the ways they interact with their environment.[12] One important non-material aspect that can be used to create distinction between cultures is how they progress through the various stages of life and the role played by people in each stage.[13] For example, in American culture, families generally see themselves as having a responsibility for taking care of older members, while the !Kung group depends on hunting and gathering for subsistence and makes the choice to leave behind older and weaker members of the group, as they move on to the next source of food. This is a necessary action, as slowing down for older members of the group or having to be responsible for them could harm the rest of the group or expose them to predators.[14] Since leaving elders behind to die on their own is not a practice of the mainstream American culture, and Americans are unlikely to have been in a position where they had to make such a choice, this cultural practice can be difficult for us to understand.

Values and Sustainability

When thinking about sustainability, one of the most important facets of non-material culture is what a group values. Each of the choices we make and actions we initiate are reflections of the things that we value. Humans are predisposed to do things that are in alignment with their personal values. When we engage in practices that we believe are sustainable, we are doing so based on our cultural attitudes about what is sustainable and the resources we most want to protect. This is evident in the current debate over paper versus plastic bags. As a cultural norm, Americans tend to be concerned with what happens to a product after we use it, in turn placing value in the paper bags that will break down more quickly than plastic in a landfill. We also tend to appreciate that paper bags are made from trees that can be replanted and are therefore seen as a renewable resource. However, in choosing to bring our groceries home in a paper bag, we neglect to take into consideration the fact that the process of manufacturing and transporting these paper bags is much less energy-efficient and results in more environmental contaminants than the production of their plastic counterparts.[15] An individual or culture that places more importance in the air they are breathing and energy availability, might be more likely to make the unpopular choice of bringing their items home from the store in a plastic bag.

Our values serve as the motivation behind our actions, generally leading us to choose things that make us intrinsically satisfied.[16] This means that for sustainable practices to

become the norm instead of the exception, a culture needs to have a core set of values that satisfy our need for happiness, while considering the impact that our actions will have on others today and in the future. This means that a culture of sustainability is one where those who have plenty chose to consider those that have less in their actions and are willing to make sacrifices that have both short- and long-term benefits for people that they will never meet. This represents a culture where people are willing to divide resources, make compromises, and practice restraint from excess and the pursuit of happiness through satisfaction of our material desires. Cultures that favor sustainable practices need to have the ideas that all people are inherently equal, that the planet should be respected and valued, and that information needs to be true and transparent, embedded in their cultural norms. When a culture has social support structures in place that push people towards living a materialistically simple life and consume in ways that are critical and mindful, sustainability will become one of the group's core values.[17] In short, for sustainable practices to become a part of a culture, people need to value the environment more than the material things they have grown accustomed to possessing.

Additionally, a society's views of traditional gender roles impact how much value the group places in sustainable practices. The United Nations' Sustainable Development Goals identifies gender equality as one of the seventeen necessary steps in their outline for working towards a global future that is more sustainable. This objective is necessary because in the developing world, gender inequality leads to women being less educated than their male peers and relying more on the environment for their livelihoods. This means that women that are less educated are likely to have jobs that exploit the environment and are unsustainable. [18]

However, traditional gender roles in more developed countries are also acting as a barrier to sustainability, due to the perceived femininity of environmentally friendly practices. A study published in the *Journal of Consumer Research* found that men in the first world are likely to recycle less and litter more, to avoid "green" products both in public and private, and have a larger carbon footprint that they feel little responsibility for. The study found that women also viewed recycling as a feminine practice and seemed to have more regard for the environment due to their inherent concern for the future.[19] In an attempt to determine how men can be encouraged to make sustainable consumer choices, it was found that men feel that their masculinity is less threatened by branding with images, colors, fonts and words than convey that they are "'Men'-vironmentally-friendly".[20] However, men are overall less likely to engage in sustainable practices until our society places less value in the gender identity that causes us to view the men walking around the grocery store with reusable bags as feminine and believe women should be ordering salads when they go out to dinner, while men order steaks.[21]

Folk Cultures' Sustainable Practices

Culture exists in various forms, one of which is folk culture. The term "folk culture" originated as a way for anthropologists to describe cultures that were assumed to be simple and not metropolitan, but not primitive. Today, we tend to associate folk culture with homogeneous groups living in rural areas[22] that have more conservative values that place importance on the family and a cohesive local identity. Folk customs have generally developed in areas that are more isolated and have remained relatively unchanged due to group members remaining in rural areas that are geographically separated from others, and the culture only spreading if members of the group physically relocate. Traditions are foundational in folk cultures and people are likely to pass things down within their families, from material goods, to stories and songs, to recipes for preparing foods.[23]

The relationship many of these traditional cultures have with the environment often leads to them valuing what comes from the land, more than the consumerist goods that globalized popular cultures tend to place value in. A lack of access to mass-produced consumer goods generally leads to folk cultures using what is regionally available for food, clothing, and building materials. We can see examples of this in the differences between Native American tribes throughout the United States. Those that lived in the Mid-Atlantic region, like the Lenapi, used material from locally grown trees to build their houses and hides from the deer that lived in the area for clothing.[24] This is in stark contrast as compared to Southwestern Native American groups, such as the Hopi, who wore clothing that was woven from cotton and lived in pueblos constructed of locally-sources adobe.[25] These same trends of being heavily dependent on the environment and utilizing natural resources found in the area in which they reside, are still evident in folk cultures around the world.

Sustainability in American Popular Culture

In contrast to folk culture, popular culture is a concept that has a significant impact on my students' everyday lives. Popular culture relates to many aspects of their lives, such as the songs they listen to, the time they spend Snapchatting their friends, the Starbucks they drink, the expensive sneakers they wear, and the Netflix series they watch. Although each of these aspects can be a part of folk culture as well, it is classified as popular culture when the same variation of the trait is widespread across geographic locations. Forms of entertainment, such as artistic expression, play a large role in contributing to pop culture, as well as trends in building styles, food, clothing, and leisure activities.[26] The globalized nature and number of people that are a part of these types of cultural groups make it susceptible to rapid change. This is partially due to the use of advertising and media that allows trends in popular culture to spread quickly over a large area, adding an aspect of uniformity across multiple places.[27] The spread of uniformity, however, is likely to eliminate characteristics that make an area unique and overpower folk cultures in ways that reduce their prominence and create a more homogenous global culture.[28] The slang

terms students use, viral dances they know, songs they listen to, social media they use, and clothing they wear are all dictated by pop culture.

Popular culture plays a significant role in shaping the lives we live and is also being recognized for its ability to spread and reinforce an agenda of sustainable practices. People are likely to engage in the behaviors and use the products that they see being used in the television shows and by the celebrities that dominate American mass media. So, when Americans view sustainable practices being used via these mediums, it is likely that they will begin to engage in some of the same activities. In the past decade, shoe companies like Rockport have created advertising campaigns that attractively show how their product is built to aid you in using the most sustainable method of transportation – walking. Las Vegas is acting as a trendsetter with its newly-constructed buildings that are Leader in Energy and Environmental Design (LEED) Gold certified, and the number of car-less characters in popular television shows is on the rise.[29] Young children are being seen as potential stewards of the environment, as they watch shows like Alphabravos, which features a cast of characters trying to save the environment while teaching views about Sustainable Development Goals.[30] Advertising and endorsements from public figures are playing a huge role in Americans' placing increased value in sustainable actions, as is evidenced by the growing popularity of Impossible Foods products that are selling out at high end restaurants, as well as fast food restaurants and grocery stores.[31]

Additionally, sustainable practices have become more and more integrated within our core set of American values throughout the twenty-first century. As climate marches are held and states pass legislation to ban single-use plastics, people are developing an understanding of the environmental concerns we are facing and sustainability is seen as a prescription for reducing the impact of these problems. Americans are beginning to take ownership of the values that are paired with sustainability, integrating these new preferences into their daily lives, and encompassing sustainability in the country's mainstream culture. All around us, there are people refilling their reusable water bottles, ditching their plastic straws, and finding ways to reduce their waste- either out of genuine concern for the impact they are having on the environment, or out of concern for complying with social norms.

The clothing industry is one facet of American popular culture that has given a lot of attention to sustainable practices, as celebrities and large companies raise awareness about sustainable fashion. Designer Stella McCartney has become a leader in the industry by making sustainable materials, production processes, and operations a key facet of her own company, and by working with the United Nations to launch the Fashion Industry Charter for Climate Action.[32] The charter set emission reduction goals for the industry and identified commitments companies can make towards sustainability in the areas of raw material choice, manufacturing, and policy engagement.[33] Other luxury fashion brands showed off their sustainable practices at the 2019 Milan Fashion Week's Green Carpet Awards ceremony, where awards were given for eco-stewardship, all around

sustainable practices, and using media as an agent of change.[34] Brands that are more accessible to the general population are also making sustainable choices, such as Allbirds, who are using ethically sourced wool, recycled water bottles, eucalyptus tree fiber, castor bean oil, and carbon-negative sugar cane in their shoes.[35] Publications such as The New York Times[36] and Good Housekeeping[37] are platforms with articles written to encourage consumers to make sustainable clothing choices.

Images of plastic bottles floating in bodies of water and sea turtles impaled by plastic straws have led to Americans being conscious of the waste that is being created as we go about our daily lives. It is not uncommon to see people swapping out their single-use plastic water bottles for a longer-lasting refillable option, as a means of reducing waste. However, many Americans have gone further than that. The concept of a no waste lifestyles is also becoming a more widespread way of living more sustainably in the United States. This lifestyle change is gaining popularity slowly since it is directly opposed to the great value that most Americans generally place on convenience, but I am steadily noticing more friends posting on social media about taking their reusable containers to natural food stores to purchase spices, and how much they love their bottle-less Shampoo Bars from Lush.[38]

Those that are abandoning the ease of using the pre-packaged items that have become a hallmark of fast-paced American lifestyles are using media to make low waste living more mainstream. Although there is a lack of academic information in this area, over four million posts on Instgram are labeled with "#zerowaste" and are filled with products, recipes, and other inspiration to help people cut down on the waste in their daily lives. Numerous websites have also been created to facilitate making consumer choices that reduce waste, such as Litterless, which explains the importance of moving beyond recycling to zero waste living and includes guides on how to grocery shop with no waste.[39] Going Zero Waste is another website that breaks zero waste living down into a "simple step-by-step process" for those looking to test the waters of living a more sustainable lifestyle. This includes a blog written by people that are on journeys to live waste-free lives, book suggestions, tips to get started, and a community discussion board.[40] Whether fully committing to living without waste or simply making the switch from plastic to reusable water bottles, the practice of making lifestyle choices that result in less waste is growing in popularity throughout the United States.

For those that are looking to make more sustainable choices but are not quite ready to commit to the zero waste lifestyle, choosing more sustainable foods is a trend that is becoming more popular in the United States. In an attempt to reduce their impact on the environment, consumers can choose to purchase foods that are in season, organically and locally grown, by jumping on the "farm to table" bandwagon.[41] These choices reduce the environmental impact caused by treating crops with chemicals and transporting items far from where they were grown. Other consumers are striving to reduce their carbon footprint by reducing the amount of red meat they consume. This past October, Popular

Science published an infographic showing how cutting out meat products can limit carbon dioxide emissions, while challenging readers to join in on their #NoRedOctober campaign. Although it seems like a small change, the 42 kilograms of carbon dioxide saved by a single person choosing to cut out red meat from their diet for thirty-one days has the potential to significantly impact the environment. Even greater impacts can be realized by avoiding meat consumption all together, as the 71 kilograms of emitted carbon dioxide are saved from one person choosing to cut out all meat products from their diet for a single day.[42] Some Americans are making even more environmentally-conscious food decisions by switching to entirely plant-based diets. As a food source, plants require the use of fewer natural resources and are less taxing on the environment throughout the entire growth and production process.[43] As we become more aware of the impact eating meat has on the environment, more and more Americans are making different choices about what they use to fuel their bodies.

Spreading Sustainable Ideas

Technology and the media that accompanies it play an important role in shaping popular culture, as many trends are created by corporations seeking to make a profit[44] and are popularized through the use of media. Television and film are an important factor in the dissemination of popular culture trends, due to their widespread audience. Today, people around the world have near-universal access to televisions. Watching television has become the most widespread leisure activity in the world, with people across the globe watching an for an average of three hours each day.[45]

   Widespread use of the internet has also propagated trends in popular culture, particularly through the use of social media. The global diffusion of internet access has followed the same trends as that of television, but at a later point in time. In 1995, when television access was available across the globe, only nine percent of the world's population had internet access. This spread quickly, bringing an additional thirty five percent of the global population into connectivity over the next five years. Global internet access has continued to increase rapidly, but it still not universal. Today, people have the least likelihood of having interned access in southern Asia and sub-Saharan Africa, particularly in developing countries.[46] In many instances, the use of social media accompanies the introduction of internet technology. This is a concept that students will be able to relate especially well to, as my students shared that they spend significantly more time interacting with their social networks than watching television. According to a Pew Research Center study, American social media use has grown exponentially in the past six years. Facebook and YouTube dominate as the most-used social media sites, while large percentages of Americans, especially those under thirty, share that they also use Snapchat, Instagram and Twitter multiple times each day.[47] Smart Insights, a marketing advice company, highlights the fact that global internet and social media usage numbers are continuing to grow. Their data shows that in 2018, fifty three percent of the world's population are classified as "internet users", with forty two percent actively using

social media.[48] This means that eighty percent of the global population that has internet access is using the technology to interact with others. As with prior media-based technologies, the internet is least accessible is southern Asia and sub-Saharan Africa, while being most accessible in Europe and North America.[49]

Such widespread access to media enables advertising to play a huge role in our values, and in turn, how we think about sustainability. In cultures that have become globalized through technology and interconnectedness, we are exposed to nearly 5,000 advertisements per day.[50] These messages shape both our thoughts and actions, and have the potential to have a huge influence on the choices that we make. The targeted messages we are seeing today push us towards materialism and always wanting more. However, there is potential to use advertising to reinforce the intrinsic values that are tied to living more sustainable lives- living materialistically simply, consuming critically, and acknowledging the impact our choices have on people around the globe. Global marketing campaigns have the potential to spread messages that provide the extrinsic motivation needed to choose to live sustainable lives.[51]

Teaching Strategies

Many of the students at my school are significantly below grade-level when it comes to reading and writing, so the social studies department has been focusing on weaving literacy skills into our own curriculum. This is especially true for underclassmen, who we are trying to arm with skills that will be enduring and increase their success as they progress to higher-level courses. In ninth grade social studies courses, we aim to expose students to disciplinary texts with challenging language and practice using context clues to interpret them, increase the reading endurance of our students that are used to reading short passages, select the most important details of a reading in order to write summaries, and make claims that are supported by specific evidence.

Modeling

When students are unfamiliar with something they will be doing, it is highly beneficial for the teacher to model the way students should be doing the activity. In many instances, high school teachers seem to assume that their students are familiar with what is being asked of them and simply explain the instructions and send students on their way. This can set students up for failure, putting them in a situation where they do not know what is expected of them or are overwhelmed by a vague understanding of the assignment. Modeling is especially useful when introducing students to disciplinary-specific texts, which varies greatly from the types of reading they are familiar with. Many social studies teachers have become so familiar with the type of thinking we need to engage in order to interpret social studies sources, to the point that it becomes second nature. When modeling these sources, it is necessary for teachers to prepare the source by reading through it for specific contextual clues about the information, the author's main idea and

supporting details, words or phrasing that may be unfamiliar to students, and questions that could be asked of the document. This approach prepares them to model their thinking for students and allows our students to see examples of what they should be looking for in primary sources.

Reading Images

Our students spend all day, every day looking at pictures and taking in the images that are surrounding them. However, they are likely to process, interpret, and make meaning of the things they see in ways that vary greatly from the ways social scientists "read" images. Our students will be able to identify the main idea of an image easily and will likely be able to pick out all of the components of the picture. However, they are generally less skilled when it comes to contextualizing what they see and drawing conclusions from the image. This means that it is necessary to guide them through the process of how to read images and make meaning out of that they see. Students need to be led through gathering information about sourcing the image to draw conclusions about when and why it was created, what is in the picture including subjects and positioning, and draw conclusions about what things are not included in the image and why. Once they have done this, students need to understand how this information can be used to determine what message the artist is trying to present. In this case, images could include photographs, maps, population pyramids, charts, graphs, and political cartoons. Reading images will require students to gather evidence about places and groups that are unfamiliar to them, and look for patterns in information. This pushes students to go beyond just what they see in front of them and draw conclusions about the information.

Collaborative Pairs

Using collaborative pairs is a great way to ensure that all students remain engaged in the activity and learn the desired information from the lesson, while identifying any misconceptions. In a world where students seem to prefer to live 'in their own worlds' and would much rather communicate with others through digital formats, getting them to engage in actual conversation with someone else seems to push some students outside of their comfort zones. Making deliberate choices in student pairings can serve to provide support for students that perform at a lower level and encourage students to acknowledge the ideas of others, instead of simply taking their own ideas as fact. Working in pairs eliminates the intimidation that can accompany speaking in front of larger groups or the possibility of one student being overruled by a majority group that shares the same ideas or opinions. Collaborative pairs are often used during Think-Pair-Share activities, where students are asked to start by coming up with their own ideas about a particular topic before exchanging ideas and discussing with their partner, and ultimately having a class discussion on the topic. In this unit, it would be useful to use this teaching strategy as students explore cultures and perspectives that are unfamiliar, in order to share ideas and reduce the amount of ethnocentrism in students' thinking.

Writing Summaries

One of the most surprising struggles my ninth graders face in their writing is the ability to write summaries after interacting with some sort of text, whether in print or digitally. They have an idea of what it means to summarize something and if I ask them to summarize the class period or something else that they have experienced first-hand, they are easily able to pick out the main ideas and provide a short overview of a large amount of information. However, when asked to summarize in an academic situation, whether verbally or in writing, students often have difficulty and will pick out secondary details but overlook the main idea. Accordingly, it is important for students to continually practice writing summaries and refining their skills. When we work with summarization at William Penn, students are reminded of the acronym TWINE, which tells them that summaries should tell the reader the topic of what they are summarizing, explain what they learned, be in their own words, not be too long, and include essential vocabulary. In this unit, it will be essential for students to be able to summarize the facts of American popular culture that are tied to sustainability.

Evidence-Based Writing

Another area of writing that my students display weaknesses in is making claims that are backed by evidence, as well as explaining how the evidence they have chosen is helpful in supporting the argument they are trying to make. Being pushed to write in this fashion can be unfamiliar and uncomfortable for students that have grown used to hunting for answers within a text and copying it down on their worksheet word-for-word. My school uses the acronym CSET (claim, support, evidence and tie-up) to provide our students with a framework for what evidence-based claims ought to look like. Students are taught that their writing should generally follow the format of making a claim, supporting the claim with their own words, providing evidence from the source and then explaining the evidence as they tie it up. It is generally most difficult for students to choose textual evidence that best supports their claim and then go beyond a simple conclusion to tie-up their writing piece. In this unit, students will need to incorporate evidence in drafting a definition of what sustainability is.

Digital Mapping

In addition to increasing students' literacy skills, I believe it is important to teach them the educationally appropriate ways they can benefit from the use of technology. This unit lends itself to incorporating technology through the use of online mapping software, such as Google Maps and ArcGIS. The use of Esri's ArcGIS software is beneficial to this unit, as students look for mapped patterns, related to sustainability. There are many relevant layers of data that students can add to their map, in order to determine where sustainable

practices are happening, and make predictions about why they are happening in those locations.

Classroom Activities

Title: Thinking Spatially About Sustainability

Essential Question: What characteristics are common between places that engage in sustainable practices and those that do not?

This lesson is intended to help students develop their own understanding of the connections between levels of sustainability and other trains of a country. They will determine that less developed countries are less likely to have the infrastructure to engage in sustainable practices than their more developed counterparts.

Anticipatory Set: What actions would have the most positive impact on the environment? What about the most hurtful impact?

Lesson Details: Many students come to my class with a general understanding of the concept of sustainability but are unlikely to have any background knowledge about which regions of the world are likely to engage in sustainable practices. This lesson is intended to get them to engage in spatial thinking, when it comes to sustainability. Students will begin this lesson by working in groups to brainstorm a list of characteristics that would help them understand if a location engages in sustainable practices, and why this is or is not the case. As students are working, I will monitor their lists to ensure that they are including information such as levels of pollution and various measures of development (wealth, gender inequality, industries). Once students have compiled their lists, they will use Esri's ArcGIS digital mapping software to create a world map that has layers added to it for each of the characteristics they have identified. Students will work with the overlay and transparency features, as well as turning layers on and off on their maps, to identify mapped patterns. The lesson will conclude with a written assignment, in which students are identifying the ideal characteristics for a hypothetical most sustainable place on Earth and a hypothetical least sustainable place on Earth.

Title: The Culture of Sustainability Around the World

Essential Question: How do sustainable practices differ across space?

This lesson is intended to demonstrate that the idea of engaging in sustainable practices manifests itself differently, in different places around the world.

Anticipatory Set: What things do you or people you know do, that you believe are sustainable?

Lesson Details: This lesson will focus on the culture of sustainability and the fact that different cultural groups have different ideas about what they can do to have a positive impact in the planet. During this activity, students will choose a specific country and use recent news and journal articles to research the sustainable actions that are currently being focused on in that country. They will then choose one or two initiatives to further investigate. Students will summarize the initiatives in their country and why they are seen as sustainable on a Google Slides, as well as reflect on whether they believe the practice would be possible in the United States. I will provide students with an example slide about garbage incineration in Switzerland, which is being done in facilities that go to great lengths to ensure that nothing harmful is released into the environment. Such processes are less common in the United States due to regulations that prevent trash from being burned. Each student's slide will be compiled into a class Google Slides Presentation, that will be used to complete a digital gallery walk. Students will use a blank world map to take notes on their classmates' slides to further develop their spatial thinking skills. The lesson will then conclude with a class discussion on global trends in sustainable thinking and how these trends differ from American trends in sustainability.

Title: Is That Item Really Sustainable?

Essential Question: How do you know if a material good is truly sustainable?

This lesson is intended to help students think critically about advertising and how it impacts consumer choice, in determining the impact an item truly has on the environment.

Anticipatory Set: Which is more sustainable- paper or plastic?

Lesson Details: In order to get students thinking about consumer choices for this lesson, we will start class with a discussion about whether paper or plastic is more sustainable. Students are likely to quickly identify paper as the more sustainable option due to recent bans on single use plastics and the move away from plastic shopping bags. However, I will encourage them to think about why plastic could be considered more sustainable if we think about more than just the item's ability to break down in a landfill. I will ask them probing questions about the ability to reuse items, opportunity cost of the resources, and pollution associated with producing and transporting each. Students will then begin the lesson by choosing an item that is advertised as being sustainable and gather information about its materials, production processes and supply chain in order to determine whether it is indeed sustainable. Some examples of items they may choose are boxed water, metal straws, almond milk, organic product and recycled cardboard boxes. Students will summarize their findings and draw conclusions about their research by writing a letter to the CEO of the company that made the item they've researched

explaining why the packaging should continue to include the term sustainable, or why the phrasing should be removed from the packing.

Appendix A: Standards

Delaware Geography Standard Three, 9-12 Benchmark: Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.

Students will work towards meeting this standard throughout the course of the unit, as they develop an understanding of how cultures are distinctive and examples of differing cultures around the world. They will be able to demonstrate that they have met it with the final classroom activity, in which they identify specific examples of a culture impacting settlement patterns and activities in a particular location.

CCSS.ELA-LITERACY.RH.9-10.1

Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

Students will meet this standard as they create written pieces that explain what sustainability means to them, incorporating information from various activities throughout the unit. They will have the opportunity to interact with primary sources as they use images and raw data, and make observations about the aspects of sustainability that are evident in their daily lives.

Resources

"About the Fashion Industry Charter for Climate Action." United Nations Climate Change. United Nations Framework Convention on Climate Change, November 15, 2019. https://unfccc.int/climate-action/sectoral-engagement/global-climate-action-in-fashion/about-the-fashion-industry-charter-for-climate-action. This webpage provided an overview of the various facets of the Charter for Sustainable Fashion.

Berners-Lee, Mike. *There Is No Planet B: a Handbook for the Make or Break Years*. Cambridge: Cambridge University Press, 2019. This book provided an overview of sustainability and how we can live lives that are more sustainable.

Brough, Aaron R. "Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption." *Journal of Consumer Research*, August 2016. https://journalistsresource.org/studies/environment/sustainability/going-green-environment-gender-stereotypes-recycling/. This article summarized findings about

gender bias and sustainable practices, showing that consumer research has shown women to be more likely to engage in sustainable practices than men.

Brough, Aaron R., and James E.B. Wilke. "Men Resist Green Behavior as Unmanly." *Scientific American*. Scientific American, December 26, 2017. https://www.scientificamerican.com/article/men-resist-green-behavior-as-unmanly/. This article elaborated on research conducted for the Journal of Consumer Research about the differences in sustainable practices between men and women.

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"Frequently Asked Questions About the Lenape or Delaware Tribe." Official Website of the Delaware Tribe of Indians. Delaware Tribe of Indians. Accessed December 1, 2019. http://delawaretribe.org/blog/2013/06/26/faqs/. This website provided an overview of the Lenape Tribe, as used in my discussion of folk cultures and their practices.

"Goal 5: Gender Equality." Sustainable Development Goals. Sustainable Development Goals Fund. Accessed November 16, 2019. https://www.sdgfund.org/goal-5-gender-equality. This webpage provided an in-depth explanation of the United Nations' Sustainable Development Goal that is related to gender equality, as well as targets that can be used to measure whether the goal is being achieved.

"Hopi Tribe: Facts, Clothes, Food and History." Native Indian Tribes. War Paths to Peace Pipes, January 16, 2018. https://www.warpaths2peacepipes.com/indian-tribes/hopi-tribe.htm. This website provided an overview of the Hopi Tribe, as used in my discussion of folk cultures and their practices.

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Kellogg, Kathryn. "Going Zero Waste." Going Zero Waste. Accessed December 1, 2019. https://www.goingzerowaste.com/. This website provides an overview of zero waste living.

Knappett, Carl. *Thinking Through Material Culture: An Interdisciplinary Perspective*. Philadelphia: University of Pennsylvania Press, 2005. This book was useful in identifying and writing an explanation of what material culture consists of.

Marsh, Meredith, and Peter S. Alagona. *Barrons AP Human Geography*. Hauppauge, NY: Barrons Educational Series, 2016. This Advanced Placement Human Geography review book was useful in providing an overview of culture, as well as the material and non-material aspects of it.

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