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Guided Thesis: Vocational Training Program for Circlewood

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International Community Development

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Introduction

National Geographic's *Into the Okavango* follows a team of biologists and local African guides led by ornithologist Steve Boyes on a survey down the Cuito River towards the Okavango Delta in Botswana. After weeks on the river winding through lush landscapes, suddenly a change appears. Juxtaposed next to the turquoise blue river and verdant land on its left bank lies the remains of a forest "charred black with fire" (00:49:30-00:49:35). As the team continues on their journey, they encounter obstacles resulting from these manmade fires: erosion of the riverbank, trees growing towards and within the river, and the blockages these two factors combined create. Eventually Steve meets the villagers who create these blazes, and he learns that they live on the edge of survival, using these fires to aid in their hunting efforts. These hunts provide most of the protein and calories for the village. What first seemed to be an environmental science dilemma morphed into a larger sociological problem encompassing culture, class, tradition, ritual, and poverty. Seeing Steve interact with these villagers after surveying the ecological damage left behind after their hunts leaves the viewer wondering what kind of solution could solve both these fights for survival.

Community development often seeks to address these types of problems in our world. Creating solutions adapted to the local context requires an understanding of the fundamental differences between groups, namely in their cultural traits, as well as the influence of the physical environment on cultural practices in order to design programs that are acceptable to the local community. In this paper, I will begin to explore these issues by first discussing the need for contextualization in community development work. Next, I will outline the major components of culture along with an example of how creativity and innovation can be used in

contextualized solutions. Then I will show the relationship between environment and culture, ending with a case study describing how my fieldwork experiences led to a contextualized project proposal for a vocational program.

Role of Contextualization

Whenever a community development practitioner sets out to conduct a project in a community, they inevitably enter into this community's story. Myers describes where this story comes from: "The community comes from a past, and its memory of that past is the beginning of any new story" (206). Throughout this history, the community has survived through innovation and adaptation, despite some failures that may have occurred. This survival strategy resulted in unique ways of viewing and understanding their world as well as the development of "capabilities, resources, skills, and knowledge" (209). Community development practitioners arrive at a specific point in that story when they do development work in any given community. Understanding this story and accommodating our program to it, rather than expecting people to adapt themselves to the program, will promote the successful outcomes sought. However, beyond simply creating effective programs, contextualization shows respect to the community. Myers tells his reader that listening to a community's story shows "that we think its story is valuable" (207). This process, appropriately undertaken, is termed contextualization and represents a key skill for community development work.

Culture and Contextualization

At the heart of contextualization lies cultural differences. Sunstein and Chiseri-Strater define culture as "an invisible web of behaviors, patterns, rules, and rituals of a group of people" (3). This web binding a culture is not inherited or genetically based. Instead, these patterns are learned from childhood onwards, resulting in a kind of "collective programming of the mind"

from a shared social environment (Hofstede et al. 6). These mental programs show themselves at times in tangible, visible ways. These easily identifiable expressions of culture include symbols, heroes, and rituals – the practices of culture. However, shared values form the core of culture (8). While practices may come and go with the generations, a culture's values persist through many years and change more slowly (19). Community development practitioners must learn to understand and appreciate these differences since development projects will be imbedded in this invisible web of culture.

One framework offered by Hofstede et al. describes these differences as "dimensions of culture" (31). Early on in the research, Hofstede and his colleagues created four distinct dimensions: "power distance. . . , collectivism versus individualism, femininity versus masculinity, and uncertainty avoidance" (31). Since that time, two additional dimensions have been added: "long term orientation versus short term normative orientation" and "indulgence versus restraint" ("National Culture"). All these dimensions exist on a scale. Some cultures will score higher or lower on the scale, while others may show no preference between the two.

It is important to keep in mind that while this research was conducted on a national scale, significant variation in cultural characteristics occur within different groups within a single country. The nation system was only recently applied on a planet-wide basis, with colonial claims in many cases forming national boundaries rather than "cultural dividing lines" (Hofstede 21). Many ethnic groups may exist within a single country, arbitrarily bound together due to historical influences. Additionally, even within more ethnically homogeneous nations, any number of subcultures may form due to religious, geographical, gender, or socioeconomic differences (45). Communities that come together under any of these conditions with shared values at their core (Vogl 10) will inevitably produce culture as "no group can escape culture"

(Hofstede 12). For this reason, community development practitioners should always take a learning stance when engaging cross-cultural communities. Broad definitions like the dimensions of culture may not accurately reflect a subculture encountered in the field. They provide a general direction or starting point, but truly understanding a group's culture will take time, relationship, and careful observation.

Dwight Conquergood and his work with Hmong refugees offers an important example of the results of this careful observation of a culture as well as the innovation that may be needed to put them into practice. In the hills of Thailand, the Hmong people found themselves in a crowded refugee camp following the Vietnam War under unfamiliar "environmental constraints", leading to a number of health and hygiene issues (Conquergood 226). Camp healthcare workers unsuccessfully tried to educate the community on these problems and in the end attributed their failure to their perception of the Hmong's primitive and stubborn nature (Fadiman 166), rather than their poor cross-cultural communication skills. Conquergood, on the other hand, took a contextualized approach and used traditional performative art techniques to convey the information in a way that the Hmong would accept and understand, using both well-known Hmong characters and inventing a few of his own in partnership with the Hmong performers (Conquergood 225). His insightful understanding of their culture and willingness to work alongside them combined with creativity led to a positive result for everyone involved.

Culture and Environment

When thinking about culture and its interaction with the natural world, a reciprocal relationship emerges. On one side, Matsumoto makes the case that the ecological environment plays a role in the formation of culture. On a foundational level, cultural groups over the thousands of years of human development have come together for the purposes of survival. The

challenges presented by the environment vary according to their geographical location, resulting in unique solutions to these problems. Using "the power of the group", groups can create "environmental adaptations" that Matsumoto believes constitutes, to a large degree, the foundation of culture (1291). Utilizing distinctive features of human culture like language and our drive to continually seek improvement of technologies, these adaptations are passed down and become fixtures of a group's cultural knowledge (1291-1292). Thomas et al. acknowledge the importance of these wells of knowledge for climate adaptation, stating that as they are "[c]ollected over generations, and continuously refined through transmission," traditional ecological knowledge "withstands the test of time" (12). Then as groups use these adaptations, cultural beliefs, in turn, are used to modify their environment, creating a cycle of reciprocity between culture and environment. Development practitioners would do well in their pursuit of contextualization, particularly in environmental projects, to honor the ways that local groups have adapted to their particular climate and geography.

It is interesting to note how the influence of the natural environment translates to observable and consistent cultural differences. In tangible ways, climate produces different cultural practices, including clothing, agricultural products, food traditions, and architectural preferences. The local resources in terms of native plants, availability of minerals, and precipitation patterns largely determine these practices (Matsumoto 1294). However, even less easily perceptible factors like Hofestede's indices show a relationship to environmental factors. For example, research has shown a correlation between a country's latitude, particularly its capital city, and its ranking on Hofstede's dimension of individualism (1294). A truly contextualized approach should acknowledge the influence of environment on a group's cultural traits and aim to take advantage of these local capacities.

Food practices represent a well-known example of these more visible cultural traits impacted by environmental factors. In Western grocery stores today, food could be imported from all over the world. Historically, however, the local climate determined a person's diet. Collectively, these local foods became a culture's food traditions and were passed on through the seasons and the generations. Despite the increase in globalization in recent decades, the core of these food traditions remains an important part of people's daily lives. Development projects that deal with food must acknowledge these cultural food preferences, including agriculture programs. Valley Verde in San Jose, California, understands and applies these principles among the multicultural clients of their home gardening training program. However, this emphasis on culturally appropriate garden products only came about after a key evaluation of the program. After hearing from their clients that they did not want to grow unfamiliar foods like beets, Valley Verde began tailoring the seeds used for their trainings to each group's preferences. Mexican participants get foods like epazote, and Vietnamese participants receive mustard greens (Damiani). Claudia Damiani, a staff member there, described how this has improved their outcomes by "not just going to the community but also delivering what the community needs." With this contextualization, Valley Verde can more effectively meet their food insecurity goals by increasing the chances that their participants will actually eat the food they are learning to grow. Additionally, their clients can find more joy by having this opportunity to access and harvest their familiar, beloved cultural foods.

A Contextualization Case Study

During my fieldwork learning more about environmental work, I discovered the breadth of opportunity for contextualization that the natural world affords, both for success and for failure. Agriculture practices are inherently cultural practices, adapted and developed over many

generations in response to the local climate. Agroforestry is quickly gaining popularity among

sustainable agriculture proponents, but Lasco et al. make a point to note the ways that these kinds

of programs should be contextualized to both the local environment as well as "local practices,

cultural norms and traditions" (85). Additionally, combining scientific knowledge with

traditional agroforestry systems and "indigenous knowledge" will provide greater success both in

outcomes and acceptance by farmers (84). Learning from local farmers and integrating their

knowledge into agricultural projects fosters copowerment along with improved programs. In a

related field, nutrition sensitive interventions could also benefit from improved environmental

contextualization by acknowledging the full extent of where communities obtain food.

Proponents of forest conservation typically base its importance on carbon sequestration or

biodiversity, but forests also serve as a source of nutrition and income for people living nearby,

even resulting in lower rates of stunting (Rasolofoson et al. 2, 7). Recognizing both the

environmental and cultural importance of forests could strengthen these kinds of interventions.

When environmental work does not feature appropriate contextualization, the potential

for failure increases, as well as harm to the local community and ecosystem. In the wake of the

Kyoto Protocol and carbon sink credits, many large-scale tree planting projects were initiated.

Despite the potential for "considerable climactic gains", one such project in Brazil called the

Plantar Project drew heavy criticism by local farmers and the broader nonprofit community for

"threatening the native flora and fauna" by relying on a large monoculture planting of non-native

eucalyptus (Backstrand and Lovbrand 65). In addition to the introduction of fertilizers and

pesticides into a nearby river, the project jeopardized the local economy and caused local

displacement (65). Perhaps the project's biggest mistake was choosing not to consult local

leaders in planning its activities. Ignoring both environmental factors and cultural factors posed great harm to the community that depended on this land for their livelihood.

With these factors in mind, I employed contextualization in my project on a broader cultural level by addressing the ways that Western culture typically engages with the natural world. Due in part to our veneration for science and confidence in technology, people in Western societies often use metaphors illustrating nature as a machine to be manipulated (Sanford 289) leading to an "ethic of dominance" (288) over the environment, one result being the inundation of industrial agriculture in the American food system. This tendency has cultural roots, which some researchers relate back to Hofstede's dimension of individualism (Schultz 9). To counter this cultural factor, I recommended that part of the vocational program's curriculum be dedicated to helping participants uncover their underlying assumptions about how humanity should relate to their environment. By understanding how these cultural metaphors have shaped them, participants would be able to replace them with frameworks more conducive to sustainable and regenerative work.

After encountering a wide range of environmental attitudes among the professionals I spoke to in my fieldwork, I knew it would be important to choose training options that matched Circlewood's environmental philosophy and organizational culture. Environmentalism as a field comprises a wide variety of careers with differing purposes, from promoting organic agriculture to cleaning up toxic spills. Additionally, professionals within these fields hold different views of their purpose in the larger context. I learned from Gretchen Stokes, for example, that some fisheries experts study fish for their benefit to humans while others study them for their biological value as part of the larger ecosystem. Moe-Lobeda terms this the difference between an "anthropocentric" and an "ecocentric consciousness" (123). Among these varied fields and

attitudes, I realized that the career path I chose to base my recommendations on should align with Circlewood's vision to promote both Earth's and humanity's flourishing through regenerative and sustainable practices (Amadon). Among the options I chose, I sought out ways to expand their traditional scope to include elements of regeneration, like in the green architecture option. In the end, I showed how these vocational programs could blend well with Circlewood's philosophy as well as promote their ecological goals.

Another contextualization factor I considered along with Circlewood's organizational culture was how to best take advantage of the capacities represented in the land on Camano Island. Knowing that the Education Village would be housed on this land upon its completion, I based each option on some element of the physical resources there. The surrounding forest features prominently on the Island, which ultimately led to the arborist program I proposed. The development of a permaculture and agroforestry system there would provide an experiential learning environment for students, which I used as the basis for a sustainable agriculture program. The educational complex itself, featuring sustainable architecture and space for meetings, represents a capacity utilized in the LEED course and sustainable leadership certificate. These options additionally make use of the knowledge and experience represented in Circlewood's staff and community who could teach as part of these programs. I believe that these recommendations reflect the rich resources at Circlewood's disposal.

Future Implications

As a nutrition professional, cultural practices that affect food choices have always been a primary aspect of my work. However, the scope of difference that affects community development work has opened many new avenues of understanding for me. The role of my work and its connection to the environment has been an especially important lesson that will carry

forward to my future vocation. Wendell Berry shows that "eating is an agricultural act" (105), meaning that everyone participates in agriculture and the lives of farmers simply by purchasing and consuming food. In working towards a more just food system where food insecurity loses its power over low-income communities, I cannot forget the context of the natural world with the climate, topography, and fields that make it up. Any development program will find itself imbedded in the web of invisible and visible cultural factors, but food and nutrition projects find themselves tied particularly deeply into both the intangible dimensions of culture and the physical world of agriculture. I must retain the posture of a student for the rest of my career to fully understand all the implications of these and the best way to adapt to them with contextualization.

Conclusion

Like the villagers that Steve Boyes and his team encountered along the Cuito River, every place, every community, and every person exist within a specific context, preceded by history and a survival strategy that has carried them through both celebration and mourning. If a community development worker chooses to enter into these stories with a particular program, its success will depend on how well local contextual factors are understood and adapted to. Culture comprises a foundational area of difference to accommodate with contextualization, but the natural environment, with both its risks and opportunities, must be considered in development planning. To respect the culture and context of a people shows respect and honor to them as well.

Works Cited

Amadon, James. Personal interview. 24 July 2020.

Backstrand, Karin, and Eva Lovbrand. "Planting trees to mitigate climate change: contested

discourses of ecological modernization, green governmentality and civic

environmentalism." *Global Environmental Politics*, vol. 6, no. 1, 2006, DOI:

10.1162/152638006775991911.

*Berry, Wendell. "Social and Environmental Impacts of Everyday Food Choices." *Simpler

Living, Compassionate Life*, ed. Michael Schut. Morehouse Education Resources, 1999,

pp. 104–110.

*Conquergood, Dwight. "Health theatre in a hmong refugee camp: performance, communication,

and culture." *The Drama Review*, vol. 32, no. 3, 1988, pp. 174-208.

Damiani, Claudia. Personal interview. 22 June 2020.

*Fadiman, Anne. *The Spirit Catches You and You Fall Down.* Farrar, Straus and Giroux, 1997.

*Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. *Cultures and Organizations:

Software of the Mind.* 3rd ed. New York, McGraw Hill, 2010.

Into the Okavango. Directed by Neil Gelinas, featuring Steve Boyes, National Geographic, 2018.

Lasco, Rodel, et al. "Climate risk adaptation by smallholder farmers: the roles of trees and

agroforestry." *ScienceDirect*, vol. 6, 2014, DOI: 10.1016/j.cosust.2013.11.013.

Matsumoto, David. "Culture, context, and behavior." *Journal of Personality*, vol. 75, no. 6,

2007, pp. 1285-1318, DOI: 10.111/j.1467-6494.2007.00476.x.

*Moe-Lobeda, Cynthia. *Resisting Structural Evil: Love as an Ecological-Economic

Vocation.* Fortress Press, 2013.

*Myers, Bryant. *Walking with the Poor: Principles and Practices of Transformational*

    Development. Maryknoll, Orbis, 2011.

*"National Culture." *Hofstede Insights*, www.hofstede-insights.com/models/national-culture/.

    Accessed 13 January 2021.

Rasolofoson, Ranaivo, et al. "Forest conservation: a potential nutrition-sensitive intervention in

    low- and middle-income countries." *Frontiers in Sustainable Food Systems*, vol. 4, no.

    20, 2020, DOI: 10.3389/fsufs.2020.00020.

Sanford, A. Whitney. "Ethics, narrative, and agriculture: transforming agricultural practice

    through ecological imagination." *Journal of Agricultural and Environmental Ethics*, vol.

    24, 2011, DOI: 10.1007/s10806-010-9246-6.

Schultz, Wesley. "Environmental attitudes and behaviors across cultures." *Online Readings in*

    Psychology and Culture, vol. 8, no. 1, 2002, DOI: 10.9707/2307-0919.1070.

Stokes, Gretchen. Personal interview. 11 July 2020.

*Sunstein, Bonnie Stone, and Elizabeth Chiseri-Strater. *Fieldworking: Reading and Writing*

    Research, 4th edition*. Bedford/St. Martin's, 2011.

Thomas, Kimberly, et al. "Explaining differential vulnerability to climate change: A social

    science review." *WIREs Climate Change*, vol. 10, no. 2, 2019, DOI: 10.1002/wcc.565.

*Vogl, Charles. *The Art of Community: Seven Principles for Belonging*. Berrett-Koehler

    Publishers, 2016.

*ICD resources from Culture, Community Development, Fieldwork, and Social and
Environmental Justice courses

Essay 2: Qualitative Research

Introduction

I have spent the majority of my academic and professional career immersed in numbers. Quantitative methods and statistical analysis dominated the discussions in my research courses as an undergraduate student. I learned to evaluate the world with the criteria of statistically significant differences and percent change. Encountering qualitative research was the breath of fresh air that I never knew that I needed. I discovered that qualitative researchers essentially collect the stories of people's lives, stories that become "data with a soul" (Brown 00:00:50-00:01:01). The values of qualitative research and community development align in the emphasis on elevating the voices of the people they work with to describe and relate their own experiences and meaning. The following paper will expand on the assumptions and practices of qualitative research and their usefulness for development practitioners. Then, I will discuss how my fieldwork utilized these methods and resulted in a proposal for a vocational training program. I conclude with a hypothetical evaluation of this program using both quantitative and qualitative methods. A final summary and conclusion show how I plan to continue my use of qualitative methods in my future vocation.

Qualitative Research and Community Development

One advantage of using qualitative research for community development work lies in its foundational starting point of inductive reasoning. Inductive inquiry begins with the data, building out toward a theory (Merriam and Tisdell 17). Deductive reasoning, which underlies most quantitative research, operates in the reverse, by conducting experiments to see if the data fits the assumptions of the initial hypothesis. By combining "bits and pieces of information from interviews, observations, or documents" (17), qualitative researchers use inductive inquiry to

allow the data to speak for itself. Since qualitative methods rely heavily on interviewing, this essentially means that researchers allow people to speak for themselves. The process of listening, documenting, and analyzing gives a picture of how people in the study area interpret their world, rather than how they respond to researchers' "preconceived notions of the world" (109). This practice is essential for community development workers. To truly understand the context practitioners work in, they must taking a learning stance and build their knowledge of a place on what they observe and hear from the people themselves.

Similarly, the constructivist perspective of qualitative research further emphasizes the way that meaning is socially constructed within a context. Qualitative researchers essentially aim to better understand "how people make sense of their lives" (Merriam and Tisdell 15). These researchers recognize that socially constructed meaning is influenced by many contextual factors like the local culture and value systems. This necessitates that researchers learn to step out of their own cultural viewpoints and "see through multiple sets of eyes" (Sunstein and Chiseri-Strater 63), particularly within the discipline of ethnography. Qualitative research gives the time, space, and depth of understanding to allow people to give voice to their own experiences. This perspective is especially helpful for community development work, as it encourages practitioners to examine their own biases and to set aside their expectations.

Qualitative methods allow researchers to investigate a wide range of subjective experiences within this element of meaning-making, including emotions, identity, and beliefs. Despite some advantages of quantitative analysis, it cannot fully explain or explore the full range of the human experience. Many scientific disciplines are dominated by statistically and deductively derived knowledge. While this empirical understanding is necessary, it informs many policies and interventions without considering the human side of the issue. For example,

scientists often describe climate change in terms of temperature shifts, changing weather phenomena, and atmospheric composition. However, for traditional cultures with strong environmental identity and heritage, a changing climate means that "traditional lifeways are dramatically disrupted" (Figueroa 235). The cultural losses are significant and painful. I experienced a moment of this type of grief in speaking with Tom and Christine Sine, who played an integral part in Circlewood's origin, as they related the influence of Celtic spirituality on their journey on Camano Island. When Tom spoke about the holistic faith of the ancient Celtic Christians and their understanding of "the sacredness of the created order", I commented on the prevalence of this kind of connection with the Earth in traditional societies today. Christine responded that the Celtic view of God's creation indeed resonated deeply with African Christians they had met and spent time with. I felt a deep pang of regret as I realized the weight of their relationship with the land and, in turn, all they stood to lose if climate change were to continue on its current trajectory.

Even in Western societies without this strong tradition of environmental heritage, people have deep emotional and experiential connections with the land that cannot be easily understood with quantitative methods (Hinds and Sparks 109). I encountered an example of this in speaking with Ruth Seawell, one of the first women foresters in Alabama, as she described the origins of her love for the forest through cherished memories with her father in the outdoors as a child. She then shared this love with her children as they grew up in the same way, instilling in them a passion for the trees and the land. Allowing for the expression of these cultural and emotional relationships, and their implications in community development work, represents a critical role that qualitative research can play in environmental work.

These assumptions, values, and practices of qualitative research resonate deeply with the values of community development. Contextualization, in particular, cannot be accomplished without taking on the perspective of a qualitative researcher who through careful observation and deep listening sees past a culture's superficial practices to its foundational values and beliefs. The primary tools of this type of research, the interview and observation, take the development practitioner out into the field to spend time with the people they seek to serve. Anne Fadiman's immersion into Hmong culture, resulting in her book *The Spirit Catches You and You Fall Down*, occurred over a period of nine years, spending so much time with the family who became the center of her book that they consider her part of the family (302). It was this extended amount of time that led to the depth of her insight about a culture that had been historically hidden from outsiders. This type of concentrated time learning about a context helps ground the development worker in a deeper "sense of place" (Sunstein and Chiseri-Strater 186), a reminder of a program's connectedness to a bounded geography and culture.

In order to immerse oneself into this process, both researcher and development practitioner must remember that reflexivity and self-examination are an integral part of doing this type of work since researchers are the primary data collection instrument. Merriam and Tisdell give the reminder that "the human instrument has shortcomings and biases" (16) which must be acknowledged and scrutinized. This constant monitoring means that "doing fieldwork is to learn to see not just the other but ourselves as well. The spatial gaze demands that we look – and then look back again at ourselves" (Sunstein and Chiseri-Strater 172). This type of self-reflexivity aids the development worker to become sensitive of the way their own perceptions impact those they serve. Myers advises to "guard daily against the power of our education and experience" since "[t]here is always a temptation to assume our view of reality is correct in a

way that adds to the poverty of the poor" (221). Patience, humility, and consistent self-reflection are tools for becoming a holistic and transformational practitioner.

A Qualitative Research Case Study

In my fieldwork for a project proposal for the environmental organization Circlewood, I undertook qualitative research to learn more about the field of environmentalism, particularly regarding the job market and potential vocational paths. I conducted semi-structured interviews with experts from a variety of backgrounds, including forestry, fisheries, environmental education, consulting, and sustainable agriculture. I discovered quickly that just as vast as the range of specific disciplines within the environmental sciences is the range of philosophical perspectives about humanity's relationship to the earth. Though on the surface the answers given by these experts appeared objective, I knew that their perspectives resulted from a culmination of life experience, cultural upbringing, and the metaphors they internalized regarding the natural world (Sanford 284). A dominant perspective in Western culture views the Earth "in pretty utilitarian terms . . . as stuff to use" (Sine and Sine). The perspective of environmental professionals can range from this commodified viewpoint to wanting to preserve all of nature from humanity's interference. "Somewhere in the middle" lie people like Dr. Fogarty, a biologist and forestry expert I interviewed during my research, who focus on conservation. These people recognize humanity's need for resources while minimizing the damage of obtaining them (Fogarty). These insights informed what vocational track I should investigate further as I considered them alongside the philosophy of regenerative practices that Circlewood holds.

With this diversity of perspective and occupational fields present among the interviewees, I was able to see a much broader picture of the opportunities for vocation as well as the threats to the health of the global environment. From interviews, the expectation is to obtain the

"experiences, opinions, feelings, and knowledge" (Patton qtd. in Merriam and Tisdell 105) from those interviewed, and I acquired this type of information through these experts' projections of future trends, assessments of the present, and proficiency in the fields of study they had spent years cultivating. From these bits of insight, I proceeded in my research with triangulation, utilizing "multiple methods" and "multiple sources of data" to "confirm emerging findings" (Merriam and Tisdell 244-245). One way I pursued triangulation was through using what I learned from one interview to formulate questions for the next, building a more complete definition of the new concept I had learned. Another triangulation method I used was to conduct archival research on interesting topics I encountered, for example in spending much time doing online research about a tree planting subculture after an interview with Ruth Seawell. Similarly, my inclusion of green architecture in my proposal came from hearing about the importance of sustainable housing from more than one interviewee (Kurtz, Inslee, Sine and Sine). My understanding of environmental topics stretched both wide and deep owing to the use of qualitative methods.

Program Evaluation and Qualitative Methods

This process of qualitative inquiry resulted in a project proposal focusing on environmental vocational training. Should this project become a reality, program evaluation will constitute an important component of making the program successful. More than just collecting statistics on services provided, an evaluation can assess if a program actually achieves the change it sets out to make, and if not, it can provide valuable information for organizational learning and program improvements (Culligan and Sherriff 3). The evaluation plan would differ depending on which training option was chosen, but the following discussion details some

general principles and outcomes that could be utilized regardless of the ultimate choice of program.

Like in research, program evaluators can choose between quantitative and qualitative methods for gathering data. Each method provides certain advantages and disadvantages, but by combining the two using mixed methods, "the resulting evaluation often benefits enormously from the strengths of both traditions" (Bamberger and Rugh 231). Quantitative methods are often favored because of the perception of greater objectivity as well as ease of scalability and generalizability (Culligan and Sherriff 35). However, qualitative evaluation methods can "[p]rovide depth and detail" (35) to illuminate the full experience of those involved with the program. This depth helps to answer questions of "how" and "why" change occurred, beyond just documenting the presence of change (34). Krueger adds that in addition to improving the quality of evaluation data, stories gathered during qualitative evaluation help to frame data in a way that is more relatable for those who receive the final report. He confesses, "Numbers may appeal to my head, but they don't grab my heart" (404). Qualitative data gives a face to the statistical outcomes of a program, helping community developers to remember the people behind the numbers. With this information in mind, an evaluation of this training program could include outcomes assessed through both qualitative and quantitative methods.

The proposed training program options generally focus on preparing participants for the environmental workforce, whether for a new career field or to add skills to their current job. For those seeking a new career, one outcome to evaluate would be the ability of program graduates to obtain a job. Although this element of the program's success depends on the assumption that an adequate job market exists for this field (Culligan and Sherriff 16), keeping quantitative records on participants' employment after graduation gives evidence of how well the program

prepares them for that particular field. Graduates could be followed for up to one year after completion. Another aspect of the arborist and green architecture program includes preparation for certification exams. This leads to an additional quantitative element through assessing the pass rate of participants who take these exams after completion of the program. A high percentage of graduates who pass the exam would indicate comprehensive and effective curriculum.

A universal purpose of creating this training program is to confer both knowledge and practical skills to participants. An outcome related to knowledge gained would seek to evaluate how much participants learned about climate literacy, soil health, and other environmental science topics. For practical skills, outcomes could be related to participants' understanding and ability to apply tools like design thinking or the proper pruning of different tree species. A quantitative method for assessing these outcomes could include a pre- and post-test or could use pass rates of certification exams. These outcomes measure the objective change in knowledge that participants experience.

A considerable part of learning, however, happens in the subjective experience of personal growth. Especially for this kind of program that seeks to transform participants' perception of their relationship to the environment, many affective factors will be involved as well. A study by Gosnell et al. with regenerative farmers in Australia illustrates how occupational transformation does not occur solely in "cognitive processes"; instead, "transformation in the personal sphere is foundational" and encompasses "more visceral sensations, emotions, and feelings that relate to virtues, drives, and motivations" (6). These elements of a transformational experience cannot be easily captured using quantitative data. Qualitative research methods could help to elucidate these kind of affective responses and help to

expose the full breadth of their experience in the program, positive and negative, to generate support for the program's effectiveness and to offer opportunities for improvement. This data could be gathered through exit interviews with participants once they complete the program.

Future Applications

The humble, open stance of a qualitative researcher will carry me far in my future vocational efforts in community development. The impetus to ask meaningful questions, listen before speaking, and make careful observations will help me to clearly and truly see the contexts that I will have the privilege of working in. Only with this clear vision of a place and a people can I facilitate projects that feature contextualization, collaboration, and copowerment. Qualitative methods also remind me to see beyond the statistics, the quantitative analyses, and the "abstraction" that is "the poor" (Myers 105). Giving someone the time and space in an interview to tell me what they think and feel speaks to their humanity and allows it to shine through. Myers says that "[r]eferring to people by a label is always dangerous" (105); so is referring to them by a number, I would add. Those experiencing poverty are "rather a group of human beings who have names, who are made in the image of God for whom Jesus died" (105). Using what I have learned from qualitative research helps me to remember their names and their stories as central to my work.

Conclusion

Qualitative research investigates the way that people create meaning in their lives and interpret the reality they experience each day. It allows people's own words to become the data and to voice the final themes and outcomes portrayed. This type of research requires a significant investment of time and a unique skillset, but it benefits community development work as a whole by adding texture, nuance, and life that is often sorely missed in quantitative analysis. The values

underlying this type of research represent powerful tools to ensure that those on the margins are

seen, heard, and known.

Works Cited

*Bamberger, Michael, and Jim Rugh. "Quantitative Evaluation Methods." *Real World*

    Evaluation: Working under Budget, Time, Data and Political Constraints, Sage, 2011.

*Brown, Brene. "The Power of Vulnerability." *TED,* TEDxHouston, June 2010,

    www.ted.com/talks/brene_brown_on_vulnerability?language=en.

*Culligan, Mike, and Leslie Sherriff. "A Guide to the MEAL DPro." Catholic Relief Services,

    Humentum and the Humanitarian Leadership Academy, 2019, mealdpro.org/wp-

    content/uploads/2019/03/MEAL-DPro-03_29_2019.pdf.

*Fadiman, Anne. *The Spirit Catches You and You Fall Down.* Farrar, Straus and Giroux, 1997.

Figueroa, Robert Melchior. "Indigenous peoples and cultural losses." *Oxford Handbook of*

    Climate Change and Society, edited by John S. Dryzek, Richard B. Norgaard, and David

    Schlosberg, Oxford University Press, 2011, pp. 232-247.

Fogarty, Jarrod. Personal interview. 14 July 2020.

Gosnell, Hannah, et al. "Transformational adaptation on the farm: Processes of change and

    persistence in transitions to 'climate-smart' regenerative agriculture." *Global*

    Environmental Change, vol. 59, 2019, doi: 10.1016/j.gloenvcha.2019.101965.

Hinds, Joe, and Paul Sparks. "Engaging with the natural environment: The role of affective

    connection and identity." *Journal of Environmental Psychology*, vol. 28, 2008, DOI:

    10.1016/j.jenvp.2007.11.001.

Inslee, Forrest. Personal interview. 22 September 2020.

Krueger, Richard. "Using stories in evaluation." *Handbook of Practical Program Evaluation*,

    edited by Joseph S. Wholey, Harry P. Hatry, and Kathryn E. Newcomer, third edition,

    Jossey-Bass, 2010, pp. 404-423.

Kurtz, Sandra. Personal interview. 19 July 2020.

*Merriam, Sharan B., and Elizabeth J. Tisdell. *Qualitative Research: A Guide to Design and Implementation.* 4th ed., Jossey-Bass, 2016.

*Myers, Bryant. *Walking with the Poor: Principles and Practices of Transformational Development.* Maryknoll, Orbis, 2011.

Sanford, A. Whitney. "Ethics, narrative, and agriculture: transforming agricultural practice through ecological imagination." *Journal of Agricultural and Environmental Ethics*, vol. 24, 2011, DOI: 10.1007/s10806-010-9246-6.

Seawell, Ruth. Personal interview. 4 August 2020.

Sine, Tom, and Christine Sine. Personal interview. 11 August 2020.

*Sunstein, Bonnie Stone, and Elizabeth Chiseri-Strater. *Fieldworking: Reading and Writing Research,* 4th edition, Bedford/St. Martin's, 2011.

*ICD resources from Research for Social Change, Fieldwork, Program Evaluation, Community Development, and Culture courses

Essay 3: ICD Values

Introduction

Bryant Myers makes the case that holism "is an important word for Christian thinking about development" (98). In addition to a holistic view of the story of Scripture, community development practitioners should learn to see the full picture of the social structures that bind people into communities. This process requires seeing past simply the sum of individuals to instead understand the collective effect of the web of relationships around them (99, 201). With a holistic perspective, the people that development projects impact thrive through an enhanced sense of "meaning, discovery, identity and vocation" (202) as they are treated with dignity, respect, and honor. I have sensed this pursuit of holism follow me through my journey in my community development studies. From individual farmers to the global economic effects of agricultural trade, I have developed a deep desire to see the world as a unified, interconnected system and to perceive the extent that changes ripple out into this system.

As I have learned more of the nature of our modern world system and the depths of injustice within it, the principles of social justice and copowerment have offered me the tools and insights needed to cast a vision of a world that flourishes with equity and dignity. I begin this paper with a description of what I see as I look back over the process of my personal development these past months. Next, I discuss how a deepening of my understanding of social justice has given shape to what a just food system could look like. My reflections continue with a consideration of copowerment as it relates to traditional agriculture and conclude with the importance of my character in becoming a holistic development practitioner.

The Process of Transformation

As I think back over my experience in this program, 1 Corinthians 13:12 comes to my mind: "For now we see in a mirror, dimly, but then face to face. Now I know in part, but then I shall know just as I also am known" (*NKJV*). Many forces work against us in this world that hinder our ability to see the truth about God, those around us, and ourselves. Ethnocentrism, modernity, power, the status quo, comfort, and ultimately sin all serve to distract us from seeing clearly. In this way, we live our lives viewing the world through a particular lens that is colored by the culture around us and that tells us how we should interpret what we observe and feel. The experience of studying community development and gaining a broader understanding of both historical and current events has revealed to me many areas where I am, as Paul describes, seeing "in a mirror, dimly." It is as if a veil has been drawn back from my mind's eye to give me a glimpse into the truth of the world. I know, also like Paul, that I will not be able to perceive truth in its full clarity until I come face to face with my Creator, but the brokenness of this world and the coming of His Kingdom have come a little more into focus over the past few months.

I have learned that the truth is not always apparent at first glance. If I only keep my gaze to surface level and base my assumptions on what is immediately before me, I will never be able to achieve the change in the world that I seek. Injustice is often hidden and obscured within the systems the modern world depends upon. I have been surprised and dismayed on learning about the multiple injustices imbedded within our food system. As a dietitian, I looked at a container of blueberries on a grocery store shelf, and the only thing I saw beyond its bright color was its nutritional content. Now, I see the faces and hear the stories of the Triqui workers that Dr. Seth Holmes spent many months with over the course of a picking season on a berry farm in Washington. Though consumers only see the final product of their labors neatly packaged in

plastic clamshells, the Triqui picked these berries through much physical pain, inequality, and psychological stress (Holmes 85). The structure of the Western way of life shields us from these realities; I have learned through much shock and dismay that I cannot remain in ignorance if I truly seek justice in the world.

Social Justice

This idea of justice remains central in the work of community development practitioners. Though commonly understood to mean "equality and fairness," the biblical notion of social justice finds its expression as "the practical outworking of loving God and others" (Clawson 20-21). Just behavior comes about by reflecting the character of God back to a fellow image bearer in showing love and mercy (20). The theological roots of the definition of justice come from the Hebrew words *zedaqah* and *mispat*, which respectively emphasize right relationships among God and His people and the importance of upholding basic human rights. Both terms together show that a just society is one where each person flourishes individually and as a member of the community (Moe-Lobeda 181). The Bible overflows with examples and instructions from God on seeking justice in our world.

Thinking about my field of field of food and nutrition, I realized that I needed a more holistic understanding of what a just food system would look like. Like the Triqui workers already mentioned, the food system touches many more people than just the end consumer, which is typically who the conversation revolves around. It touches farmworkers who spray dangerous pesticides (Clawson 102), rural communities with contaminated groundwater (105), and smallholder farmers in Mexico whose livelihoods were taken by the influx of cheap North American corn after NAFTA (Young 202-203). The discussion around nutrition, food, and

health cannot end at what kind of diet creates risk factors for disease. Food must be seen in its larger context of how it is grown, processed, and distributed.

In a similar way, some terms that typically describe the causes of hunger do not fully convey the justice issues surrounding food. Learning more about the global food system helped me to understand that food insecurity should be seen as a symptom of broader forces at play that cause inequitable distributions of food, rather than the ultimate focus of nutrition programming. Food insecurity is a term that indicates a lack of access to "nutritious, safe, and acceptable foods" obtained in "a socially acceptable way" (Hayes and Carbone 2). With food insecurity as the only identified underlying cause of poor nutrition, the "societal structures responsible for those outcomes" (2) remain unaddressed. The problem lies not just in how much food is available for the population but in its distribution and the "politics, economics and ideology" that govern it (Young 21). I am learning to expand my understanding of undernutrition and food inequalities through the lens of food justice or food sovereignty that emphasize a community's ability to determine and control their own local food network.

I have also found that environmental justice cannot be excluded from any discussion on just food systems. The realities of industrial farming and climate change, in particular, often lead to communities that are "disproportionately exposed to environmental harms or lack of resources" (Hayes and Carbone 2). The principles of industrial farming cause much environmental harm, including the introduction of dangerous chemicals into the ecosystem, loss of biodiversity, and damaged soil health, among others. These effects result in disproportionate harm to vulnerable groups, like children. In addition to the risk of pesticide ingestion from residue left on food products, simply living near an agricultural area led to higher pesticide metabolite levels in children in California when compared to children in urban areas (Bradman et

al. 1092). Farms depending on chemicals to protect and enhance their yields pose an environmental threat to the surrounding community. Additionally, the effects of climate change ultimately lead to increased risk for people living in vulnerable areas of the global South. For those in rural areas whose livelihoods are dependent on their environment, shifts in climate patterns could lead to impacts on their traditional methods of earning an income or accessing food through trades like farming, fishing, or sale of forest products (Thomas et al. 6). Due to many social factors, they may have a diminished ability to adapt to these changes. The injustice becomes apparent when considering that these communities often contribute a much lower proportion of the greenhouse gases that lead to climate change. Creating a just food system must deal with these environmental factors shaping the current global food system.

Copowerment

A dangerous temptation for development practitioners, especially those who like me come from privilege in the global North, lies in how they view those in poverty and how they should relate to them. Due to the nature of the problems they aim to alleviate, common understandings of poverty tend to focus only on what is lacking in impoverished communities: "the absence of things, ideas, and access" (Myers 114). Poverty becomes a gaping hole that can be filled with programs and resources. This attitude inadvertently contributes an unhealthy dependency in the people served by development programming when they "are reduced to passive recipients, incomplete human beings whom we make whole through our largess" (114). Not only does this disempower the poor, but it also enlarges the privileged person's view of themselves, until they "become messianic" (115) in their own eyes. Myers provides a grave reminder that "[t]his attitude increases their poverty and tempts us to play god in the lives of the

poor" (114). This statement deeply affected me when I first read it, and I knew I had to find another way forward in my future vocational work.

The answer to this harmful attitude can be found in the concept of copowerment. Instead of empowerment, which denotes a one-way exchange of skills and resources, copowerment acknowledges that development practitioners have something to learn from those who they work for and alongside through projects and interventions. Rather than only seeing what they do not have, practitioners celebrate the God-given capacities, gifts, wisdom, and knowledge present among the community. Copowerment acknowledges the unique ways each person is made in the image of God, and, so, honors and lifts up those who often find themselves marginalized and cast aside by the rest of the world. In turn, those who traditionally hold the power in development projects learn humility and compassion for those they serve.

I have spent a lot of time over the past year thinking about the intersection of food and the environment. Agriculture, the place where this intersection occurs, underwent a dramatic shift towards ecological degradation with the advent of the Green Revolution in the global North. A movement back towards sustainable and regenerative practices is gaining traction here again, but the reality of agriculture in the rest of the world shows that traditional methods have continued to provide nutrition for vast numbers of smallholder farmers around the world (Singh and Singh 297). Many buzzwords in sustainable agriculture circles today have actually been practiced for thousands of years, including agroforestry, intercropping, cover cropping, composting, and holistic, "crop-animal integrated farming" (Singh and Singh 300-305). Though many agriculture programs exist among rural communities of the global South, the truth is that much wisdom and insight can be found among these farmers' time-tested methods of cultivation.

Approaching these situations with humility and aiming for copowerment will result in both practitioner and farmer coming away enriched with valuable knowledge and skills.

Despite the value of these traditional practices, the influence of modern agriculture has gradually caused the loss of biodiversity, cultural knowledge, and dignity in these rural, farming communities. These priceless depositories of traditional knowledge are being lost as people perceive their traditional methods as inferior to modern systems: "Once they perceive themselves as poor, people stop regarding their traditional knowledge as human capital (…cultural capital) with an intrinsic value; conversely, they overvalue the external education and training received through programmes and subsidies" (Parraguez-Vergara et al. 8). The lack of copowerment discourages and demoralizes the people that community development programs purportedly aim to help. Knowing the weight of a "marred identity" in the experience of living in poverty (Myers 127), the loss of native crops from undervaluing traditional agriculture finds an equal in significance with the loss of dignity. During my training in the sciences, I was taught to see myself as the "expert in nutrition" because of my superior knowledge and expertise. The temptation to hold evidence-based practices and the scientific method as the higher path to determining value and weight has been challenging to surrender. However, seeing the effects of this loss of respect and worth that can occur when copowerment is absent pushes me to seek the humility and open-mindedness needed to do this successfully.

Copowerment also fosters diversity in thought which can only serve to strengthen community development initiatives. Petra Kuenkel addresses the importance of diversity as part of the "collective intelligence" and "engagement" dimensions of her Collective Leadership Compass. In order to "co-create" solutions to challenging problems (5), first "trust and cohesion" must be cultivated by forming collaborative relationships with a variety of stakeholders through

engagement (62). Then with everyone present, the diversity of perspective and opinion present can lead to "a pathway to future possibilities" when "genuine listening" is exercised (68). The key to making this an approach of copowerment lies in truly engaging with all key stakeholders – not just experts and government officials but the people who will be impacted by the program being planned. Including their diversity of life experience and knowledge can only strengthen the impact that everyone hopes to see from the project and allows the community to participate as architects of their future.

Philosophy of Service

While I have gained many skills and insights during this program, I have also come to see that of equal importance is who I have become. Palmer reminds his readers that in this life "[w]e are not here only to transform but to be transformed" (97). Practicing skills like copowerment or seeking justice must have the foundation of a character that values each person's life, one of humility, peace, and compassion. No matter the technical proficiency of its design, an effective, holistic program "is much more in the heart and mind of the practitioner than it is in the program" (Myers 224). Through much self-reflection over the course of the last several months, I believe that I have identified many places in my heart that do not tend toward this type of holism and sought to transform them more into the image of Christ. My studies may be drawing to an end, but this process of learning to love and serve with more authenticity and conviction will continue on long after graduation.

Conclusion

As the world comes more into focus for me, the need for more just social systems and the value of copowerment compel me to listen more intentionally and to approach every situation with humility. God's gift of diversity to humanity means that I have something to learn from

each and every person that I encounter, no matter their position in society. Becoming a

community development practitioner does not mean that I will be able to "save" the world with

my superior expertise; instead, it entails a journey walked alongside others as we learn together

to co-create a future marked by justice, equity, and human flourishing.

Works Cited

Bradman, Asa, et al. "Effect of organic diet intervention on pesticide exposures in young

children living in low-income urban and agricultural communities." *Environmental

Health Perspectives*, vol. 123, no. 10, 2015, DOI: 10.1289/ehp.1408660.

*Clawson, Julie. *Everyday Justice: The Global Impact of our Daily Choices.* Intervarsity, 2009.

Hayes, Cassidy, and Elena Carbone. "Food justice: What is it? Where has it been? Where is it

going?." *Journal of Nutritional Disorders and Therapy*, vol. 5, no. 4, DOI:

10.4172/2161-0509.1000179.

*Holmes, Seth. *Fresh Fruit, Broken Bodies: Migrant Farmworkers in the United States.* U of

California Press, 2013.

*Kuenkel, Petra. *The Art of Leading Collectively: Co-Creating a Sustainable, Socially Just

Future.* Chelsea Green Publishing, 2016.

*Moe-Lobeda, Cynthia. *Resisting Structural Evil: Love as an Ecological-Economic Vocation.*

Minneapolis, Fortress Press, 2013.

*Myers, Bryant. *Walking with the Poor: Principles and Practices of Transformational

Development.* Orbis, 2011.

*Palmer, Parker. *Let Your Life Speak: Listening for the Voice of Vocation*. San Francisco,

Jossey-Bass, 2000.

Parraguez-Vergara, Elvis, et al. "Does indigenous and campesino traditional agriculture have

anything to contribute to food sovereignty in Latin America? Evidence from Chile, Peru,

Ecuador, Colombia, Guatemala and Mexico." *International Journal of Agricultural

Sustainability*, vol. 16, no. 4-5, 2018. DOI: 10.1080/14735903.2018.1489361.

Singh, Rinku, and G. S. Singh. "Traditional agriculture: a climate-smart approach for sustainable

      food production." *Energy, Ecology and Environment*, vol. 2, no. 5, 2017, DOI:

      10.1007/s40974-017-0074-7.

The Bible. New King James Version*,* Thomas Nelson, 1982.

Thomas, Kimberly, et al. "Explaining differential vulnerability to climate change: A social

      science review." *WIREs Climate Change*, vol. 10, no. 2, 2019, DOI: 10.1002/wcc.565.

Young, E.M. *Food and Development*. Abingdon, Routledge, 2012.

* ICD resources from Thesis I & II, Community Development, Research for Social Change, and
Social and Environmental Justice courses

Appendix: Project Proposal

Introduction

Modern humanity has forged a tenuous and destructive relationship with the natural

world over the last several generations. Instead of recognizing our interdependence with the

environment in which we live and work, we have attempted "to live in it on [our] own terms"

(Berry 222), even pretending to have a completely separate existence from it. This drive to

control our environment with chemicals and machines has led to extensive environmental

degradations, including pollution, climate change, deforestation, and species extinction.

Additionally, an increasing number of natural disasters can be connected back to the effects of

climate change, which impacted the lives of 68.5 million people in 2018 (Fawzy et al. 2070). We

must make a dramatic, global shift in our attitude toward our planet and its natural resources if

we are to mend this broken relationship.

For the decades that the seeds of Circlewood have been growing on Camano Island, the

community that formed there aimed to provide "a different experience in a world that's more

utilitarian" (Sine and Sine), united in their love for nature and for God. Circlewood carries this

vision forward today, helping to redefine a harmful understanding of the environment that

dominates our culture today. One way to achieve this is through the creation of a vocational

training program. Training and equipping an ecologically-minded workforce will further the

mission "to accelerate the greening of humanity" ("Who We Are"). This type of program will

provide the necessary hard skills of creation care while also raising up leaders to forge new paths

to sustainability.

In order to fulfill Circlewood's vision for a transformed, ecological community, a

vocational training program should embody the values of sustainable and regenerative

engagement with the natural world. This proposal will outline several options to translate these ideals into practical curriculum guiding participants to become leaders in sustainability, either in a new career or to transform their approach to their current career. After discussing the contribution of qualitative fieldwork to this project, the first component of this proposal will be to outline skill sets to be included in any training program chosen. Next, a conceptual framework for a certificate in sustainable leadership, applicable to any field of work, will be explored. Then, using insights collected from experts across the realm of environmental work, specific vocational options will be discussed, including arboriculture, sustainable agriculture, and green architecture. The proposal will conclude with other considerations for training programs of shorter durations.

Qualitative Fieldwork

Although the nature of this project proposal required thorough literature review, the basic groundwork for assessing the employment opportunities for environmental work occurred through qualitative research with experts across a variety of fields. Speaking with these environmental professionals allowed insight into the current situation of their respective fields' job market as well as future opportunities and trends. I was able to access expertise in fields as diverse as fisheries, forestry, consulting, and sustainable agriculture in a short amount of time by taking advantage of the years of experience and knowledge represented in these interviewees' careers. The information gleaned from these interviews then gave me credible leads with which to follow up with literature review and additional research to support my recommendations.

General Training Content

A necessary component of this type of program would be training on the basics of environmental science and sustainability, particularly climate literacy. Additionally, through the course of fieldwork interviews and literature review, a number of other themes emerged that

would be useful content regardless of the option chosen. In each potential training curriculum, the goal extends beyond simply transferring usable skills to participants; instead, the hope is for participants to emerge with a new outlook on their work and the natural world, as leaders in their respective fields. The following sections address these more general topics.

Narrative, metaphor, and worldview

A person who desires to work in sustainability must be able to critically assess their underlying assumptions about how humanity should relate to the environment. These assumptions and attitudes result from "metaphoric and narrative language structures" (Sanford 284). In simpler terms, the stories told and metaphors used in thinking about the environment matter because they ultimately lead to practices and actions taken in both professional and personal contexts (286). An example can be found in industrial agriculture where images of conquest or the manipulation of machine parts may be invoked to describe farming practices (289). A key goal of the training program should be to help participants bring any unexamined assumptions about their relationship to the environment to the forefront and critically examine them. Fortunately, challenging worldviews and offering alternative viewpoints is a strength that Circlewood already possesses, so incorporating this element into curriculum should flow naturally from the work already being done.

Leadership

The complexity and urgency of the global environmental crisis require effective leadership. However, many people resist the idea of leadership out of self-doubt, fear, cynicism, and many other reasons (Palmer 74, 86-90). Petra Kuenkel argues that to achieve the sustainable future our planet needs, leaders must be developed with skills of collaboration who honor collective wisdom (5). However, "[c]ollaborative co-creation of a sustainable future is no easy

task" (19). Becoming the type of leader who can draw together diverse stakeholders and viewpoints and achieve results will take training and support, which a training program like this one could provide.

Business skills

Another common theme to come out of fieldwork interviews specifically was business skills. Whether leading a nonprofit, working for a government agency, or becoming an environmental consultant, "you need hard skills: knowledge integral to building organizations - like finance, distribution, or marketing" (Bornstein and Davis 125-126). A unique application of these skills will be discussed in the sustainable agriculture option, due to the demands of things like seedling inventory (Damiani) and crop planning (Kenney).

Option 1: Certificate in Sustainable Leadership

General description and job outlook

This option describes an academic certificate, issued by a higher education institution in partnership with Circlewood, that could provide participants general sustainability skills for any field of work. The advantage of this option lies in its lack of specificity; it could attract a wide variety of people from varied walks of life. Additionally, "[t]here is no set career path for jobs in sustainability" (Hamilton), so many people are likely seeking a formal education opportunity to access training that may be difficult to find otherwise. As implied in its name, curriculum for this option would focus heavily on leadership.

The outlook for "green" jobs is optimistic due to a number of factors. The increasing price of energy motivates many companies to reduce their energy use, "finding new ways to do more with less" or utilizing alternative energy (Hamilton). A customer base increasingly concerned about environmental concerns represents another reason businesses may try to

increase their sustainability efforts. As the urgency of climate change and environmental degradation continues to rise in importance to the public, many organizations see that they can "improve corporate reputations" (Hamilton) by becoming more green, but they need the staff and expertise to make this happen.

Academic framework: FEW Nexus

This certificate would likely be based out of a partnership with a university or seminary, so certain academic elements will be necessary to include. Environmental work ultimately ties back to the environmental sciences and what is known about the natural world from empirical evidence. The complexity of this body of knowledge can be overwhelming, unless looking at it through an organized framework. One such framework arising from academic literature is the food-energy-water (FEW) nexus. This conceptual understanding of environmental issues "refers to the intrinsic interconnectedness of food, energy, and water systems" (Dreyer et al. 137). Adding in a fourth system, humans, provides the full effect of humans interacting with their environments as part of the proposed "FEWxH" nexus (142). Participants could learn to analyze their organizational decisions in terms of their interrelated consequences on the nexus. The FEW nexus represents one possible framework among many, but its description here gives an idea of how similar frameworks could be used in designing this certificate curriculum.

Design Thinking

In addition to the practical skills of understanding environmental science, another tool that could be incorporated into this curriculum is design thinking. Contrary to common beliefs about creativity and innovation, Tom and David Kelley believe that creativity can be learned and practiced. For program participants looking to transform the way they approach their careers, these types of skills will be vital to seeing their job differently and innovating effective ways to

reduce their environmental impact. The design thinking model comprises four major stages: generating ideas, synthesizing them into a solution, prototyping, and implementing the final result (Kelley and Kelley 22-24). Learning this process will aid participants in "[r]ediscovering the familiar" (78) to see "friction points" (77) where more sustainable processes could be achieved. A workshop created by Geissdoerfer et al. showed that these principles combined with value mapping can successfully aid participants in creating sustainable business models (21). As design thinking is inherently practical, in-class exercises or other experiential learning opportunities should be incorporated.

Option 2: Arborist Certification

General description and job outlook

This option would provide training in the field of arboriculture, ultimately with the goal of participants obtaining an arborist certification. Arborists, sometimes known as tree surgeons or tree doctors ("What does an arborist do?"), are specially trained and certified in the care of trees. Like medical practitioners for humans, arborists can assess trees and provide the proper treatment for any identified issues as well as preventive services ("What does an arborist do?"). In the industries they work in, arborists' expertise makes them valuable assets for projects they are consulted on (Despot and Gerhold 270-272). As trees make up a vital component of a healthy ecosystem and planet, having specialists trained to maintain them (particularly in urban areas that lack forest cover) represents an important career field within environmentalism.

The International Society of Arboriculture (ISA) certifies arborists through an examination process. The ISA does not require higher education to sit for the exam; a person can be qualified by three years of work experience in the field, including volunteer work or supervised training programs. A combination of a university degree related to arboriculture and

one year of experience can also qualify for the exam (*ISA Certified Arborist* 3). The ISA reports

that the last ten years has seen a significant increase in demand for arborists' services ("The

Power of ISA Credentials"), with this credential opening the door to a variety of jobs. For

example, a study conducted on urban forestry jobs showed a high concentration of opportunities

on the West Coast where the ISA certification was the most commonly needed credential

(O'Herrin). After obtaining this certification, program participants could seek employment at

government offices, power companies, arboretums, or private tree care companies.

Certification exam content

Curriculum for this program option would be based around the content of the certification

exam to prepare students to become certified. The ISA states that the exam contains information

in ten major topics, concentrating on soil management, safe work practices, pruning, diagnosis

and treatment, and tree risk management (*ISA Certified Arborist* 3). While many of these topics

are knowledge based, many require hands-on training like tree climbing, equipment use, limb

and root pruning, and wound dressing. Curriculum could also extend beyond these guidelines to

include more regenerative topics. The roles of trees in regenerating soil nutrients (Rhodes 102;

Pardon, et al. 409) could be one such topic. For a global perspective, participants could learn

about the role of planting trees for carbon sequestration, as well as learning from mistakes made

in mass plantings of non-native trees and excluding local leadership (Backstrand and Lovbrand

65). Framing their skills in the larger context of sustainable development will help them to

consider "the importance of cultural and social contexts" (Willis 189) in addition to localized

ecosystems, preparing them for careers outside arborists' traditional spheres.

Challenges to Implementation

One of the challenges to conducting this training on-site at Camano Island results from

the slow growing nature of trees. The surrounding forest would be an excellent site for studying various species of trees and perhaps learning to identify diseases. Tree climbing could also be practiced in abundance. However, unlike crops that grow and are harvested in a relatively short time, any intervention like limb pruning on a tree will last for many years over the lifespan of the tree. It also may be undesirable under the forest management plan in place for arborist interns to make alterations to the trees. Additionally, learning about urban arboriculture could not take place on Circlewood's land. For these reasons, some training may have to take place off site from Camano, partnering with arborists who work in other areas.

Option 3: Sustainable Agriculture

General description and job outlook

This training program would capitalize on a resource available on Camano Island already, its permaculture and agroforestry systems, to train participants on sustainable agriculture techniques. Evidence of the detrimental environmental consequences of industrial agriculture continues to build; new food systems are needed to restore the biodiversity, soil health, and clean water supply that modern farming techniques have damaged. This restoration can be achieved through regenerative systems like permaculture and agroforestry.

Sustainable and regenerative models have grown in popularity and demand in recent years, leading to a variety of job opportunities for graduates once they complete the program. Permaculture, in particular, was recognized and commented on as a growing trend by many of the environmental experts that I spoke to during my research (Kurtz; Seawell; Kenney). The permaculture consultants who provided expertise for Circlewood's own system evidence the potential to turn these skills into gainful self-employment (Inslee). Apart from starting a sustainable farm for oneself, community gardens and environmental education are becoming

more common avenues of employment as well. For example, Valley Verde in San Jose, California, is a nonprofit providing culturally appropriate gardening training who has multiple staff dedicated to teaching participants how to grow food. Opportunities like this will continue to grow in the coming years.

The permaculture model

Though typically known as a set of agriculture practices, the permaculture movement encompasses its own worldview and set of values. Permaculture was created in 1978 as an agricultural design system that sought to integrate human and agricultural settings into a blended productive landscape (Ferguson and Lovell 253). The practice and metaphor of permaculture, as I spoke about with James Amadon, embodies the idea that humanity can exist in ways that enhance and regenerate Earth's ecosystems while meeting our own needs (266). This emphasis on the social aspects of permaculture has permeated the books and literature written about it through the years. A quantitative analysis of terms that appear in this body of literature shows that "the centrality of community is nearly equal to design" (265). This ethos corresponds well to the community building goals of Circlewood. Charles Vogl shows that shared values form the foundation of strong communities (10). The inherent values present in the permaculture model will only serve to enhance the community being built through Circlewood's other activities.

Despite these advantages, permaculture does face some criticism in its agricultural practices. Permaculture, from its beginnings, has existed and evolved outside the bounds of traditional scientific and empirically tested knowledge. For this reason, many of its claims rely on personal anecdotes as evidence and have been described as "overreaching and oversimplifying" (Ferguson and Lovell 267). Despite these critiques, its design principles do generally coincide with tenets of agroecology, a discipline that arose out of traditional scientific

methods (Krebs and Bach 15). If permaculture is used as the basis of this program, it would be prudent to integrate agroecological principles and acknowledge some of the limitations of the permaculture literature.

Agroforestry

Agroforestry represents another sustainable agriculture method gaining momentum in agroecology that will also be present on Camano Island. The benefits of agroforestry abound: improved water use and storage, protection from wind, creation of microclimates and shade, and reduced erosion (Lasco et al. 84). Additionally, trees enrich the soil with minerals and organic carbon (Pardon et al. 102). Trees can contribute a key adaptation tool to climate change for smallholder farms as weather patterns continue to change, especially when these methods feature contextualization in terms of cultural farming practices and the local environment (Lasco et al. 84). Teaching these skills as part of this training program will be a valuable addition to their repertoire of regenerative agriculture techniques.

Special application of business skills

Both general and specialized business skills will be an important component of this type of program. These insights came out of two interviews I conducted with people working in this field. When I spoke with Claudia Damiani, an employee of Valley Verde, she shared that a challenge of her job resulted from not having an inventory system for the seedlings she grew each season. Learning how to apply basic business skills like inventory to agricultural settings would be a helpful addition to the curriculum. Another example came from a conversation with Laura Kenney who was an intern on an organic farm in Georgia. A key component of her studies there consisted of learning how to plan and operate a community supported agriculture model. These skills would teach participants how to project crop needs based on the number of

subscribers to then be able to design plantings to have sufficient supply for their customers. This increasingly popular business model for farmers would be a way to help participants make their skills marketable and profitable.

Option 4: LEED Certification Exam Preparation

General description and job outlook

This potential training program would focus on green architecture by preparing students to take the Leadership in Energy and Environmental Design (LEED) certification exam, a globally recognized system for the construction of sustainable buildings. The construction and operation of buildings in modern societies use large quantities of resources and energy, up to 42% of the energy used in the US yearly (Amiri et al. 1). Viewed broadly, during the last two decades "the building of shelter (in all its forms) consumed more than half of the world's resources" (Wines). This reality represents a key point of intervention in the effort to counter climate change. The green architecture being constructed on Camano Island and the knowledgeable architect in Circlewood's community who designed it are important resources that would be beneficial for this program.

The LEED certification model contains two components: the certification of building projects and the certification of building professionals. This program focuses on the latter which is accomplished through passing the certification exam. The LEED exam has no education or licensure prerequisites; any person involved in building, including architects, planners, and construction professionals, could benefit from seeking this certification. This program would benefit most from offering training for the entry-level certification, called the LEED Green Associate. The format would likely take a weekend retreat or weekly seminar style since most participants would probably be working during the week.

Certification exam content

The exam centers mostly on the LEED building certification process but also emphasizes knowledge about energy efficiency and the context of LEED projects in the community. Certifying a building as LEED compliant involves a process of analysis and documentation of credits based on the type of building being constructed ("LEED certification for new buildings"). Passing the exam requires a working knowledge of these processes. Additionally, the principles of sustainable construction constitute another major area of the exam, including water efficiency, energy efficiency, and building materials ("Prepare for your LEED Green Associate Exam"). Curriculum for this training option should focus on these themes.

Training beyond LEED

Although the topics for the LEED exam provide a solid foundation, a training program seeking to develop leaders in sustainable architecture could extend beyond these parameters to include regenerative systems and utilization of traditional knowledge. The LEED certification for buildings may be one of the most well-known systems, but research has shown that its principles are not uniformly able to improve energy efficiency. In fact, Amiri et al. point to evidence that up to one third of LEED certified buildings used more site energy than conventional buildings, particularly the lower levels called "Certified" and "Silver" (5-8). Program participants should learn to think critically beyond what LEED teaches to ensure environmental benefits and perhaps to achieve regenerative building goals that minimize and repurpose waste (Rhodes 405-406). Another possibility could be to include the importance of contextualization and the use of traditional building knowledge that developed in response to local understanding of the climate and successful adaptation strategies (Thomas et al. 12). This generational knowledge can be extremely valuable, "providing we have the humility" to consider it seriously (Myers 213).

Ragheb et al. describe an Egyptian green home that utilizes a traditional courtyard and stone wall design that both promotes cooling with less energy input and honors Egyptian heritage and culture (783). This training program could produce global leaders, as well as technical experts.

Miscellaneous Recommendations for Consideration

The previous options aimed to provide comprehensive training for participants to prepare them for a new or transformed career. The following options consist of short-term opportunities to provide participants with perhaps one or two new skills to add to their expertise. In learning the history of the land on Camano Island that now houses Circlewood, I felt compelled to honor the tradition of the yearly retreats that provided those who came with a greater connection with nature and its Creator (Sine and Sine). These trainings of shorter duration, along with the LEED exam prep course above, align more closely with this precedence. Additionally, any of the above options could be reduced to shorter trainings, like a one-day tree planting course or periodic organic gardening seminars for the public.

Dietetic Internship rotation

Although education for dietitians covers vast areas of knowledge, many programs miss the opportunity to train future experts in nutrition on food systems. The majority of dietetics educators see the value of incorporating sustainability into their curriculum but lack the time or expertise to effectively teach it (Wegener 395). The structure of a dietitian's final phase of education, the dietetic internship, provides an opportunity to gain the "'authoritative' knowledge" and "experiential knowledge" (394) that they need to become competent in food systems expertise. Dietetic internships provide interns with supervised practice in three main areas: clinical nutrition, food service management, and community nutrition. Circlewood could partner with a local dietetic internship (there are at least seven programs in Washington state) to

host a rotation for interns to help them learn about sustainable agriculture and sustainable food systems. In just the one or two weeks that interns would rotate with Circlewood, they would gain invaluable knowledge that many nutrition students routinely miss out on.

Native plants and foraging tours

A revival of the "Wild Camano Botanical Tour" conducted in previous years on Camano Island could be another short-term opportunity to raise awareness of environmental concerns in the community. The use of native plants is gaining in popularity for their environmental benefits. A native plants tour could be catered to professionals in the landscaping or plant nursery industries to promote their use for commercial purposes. Another concept connected to alternative food movements and sustainability proponents is foraging. Researchers on foraging practices describe a bike tour they took to learn about wild foods that could be found along a trail in Pennsylvania, an activity growing in popularity (McLain et al. 220-221). This type of tour on Camano Island could be targeted to curious laypersons or, as the authors argue, could be advertised as a skill building exercise for urban planners (237). As efforts in sustainability continue to spread to municipal and regional systems, perhaps urban foraging could become more accepted and promoted as a part of daily life.

Conclusion

The recommendations outlined above resulted from interviews with environmental experts as well as a review of the literature to determine opportunities in environmental careers and what skills they require. As Circlewood seeks to promote a holistic worldview that features regenerative and sustainable systems, a vocational program that provides technical vocational skills should also build up innovative, critical thinkers to lead the way to a future where humanity exists harmoniously with the natural world. Whatever the green skills taught, we honor

the Creator as we learn to care for His creation.

Works Cited

Amadon, James. Personal interview. 24 July 2020.

Amiri, Ali, et al. "Are LEED-certified buildings energy-efficient in practice?." *Sustainability*,

vol. 11, no. 6, 2019, DOI: 10.3390/su11061672.

Backstrand, Karin, and Eva Lovbrand. "Planting trees to mitigate climate change: contested

discourses of ecological modernization, green governmentality and civic

environmentalism." *Global Environmental Politics*, vol. 6, no. 1, 2006, DOI:

10.1162/152638006775991911.

*Berry, Wendell. "Two Economies." The Art of the Commonplace, ed. Norman Wirzba,

Counterpoint, 2002, pp 219-235.

*Bornstein, David, and Susan Davis. *Social Entrepreneurship: What Everyone Needs to Know*.

Oxford, Oxford UP, 2010.

Damiani, Claudia. Personal interview. 22 June 2020.

Despot, David, and Henry Gerhold. "Preserving trees in construction projects: Identifying

incentives and barriers." *Journal of Arboriculture*, vol. 29, no. 5, 2003, retrieved from

https://pdfs.semanticscholar.org/3635/0c4839935511e3ea42241bee590aacc80245.pdf.

Dryer, Stacia J., et al. "Towards a psychology of the food-energy-water nexus: costs and

opportunities." *Journal of Social Issues*, vol. 76, no. 1, 2020, DOI: 10.1111/josi.12361.

Fawzy, Samer, et al. "Strategies for mitigation of climate change: a review." *Environmental

Chemistry Letters*, 2020, DOI: 10.1007/s10311-020-01059-w.

Ferguson, Rafter Sass, and Sarah Taylor Lovell. "Permaculture for agroecology: design,

movement, practice, and worldview. A review." *Agronomy for Sustainable Development*,

vol. 34, 2014, DOI: 10.1007/s13593-013-0181-6.

Geissdoerfer, Martin, et al. "Design thinking to enhance the sustainable business modelling

      process - a workshop based on a value mapping process." *Journal of Cleaner Production*,

      vol. 135, 2016, DOI: 10.1016/j.jclepro.2016.07.020.

Hamilton, James. "Is a sustainability career on your green horizon?." *U.S. Bureau of Labor*

      Statistics, 31 August 2012, https://www.bls.gov/green/sustainability/sustainability.htm.

Inslee, Forrest. Personal interview. 22 September 2020.

ISA Certified Arborist Application Guide. International Society of Arboriculture, online PDF,

      2020, https://www.isa-arbor.com/Portals/0/Assets/PDF/Certification-Applications/cert-

      Application-Certified-Arborist.pdf.

*Kelley, Tom, and David Kelley. *Creative Confidence: Unleashing the Creative Potential*

      Within Us All. William Collins, 2013.

Kenney, Laura. Personal interview. 12 July 2020.

Krebs, Julius, and Sonja Bach. "Permaculture—Scientific evidence of principles for the

      agroecological design of farming systems." *Sustainability*, vol. 10, no. 9, 2018, DOI:

      10.3390/su10093218.

*Kuenkel, Petra. *The Art of Leading Collectively: Co-Creating a Sustainable, Socially Just*

      Future. Chelsea Green Publishing, 2016.

Kurtz, Sandra. Personal interview. 19 July 2020.

Lasco, Rodel, et al. "Climate risk adaptation by smallholder farmers: the roles of trees and

      agroforestry." *ScienceDirect*, vol. 6, 2014, DOI: 10.1016/j.cosust.2013.11.013.

"LEED certification for new buildings." *U.S. Green Building Council*,

      https://www.usgbc.org/leed/rating-systems/new-buildings. Accessed 10 December 2020.

McLain, Rebecca, et al. "Gathering "wild" food in the city: rethinking the role of foraging in urban ecosystem planning and management." *Local Environment*, vol. 19, no. 2, 2014, DOI: 10.1080/13549839.2013.841659.

*Myers, Bryant. *Walking with the Poor: Principles and Practices of Transformational Development.* Maryknoll, Orbis, 2011.

*Palmer, Parker. *Let Your Life Speak: Listening for the Voice of Vocation*. San Francisco, Jossey-Bass, 2000.

Pardon, Paul, et al. "Trees increase soil organic carbon and nutrient availability in temperate agroforestry systems." *Agriculture, Ecosystems and Environment*, vol. 247, 2017, DOI: 10.1016/j.agee.2017.06.018.

"Prepare for your LEED Green Associate Exam." *U.S. Green Building Council*, 1 November 2014, https://www.usgbc.org/articles/prepare-your-leed-green-associate-exam.

Ragheb, Amany, et al. "Green architecture: a concept of sustainability." *Procedia - Social and Behavioral Sciences*, vol. 216, 2016. DOI: 10.1016/j.sbspro.2015.12.075.

Rhodes, Christopher. "Permaculture: regenerative - not merely sustainable." *Science Progress*, vol. 98, no. 4, 2015, DOI: 10.3184/003685015X14467291596242.

Sanford, A. Whitney. "Ethics, narrative, and agriculture: transforming agricultural practice through ecological imagination." *Journal of Agricultural and Environmental Ethics*, vol. 24, 2011, DOI: 10.1007/s10806-010-9246-6.

Seawell, Ruth. Personal interview. 4 August 2020.

Sine, Tom, and Christine Sine. Personal interview. 11 August 2020.

"The Power of ISA Credentials." *International Society of Arborists*, https://www.isa-arbor.com/Credentials/The-Power-of-Credentials. Accessed 9 December 2020.

*Vogl, Charles. *The Art of Community: Seven Principles for Belonging*. Berrett-Koehler

    Publishers, 2016.

Wegener, Jessica. "Equipping future generations of registered dietitian nutritionists and public

    health nutritionists: A commentary on education and training needs to promote

    sustainable food systems and practices in the 21st century." *Journal of the Academy of*

    Nutrition and Dietetics, vol. 118, no. 3, 2018, DOI: 10.1016/j.jand.2017.10.024.

"What does an arborist do?." *American Arborists*, 31 March 2017,

    https://www.americanarborists.net/tree-tips/2017/march/what-is-an-arborist-anyway-/.

"Who We Are." *Circlewood*, https://www.circlewood.online/about. Accessed 9 December 2020.

*Willis, Katie. *Theories and Practices of Development*. New York City, Routledge, 2011.

Wines, James. "Green architecture." *Encyclopaedia Britannica*, 25 September 2019,

    https://www.britannica.com/art/green-architecture/Principles-of-building-green.

*ICD resources from Community Development, Culture, and Social Entrepreneurship courses

Complete Works Cited

Amadon, James. Personal interview. 24 July 2020.

Amiri, Ali, et al. "Are LEED-certified buildings energy-efficient in practice?." *Sustainability*,

vol. 11, no. 6, 2019, DOI: 10.3390/su11061672.

Backstrand, Karin, and Eva Lovbrand. "Planting trees to mitigate climate change: contested

discourses of ecological modernization, green governmentality and civic

environmentalism." *Global Environmental Politics*, vol. 6, no. 1, 2006, DOI:

10.1162/152638006775991911.

*Bamberger, Michael, and Jim Rugh. "Quantitative Evaluation Methods." *Real World

Evaluation: Working under Budget, Time, Data and Political Constraints*, Sage, 2011.

*Berry, Wendell. "Social and Environmental Impacts of Everyday Food Choices." *Simpler

Living, Compassionate Life*, ed. Michael Schut. Morehouse Education Resources, 1999,

pp. 104–110.

*Berry, Wendell. "Two Economies." The Art of the Commonplace, ed. Norman Wirzba,

Counterpoint, 2002, pp 219-235.

*Bornstein, David, and Susan Davis. *Social Entrepreneurship: What Everyone Needs to Know.*

Oxford, Oxford UP, 2010.

Bradman, Asa, et al. "Effect of organic diet intervention on pesticide exposures in young

children living in low-income urban and agricultural communities." *Environmental

Health Perspectives*, vol. 123, no. 10, 2015, DOI: 10.1289/ehp.1408660.

*Brown, Brene. "The Power of Vulnerability." *TED,* TEDxHouston, June 2010,

www.ted.com/talks/brene_brown_on_vulnerability?language=en.

*Clawson, Julie. *Everyday Justice: The Global Impact of our Daily Choices.* Intervarsity, 2009.

*Conquergood, Dwight. "Health theatre in a hmong refugee camp: performance, communication, and culture." *The Drama Review*, vol. 32, no. 3, 1988, pp. 174-208.

*Culligan, Mike, and Leslie Sherriff. "A Guide to the MEAL DPro." Catholic Relief Services, Humentum and the Humanitarian Leadership Academy, 2019, mealdpro.org/wp-content/uploads/2019/03/MEAL-DPro-03_29_2019.pdf.

Damiani, Claudia. Personal interview. 22 June 2020.

Despot, David, and Henry Gerhold. "Preserving trees in construction projects: Identifying incentives and barriers." *Journal of Arboriculture*, vol. 29, no. 5, 2003, retrieved from https://pdfs.semanticscholar.org/3635/0c4839935511e3ea42241bee590aacc80245.pdf.

Dryer, Stacia J., et al. "Towards a psychology of the food-energy-water nexus: costs and opportunities." *Journal of Social Issues*, vol. 76, no. 1, 2020, DOI: 10.1111/josi.12361.

*Fadiman, Anne. *The Spirit Catches You and You Fall Down.* Farrar, Straus and Giroux, 1997.

Fawzy, Samer, et al. "Strategies for mitigation of climate change: a review." *Environmental Chemistry Letters*, 2020, DOI: 10.1007/s10311-020-01059-w.

Ferguson, Rafter Sass, and Sarah Taylor Lovell. "Permaculture for agroecology: design, movement, practice, and worldview. A review." *Agronomy for Sustainable Development*, vol. 34, 2014, DOI: 10.1007/s13593-013-0181-6.

Figueroa, Robert Melchior. "Indigenous peoples and cultural losses." *Oxford Handbook of Climate Change and Society*, edited by John S. Dryzek, Richard B. Norgaard, and David Schlosberg, Oxford University Press, 2011, pp. 232-247.

Fogarty, Jarrod. Personal interview. 14 July 2020.

Geissdoerfer, Martin, et al. "Design thinking to enhance the sustainable business modelling

    process - a workshop based on a value mapping process." *Journal of Cleaner Production*,

    vol. 135, 2016, DOI: 10.1016/j.jclepro.2016.07.020.

Gosnell, Hannah, et al. "Transformational adaptation on the farm: Processes of change and

    persistence in transitions to 'climate-smart' regenerative agriculture." *Global*

    Environmental Change, vol. 59, 2019, doi: 10.1016/j.gloenvcha.2019.101965.

Hamilton, James. "Is a sustainability career on your green horizon?." *U.S. Bureau of Labor*

    Statistics, 31 August 2012, https://www.bls.gov/green/sustainability/sustainability.htm.

Hayes, Cassidy, and Elena Carbone. "Food justice: What is it? Where has it been? Where is it

    going?." *Journal of Nutritional Disorders and Therapy*, vol. 5, no. 4, DOI:

    10.4172/2161-0509.1000179.

Hinds, Joe, and Paul Sparks. "Engaging with the natural environment: The role of affective

    connection and identity." *Journal of Environmental Psychology*, vol. 28, 2008, DOI:

    10.1016/j.jenvp.2007.11.001.

*Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. *Cultures and Organizations:*

    Software of the Mind. 3rd ed. New York, McGraw Hill, 2010.

*Holmes, Seth. *Fresh Fruit, Broken Bodies: Migrant Farmworkers in the United States.* U of

    California Press, 2013.

Inslee, Forrest. Personal interview. 22 September 2020.

Into the Okavango. Directed by Neil Gelinas, featuring Steve Boyes, National Geographic, 2018.

ISA Certified Arborist Application Guide. International Society of Arboriculture, online PDF,

    2020, https://www.isa-arbor.com/Portals/0/Assets/PDF/Certification-Applications/cert-

    Application-Certified-Arborist.pdf.

*Kelley, Tom, and David Kelley. *Creative Confidence: Unleashing the Creative Potential Within Us All.* William Collins, 2013.

Kenney, Laura. Personal interview. 12 July 2020.

Krebs, Julius, and Sonja Bach. "Permaculture—Scientific evidence of principles for the agroecological design of farming systems." *Sustainability*, vol. 10, no. 9, 2018, DOI: 10.3390/su10093218.

Krueger, Richard. "Using stories in evaluation." *Handbook of Practical Program Evaluation*, edited by Joseph S. Wholey, Harry P. Hatry, and Kathryn E. Newcomer, third edition, Jossey-Bass, 2010, pp. 404-423.

*Kuenkel, Petra. *The Art of Leading Collectively: Co-Creating a Sustainable, Socially Just Future.* Chelsea Green Publishing, 2016.

Kurtz, Sandra. Personal interview. 19 July 2020.

Lasco, Rodel, et al. "Climate risk adaptation by smallholder farmers: the roles of trees and agroforestry." *ScienceDirect*, vol. 6, 2014, DOI: 10.1016/j.cosust.2013.11.013.

"LEED certification for new buildings." *U.S. Green Building Council*, https://www.usgbc.org/leed/rating-systems/new-buildings. Accessed 10 December 2020.

Matsumoto, David. "Culture, context, and behavior." *Journal of Personality*, vol. 75, no. 6, 2007, pp. 1285-1318, DOI: 10.111/j.1467-6494.2007.00476.x.

McLain, Rebecca, et al. "Gathering "wild" food in the city: rethinking the role of foraging in urban ecosystem planning and management." *Local Environment*, vol. 19, no. 2, 2014, DOI: 10.1080/13549839.2013.841659.

*Merriam, Sharan B., and Elizabeth J. Tisdell. *Qualitative Research: A Guide to Design and Implementation.* 4th ed., Jossey-Bass, 2016.

*Moe-Lobeda, Cynthia. *Resisting Structural Evil: Love as an Ecological-Economic Vocation.*
Minneapolis, Fortress Press, 2013.

*Myers, Bryant. *Walking with the Poor: Principles and Practices of Transformational Development.* Orbis, 2011.

*"National Culture." *Hofstede Insights*, www.hofstede-insights.com/models/national-culture/.
Accessed 13 January 2021.

*Palmer, Parker. *Let Your Life Speak: Listening for the Voice of Vocation*. San Francisco,
Jossey-Bass, 2000.

Pardon, Paul, et al. "Trees increase soil organic carbon and nutrient availability in temperate agroforestry systems." *Agriculture, Ecosystems and Environment*, vol. 247, 2017, DOI:
10.1016/j.agee.2017.06.018.

Parraguez-Vergara, Elvis, et al. "Does indigenous and campesino traditional agriculture have anything to contribute to food sovereignty in Latin America? Evidence from Chile, Peru, Ecuador, Colombia, Guatemala and Mexico." *International Journal of Agricultural Sustainability*, vol. 16, no. 4-5, 2018. DOI: 10.1080/14735903.2018.1489361.

"Prepare for your LEED Green Associate Exam." *U.S. Green Building Council*, 1 November 2014, https://www.usgbc.org/articles/prepare-your-leed-green-associate-exam.

Ragheb, Amany, et al. "Green architecture: a concept of sustainability." *Procedia - Social and Behavioral Sciences*, vol. 216, 2016. DOI: 10.1016/j.sbspro.2015.12.075.

Rasolofoson, Ranaivo, et al. "Forest conservation: a potential nutrition-sensitive intervention in low- and middle-income countries." *Frontiers in Sustainable Food Systems*, vol. 4, no. 20, 2020, DOI: 10.3389/fsufs.2020.00020.

Rhodes, Christopher. "Permaculture: regenerative - not merely sustainable." *Science Progress*,

      vol. 98, no. 4, 2015, DOI: 10.3184/003685015X14467291596242.

Sanford, A. Whitney. "Ethics, narrative, and agriculture: transforming agricultural practice

      through ecological imagination." *Journal of Agricultural and Environmental Ethics*, vol.

      24, 2011, DOI: 10.1007/s10806-010-9246-6.

Schultz, Wesley. "Environmental attitudes and behaviors across cultures." *Online Readings in*

      Psychology and Culture, vol. 8, no. 1, 2002, DOI: 10.9707/2307-0919.1070.

Seawell, Ruth. Personal interview. 4 August 2020.

Sine, Tom, and Christine Sine. Personal interview. 11 August 2020.

Singh, Rinku, and G. S. Singh. "Traditional agriculture: a climate-smart approach for sustainable

      food production." *Energy, Ecology and Environment*, vol. 2, no. 5, 2017, DOI:

      10.1007/s40974-017-0074-7.

Stokes, Gretchen. Personal interview. 11 July 2020.

*Sunstein, Bonnie Stone, and Elizabeth Chiseri-Strater. *Fieldworking: Reading and Writing*

      Research, 4th edition. Bedford/St. Martin's, 2011.

The Bible. New King James Version*, Thomas Nelson, 1982.

"The Power of ISA Credentials." *International Society of Arborists*, https://www.isa-

      arbor.com/Credentials/The-Power-of-Credentials. Accessed 9 December 2020.

Thomas, Kimberly, et al. "Explaining differential vulnerability to climate change: A social

      science review." *WIREs Climate Change*, vol. 10, no. 2, 2019, DOI: 10.1002/wcc.565.

*Vogl, Charles. *The Art of Community: Seven Principles for Belonging*. Berrett-Koehler

      Publishers, 2016.

Wegener, Jessica. "Equipping future generations of registered dietitian nutritionists and public

   health nutritionists: A commentary on education and training needs to promote

   sustainable food systems and practices in the 21st century." *Journal of the Academy of*

   Nutrition and Dietetics, vol. 118, no. 3, 2018, DOI: 10.1016/j.jand.2017.10.024.

"What does an arborist do?." *American Arborists*, 31 March 2017,

   https://www.americanarborists.net/tree-tips/2017/march/what-is-an-arborist-anyway-/.

"Who We Are." *Circlewood*, https://www.circlewood.online/about. Accessed 9 December 2020.

*Willis, Katie. *Theories and Practices of Development*. New York City, Routledge, 2011.

Wines, James. "Green architecture." *Encyclopaedia Britannica*, 25 September 2019,

   https://www.britannica.com/art/green-architecture/Principles-of-building-green.

Young, E.M. *Food and Development*. Abingdon, Routledge, 2012.