DISSERTATION

EQUITABLE ACCESS TO COOPERATIVE EXTENSION SERVICES FOR INDIGENOUS COMMUNITIES

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ABSTRACT

EQUITABLE ACCESS TO COOPERATIVE EXTENSION SERVICES FOR INDIGENOUS COMMUNITIES

Cooperative Extension, the United States Department of Agriculture's educational outreach program, is found in nearly 100% of US counties, but can only be found in a tiny percentage, less than 10%, of Indigenous communities (Brewer, Hiller, Burke, & Teegerstrom, 2016; NCAI, 2010). Control over agricultural systems and alienation from traditional foodways was used during colonization to overpower and disenfranchise Indigenous communities (Dunbar-Ortiz, 2015; Harris, 2004; Knobloch, 1996) and the reverberations of this history are still present in Indigenous communities today. Given the mission of equity and access that Land Grant Institutions (LGIs) ascribe to (Sorber & Geiger, 2014) and the history of Indigenous land dispossession that created LGIs (Stein, 2017), Cooperative Extension has a responsibility to Indigenous communities to provide equitable access to the benefits of this system. Traditional Extension programs at 1862 LGIs can collaborate with the Indigenous communities in their state in order to equitably provide educational resources and agricultural support.

Through a Critical Race Theory and decolonizing lens, I investigated to what extent Extension educators at 1862 LGIs in the Western Region of Extension are collaborating with Indigenous communities, what makes Extension educators that do form these collaborations successful, the common barriers to successful collaborations, and what systemic supports are missing for successful collaborations to exist. In order to do this, I used a transformative convergent mixed methods approach that included a survey to gain a quantitative overview of the

collaborations in the region and qualitative interviews to more deeply understand specific examples of collaborations through educators' lived experiences. During the research process, I included participant voices and feedback during all stages.

The major findings from this work are grouped into four sections. First, I provided an overview of the kinds of programs that Extension educators are facilitating in the region, including many programs that address traditional Extension topics as well as programs that lie further outside of Extension's traditional reach. Next, I explored the characteristics of successful education programs and successful educators. Successful programs centered the goals of the communities in their planning and implementation, they enjoyed collaborative support from an Insider to the community, and were culturally relevant. The participants also identified characteristics that make educators successful, including making a long-term commitment and getting involved with the community, building trusting relationships, developing an academic understanding of the historical, cultural, and educational context, being willing to learn, and developing allyship. The last section of the Findings explored the barriers that educators identified to successful collaborations, including a lack of funding, the logistics of doing research, issues associated with rural communities, their time being spread too thin, community distrust of the government and universities, and the racism that they and their communities face.

From the findings of this study, my participants and I co-created implications and recommendations to more equitably serve Indigenous communities. These included how Extension could better support people, education, and culture within the organization. Lastly, the participants and I suggested next steps for Extension, educators, and future research.

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CHAPTER 1

INTRODUCTION

Beginning in 1862, the federal government gave land to each state to open a public institution of higher education and they called these Land Grant Institutions (LGIs). The mission of these institutions was to "teach agriculture, military tactics, and the mechanic arts as well as classical studies so members of the working classes could obtain a liberal, practical education" (APLU, 2018). In association with each LGI, Cooperative Extension Services, overseen by the United States Department of Agriculture (USDA), provided agriculture-related services that brought the research generated at the LGI to the community through educational outreach and assistance with farming practices (Brewer et al., 2016).

LGIs and Extension were founded to bring access, education, and agricultural support to the citizens of the states they serve and both benefit from a public perception of perpetuating democracy and inclusion. This combination is powerful, both in the political power they represent and the funds they have access to. Historically, Extension educators mostly worked in rural counties, establishing personal relationships within the community in order to deliver educational programs. This was important work for rural America and continues to be today, with an Extension office in or near all of the 3,000 counties in the US (Hiller, 2005). However, LGIs and Extension have a complicated history associated with the colonization of the country and still do not serve all communities equitably.

The Morrill Act of 1862 gave land to LGIs, but that land was the product of colonization and Indigenous land dispossession (Stein, 2017). In order to overpower and disenfranchise

Indigenous communities, colonists used, in part, assimilation through agriculture and alienation from traditional foodways (Dunbar-Ortiz, 2015; Harris, 2004; Knobloch, 1996). When viewed through Critical Race Theory (CRT) and decolonizing lenses, the inequitable access to agricultural support services, including the education services of Extension, continues the violence of land dispossession and makes LGIs complicit in the continuation of this colonial ideology (Brayboy, 2005; Stein, 2017).

In recognition of these issues, the Equity in Educational Land Grant Status Act was signed in 1994, granting 29 Tribal Colleges land grant status and resources to support research, education, and extension programs (NIFA, 2018). This Act also gave funds from the USDA to existing Tribal Colleges in 12 states for Extension programs (Hiller, 2005). Currently, there are 35 designated 1994 Land Grant Tribal Colleges in 14 states (Brewer et al., 2016). Despite these efforts, Extension offices can only be found in a tiny percentage, less than 10%, of Indigenous communities, compared to the nearly 100% coverage of US counties (Brewer et al., 2016; NCAI, 2010). Further, the Federally Recognized Tribal Extension Program (FRTEP), housed at 1862 LGIs, places Extension personnel in Indigenous communities, and most 1994 LGIs have Extension personnel on their campuses as well, but both programs have been and continue to be unable to provide equitable support.

In this study, I sought to understand the ways in which Extension is collaborating with Indigenous communities, what makes Extension educators that do collaborate with Indigenous communities successful, the common barriers to successful collaborations, and what systemic supports are missing for successful collaborations to exist. To position this work in its sociohistorical context, I aligned the history of Federal Acts and Treaties with Indigenous peoples and

how land dispossession was systematized for wealth accumulation in the Land Grant System. Furthering this perspective, I examined the ways in which Extension can have a part in resolving these inequities, often in conjunction with the concept of food sovereignty, traditional foodways, and their associated culture. Minimal research has been conducted with Indigenous communities by Extension, and a revitalization of these efforts for and by Extension is needed. Currently, there is not a systemic support structure in place to facilitate collaborations, provide resources, or connect with personnel doing the work.

Because of the academy's role in perpetuating colonizing epistemologies, I made theoretical and methodological commitments in this work. First, the recognition that all inquiry is both political and moral, whose outcomes should benefit and promote the voices and self-determination of research participants. The critical methodology and research in this study strived to be decolonizing and participatory, committed to Indigenous community interests. The results should be assessed in terms of the benefits created for Indigenous peoples and whether it aligns with their goals, and not in terms of colonial paradigms (Denzin et al., 2008). I explicitly addressed issues of power in terms of interrogating both the research methods themselves and the outcomes of the research (Mertens, 2010) through a decolonizing lens with an emphasis on the counternarratives and co-construction of knowledge with participants through their lived experiences (Fierros & Delgado Bernal, 2016).

Using these perspectives, I asked the following research questions: (1) What affordances and constraints exist in established and emerging collaborations between Cooperative Extension and Indigenous communities?; (2) In what ways could new collaborations between Cooperative Extension and Indigenous communities be created and supported?; and (3) In what ways do

sociocultural histories and hegemonic structures influence change agency among Extension personnel and communities?

In order to answer these questions, I investigated the Western Region of Extension through a transformative convergent mixed methods study. The Western Region of Extension is large, encompassing 13 states, American Samoa, Guam, Micronesia, and the Northern Mariana Islands. Because of the large area and associated complexity, I used a survey to gain an overview of the existing collaborations and future needs in the region. In order to more deeply understand specific examples, I interviewed professionals from 1862 LGIs in the region that collaborate with Indigenous communities to better understand their lived experiences. During the research process, I included participant voices and feedback during all stages.

The interviews and survey responses revealed the types of programs that educators are facilitating in Indigenous communities, characteristics that make educators and educational programs successful, and significant barriers to this work. Participants identified centering the community's goals, building and working with trusting relationships, and learning about the culture and context in order to deliver effective programs as characteristics that are essential for educator and program success. Additionally, participants highlighted barriers to successful collaborations including constraints imposed by the LGI including funding, time, and the importance of doing research, as well as the larger societal, systemic, and historical issues of racism and distrust of government and universities.

The Findings are divided into four sections. First, I provided an overview of the kinds of programs that Extension educators are facilitating in the region. These include many programs that address traditional topics that are often included in Extension programming, such as 4H and Master Gardener programs. Further, many participants described programs that lie further

outside of Extension's traditional reach including programs about public and community health, food sovereignty, and others that are determined to be important by the communities themselves. The descriptions of these programs were important because they spoke to the needs in Indigenous communities and how Extension educators are often in the best positions to meet those needs, regardless of Extension's traditional educational role.

In the next two sections, I presented the characteristics of successful education programs and successful educators. Participants described successful programs that were centered on the goals of the communities they served, had collaborative support from an Insider to the community, and were culturally relevant in both their programs and pedagogy. The participants also described characteristics of successful educators, including the need to make a long-term commitment and get involved with the communities, building trusting and long-term relationships, developing an academic understanding of the historical, cultural, and educational context, being willing to learn, and developing allyship.

The last section of the Findings explored the barriers that educators identified to successful collaborations. These included a lack of funding, research logistics, issues with communities being remote and rural, their time being spread too thin, community distrust of government and universities, and racism that both they and members of their communities face. Further, respondents to the survey that have never collaborated with Indigenous communities discussed the barriers that they found to be ultimately prohibitive to their forming or maintaining collaborations with Indigenous communities. Many of these prohibitive barriers confirmed the importance of the characteristics of successful programs and educators, as these barriers were often overcome in successful collaborations.

From the findings of this study, my participants and I co-constructed recommendations and implications. Suggestions for what Extension could be doing to better serve Indigenous communities emerged including how they might support people, education, and culture within their organization. These included encouraging engagement and collaboration, creating culturally relevant programs, allowing Extension educators freedoms in their work, giving value to this work in employee evaluations, and providing support, education, and mentoring to Extension educators. Lastly, I discuss next steps for Extension administration, educators, and future research including how they can create systemic change through supporting collaborations with Indigenous communities and the work that still needs to be done.

CHAPTER 2

DEFINITIONS, THEORETICAL PERSPECTIVES, AND REVIEW OF LITERATURE

In order to situate this work in its academic and theoretical contexts, I provide a list of terms and definitions of important concepts and distinctions. Next, I describe the theoretical perspectives important to this work, including Critical Race Theory, and how they informed the design, data collection, and data analysis of this study. I also explore the literature pertaining to the United States history and policy of the United States government's relations with Indigenous peoples, the Land Grant System and its use of Indigenous land dispossession for wealth accumulation. To illustrate some of the main points in these two areas, I investigate two terms, "Indian Country" and "Agent," as they have been used throughout history. Also, I explore Extension's research regarding Indigenous communities, the concept of food sovereignty and how it applies to Indigenous communities, as well as various pedagogies that emerged as being important to this work.

Definitions and Terms

Indigenous, Native, and Tribe

The terms "Native" and "Indigenous" are often used interchangeably in the literature, but I choose to use the term "Indigenous." This is a more precise term with a connotation of "the First Peoples of a place" as opposed to anyone that was born in a place (i.e., Native). Indigenous peoples' preferences for terms vary based on culture, place, language spoken, history, and region; for example: "Plains Indians," "LDN peoples," or "Algonquian-speaking peoples."

Although this work is centered in the United States, other countries and their Indigenous peoples have preferences for terms as well. Canada often uses the term "First Peoples" and Australia often uses the term "Aboriginals." While I choose to use the term "Indigenous" for the US-centric context of this work, I do so with the knowledge that it is dangerous in other parts of the world. Smith (2012) writes:

There are many countries where indigenous is not a term that can be used safely by communities who might wish to call themselves indigenous. They may be defined by their own state (China, say) as ethnic groups, or as 'tribals' in India, as peasants in Latin America, or as mountain people in South Asia... Identifying as 'indigenous' can be dangerous in some parts of the world; it can be associated with dirtiness, savagery, and rebellion... But the world does change, and some countries have embraced the aspirations of indigenous sovereignty.... (p. xii)

Also, it is generally true that citizens of a Nation prefer to be referred to by their Nation and in their own language, so I have done so when I was able. Unless I am quoting from other sources or participants, I do not use the term "Indian," although this term is not universally considered derogatory by Indigenous peoples (Dunbar-Ortiz, 2015). The term "tribe" is a legal term having to do with federal or state recognition. This term is often used here when referring to a specific group of Indigenous peoples, often located on a federally-recognized reservation, because of the sovereign status of that group. I do not use the term "tribe" unless the legal definition is necessary or I am quoting from literature or participants. Instead, I use terms such as "community," "people," or "group" interchangeably.

Race vs. Nation

This work racializes indigeneity. I have given a lot of thought to this categorization, particularly given my positionality, with the understanding that race is a settler colonial tool imposed on a group for the purposes of oppression and marginalization (Omi & Winant, 2015). A decolonizing conception and one truer to how Indigenous peoples view their own identity

(Dunbar-Ortiz, 2015) would be to view indigeneity as a Nation status or a Peoplehood rather than a race.

Using the settler colonizer's view of indigeneity as a race serves three purposes. First, I must adopt the ideology and language from the history of legal Acts, Treaties, and Laws written and imposed by colonizers in order to argue for the responsibility that the Federal government has to Indigenous communities. The legal history of relations with Indigenous communities presupposed indigeneity as a race and uses that categorization as a form of oppression. Race also played a significant role in the legal and ideological formation of the Land Grant System, for whom it was built, and who could be educated by it. Only from within this system of power set up by White colonizers can the argument be made to them of their legal responsibilities.

Second, race was a tool used to dispossess Indigenous peoples of their land and is a hallmark of settler colonialism around the world (Barker, 2012). It was the "othering" power of racialization (Omi & Winant, 2015) and the divergent worldviews of the White colonizers and Indigenous peoples that allowed for the genocide, removal, and forced servitude used during colonization. Racialization was used to legitimize these actions and to assimilate Indigenous peoples to a White, Euro-centric way of life, particularly in agriculture. The violence of land dispossession, made possible by the racialization of Indigenous peoples, continues today through the inequitable access to resources, education, and systemic oppression.

Third, the theoretical framework that I have chosen, Critical Race Theory (CRT) and, by extension, Tribal Critical Race Theory (TribalCrit), recognize the implications that race and racialization have on power relations and systems of oppression. The history of CRT in Critical Legal Studies aligns with my arguments here and TribalCrit explicitly calls attention to the unique situation of Indigenous peoples in both race and legal status (Brayboy, 2005). The power

of this theoretical framework is important to understand how race was used in the ways explained above. Further, many participants in this work commented on the role that race plays in their collaborations with Indigenous communities, illustrating how race and indigeneity are still conflated and how this manifests itself in the real world.

Theoretical Perspectives

My work lives in the intersection between the legal, social, and cultural implications of race and colonialism, informal education for community transformation and development, and the importance of agriculture and food to identity and culture. To inform this work, I explore the frameworks of Critical Race Theory (CRT) and Tribal Critical Race Theory (TribalCrit), the history of their development, their understanding of power, and the influential scholars that have made theoretical contributions. I also include how these frameworks have informed educational praxis and pedagogies.

Positionality

White Woman as Privileged Position Colonial Monarch-of-all-I-survey In Deterritorialized Spaces Within/Against Colonizing Total Institutions What interruptions can I make? Perform my colonizer/colonized self Witness my Personal/Professional journey Light the fires and heat the water.

-Traveling Subjectivities by Lisa Cary (2004, p. 76)

As a White, middle class, educated, heterosexual, cis-gendered woman, I acknowledge the inherent tensions present with these theoretical perspectives informing this work. To do the issues here theoretical justice, I must recognize the racism and colonialism in their origins and in their continuation in order to dismantle them. Because of this, and with respect to the lived experiences of the scholars, both past and present, that contributed to the development of these

theoretical perspectives, I move forward in service to the self-determination and liberation of the communities involved and in the facilitation of their voices being lifted above the oppressive systems that this racism and colonialism created.

Critical Race Theory

CRT was born out of legal studies and is rooted in the social movements of the 1960s. From the beginning, CRT scholars have been concerned with both academic and social endeavors as they sought justice, liberation, and economic empowerment. Tate (1997) explained, "CRT is a product of and response to one of the most politically active and successful eras of social change in the United States and cannot be divorced from it without losing analytical insight" (p. 197). Engaging in the Civil Rights movement required scholars to develop new, broader theories of race and how they applied to the legal, political, and economic systems in order to address systemic and institutional inequality, disenfranchisement, and power in US society (Delgado & Stefancic, 2012; Omi & Winant, 2015; Thompson Dorsey & Venzant Chambers, 2014). While the civil rights movement favored step-by-step progress, scholars in CRT, "questioned the foundations of the liberal order, including equality theory, legal reasoning, Enlightenment rationalism, and neutral principles of constitutional law" (Delgado & Stefancic, 2012, p. 3). Scholars of CRT recognized the pervasiveness of race in US social and historical consciousness and how that shaped issues of law, politics, and privilege (Crenshaw, 1995). Issues such as interpretations of the law that claim to be colorblind or the idea of meritocracy in society can be revealed through a CRT lens to be creations of White hegemonic control of essential systems and structures in US society (Parker & Lynn, 2002).

People exist within asymmetric systems of power and privilege and scholars in CRT prioritize the goal of liberation and emancipation of oppressed populations. Scholars and

practitioners of critical pedagogy, keeping with this underlying commitment, seek to critically interrogate the pedagogical relationships between history, culture, economics, ideology, and power in order to promote transformation of existing inequalities in the education system (Darder, 2017). The power of critique in this framework is to reveal and analyze social inequalities and oppressive systems in order to transform them through action. A CRT perspective recognizes that the knowledge produced through education can change existing oppressive structures and remove oppression through the empowerment of oppressed people. Knowledge should be in the context of action and the search for freedom (Crotty, 1998).

While CRT is a distinct theoretical framework from Critical Legal Studies (CLS), some of the issues that are still important to scholars of CRT have their origins in law and politics. The idea of color-blindness- that it is undesirable to perceive race- has its underpinnings in legal language from the civil rights movement. From the idea that law shouldn't apply differently to different people to that of "separate but equal," the color-blind principle existed in civil rights discourse (Tate, 1997). Omi and Winant (2015) state that the issue of colorblindness is hegemonic. They contend that advocates of a colorblind ideology believe that the goals of the civil rights movement have been achieved, race is a thing of the past, and any amount of race consciousness must be tainted by racism. This view ignores the significant impacts that race has on health, politics, education, and criminal justice, just to name a few.

Because of this, critics of colorblind ideology advocate for race-conscious policies to address these issues and a rejection of the attempts of the neoliberal right to advance exclusionary politics. Omi and Winant (2015) stress that colorblindness and race-consciousness have a complicated relationship and that neither is appropriate at all times and in all situations. In the complicated political, economic, and social world that we find ourselves in today, they

advocate for *radical racial pragmatism*, "a new paradigm of race based both in difference and solidarity, both in particularity and equality" (p. 264), to take into account race's importance impacts on society, while keeping our "democratic ends" in mind.

Scholars developed CRT from CLS in order to move the conversation about race and racism and their social, cultural, and political implications forward in other disciplines and social justice movements. For example, many of the legal issues written about by scholars of CRT and CLS have important implications for education, including in higher education admissions, K-12 educational policies, school discipline, curriculum development, achievement tests, and school funding. The education system is a site where the structural, social, and cultural aspects of power and privilege can maintain and exacerbate racial inequities (Thompson Dorsey & Venzant Chambers, 2014). Tate (1997) points out that there have been legal measures taken through time to resolve inequitable treatment based on race such as, "The flawed legal concept of separate but equal resulted in the maintenance of African American subordination" (p. 204), through segregation, especially in schools.

Derrick Bell is one of the most influential CRT scholars and critics of language in the civil rights movement. Bell's scholarship sought to contribute to discussions concerning race in the US and to inspire political activism to bring about social change. Bell wrote about the legal and political history of the US and the racial power struggles within it, including "separate but equal," his idea of interest convergence and divergence, and his arguments that White people would not support policies that would threaten their powerful social standing. Interest convergence states that significant progress for African Americans is achieved only when the goals of Black people are consistent with the needs of White people. This, though, is temporary

and is followed by a period of divergence in which White people try to reclaim the power and privilege that they perceive to have lost during convergence (Bell, 2008).

Not only are Bell's arguments important in legal studies, they have powerful implications for issues in education (Tate, 1997). Indeed, we have seen a recent resurgence in issues surrounding affirmative action and using race in university admissions policies. Based on Bell's interest convergence and divergence idea, Thompson Dorsey and Venzant Chambers (2014) add another stage to the cycle they call imperialistic reclamation, a more aggressive period of divergence. They call this cycle C-D-R to represent the phases in it (convergence, divergence, reclamation).

An important component to their argument and another critical CRT issue is how Whiteness can be considered a property interest. The origins of property rights in the US are filled with racial oppression going back to slavery and the protection that White identity bestowed. In this way, Whiteness became valuable property as something that gave power and privileges associated with that identity. This allows White people to use the law to establish and protect property interests as seen in the dispossession of Indigenous lands, voting rights, and educational opportunities. Harris (1993), therefore proposed the *property functions of whiteness* to explain the power that law gives to White people, including the right to Indigenous land dispossession. Ladson-Billings and Tate (1995) used this conception of Whiteness as property to address inequalities in the educational system including access to institutions of higher education.

CRT scholars also call attention to voice and counternarratives within the framework (Parker & Lynn, 2002). Racialized people share a common lived experience, so voice and narrative become important sources of data. According to Delgado (1988), minoritized people

live in a world dominated by race, so the exchange of stories concerning ways of dealing with racism is common. These stories become important histories that assist people of color in "naming one's own reality." Solórzano & Yosso (2002) identify three types of counternarratives, including personal narratives, narratives of others, and composite narratives. All three can be used by researchers to include the realities of marginalized peoples. Delgado (1988) also emphasized how counterstories can serve a destructive function. He writes that stories are able to change mindsets because, "they can show that what we believe is ridiculous, self-serving, or cruel. They can show us the way out of the trap of unjustified exclusion. They can help us understand when it is time to reallocate power" (Delgado, 1989, p. 2415).

In addition to race, scholars of CRT describe the importance of intersectionality in oppression. Crenshaw (1993) called for an intersectional framework to address multiple systems of subordination. Crenshaw's primary analysis concerned race and gender, but she didn't discount the idea that these ideas should be expanded to include class and age. Her *structural intersectionality* idea is instrumental in understanding the overlapping structures of oppression that influence women of color as well as other variations of identity in society. Also important to my research is Crenshaw's idea of *political intersectionality*, which says that, when policies are written based on the mutually exclusive notions of race and gender, they fail to accurately represent oppressed people's experiences and realities in a contextualized way.

While the intersectionality of race, class, gender, and sexual orientation are important in the social and cultural construction of power, Omi and Winant (2015), along with Woodson (1933) and Du Bois (1903), claim that race is the central construct for understanding inequality. They call race "the master category" to describe how race has served as a template for other differences and resulting inequalities, such as gender and class.

According to Omi and Winant (2015, p. 245), race is "linked to the conquest of the Americas" in that, from the beginning, it was necessary for White colonists to distinguish Indigenous peoples, a process that they refer to as "othering." Race is evoked to justify structures of inequality, differential treatment, and subordinate status. These categories are subject to variation over historical time and space and are reflective of specific social structures, cultural meanings and practices, and of broader power relations. Omi and Winant's theory of *racial formation* is defined as "the sociohistorical process by which racial categories are created, inhabited, transformed and destroyed" (p. 109). Race is neither objective or illusory; neither rooted in biological difference, fixed and concrete, or a purely ideological construct. It is a social construct that "continues to constitute a fundamental aspect of human identity" (p. 246).

Intersectionality within the CRT framework is valuable to understanding inequalities in the school system. Schools are a site of social and cultural reproduction of values. Ladson-Billings and Tate (1995) build on the work of previous influential scholars on race and intersectionality to apply CRT to education. They explain that race must be included when describing differences in school experience and performance for students because descriptions based on class and gender alone aren't enough. They also emphasize the importance of voice in CRT when applied to education because, without the voices of people of color, a complete analysis of the school system is impossible. Delgado and Stefancic (1989) discuss their idea of structural determinism and how systems maintain power by reproducing existing ideas, arguments, and methods. Tate (1997) says that, "one implication of structural determinism is that it limits how individuals and society at large are able to analyze and critique oppression" (p. 223). While Delgado and Stefancic were specifically talking about the legal system, the school system is subject to structural determinism in the same ways that the legal system is. Using CRT

as a framework to critique the school system disrupts structural determinism and opens the possibility to examine oppression.

Power. Foucault thought extensively about power, knowledge, and how these function within a society. He used terms such as "regimes of power" and power/knowledge to understand how particular truths were generated and legitimated within societal power relations. For Foucault, power was not static; it was an active process that was at work on all parts of our relation to society, i.e., our bodies, relationships, sexuality, and the ways that we construct knowledge (Foucault, 1991).

Delgado (1990) wrote that, "knowledge is power, and power is something that people fight to obtain and struggle to avoid giving up" (p. 110). He referenced that, even in physical science, people dislike paradigm changes because, "it often portends changes in power and well-being for specific persons or groups" (p. 110). Because of this, people in power resist change in who has knowledge and of what kind. In this way, power is also important in acts of resistance, acts that are produced as people interact with the systems of power and domination. This more complex conception of power as it relates to individuals and society opens possibilities for discursive action within a knowledge-creating system (Darder, 2017).

Hegemony, the dominance of one group over another, affords the dominant group social control that is carried out through moral and intellectual control (Gramsci, 1971). The concept of hegemony serves to protect existing power relations and, as Foucault understood as well, is an ever-changing phenomenon as systems and groups challenge existing power dynamics.

Understanding how hegemony functions in society and in the education system enables educators to understand not only how power is produced, but also how power can be challenged through resistance, critique, and social action (Darder, 2017).

From a CRT perspective, it is important to consider how the construction of knowledge implies the construction of values. Learning and teaching have societal implications and the system of education is a part of the social production and reproduction process. The ways in which we teach and what we teach creates and perpetuates social knowledge and relations of power (Guba, 1990). Habermas defined "emancipatory knowledge" to better understand how social relationships are distorted by the tensions of power and privilege. This made it possible to attack sources of power and use education as a means of enlightenment and action to improve society (Terry, 1997).

The dialectical nature of CRT allows the educator and researcher to use the transformational and emancipatory power of that idea and not see the systems of power and oppression in society and the school system as fixed (Darder, 2017). In education, CRT can be used to interrogate the contradictions that exist between the system and the lived experiences of students, how knowledge is created within a historical context, and the goodness criteria of knowledge and associated epistemologies.

Tribal Critical Race Theory.

A great human sacrifice created the United States and all the Americas: the twin genocides of conquest and slavery. Although an immense effort has been made to repair the damage that sacrifice caused, the destruction can never really be undone.

-Omi and Winant (2015, p. 245)

Not all minoritized people interact with systems of power and oppression in the same ways, reflecting their different origins and struggles. Because of this, distinct theoretical frameworks have emerged, focusing on different historical perspectives, gendered, racialized, and colonized peoples, and issues of agency and voice to specifically address these histories and contexts. For example, Latino Critical Race Theory emerged to address issues affecting the Latinx community including immigration, language, identity, culture, and skin color. Asian

Critical Race Theory emerged to critique minority stereotypes, immigration and naturalization, language, and disenfranchisement as they relate to Asian people in the United States (Brayboy, 2005).

Battiste and Youngblood Henderson (in Dunbar, 2008) argue that knowledge creation is based on Eurocentrism, which lacks recognition of Indigenous knowledge systems, ways of knowing, and ways of doing. This establishes the dominant group's knowledge and culture as the norm, especially in institutions of higher education and research. Some Indigenous scholars argue that some versions of CRT are still rooted in the Western paradigm and epistemology and are, therefore, in tension with Indigenous knowledge and methodologies (Grande, 2008; Parker & Lynn, 2002). Ecological scholars have also expressed concerns stating that, "critical educators are accused of intensifying or reinscribing dominant values, particularly within contexts where non-Western traditions or indigenous knowledge challenges critical pedagogical definitions of the world" (Darder, 2017, p. 17). Because my research is interested in equity for Indigenous communities, specifically as they relate to power and oppression, the racialization of indigeneity as a tool for oppression, and the role that colonization played in the formation of these issues in the United States, I am going to be drawing upon Tribal Critical Race Theory (TribalCrit).

Indigenous scholars (Brayboy, 2005; Hermes, 1999; Williams, 1997) began utilizing tenets of CRT to examine the effects of not only race, but also colonization, on power and privilege in society. They embraced other foundational aspects of CRT including the importance of voice and narrative, recognizing hegemony in social and cultural institutions, and the use of knowledge to bring about social change. By colonization, they mean more than geographical or physical colonization and expand that idea to include colonizing thought, knowledge, and power structures dominate in society. TribalCrit prioritizes the historically and geographically varied

epistemologies and ontologies found in Indigenous communities, and some of the unique issues concerning Indigenous peoples including language loss, natural resources management, college access, and issues of power between federal, state, and tribal governments.

Brayboy (2005) outlined the TribalCrit theoretical framework as a distinct framework within CRT in order to:

Address the complicated relationship between American Indians and the United States federal government and begin to make sense of American Indians' liminality as both racial and legal/political groups and individuals. It is this liminal space that accounts for both the political/legal nature of our relationship with the U.S. government as American Indians and with our embodiment as racialized beings. I wish to emphasize the liminality of our position (legally/politically and socially); I do not offer one expression of it at the exclusion of another. (p. 427)

Here, the overlap between the racial, legal, and political as well as the experience of colonization contribute to the TribalCrit framework in a way that is unique to Indigenous people. Indeed, the first and second tenets of TribalCrit, "colonization is endemic to society" and "U.S. policies toward Indigenous peoples are rooted in imperialism, White supremacy, and a desire for material gain," frame the understanding of how the history and policies concerning inequitable access to educational resources demonstrates how the violence of colonization is being perpetuated by LGIs and impacts Indigenous communities today.

I use these frameworks to investigate the relationship between the US government and Indigenous peoples from a sociohistorical context and how Indigenous land disposition was used to create the Land Grant System. I also explore Extension's research with Indigenous communities and how food sovereignty has been applied in Indigenous communities. Last, culturally relevant, Indigenous, and decolonizing pedagogies offer epistemological and practical ideas for delivering successful educational programs in Indigenous communities.

History and Policy of The US Government's Relations with Indigenous Peoples

In order to understand the systemic oppression experienced by Indigenous communities in the Land Grant System and Cooperative Extension, I explore the history of Federal Acts, Laws, and Treaties pertaining to providing agricultural support to Indigenous communities, the history of the Land Grant system, how agriculture was used to control and assimilate Indigenous peoples, and the underlying causes to it all, Indigenous land dispossession and settler colonialism. Currently, Indigenous communities are not being served equitably by Extension, despite explicitly asking for the benefits of this system (NCAI, 2010; NCAI, 2015), and little research has been done by Extension on these topics. Agricultural practices and food systems are intrinsic to the political, economic, physical, social, and cultural health and longevity of a community (Kamal et al., 2015). Participants identified the importance of understanding the historical context within communities, and described how this helps to make them successful educators. For example, this academic understanding allows them to create programs that are culturally relevant, informs them about how they and their associated identities show up when working in Indigenous communities, and about the possible distrust that communities might have towards the government and universities.

United States Colonization: Settler Colonialism, Race, and Culture

Writing US history from an Indigenous peoples' perspective requires rethinking the consensual national narrative. That narrative is wrong or deficient, not in its facts, dates, or details but rather in its essence. Inherent in the myth we've been taught is an embrace of settler colonialism and genocide. The myth persists, not for an absence of free speech or poverty of information but rather for an absence of motivation to ask questions that challenge the core of the scripted narrative of the origin story.

-Dunbar-Ortiz (2015, p. 2)

Settler Colonialism is a distinct type of colonialism that seeks to remove and replace

Indigenous populations with the colonizer society in order to develop sovereignty in perpetuity.

Through social and material relations, colonizers claim ownership and political rights over

Indigenous peoples (Stein, 2017), eliminating the challenges posed to their sovereignty by Indigenous claims to land through genocide and forced removal. This domination of place and of people's bodies and minds is for the production of privilege and maintained by military, political, and economic power, as well as other systemic structures of cultural control, such as education (Greenwood, 2009).

From the moment that White colonists arrived on North American soil, they set about conquering the land, building settlements, and using natural resources. Inevitably, Indigenous peoples and colonists clashed over this; in order for colonists to carry out their goals, they needed to overpower the Indigenous peoples they encountered, acquiring land for political power and monetary gain (Stein, 2017). Dunbar-Ortiz (2015, p. 2) states that the history of the United States cannot be understood without this particular view of colonialism, "The history of the United States is a history of settler colonialism- the founding of a state based on the ideology of white supremacy, the widespread practice of African slavery, and a policy of genocide and land theft." Race is evoked to justify structures of inequality, differential treatment, and subordinate status. These categories are subject to variation over historical time and space and are reflective of specific social structures, cultural meanings and practices, and of broader power relations.

According to Omi and Winant (2015, p. 245), race is "linked to the conquest of the Americas" in that, from the beginning, it was necessary for White colonists to distinguish Indigenous peoples. Race was an important tool that the colonists used to establish the early power dynamics in North America and this importance has never gone away in our political culture. Indeed, the seizure of land and goods, the coerced labor of Indigenous peoples, and their outright extermination were surrounded by rhetoric about White colonist's supremacy, creating the ideology necessary for White colonists to conquer the land (Omi & Winant, 2015). Harris

(2004) calls these the "assumptions and representations inherent in colonial culture- in the binary of civilization/savagery, in the erasures of Aboriginal knowledge of time and space, in assumptions about race and gender, in the concept of the land as empty (*terra nullius*)" (p.165). Further, this mentality doesn't just hold during the colonization of a place, but continues to permeate the social, cultural, economic, and political relations between the colonizers and Indigenous peoples, since these power relations must be maintained in order to continue systems of oppression and the accumulation of privilege.

Federal Laws and Treaties for Land Dispossession and Assimilation Through Agriculture

In addition to land dispossession, colonists set out to assimilate Indigenous peoples into Western customs and culture in various ways, including through agricultural methods. Providing agricultural support to Indigenous populations through US policy served to assimilate by educating Indigenous people in the European style of agriculture. According to Harris (2004),

Hardly a white person questioned the distinction between civilization and savagery or the association of the former with Europeans and the latter with Indigenous people. Nor did they question the proposition that civilized people knew how to use land properly and that savages did not. (p. 170)

In Knobloch's book, *The Culture of Wilderness: Agriculture as Colonization in the American West* (1996), she describes how, as colonizers moved westward, they transformed wilderness through agricultural colonization, eliminating anything or anyone that stood in the way of this goal, including Indigenous peoples:

An agricultural society is founded not just on its difference from other societies, but on the exclusion and extirpation of other societies. As it pushes out over its territory with its projects of colonization, occupation, and the formation of the advanced state, whatever pushes back- plants, insects, Native Americans, unwanted immigrants- looks to the colonizers like themselves. (p. 143)

Agriculture as a discipline requires the domestication and colonization of both the land and the structures of power governing that land.

This is also seen in the way early colonists saw the extermination of the buffalo as both an end in itself and a way to control Indigenous peoples by creating economic dependency.

Under US policy that directed the army to kill buffalo, tens of millions were killed, almost to extinction, by the 1880s. While the narrative that is taught in schools isn't false, there were commercial interests in buffalo hide, most of the hunting was organized by the military. Old Lady Horse of the Kiowa Nation spoke of this slaughter, its connection to agricultural domination of the land, and the Kiowas' connection to the buffalo:

Everything the Kiowas had came from the buffalo... Most of all, the buffalo was part of the Kiowa religion. A white buffalo calf must be sacrificed in the Sun Dance. The priests used parts of the buffalo to make their prayers when they healed people or when they sang to the powers above.

So, when the white men wanted to build railroads, or when they wanted to farm or raise cattle, the buffalo still protected the Kiowas. They tore up the railroad tracks and the gardens. They chased the cattle off the ranges. The buffalo loved their people as much as the Kiowas loved them.

There was war between the buffalo and the white men. The white men built forts in the Kiowa country, and the wooly-headed buffalo soldiers shot buffalo as fast as they could, but the buffalo kept coming on, coming on, even into the post cemetery at Fort Sill. Soldiers were not enough to hold them back.

Then the white men hired hunters to do nothing but kill the buffalo. Up and down the plains those men ranged, shooting sometimes as many as a hundred buffalo a day. Behind them came the skinners with their wagons. They piled the hides and bones into the wagons until they were full, and then took their loads to the new railroad stations that were being built, to be shipped east to the market. Sometimes there would be a pile of bones as high as a man, stretching a mile along the railroad track.

The buffalo saw that their day was over. They could protect their people no longer. (Dunbar-Ortiz, 2015, p. 143)

By eliminating the buffalo, colonists demonstrated their military strength and removed something that was both spiritually and agriculturally important to the Indigenous peoples of the plains. Colonization of the peoples, land, and agricultural commodities went hand in hand.

In order to achieve this dominance over the land and Indigenous people, the US government began enacting laws, acts, and treaties that would set up systems of power through agriculture. In 1493, The Doctrine of Discovery announced that Christian nations discovering

new lands had title to them, as long as the inhabitants of those lands were non-Christian (Deloria & Lytle, 1984). In 1792, after the US successfully gained independence from England, U.S. Secretary of State, Thomas Jefferson, declared that the Doctrine of the Discovery would be adopted by the US as it applied to the purchase of Indigenous lands. Deloria and Lytle (1984) claim that this doctrine has shaped all of the federal laws pertaining to Indigenous peoples since, "Every legal doctrine that today separates and distinguishes American Indians from other Americans traces its conceptual roots back to the Doctrine of Discovery and the subsequent moral and legal rights and responsibilities of the US with respect to Indians" (p. 2).

Williams (1989) argues that these early US policies pertaining to Indigenous land and the legal concepts behind them were rooted in self-interest, allowing White colonists to rationalize their action to take Indigenous lands. Not only does this speak to the deep-seated racism that allowed this to happen, but also the ontological and epistemological difference in the way colonists and Indigenous peoples viewed their relationship with the land. In treaties and in concepts, this highlights the distinction between "habitation" and "ownership." Despite Indigenous habitation of the land, they were not treated as if they "owned" it, allowing for its dispossession and their alienation from their agricultural livelihoods, as well as the land's spiritual and cultural significance.

The Morrill Land-Grant College Act of 1862 (hereafter the Morrill Act) was not the only legislation to be signed that year impacting Indigenous populations. Also in that year, the Homestead Act and the Pacific Railroad Act, also signed by President Abraham Lincoln, further enabled and encouraged colonization and increased federal authority over acquired lands. Under the Pacific Railroad Act, private companies were provided with nearly 200 million acres of Indigenous land and, under the Homestead Act, 1.5 million homesteads on 300 million acres

were granted to settlers west of the Mississippi river. Most of the western territories were delayed in gaining statehood due to Indigenous Nations resisting the dispossession of their lands, including Colorado, North Dakota, South Dakota, Montana, Washington, Idaho, Wyoming, Utah, New Mexico, and Arizona (Dunbar-Ortiz, 2015). Both of these Acts broke multiple treaties with Indigenous nations, allowing colonizers to move west and to "spread wealth" across the continent (Stein, 2017).

In 1887, the General Allotment Act (also known as the Dawes Act) broke up land that was allocated for reservations into smaller sized plots to be handed out to individuals chosen to receive land if they had adopted White customs, clothes, and farming practices. Allotments were overseen by the Bureau of Indian Affairs, which limited the ability of families to make decisions about their own land. After each allotment had been assigned, any "excess" land was returned to the public domain and then made available for colonists to purchase, greatly reducing the holdings of most tribes, even within their reservations (Ruelle, 2017). Because of the Dawes Act, more than 90 million acres, representing nearly two-thirds of reservation land, were given to colonists while the tribes often went without compensation.

Under the guise of land rights protection in the time of land rushes, land was used to incentivize assimilation and coerce tribes into abolishing their tribal governments in favor of Federal law, while keeping Indigenous peoples subservient and in poverty. Often, the land given was unsuitable for farming, even if Indigenous people wanted to take up European agricultural practices. Many people could not afford livestock, tools, and other necessary supplies in order to make the land profitable (Dawes, 2019).

The implications of settler colonialism on cultural, social, political, and economic aspects of this country don't just hold during the colonization of a place, but continues to permeate the

relations between colonizers and Indigenous peoples, since these power relations must be maintained in order to continue systems of oppression and the accumulation of privilege. One of the ways we can observe this is through the use of language, both legal and colloquial, that persists. Language and culture are inextricably linked, as the need for a word or idea speaks to the needs of a culture. To this end, I examine the term, "Indian Country," its origins, and continued use today as they apply to agriculture and Extension.

"Indian Country" as it is Used to Racialize and Control

"Indian Country" is a legal term, whose history and continued use by federal programs including Extension, illustrates how indigeneity was racialized and used to control Indigenous peoples during and after colonization. It is a term used in Title 18 of the United States Code that identifies Indigenous jurisdiction under US colonial laws. It describes land within the boundaries of federally recognized reservations, "dependent Indian communities" (whether inside or outside of a reservation), lands acquired by tribes, and other lands holding a title (Hiller, 2005).

Reservations are land areas set aside by treaty, Acts of Congress, or Executive Orders. The term's use extends beyond geographical considerations, however, to represent all the overlaps that exist between the political relationship of Indigenous traditions and federal laws passed between the US and Indigenous populations (Deloria & Lytle, 2007). Because Extension is a federally-funded program, it is a term often used by Extension and other literature concerned with federal laws and programs.

Historically, "Indian Country" was considered the areas beyond the frontiers of US colonization that were inhabited primarily by Indigenous Nations. The Treaty of Lancaster in 1744 is one of the earliest examples of a treaty between the British and Indigenous Nations regarding governance and use of land, in this case between the US and the Iroquois Confederacy

(the Six Nations) regarding land that is now the state of West Virginia (Deloria & Lytle, 2007). The French defeat in the French and Indian War marked a significant change in relations between Indigenous peoples and colonizers because there was now only one European empire on the continent. Because of issues on the frontier between colonists and Indigenous peoples, England issued The Royal Proclamation of 1763 that forbade all settlement by British and French colonizers west of the crest of the Appalachian Mountains, leaving the rest to be inhabited and governed by Indigenous peoples.

In 1790, the Nonintercourse Act (actually a collection of six Acts from 1790-1834) set boundaries on reservations, regulated commerce between Indigenous Nations and the US, and outlined actions to be taken if colonists were found violating agreements on Indigenous land. Importantly, the Nonintercourse Act outlines both the inalienability of Indigenous titles to land by prohibiting non-Indigenous peoples from purchasing Indigenous lands without the approval of the federal government (Deloria & Lytle, 2007), and also defines the term "Indian Country." Although the term was used in earlier Nonintercourse Acts (1793, for example), in the 1834 Nonintercourse Act, the term is defined as:

The part of the United States west of the Mississippi and not within the states of Missouri and Louisiana, or the territory of Arkansas, and also that part of the United States east of the Mississippi river, and not within any state to which the Indian title has not been extinguished, for the purposes of this act, be taken and deemed to be Indian Country.

This became what was known in the early history of the US as Indian Territory, and represented a total shift in the use of the term to a technical and legal one, defined and ratified by Congress, representing unalienable Indigenous title to lands deemed to fall under the definition (Deloria & Lytle, 2007; Dunbar-Ortiz, 2015). These Acts marked two important shifts in the way the term was used: (1) they changed the use of the term from a pragmatic, colloquial one to a technically specific, legal one and (2) used the racialization of Indigenous peoples by the federal

government as a tool for categorization and control. The way in which the Acts applied to people- the rules, punishments associated with breaking those rules, and geographically where those rules applied- were decided based on race.

During the treaty-making era, beginning at independence and lasting until 1871, the idea of Indian Country served to reserve land for an Indigenous Nation in exchange for US government protection from settlement and the giving of social services. Federal law and the laws of individual states were unenforceable in Indian Country and Indigenous Nations had full sovereignty in those lands, granted to them through treaties. Before the Civil War, policy around Indian Country was concerned with forced removal, but then turned its attention to assimilation after the war. By the late nineteenth century, the rhetoric had changed such that the idea of a reservation was now seen as a "gift" of land being taken out of the public domain as a "benevolent gesture" for an Indigenous community (Dunbar-Ortiz, 2015).

As colonists expanded west, increasing their wealth through land holdings and the commodification of natural resources and agricultural land, the boundaries of Indian Country were pushed back and redefined via warfare, forced removal, and broken treaties. Indian Territory was dissolved in 1907 when the state of Oklahoma entered the Union and absorbed the remaining Indian Territory. The pragmatic conception of the term had fully transformed into the highly technical legal term that it is today; it exists to describe Indigenous lands and is used often in federal laws and programs concerning those areas.

In recent years, the term "Indian Country" has still been used by the US military as a synonymous term for "behind enemy lines," to designate enemy territory. On February 19th, 1991, in reference to military tactics being used in Operation Desert Storm in Saudi Arabia, Brigadier General Richard Neal stated that the US military wanted a quick victory after

committing ground forces to "Indian Country." This wasn't a one-time occurrence, however. "Indian Country," or as it is often shortened to "In Country," is a term that appears in military training manuals and in common military speech. The perpetuation of colonial terms in reference to Indigenous communities highlights the historical and social ideology still persistent in the US military and the US government, one of annihilation until unconditional surrender, harkening back to the settler colonial past (Dunbar-Ortiz, 2015; Silliman, 2008).

While the term has both protected and segregated Indigenous communities, it has always implied that there should be a place apart for Indigenous peoples. This has bestowed the power of sovereignty on Indigenous Nations and allowed colonists to impose colonial law and ideology on those Indigenous Nations through the "othering" power of racism (Omi & Winant, 2015). It is a tool of the settler colonist ideology of conquest that racialized Indigenous peoples in order to gain power and wealth. The changing definition of "Indian Country" over time reflects the changes in power between Indigenous and non-Indigenous peoples and how race, as a social construct, changes definition based on the needs of the group in power (Omi & Winant, 2015). This changing definition as it applies to a legal term, shows how law and the enforcement of law changes based on culture.

Extension, as a federal program, often uses the term "Indian Country" in its legal definition in reference to its work and programming in those areas. There is no other existing legal term that can be used in this context, so we are all bound by its definition and usage. The term Indian Country was born out of settler colonialism's ideology and the term's continued usage illustrates that this ideology is still alive in our culture, colloquial language, and our legal system. As a federal program, Extension needs to critically evaluate how its ideology, in its

programming, language, and priorities, perpetuates the violence of settler colonialism and the racism inherent in the ideology that developed the term Indian Country.

Land Grant Institutions and Cooperative Extension

According to the Association of Public and Land Grant Universities, a LGI has been designated as such by its state legislature to receive benefits of the Morrill Acts of 1862, 1890, and 1994. In the first of these Acts, signed by President Abraham Lincoln, the federal government gave land to each state so that it could be sold to generate profits in order to open a public institution of higher education. The mission of these institutions was to "teach agriculture, military tactics, and the mechanic arts as well as classical studies so members of the working classes could obtain a liberal, practical education" (APLU, 2018). From the outset, issues such as democratization, access to education, and the teaching of agriculture were presumably at the forefront of the Morrill Acts' mission.

To further this mission, two additional Acts gave assistance to agriculturalists. In 1887, the Hatch Act was passed to enable states to establish agricultural experiment stations and in 1914, the Smith-Lever Act created the Cooperative Extension Service to be associated with each LGI. This Act gave federal funds for agriculture-related services in order to bring the research generated at the LGI to the community through educational outreach and assistance with farming practices. County governments contribute some funds and LGIs contribute university faculty and staff with federal funds from the United States Department of Agriculture (Brewer et al., 2016). Historically, county Extension agents mostly worked in rural counties, establishing personal relationships within the community in order to deliver educational programs. Agents advocated for the communities that they represented on boards of county commissioners and special interest groups. This was important work for rural America and continues to be today, with an

Extension office in or near all of the 3,000 counties in the US (Hiller, 2005). LGIs and Cooperative Extension were conceived of in order to bring access, education, and agricultural support to the citizens of the states they serve.

In 1994, the Equity in Educational Land-Grant Status Act, also known as the third Morrill Act, was signed, granting 29 tribal colleges land grant status and, "resources to support innovative research, education, and extension programs that positively impact agriculture and food production" (NIFA, 2018). This Act also gave funds from the United States Department of Agriculture (USDA), which oversees Extension, to existing Tribal Colleges in 12 states for Extension programs (Hiller, 2005). Currently, there are 34 designated 1994 Land Grant Tribal Colleges in 14 states (Brewer et al., 2016).

There are currently 567 federally recognized Indigenous nations and over 314 reservations, but not all Indigenous peoples are federally-recognized; some might be state-recognized or not at all. Indigenous peoples of the United States are varied and include Native Americans, Native Hawaiians, Alaska Natives, and Pacific Islanders, all having a different legal relationship with the US government based on treaties and other laws and acts. Indigenous land, water, and resource rights extend beyond the limits of the federally-recognized reservations to include all of the Indigenous communities within the US. This includes nations that do not have land holdings (Dunbar-Ortiz, 2015). Wilkins (2002) argued that all Indigenous groups were Nations before colonization, so their status as Nations is not in question. Deloria and Lytle (1984) call this the "extraconstitutionality" of groups not recognized by the US government.

Indigenous Land Dispossession and the Land Grant System

In today's romantic idealizing of the Land Grant system, principles of democracy, equity, and inclusion are often included. Less talked about is the LGIs' origin in colonialism. Stein (2017), emphasizes that colonists came to settle indefinitely, creating systems to maintain power and control that can still be seen today. In best case scenarios, this was done through deception in the form of Treaties or Acts between the US government and Indigenous Nations, in worst case scenarios, it was done through genocide. This colonialism came in forms both internal (assimilation through western agricultural practices) and external (using Indigenous lands for wealth accumulation) (Tuck & Yang, 2012). Once those lands were obtained, their resources could be used to accumulate wealth for the colonizers and the Land Grant System is a perfect example of this. Land was being taken in this way and used for many purposes including the building of institutions of higher education long before the Morrill Acts, but their scope and legal status was unprecedented. They institutionalized land dispossession and the accumulation of wealth from that land on a large scale and with massive government backing.

According to Stein (2017), colonizers set up social-material relations so that they could assert ownership claims and political rights over Indigenous people. These relations are maintained to this day for continued capital accumulation. In this way, "US public goods like higher education have both *depended on* and been *vulnerable to* the demands of perpetual accumulation [of land and associated wealth]" (p. 2). LGIs are still linked to their colonial and capitalist past, require the continual accumulation of wealth, and are a key site in the reproduction of White citizenship and property rights. LGIs allowed the US to become a world leader due to the wealth accumulated from Indigenous lands and the ability to educate the general White population. It is this accumulation of wealth, knowledge, and the reproduction of

White citizenship at the institutes of higher education that continues to allow for the systematic oppression of Indigenous peoples (Stein, 2017).

"Agent" as it is Used in Federal Acts and Treaties for Agricultural Assimilation and the Creation of the Extension Model

In addition to the Acts outlined above, other Acts of Congress and Treaties between the US government and Indigenous peoples both set up the power dynamic between colonists and Indigenous peoples using agriculture as a method of assimilation and control and used the term "agent" in connection with these tactics from the beginnings of the country. In these Acts and Treaties, the term "agent" was used to describe a White representative of the US government tasked with overseeing activities on reservations, including agricultural activities, and would live among the Indigenous peoples they supervised. While the term "agent" wasn't only used to refer to US government representatives living on reservations in the early years of the county (it was used often in Acts of Congress to describe someone acting on behalf of the government for many reasons), through time, these "Indian Agents" evolved into what we call "Extension agents" today. A deeper understanding of the term, its origins, and current use provides a view into the development of the Extension model, specifically in Indigenous communities.

One of the first times this is observed is during the Second Congress of the United States.

The Second Nonintercourse Act of 1793 required the US to provide Indigenous peoples with agricultural implements, instruction, and agricultural "agents:"

SEC. 9. And be it further enacted, That in order to promote civilization among the friendly Indian tribes, and to secure the continuance of their friendship, it shall and may be lawful for the President of the United States, to cause them to be furnished with useful domestic animals, &c. animals, and implements of husbandry, and also to furnish them with goods or money, in such proportions, as he shall judge proper, and to appoint such persons, from time to time, as temporary agents, to reside among the Indians, as he shall think proper: Provided, That the whole amount of such presents, and allowance to such agents, shall not exceed twenty thousand dollars per annum.

President to furnish friendly Indian tribes, with domestic

to what amount in value.

Refore what

Figure 2.1

Second Congress. Sess. II. 1793. CHAP. XIX.- Act to regulate Trade and Intercourse with the Indian Tribes, Sec 9.

The text reads:

And be it further enacted, That in order to promote civilization among the friendly Indian tribes, and to secure the continuance of their friendship, it shall and may be lawful for the President of the United States, to cause them to be furnished with useful domestic animals, and implements of husbandry, and also to furnish them with goods or money, in such proportions, as he shall judge proper, and to appoint such persons, from time to time, as temporary agents, to reside among the Indians. (Nonintercourse Act, 1793. p. 331)

In addition to overseeing agricultural activities, these agents were also responsible for overseeing other activities between the colonists and Indigenous peoples, including the approval of trade and the buying of horses.

The use of the word "agent" also appears in Treaties between tribes and the US government in regard to agriculture, and here is where we see a further development of a model that resembles Extension today. The Treaty of Fort Laramie and the Navajo Treaty, both signed in 1868, are excellent examples. The Treaty of Fort Laramie, signed between the US government and the Sioux Nation to include the Black Hills of Dakota (now parts of South Dakota, Wyoming, Nebraska, and Montana) as part of the Great Sioux Reservation, includes the term "agent," to describe a federal employee with the Bureau of Indian Affairs, "then in charge," hired to assist the Indigenous population with maintaining "a tract of land." The agent was tasked with the supervision of the cultivation of crops through European agronomy models. Additionally, the government agreed to provide seeds, agricultural implements, and education for any person selected to maintain a tract of land in order to encourage farming and, therefore, assimilation into White agrarian models and culture (Oman, 2002; Treaty of Fort Laramie, 1868).

The Navajo Treaty repeats much of the same language, verbatim in places, including a provision to build a home for the "agent" within the reservation, "the assistance of the agent then in charge" with the farming of a "tract of land," and the giving of "seeds and agricultural implements" by the "agent" (Treaty With the Navajo, 1868, p. 1017).

TREATY WITH THE NAVAHO, 1868.

1017

ARTICLE 5. If any individual belonging to said tribe, or legally Heads of family deincorporated with it, being the head of a family, shall desire to comfarming may select mence farming, he shall have the privilege to select, in the presence lands, etc. mence farming, he shall have the privilege to select, in the presence and with the assistance of the agent then in charge, a tract of land within said reservation, not exceeding one hundred and sixty acres in extent, which tract, when so selected, certified, and recorded in the tion. "land-book" as herein described, shall cease to be held in common, but the same may be occupied and held in the exclusive possession of the person selecting it, and of his family, so long as he or they may continue to cultivate it.

Figure 2.2

Treaty With the Navajo, 1868, pg. 1017

The text reads:

If any individual belonging to said tribe, or legally incorporated with it, being the head of a family, shall desire to commence farming, he shall have the privilege to select, in the present and with the assistance of the agent then in charge, a tract of land within said reservation, not exceeding one hundred and sixty acres in extent, which tract, when so selected, certified, and recorded in the "land book" as herein described, shall cease to be held in common, but the same may be occupied and held in the exclusive possession of the person selecting it, and of his family, so long as he or they may continue to cultivate it. (Treaty With the Navajo, 1868, p. 1017)

This supervision by and pressure from the agent to abandon Indigenous farming practices, along with their forced removal from ancestral lands, obligated Indigenous peoples to assimilate their farming, food, and cultural practices to White, European models.

In relation to Indigenous communities, "agent" is included in many other Treaties with Indigenous Nations in multiple ways including naming an agent to manage a peace agreement in the Treaty With the Six Nations in 1794, giving an agent the authority to approve the lease of reservation land to colonists in the Treaty With the Chickasaw in 1818, and naming the agent as one of the only White people allowed to live on reservation land in the Treaty With the Cheyenne and Arapaho in 1865 (Yale Law School Lillian Goldman Law Library, 2008). People fitting the description above would later come to be known as "Indian Agents" and would still later be known as Bureau of Indian Affairs (BIA) Superintendents, after the BIA was established in 1824. These BIA Agents were assigned to reservations and hired "Boss Farmers" to manage the agricultural operations on reservations with European agronomy models (Brewer & Stock, 2016; Hiller, 2005). Some of these positions became "Extension Agents" under contract with 1862 LGI Extension programs, and the BIA and "Boss Farmers" remained on reservations until the 1980s. All of these contracts ended in the 1980s, leaving the gap in Extension services for Indigenous populations that we see today (Brewer et al., 2016; Hiller, 2005). "Agent" is still used in many states to describe an Extension employee, i.e. "Extension Agent," living in the community that they serve. This model is what accounts for much of Extension's success, but it was created and vetted on reservations with Indigenous communities.

The term "agent" was born out of settler colonialism's ideology and the term's continued usage illustrates that this ideology is still alive in our culture, colloquial language, and our Extension system. If language and terms change based on changing culture, then the continued

use of the term shows us its continued cultural significance. As a federal program that was formed from wealth accumulated through Indigenous land dispossession, Extension needs to critically evaluate how its systemic ideology, in its programming, language, and funding priorities, perpetuates the ideology of settler colonialism and land dispossession through the use of the term "agent" and, more importantly, the inequitable access that Indigenous communities have to Extension services.

Extension in Indigenous Communities Today

There have been additional programs established to bring agricultural support to Indigenous populations specifically. In 1986 and in order to address agricultural issues in Indian Country, the Indian Agriculture Working Group made 32 recommendations based on a survey of Indigenous nations. The report condemned previous Cooperative Extension programs efforts by stating, "the solutions they have recommended have not been implemented" in Indian Country. This prompted a congressional hearing in 1989 regarding the revamping of Extension in Indian Country and, in the 1990 farm bill, the Extension Indian Reservation Program (EIRP) was created. This is now called the Federally Recognized Tribal Extension Program (FRTEP) (Brewer & Stock, 2016). At its inception, the program was supposed to serve reservations that had 200,000 farmable acres or more and was to receive a \$10 million annual budget. In its first year, it received \$1 million in USDA funding (Brewer et al., 2016).

Extension work in Indian Country is done through one of three arrangements: FRTEP,
Tribal College Extension Programs (TCEP), or services administered only by the tribe itself.

Traditional county Extension funded through 1862 Extension programs might be assumed to
have responsibilities to serve Indigenous communities that coexist with counties, but it is often a
challenge to convince them of the importance of this. As early as 1930, Congress rejected a

request by the Office of Indian Affairs to send funds to the USDA for Extension work on reservations. While there are certainly examples of cooperation between county Extension and Indigenous communities, financial, governmental, and political obstacles can be daunting.

FRTEP is a "non-formal, knowledge-based educational program" that comes out of the philosophy in the Smith-Lever Act. In this case, specific outreach is done by Extension agents from 1862 and 1890 Land-Grant Institutions in Indigenous communities. The agents often live in the communities they serve and might also work with 1994 Extension educators. Currently, the program is serving 122 Indigenous Nations in 19 states and funds 36 Extension Offices (FRTEP, 2018). TCEP allows 1994 Land Grant Tribal Colleges to establish Extension offices on their campuses.

Both of these programs are competitive, grant-funded programs through the USDA, displaying a drastically different funding model compared to the guaranteed funding of traditional Extension programs (NIFA, 2018). There is a finite budget for these programs, so each competes with the other and adding new programs means that the budget for each individual program suffers. Partly because the complicated government-to-government relationship between tribal sovereignty and the US government (ICE, 2018), how taxes are collected and allocated in the aforementioned scenarios (Hiller, 2005), and the systemic and historical denial of minority racial and ethnic groups to maintain and develop their own agricultural and food systems (Brewer & Stock, 2016), Extension-related activities in Indigenous communities are set up very differently than in traditional Cooperative Extension settings.

According to Flora (1994) state and federal budgets are "under attack" and that research and Extension efforts will suffer because of that. Over the last 25 years, the average funding has remained the same despite population growth and inflation, with some FRTEP offices tripling in

size (Brewer et al., 2016). Brewer et al. (2016, p. 18) state that Extension programs succeed because of,

community trust and sustained programming efforts within communities and because issues important to the local communities are addressed. The uncertainty of funds and competition between FRTEP agents limits their ability to perform the core tasks that have made Cooperative Extension so successful.

Funding for traditional Extension programs is decided based partly on the number of farms and farmers in the state. It is only recently that statistics regarding Indigenous farms has been collected, but that data is now becoming available. In order to provide equitable access to Extension for Indigenous communities, based on the number of Extension personnel currently working in traditional programs based on population, FRTEP should be funded at approximately \$10-12 million per year (Brewer et al., 2016).

Indigenous rights groups recognize the importance of Extension services and have expressly requested equitable access to them. In 2010, the National Congress of American Indians (NCAI), the "oldest and largest national organization of American Indian and Alaska Native tribal governments," drafted Resolution #ABQ-10-009 entitled, "Provide for American Indians Equitable Access to Cooperative Extension by Urging USDA Action on the Recommendations of the FRTEP Design Team Interim Report." In it, NCAI invokes FRTEP as authorized in the 1990 farm bill and the NCAI's "tireless" efforts to educate "Congress, Tribes, and land-grant universities about the value and importance of such an educational program" and to implore Extension to fund programs as promised. They state that, while there are over 9,000 Extension agents currently employed in 3,050 counties, only 29 Extension agents currently serve the 565 federally recognized tribes on the 314 recognized reservations in the US. (Note: Since 2010, this number has changed. As of 2016, there are 36 full-time FRTEP agents, serving less than 10% of Indigenous communities (Brewer et al., 2016)).

NCAI (2010) concludes with, "Indian people, especially those living on reservations, lack equity on this point and ask for the same access to 1862 land-grant university extension educational programs that neighboring non-Indian communities have received for over 96 years." The Resolution requests funding for specific projects in particularly needy locations including the Window Rock, Zuni, and Jicarilla Apache communities; that FRTEP be changed from a competitive grant to a formula-funded program like traditional Extension programs; and to add about 60 offices to the FRTEP program. Lastly, they promise to continue to petition Congress and the USDA to provide equitable funding "for this necessary program such that it is within reach of every American Indian" (NCAI, 2010).

The NCAI created another Resolution, #SD-15-077, in 2015, this time pleading for equitable federal funding for 1994 LGIs and Indian Extension Agent Programs. Here, they state that, despite the fact that 75% of Tribal land has either forests or agricultural land and that the "political and economic self-determination and self-sufficiency of these tribes" requires Indigenous people to know how to manage their land and natural resources, FRTEP remains grossly underfunded. In the 2016 fiscal year, the President proposed to fund these programs at \$4.7 million to be awarded *competitively* and, when compared with the \$300 million awarded to 1862 institutions, this shows a "disparity and inequity in funding [that] is unconscionable and unexplainable." In response, the NCAI called upon the President and the US Secretary of Agriculture to ensure that the 1994 LGIs and FRTEP "receive equitable treatment within the Department so that they are better equipped to meet the extensive need in Indian Country" (NCAI, 2015).

It is clear from these Resolutions that there is a need in Indian Country for Extension funding, that need is recognized by Indigenous peoples, and that they have been vocal in

requesting equitable funding for these programs. In spite of these requests, the USDA FY 2019 Budget Summary shows that the 2017 Actual, 2018 Estimate, and 2019 Budget for "Extension Services at 1994 Institutions" was and will remain at \$4 million (USDA, 2018).

Extension's Research on Collaborating with Indigenous Communities

In addition to the history of laws and policies pertaining to Indigenous peoples, a review of the research conducted by Extension on these issues as well as how the concept of food sovereignty has been applied to Indigenous communities provides a wider context for these issues within academia. Research by Extension is limited and all of the available publications are reviewed here in some detail, providing the complete context of work being done by Extension on these issues and their knowledge of them.

Hassel (2004) calls attention to the fact that, despite the importance of the Land Grant mission, not all parts of society have benefited equally. He attributes this to the differences in epistemologies between that of the academy and the communities that LGIs serve. The refusal of the academy to value epistemologies that do not conform to their own creates distrust in the communities that Extension should serve and devalues those communities in the eyes of the institution. To address the inequalities suffered by groups marginalized by LGIs, Hassel details three program examples in nutrition, food, and health that were designed to be cross-cultural in their epistemologies, specifically Indigenous knowledge and Chinese medicine. In interviews with the author, participants did express distrust of the LGI because of prior experiences informing them that their knowledge was undervalued or ignored if it did not fit within a "scientific model." By bringing diverse epistemologies to their programming, Extension was able to express their commitment to diversity without the dismissal of knowledge that lies beyond Western paradigms.

Perhaps the first paper explicitly discussing the inequities in Extensions services to Indigenous communities was Hiller in 2005. That paper investigates the history of Extension's involvement in Indigenous communities, how Extension is currently being done in Indian Country, and includes a call to action to right inequities. While this paper is old now and much of its information is out of date, it is the only Extension-specific paper published explicitly calling out the inequities discussed as its main topic. The call to action states that the traditional Extension model is not working for Indigenous communities and serves to lay a solid groundwork for future research.

Hart (2006) attempted an ethnographic study of the leadership structure and the effects of colonization (although he used the word "acculturation") on the Winnebago Tribe in Nebraska. This study was partly done to understand the social structure of this particular community in order to assist Extension personnel with forming relationships there, but the author did see a theme of mistrust in the Indigenous community because of a history of educational interventions going poorly, mostly due to the last effects of oppression and colonization. This compelled the author to see the importance of learning about the community by speaking to people within it as well as using culturally competent education methods.

Emm and Breazeale (2008) acknowledge that Extension models need to be adjusted to meet the social, cultural, and economic conditions of the intended program recipients, including Indigenous populations. To accomplish this, they conducted a needs assessment for the reservations being serviced by Nevada Extension. This included an "opinion poll" of expectations and concerns in order to enhance programming efforts. They found that 84% of respondents identified unemployment as the number one community risk factor. After that, two-thirds of respondents reported alcohol and drug misuse, preparing youth for work, reservation

laws, and lack of recreation for children as important issues. For community concerns, the respondents reported the availability of illegal drugs was number one. Other community concerns were community disorganization, family conflict, lack of commitment to school, community laws/enforcement, early initiation of problem behavior, and academic failure beginning in elementary school. From this information, Extension planned to create outreach programs to address the issues.

Martenson (2011) described how Minnesota's Extension services lacked, "a sustainable, systemwide vision for working in Indian country." In response to this, Minnesota's Extension office created the American Indian Task Force with the goal of increasing Extension's work in Indigenous communities. The first goal of the group was to reach out to members of the Indigenous community. They began by meeting with staff and administrators from the 1994 Tribal Colleges and asked them to join the Task Force as well. Listening sessions were organized so that community members could share the issues they thought to be important while building relationships with members of the Task Force. They also surveyed Extension personnel to see what they would like to learn about in relation to collaborating with Indigenous communities. The results showed that people were interested in learning more about Indigenous culture and how to build relationships within Indigenous communities. From this information, Minnesota Extension created training opportunities to meet these needs. They also worked to hire Extension staff to specifically focus on working in Indian Country, most of whom were from Indigenous backgrounds, as well as someone to liaison between the University and the staff. In the end, they attributed their success to a few factors: the creation of a Task Force by Extension gave the goals legitimacy, they took a team-based approach to address issues, and they worked to meaningfully

build lasting relationships between the University, Tribal Colleges, and members of the community.

This constitutes a thorough review of all of the literature related to Indigenous communities for and by Extension professionals. The list is brief, mostly from the early 2000s, and the topics range from somewhat thoughtful and researched to insensitive and poorly researched. Given the need, a revitalization of these topics is necessary. An area of research with greater depth concerning food, Indigenous communities, and their associated culture is in food sovereignty. This represents a possible avenue for Extension to collaborate with Indigenous communities to both take advantage of Extension's expertise and center community goals.

Food Sovereignty

Food sovereignty is a term growing in popularity in food studies and sociology and was identified by participants in this work as being a successful and culturally relevant topic to build their Extension programs around. It emphasizes the importance of people's right to healthy, sustainable, culturally relevant food, while taking the production of that food into account. It emphasizes autonomy over a group's food system because of the cultural significance of food. It was first defined in 1996 by La Via Campesina, an international group of small-scale farmers, responding to neoliberalism's effects on agriculture and defending their rights to land and seeds. Indigenous peoples were present then and have continued to be an important part of the movement. At the 2007 Forum for Food Sovereignty, 500 delegates from over eighty countries adopted the Declaration of Nyeleni, which states, "Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems." The declaration goes on to emphasize the importance of food producers and consumers, the need to include the next

generation in food production, the importance of environmental, social, and economic sustainability, the need for transparent trade, and equality between genders, races, and classes (Declaration of Nyeleni, 2007).

Another related term, food justice, is similar to food sovereignty and holds many of the same commitments. Because of the economic, cultural, social, and health importance of food, scholars and activists have emphasized the importance of food justice- the ways that the intersecting identities of race, class, gender, and other forms of inequity affect food systems. Many call for a food system that is environmentally sustainable, responsive to racial and economic disparity, and highlights the contributions of racialized, gendered, low-income, and Indigenous communities (Alkon & Agyeman, 2011). By doing this, food becomes a medium for enacting social justice and change. Also, many food justice activists critique the concept of neoliberalism and how it affects the food system; for example, allowing the free market to regulate and govern itself has often had the effect of shoring up corporate profits at the expense of access to food for marginalized communities. In response, many critiques have surfaced including issues in production agriculture, labor practices, and inattention to inequities in the system (Alkon & Guthman, 2017).

Food justice and food sovereignty acknowledge and reject the neoliberal project of commodifying food. Other noteworthy and interlinked issues addressed in food sovereignty discourse include industrialization of agriculture, colonial strategies of underdevelopment, and protection of the rights of farmers, women, and Indigenous peoples (Kamal et al., 2015). For Indigenous communities, food sovereignty is part of the larger struggle for political, cultural, and ecological autonomy (Ruelle, 2017).

These terms should not be confused with *food security*, which means "that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life" (United Nations Committee on World Food Security, 2019). While this seems to be similar to the terms above and also an important goal, food security does not specify how, where, and by whom food is produced or challenge the inequities in the food system. Some argue that the idea of food security has contributed to the focus on neoliberal policies whose goal is to maximize food production. This leads to a disregard for how and where food is produced and who will benefit from its production (Hoover, 2017).

For Indigenous communities, food sovereignty is part of the larger struggle for political, cultural, and ecological autonomy (Ruelle, 2017) and has been applied to many human rights contexts, including Indigenous rights movements (Claeys, 2012). Various studies have examined how food sovereignty has looked for different Indigenous groups. Grey and Patel (2015) identified the relationship between food sovereignty and the advancement of Indigenous rights movements as one of the most complex and theoretically deep areas of food sovereignty research. La Vía Campesina's idea of food sovereignty included that peasants, Indigenous peoples, and producers created a community of resistance that was both local and national, dependent on different cultures while spanning national borders (Desmarais, 2014). Grey and Patel (2015) states that Indigenous rights movements use the idea of food sovereignty in a way that, "involves the relationship between a physical territoriality and a kincentric universe that both challenges and enriches" the definition. By "kincentic," they recognize that indigenous peoples extend their social relations to the extant cosmos, a very different view than the commodification of capitalism. Therefore, "food can be seen as the most direct manifestation of

the relationships between Indigenous Peoples and homelands, and it consequently occupies a central place in traditional thought" (p. 437).

According to Ruelle (2017), "A food system is comprised of ecological relations between humans, other living beings, and nonliving entities. For many indigenous communities, such relations are sacred and profound, and therefore acknowledged on a regular basis" (p. 115). Knowledge of food production, preparation, and consumption are taught, so the continued alienation of indigenous people from this knowledge, also continues colonialism's harm. Indigenous rights movements have used the "rootedness" of this definition to resist the colonization of indigenous place, recognizing that indigenous food and foodways are inseparable from cultural, social, and political resurgence. Both food sovereignty and Indigenous rights movements hold the ideals of autonomy and self-determination at their core. In this way, food sovereignty, "is the continuation of anti-colonial struggles in ostensibly postcolonial contexts" (Grey & Patel, 2015, p. 433).

Kamal et al. (2015) assisted the O-Pipon-Na-Piwin Cree Nation establish a wild food program, with the help of the University of Manitoba. Kamal et al. facilitated community events and youth educational programs to establish the program through multiple visits to the community. This relationship greatly informed her knowledge and enabled her to establish the program. The authors found the wild food program to have decolonizing effects because it provided, "both practical control over resources and cultural restoration" (p. 570).

Ruelle (2017) is an ecologist and ethnobotanist, who conducted research in the Standing Rock Nation of the Northern Great Plains. He interviewed elders and participated in community-based food projects. Ruelle argues that, in violation of the Fort Laramie treaty and due to the deliberate extermination of their primary food supply, the bison, the government forced the

Lakota to settle near Indian agencies where they would receive military rations. There, an agent was charged with issuing rations and organizing the growing of crops and the raising of livestock according to Western agricultural tradition. This was often unsuccessful on the new lands. The Dawes Act was enacted here and more than half of the land was deemed "excess" and opened for White settlement. Currently, 41% of the population at Standing Rock lives below the poverty line and 85% use federal food assistance programs.

In order to regain the connection to their traditional food system, the Standing Rock
Diabetes Program's Native Gardens Project collaborated with the Grand River Boys and Girls
Club to organize events in which groups of young people gathered traditional plants with elders
from the tribe. These events relied heavily on the cultural and agricultural knowledge of the tribe
and endeavored to build relationships between people and the environment as well as between
young people and tribal elders. Other programs encouraged family and community gardens. The
Native Gardens Project established community gardens and constructed raised garden beds for
elders. The produce from these gardens was then sold at farmers markets opened by the Standing
Rock Conservation District and with funds from the USDA. From these markets, it was
discovered that people no longer knew how to use traditional foods, so the Native Gardens
Project provided ingredients and supplies for workshops in a community kitchen close to the
market.

Hoover (2017), in order to understand the idea of Indigenous food sovereignty and how it is being used by Indigenous communities, visited 39 indigenous community-based farming and gardening projects around the US and interviewed the people conducting them. Despite the fact that education has not been highlighted in the food sovereignty literature, she found throughout

her interviews that education was a major goal as a solution to health issues and to preserve culture.

Because of Extension's expertise, the concept of food sovereignty offers an avenue for Extension to create meaningful educational programming that meets Indigenous communities' goals and respects sovereignty. This could further be combined with appropriate pedagogies.

Next, I explore some of the pedagogies that might be most effective in Indigenous communities.

Pedagogies: Culturally Relevant, Indigenous, and Decolonizing

Various forms of pedagogy have been proposed to teach students from different racial, cultural, economic, and historical backgrounds by taking their intersectional identities into account inside and outside of the classroom. While explanations of these pedagogies and their important components fill many textbooks, the ones of particular interest here are culturally relevant pedagogy, and Indigenous and decolonizing pedagogies. Indeed, participants identified creating culturally relevant programs and pedagogy as an important part of successful programs and as a way that Extension could support them in their work.

Culturally Relevant Pedagogy

In order to understand the successes that teachers were having with Black students in their urban classrooms, Ladson-Billings (1995) did a study that resulted in her idea of *culturally relevant pedagogy*. In response to many studies that, in her opinion, cast Black students as, "deficient and closely associated with terms such as *at-risk*, *disadvantaged*, *and underachieving*;" she decided to conceptualize Black students as "agents in the classroom worthy of both study and emulation" (Ladson-Billings, 2014, p. 76). This was building on foundational pedagogical work that resisted deficit thinking in the 1960s-1980s, in which students that deviated from the "norm" of White, middle class culture were considered "different" and

problematic (Schmeichel, 2012). These studies recognized the cultural and linguistic practices of marginalized students as resources to be appreciated and incorporated into the classroom (Paris, 2012).

In her study, Ladson-Billings (2014) found educators that were, "thoughtful, inspiring, demanding, critical; they were connected to the students, their families, their communities, and their daily lives" (p. 74). She found three major themes that made them successful in their work: academic success (the intellectual growth that students experienced) as opposed to behavior management, cultural competence (the ability to help students celebrate their cultures while learning new things in another culture) as opposed to assimilation, and sociopolitical consciousness (being able to take the learning beyond the classroom by solving real world problems) as opposed to school-based tasks. Ladson-Billings (2014) says that the secret to culturally relevant pedagogy is to, "link principles of learning with deep understanding of (and appreciation for) culture" (p. 77).

Since then, other scholars have expanded and added to the idea of culturally relevant pedagogy by adding new dimensions. This expanded understanding is valuable, because it recognizes that cultures are dynamic and change over time. Ladson-Billings (2014) describes this, "In many courses on multicultural education, students learn about static images of cultural histories, customs, and traditional ways of being. However, in reality, culture is always changing" (p. 75). These added dimensions include recognizing the impact that race and racism have on schooling (Brown-Jeffy & Cooper, 2011), the impact of the intersectionality of race, class, and gender in teachers (Dixson, 2003), and how culturally relevant pedagogy can be used in the context of Indigenous education and sovereignty (Brayboy & Castagno, 2008; Klug &

Whitfield, 2003). It is important for educators to represent culture in a real and meaningful way for students, so adding cultural dimensions to culturally relevant pedagogy is essential.

Additionally, scholars have expanded the ideas in culturally relevant pedagogy to the point of forming new pedagogies. For example, Paris (2012) says that the term "relevant" doesn't "go far enough" to include the multilingual and multiethnic realities of many of the students marginalized by systemic inequality, and questions whether "relevant" is descriptive of the goal of teaching and learning in such a reality. In response, Paris defines *culturally sustaining* pedagogy by incorporating students' intersectional identities into the classroom in a way that not only makes them relevant, but also makes them a continued presence in students' and teachers' practice. Similarly, and drawing upon Paris' approach, McCarty and Lee (2014) use the term culturally sustaining/revitalizing pedagogy in the context of educating Indigenous students, to incorporate the disappearing languages of Indigenous cultures and recognizing their impact on knowledge formation and education. Further, they connect language revitalization to the importance of sovereignty and self-determination, both in its political and educational forms. Educational sovereignty incorporates not only language and culture, but also Indigenous epistemologies that have been silenced through colonization. In this way, culturally revitalizing pedagogy is essential to the survival of Indigenous peoples and culture because of its link to sovereignty.

There are criticisms to the idea of culturally relevant or other similar pedagogies, however. Some scholars have called out how this ideology still emphasizes *difference* and still links it to a discourse of deficit by comparing the cultures of students of color to "an unspoken someone" (Schmeichel, 2012), namely the same White, middle class students that set the "norms" in a deficit model (Popkewitz, 2002). They would argue that this only further

reinscribes ideologies and systems of inequity. Also, research has found that culturally relevant pedagogy is difficult to put into practice and rarely done in the way that Ladson-Billings first described it (Ladson-Billings, 1995; Young, 2010). Indeed, she herself discussed how, "Many practitioners, and those who claim to translate research to practice, seem stuck in very limited and superficial notions of culture" (Ladson-Billings, 2014, p. 77). Without a deep understanding of the culture(s) that teachers are trying to incorporate into their classrooms, it is difficult to expect anything more than superficial additions onto curriculum, especially since this approach often clashes with systems already in place in educational settings (Gay & Howard, 2000; Young, 2010).

Indigenous and Decolonizing Pedagogy

Scholars have conceptualized Indigenous and decolonizing pedagogies that decenter Eurocentric ways of knowing and learning and center Indigenous epistemologies and voice. While some scholars use either "Indigenous" or "decolonizing" to describe their pedagogy and some use both, "Indigenous pedagogy" tends to be used in the context of practices such as using Indigenous epistemologies in teaching, valuing Indigenous knowledge, and incorporating Indigenous culture (Battiste & Youngblood, 2009; McKeon, 2012), while decolonizing pedagogies focus on identifying how colonization has impacted educational practices and ideologies and reconstructing them through Indigenous counternarratives and culture (Fellner, 2018; Pratt et al., 2018; Tejeda, 2010). Again, concepts from both terms are common in many of the pedagogies described (Battiste et al., 2002; Denzin et al., 2008; Grande, 2008).

Denzin et al. (2008) call for a merger of CRT, TribalCrit, and critical pedagogy, into what they call critical indigenous pedagogy (CIP). In their definition, they emphasize that all inquiry is political and moral; methods are used critically for social justice purposes; CIP values

the transformative power of Indigenous, subjugated knowledges and it values the pedagogical practices that produce these knowledges; it seeks forms of practice and inquiry that are emancipatory; and it embraces the contributions by Indigenous scholars to decolonize Western methodologies and how the academy has been a part of the colonial system. The work done in this framework must represent Indigenous people without distortion or stereotypes and honor their knowledge, customs, and rituals; not be judged based on neocolonial standards; and the research and researcher should be accountable to Indigenous people.

Grande (2008) wrote that Indigenous scholars have not engaged with the critical theories of education much, instead engaging with the social and political issues in their communities. While she describes this impulse as "entirely rational," she stresses the need for scholars and their communities to enact "transcendent theories of decolonization" (p. 236). In order to do this, she describes what she calls Red Pedagogy. This considers the view of land (and the problematization of colonized land) and natural resources that is less anthropocentric than other Western discourses, the importance of Indigenous languages to the maintenance of Indigenous ontology, and the view of "change as progress" for Indigenous cultures built on tradition. There are seven tenets of Red pedagogy that include the ideas that it is fundamentally rooted in Indigenous knowledge and praxis, looks for engagement with critical and revolutionary theories, promotes an education for decolonization, that it interrogates both democracy and Indigenous sovereignty, it prioritizes collective agency, and is grounded in the hope of traditional knowledge and the "possibilities of new understanding." In the end, Grande defines Red Pedagogy as the development of community-based power in order to live out Vizenor's (1993) idea of survivance, a state beyond survival or a mere response to colonization, that continues Indigenous stories. These pedagogies have important similarities including the unique experience of

colonization to Indigenous people, the importance of Indigenous voice, knowledge, and praxis, and the primacy of social change.

In practice, scholars have called for various ways of indigenizing and decolonizing pedagogy. Battiste and Youngblood (2009) advocate for the inclusion of Indigenous Knowledge (IK) in education. IK "exists in the context of their learning and knowing from the places where they have lived, hunted, explored, migrated, farmed, raised families, built communities, and survived for centuries despite sustained attacks on the peoples, their languages, and cultures" (p. 5). IK incorporates Elders into the learning process, acknowledges the importance of Indigenous languages to the preservation of knowledge, and can be incorporated into "science, arts, humanities, and legal traditions." Indeed, IK has been taken up by various educational disciplines, but maybe none so much as ecological and environmental education. Traditional Knowledge or Traditional Ecological Knowledge (TEK), as it is often referred to in that context, has emphasized the holistic, relational values in Indigenous cultures, emphasizing the connectedness between people, communities, and the natural world (Berkes, 1999; Cajete & Pueblo, 2010; Latulippe, 2015).

The concept of "Two-Eyed Seeing" is another way that educators have incorporated IK and pedagogies into their practice, again mainly in the context of science and environmental education (Michie et al., 2018). This approach attempts to "weave indigenous and main-stream knowledges together within today's educational curricula" to give the "gift of multiple perspectives" (Bartlett et al., 2012). For Two-Eyed Seeing to be successful, it is imperative that all members of a learning group have an "it's us, together' consciousness." When this can be achieved, the strengths of both IK and Western knowledge can be utilized to their highest

benefit, and in recognition that they are both complete knowledge systems side by side. Because this approach requires an understanding of both Indigenous and non-Indigenous ways of knowing, and the fact that Indigenous ways of knowing have been erased and silenced in Western education systems, Two-Eyed Seeing requires input from Indigenous Elders or Knowledge Holders in order to make sure that efforts remain true, as well as those with expertise in Western ways of knowing (Bartlett et al., 2012). Incorporating Indigenous and Western epistemologies and knowledge together also takes advantage of many of the positive aspects of culturally relevant pedagogy such as honoring students' histories and cultures, resolving conflicts between ways of knowing that can be confusing for students, and connecting learning to students' lives (Brayboy & Castagno, 2008).

Storytelling is an important way of passing along knowledge in Indigenous cultures, and so storytelling can be an important part of pedagogy as well (Bartlett et al., 2012). Storytelling is a traditional method of passing on knowledge in Indigenous communities (Brayboy, 2005; Davis, 2014). Cajete (2017) described stories' connection to Indigenous education in this way:

We find ourselves surrounded by children hungering for stories. What shall we tell them? Maybe we will tell them that listening and thinking about stories is the first foundation of Indigenous education.... Maybe we will tell them that *story is sacred* to Indigenous peoples and that stories, in their mythic forms, instructed the people on how to live a good life with proper relationship to all things. Maybe we will tell them how they will always be growing in relationship to their own story and the story of their people and place. Maybe we will tell them how we are blessed by watching them grow into becoming one with their people and their place—until it becomes *their* turn to tell their stories. (p. 114)

Cajete emphasizes how story is used to teach information about connection to place, connection to one's self, and connection to all things, as well as the responsibility that children have to pass on stories. This is the special place that stories have to Indigenous peoples' education, so educators can use story to connect students to meaningful learning.

Since colonization by the US began, the federal government has created treaties, acts, and laws between the US government and sovereign Native states concerning the right to agricultural support. The dispossession of Indigenous lands in order to accumulate wealth for LGIs through these acts separated Indigenous communities from their ancestral agricultural systems and foodways, creating greater need for agricultural support. Cooperative Extension was established in order to bring agricultural education to the communities served by the LGI, but Extension has failed to serve Indigenous populations equitably. Indigenous leaders have requested services from Extension, but these programs remain underfunded. Extension has done minimal research as to how to better serve Indigenous populations and a revitalization of these efforts for and by Extension is needed. Food sovereignty may be used to incorporate the expertise of Extension to support the cultivation of culturally relevant agricultural systems and food in Indigenous communities.

Given the history of legal and moral imperatives to provide agricultural support to

Indigenous communities and that Extension isn't serving these communities equitably, I

conducted a study to investigate how best to provide this support at a systemic level. While

Extension does collaborate with Indigenous communities in the Western Region, both with

FRTEP and through other means, there is no systemic structure or resources available to

facilitate and support these collaborations. In order to better serve the Indigenous communities

and Extension personnel within the Region, this study gathered large scale data about regional

participation in collaborations as well as investigated the lived experiences of people in the field.

Additionally, just as settler colonialist ideology is pervasive in our culture and politics, it is also in the epistemology and methodology of the academy. Colonialism privileges Western epistemologies and silences marginalized voices in research (Denzin et al., 2008; Smith, 2012).

Because of that, I used a decolonizing methodology throughout this work by interrogating Western research paradigms and processes (Deloria & Wildcat, 2010; Smith, 2012; Wilson, 2008), embracing the relational and collaborative nature of Indigenous knowledge creation (Battiste & Youngblood, 2009; Cajete & Pueblo, 2010; Latulippe, 2015), and including marginalized voices in the process (Battiste, 2008; Mutua & Swadener, 2004).

In addressing these systemic issues in Extension and with the stated epistemological and theoretical commitments, I ask the following research questions: (1) What affordances and constraints exist in established and emerging collaborations between Cooperative Extension and Indigenous communities?; (2) In what ways could new collaborations between Cooperative Extension and Indigenous communities be created and supported?; and (3) In what ways do sociocultural histories and hegemonic structures influence change agency among Extension personnel and communities?

CHAPTER 3

METHODOLOGY

In order to answer these research questions, I employed a transformative mixed methods approach, in keeping with the theoretical commitments to both CRT and decolonizing research. In this chapter, I describe the research design, participant recruitment and demographics, and the data collection and analysis techniques used. Further, I explore my positionality and how it affected this work. First, however, I describe how colonialism manifests in Western academic traditions and the need for decolonizing practices and paradigms within the academy and in the context of this research specifically.

Decolonizing Research Methodology

They came, They saw, They named, They Claimed

-Smith, 2012, p. 80

Before discussing research methodology as it pertains to this project, I must first situate academic ways of knowing and acquiring knowledge in their colonial context and decenter Western practices, epistemologies, and methodologies. Historically, research used colonizing strategies on cultural and racial groups in order to control, interpreting what researchers observed through Western epistemological lenses. L.T. Smith (2012) states:

The ways in which scientific research is implicated in the worst excesses of colonialism remains a powerful remembered history for many of the world's colonized peoples... This collective memory of imperialism has been perpetuated in the ways in which knowledge about indigenous peoples was collected, classified, and then represented back to the West. (p. 30-31)

Additionally, hegemonic Western research portrayed Indigenous peoples with a deficit-minded worldview, working to disempower and silence their ways of knowing. Indeed, colonizers viewed Indigenous knowledge as a threat to a White, Eurocentric epistemology, contaminated by Eurocentric bias, or as a commodity to be exploited (Battiste, 2008; Kincheloe & Steinburg, 2008). These practices and ideologies continue to be persistent in research and the academy.

Agriculture in particular has served to produce and reproduce White hegemony and epistemology above and beyond just the academy (Alkon & McCullen, 2010; Guthman, 2008). Extension is a pillar within agriculture, having been an indispensable part of agricultural societies, that still holds cultural and ideological significance today. Conducting critical research within agriculture, a traditionally conservative and White institution, is challenging and disrupts the status quo more than it might in other disciplines. This often creates a hostile environment for critical researchers with commitments to ethical, decolonizing methodologies and epistemologies.

Congruently, proponents of decolonizing theory see the Western academy as silencing non-Western epistemologies, particularly Indigenous epistemologies, and perpetuating systems of oppression through knowledge production and reproduction. This need is felt by many disciplines including education, feminist studies, linguistics, and literature (Mutua & Swadener, 2004). Diaz Soto (2004) states:

For most scholars of colors and their allies we are the 'colonized,' feeling the consequences of the eurocentric, scientifically driven epistemologies in which issues of power and voice are drowned by the powerful 'majority' players reflecting the 'master's' ideology. For us, *there is no postcolonial*, as we live our daily realities in suffocating spaces forbidding our perspectives, our creativity, and our wisdom. (p. ix)

All of this speaks to the need for decolonizing epistemologies and methodologies, to interrogate entire research paradigms and processes (Deloria & Wildcat, 2010; Smith, 2012; Wilson, 2008),

and to create new ones (Falcón, 2016). Further, decolonization shouldn't be limited to a spatial and temporal understanding of its effects on research, but be expanded to include colonizing tendencies in institutions and systems (Grande, 2004; Mutua & Swadener, 2004).

In response to this, decolonization research deconstructs Western research traditions through collaboration between Indigenous and non-Indigenous peoples by pushing researchers to acknowledge and evaluate various ways of knowing, their legitimacy, and how our complex identities impact knowledge creation through research (Battiste, 2008). This implies problematizing the relationship between knowledge and power in postcolonial contexts (Jankie, 2004). Decolonizing research includes participant collaboration at all phases of the process including development of questions, collection and analysis of data, interpretation of findings and implications, and the dissemination of information; co-authorship on papers resulting from collaborative work; making findings available in relevant ways to the shareholders; and always interrogating privilege, while strengthening alliances (Battiste, 2008; Mutua & Swadener, 2004). Further, decolonizing methodologies must embrace the relational and collaborative nature of Indigenous knowledge creation systems, the connectedness between people, communities, and the natural world (Battiste & Youngblood, 2009; Cajete & Pueblo, 2010; Latulippe, 2015). When describing feminist and Indigenous methodologies in research, Falcón (2016) expresses this need and acknowledges that current, Western-centric research practices might not be able to rise to this challenge:

Knowledge production is collective, and we must strive to retain that collective spirit in the organization of our research. As a result, scholars may have to be more creative about their research practices or acknowledge that we do not have the existing methodological tools or ability to research certain dimensions of relational ontologies. (p. 180)

To strive for decoloniality in research, the researcher needs to work toward undoing existing practices and paradigms, while simultaneously attempting to create and rebuild with these guiding principles in mind.

Therefore, given the context and goals of this research endeavor, I am applying a decolonizing methodology to my research design, and the ways in which I structure and write this dissertation. The outcomes of this research should and are intended to benefit and promote the voices and self-determination of research participants by being participatory and committed to Indigenous community interests and self-determination (Denzin et al., 2008). I interrogated both the research methods and the outcomes of the research (Mertens, 2010); while the methods of research are a survey and interviews, both of which are prevalent in colonized, Western research, the methodology strived to be decolonizing, with an emphasis on the counternarratives, the co-construction of knowledge with participants through their lived experiences (Fierros & Delgado Bernal, 2016), and the liberatory effects for Indigenous peoples.

This approach required many choices in the writing of this work, including using a seminarrative approach by prioritizing the use of whole quotes rather than dissecting and interpreting small parts of what participants shared. I continue this approach in the Discussion section by including the participants as discussants, when and as they shared their recommendations and implications of this research. This approach in the Discussion, while non-traditional, is intended as a necessary step, in my view, to keep with the overall epistemology and methodology of decolonization, to prioritize participants' voices, and to decentralize the researcher as the sole voice of value.

Researcher's Perspective

If you have come here to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together.

I find myself to be both an Insider and an Outsider, to varying degrees, in key communities concerning this research. Specifically, the identities that mattered most were those of Indigenous vs. Non-Indigenous, Agriculturist, and belonging to the Land Grant System. I was the furthest removed from the Indigenous community, a newcomer-but-Insider to Agriculture, and a true Insider to the Land Grant System. My belonging to these groups gave me both advantages and disadvantages concerning this research and were all constant considerations at every step of the process.

Because of the colonial history of the US and the academy, there are academics that might advocate for research with Indigenous peoples to only be conducted by Indigenous peoples, a historical view referred to as "extreme insiderism" (Merton, 1972, p. 15). Robert Alexander Innes (2009) describes the "Insider/Outsider Debate in American Indian Studies" and the benefits and drawbacks of being on either extreme of the dichotomy. "The critics of insider research have asserted that insiders' closeness to their research community clouds their views and leads to biased research findings. Insiders counter that their positioning provides a contextual understanding of the community that outsiders do not possess" (p. 440).

Ultimately, this dichotomy can be problematic, possibly leading to fragmentation across cultures and ignoring the complexity that is inherent in identity. What does it mean to be an Insider or an Outsider? To what extent is someone, with all of their identities and subgroups, a

Insider or Outsider? Mutua and Swadener (2004) contend that it is colonial epistemology itself that creates and reproduces forced binaries, placing researchers on immovable opposite poles, without recognizing the more accurate "multiplicity of the subject positions that we occupy, which often locate us fluidly in ever-shifting positions and assign us changing roles that are neither always emic nor always etic" (p. 3). False dichotomies and categorizations serve to separate, control, and essentialize, limiting power, prescribing actions, and fragmenting ideas.

Also, both Insider and Outsider perspectives have positives and negatives when applied to research methodology. Melissa Gilbert, a feminist scholar, concluded that, "the insider/outsider dichotomy is not useful because the very act of conducting research places an 'insider' in an 'outsider' position" (Gilbert, 1994). Plus, simply being a member of the researched community doesn't necessarily grant Insider status because of the intersecting and complex identities that a researcher might hold. It is the intersection of identities, for both the researcher and the community being researched, that come together to co-construct knowledge (Innes, 2009; Jankie, 2004). Therefore, we all find ourselves on a continuum between being an Insider and an Outsider (Espinosa-Dulanto, 2004) and, as a researcher, must be aware of how this continuum affects the research being done.

Recognizing that my identities and experiences place me along many continuums of belonging, I found my position along these continuums to play an important role in conducting this research. My Whiteness, and, therefore, affiliation with colonization, cemented my Outsider status with Indigenous communities. Kincheloe and Steinburg (2008) advocate that both Indigenous and non-Indigenous scholars engage in research with Indigenous communities and find strength in both positions. In regard to Outsiders' research, they state:

While in no way advocating that Western peoples speak and act for indigenous peoples, it is important for indigenous peoples to have informed allies outside their local

communities. Such allies can play an important role in helping indigenous peoples deal with the cultural, psychological, and environmental devastation of traditional colonialism and neocolonialism. (p. 140)

My privileged identities, particularly those of White and Educated, have allowed me into privileged places and given me the choice associated with those places. There is power in using that access in order to break through colonial barriers that others might encounter. Because of this, I seek to become an "allied other," with a wish to deconstruct systems of power from within and to elevate marginalized voices (Denzin et al., 2008; Jankie, 2004; Kaomea, 2004).

Another identity for which I fell along the Insider/Outsider continuum was that of Agriculturist. There are two dominant ideologies in the agricultural world: agrarian populism and neo-agrarianism. Agrarian populism is conservative, prescribes to conventional agricultural practices, and tends to form insular groups based on familial ancestry and ideology. Neo-agrarianism, on the other hand, is liberal, advocates for alternative agricultural practices, is environmentally conscious, and doesn't legitimize "belonging" in terms of familial ancestry (Brewster, 2012; Martin & Enns, 2017). I grew up as an Outsider to Agriculture, but discovered a passion for it in adulthood. While developing my love of agriculture, I became exposed to the inequities rampant in the system- speciesism, sexism, racism, and exploitation. These prompted me towards the research that I conduct here. Through professional positions, operating my own small farm, and my Whiteness, I have gained limited Insider status in the largely agrarian populist culture of LGIs, Colleges of Agriculture, and Extension, enough at least to allow me into Insider spaces. Even so, as a neo-agrarian and ally of marginalized groups, this added a layer to my Insider/Outsider status that was difficult to navigate.

A last important identity I will discuss in relation to this work is that of Land Grant Institution Insider. Land Grant Institutions profess to stand for equity and access, but in reality,

Land Grant Institutions were created for White men and to promote White wealth and knowledge accumulation (Stein, 2017). The goal of equity and access has yet to be realized by Land Grant Institutions and Cooperative Extension. I, as an upper-middle class, White, educated person, fit the mold for who Land Grant Institutions serve (although women were just as unwelcome as others mentioned here as well) and I have received my Bachelor's and Master's from a Land Grant Institution. I have also held various professional positions, in both research and student affairs, at the same LGI. All of this gives me profound Insider status, legitimacy in the system, and access to its benefits. I have had doors opened to me in Land Grant Institutions and Extension, resources offered to me, and an assumption of competence that I would not have had without my privileges and Insider status. In this way, I can be a microphone to amplify the voices of Indigenous peoples that might not otherwise exist.

Part of reflecting on my connection to this work not only includes coming to terms with how my privileged positions have benefitted from and served to legitimize the colonization of Indigenous place and epistemology, but also the damage that is done to all of us from living in a culture based on the continuation of settler colonialism's ideology favoring militarism, individuality, and separateness from nature, land, and place. While this work is primarily about arguing for equitable access to education as it applies to this one example (e.g. in Cooperative Extension services), it also speaks to deeper, more foundational challenges to our ways of knowing and being. It asks us to come to terms with how settler colonialism's epistemology and tactics, its use of violence, privilege accumulation, and exploitation of people and nature, still shapes and reproduces itself in our culture and institutions, including education and research (Greenwood, 2009; Marker, 2006).

This is not to equate the injuries of colonization felt by all people, but understanding colonization's continued effects on culture and hegemony is necessary to be able to recognize and dismantle it. Allowing for Indigenous epistemologies and voices to be heard gives all people the opportunity to understand the cultural processes at work in the production of truth, how knowledge is legitimized, and who gains power based on this system. This can be transformative for everyone living within a colonial system (Kincheloe & Steinburg, 2008). We all have healing to do from the lasting violence of colonialism and, I argue, place, food, and agriculture might be a way to begin.

Recently, a great friend and colleague made a strikingly accurate observation of me. She pointed out that I have an aversion, an all out abhorrence, towards violence. As I reflect on my life and the personal and professional paths I have taken, it is easy to understand them based on my choosing to confront the violence that I experienced or observed. Whether Insider or Outsider, I strive to embody Lilla Watson's quote at the beginning of this section in my work as I investigate the violence of inequities within systems, whether legal, educational, or cultural.

Research Design

In order to answer my research questions, I employed a transformative convergent mixed methods design with both quantitative and qualitative elements. Because of the large size of the Western Region of Extension and the unique cultures, goals, and constraints found within it, combining quantitative and qualitative methods could provide a more complete answer to the research questions (Creswell & Plano Clark, 2018). This design allows for triangulation, complementarity, and expansion of the data, making corroboration, enhancement, and a deeper illustration of findings possible (Onwuegbuzie & Leech, 2006).

Transformative Mixed Methods Design

Transformative design is a distinct form of mixed methods design that highlights the importance of value-based, action-oriented research, that directly engages members of culturally and socially diverse groups with a focus on social justice (Mertens, 2010; Mertens, 2011). This often includes theoretical perspectives, such as feminist or critical, that can then be laid over all of the design elements in a mixed methods study (Creswell, 2009; Creswell & Plano Clark, 2018) because of the recognition that realities are constructed by systems of power and privilege influenced by social, political, cultural, economic, and racial and ethnic values and that these are important determinants for which reality will be privileged in research. It is precisely the complexity inherent to systems of power and privilege that necessitates the use of a mixed methods design, with the goal of social change at the forefront (Mertens, 2007; Mertens, 2010; Mertens, 2011).

In this study, I used Critical Race Theory (CRT) and a commitment to decolonizing methodology as the theoretical frameworks overlaid on the mixed methods design. The philosophical commitments of CRT, decolonizing methodology, and transformative-emancipatory mixed methods study are congruent; CRT and TribalCrit are also value-mediated and motivated by transformation and emancipation (Lincoln et al., 2011) with the understanding that the knowledge produced can change existing oppressive structures and remove oppression through empowerment (Brayboy, 2005). Transformative design is collaborative and participatory, allowing for an overlap with decolonizing methodologies (Creswell & Plano Clark, 2018).

To answer my research questions, I distributed a survey (see Appendix B1 for the protocol) and conducted interviews (see Appendix B2 for the protocol) with Extension personnel from 1862 LGIs. Because of the large and culturally diverse nature of the Western region of

Extension, the survey gave an overview of the current situation, providing a foundation of descriptive information needed to support collaborations systemically at a regional level. The interviews allowed me to better understand the lived experiences of people in the field, providing a deeper understanding of the issues specific to states, counties, and communities.

Research Sites and Recruitment

The Western region of Extension is large, encompassing 13 states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming), American Samoa, Gaum, Micronesia, and the Northern Mariana Islands. Each state or territory has an 1862 LGI with an associated Extension Office. While this study only focused on personnel from 1862 LGIs, there are 15 1994 LGIs spread throughout the region, with varying numbers of personnel at each, that might be working with 1862 Extension.

I obtained approval for this project through Colorado State University's Institutional Review Board. For survey distribution, I had the help of the Western Extension Directors Association Director, Dr. Lyla Houglum, and the Associate Vice President for Engagement and Extension, Dr. Ashley Stokes. After creating the survey and recruitment email, I sent them to her for distribution to all of the State Directors in the region. The State Directors were asked to distribute the survey to all Extension personnel in their state and to provide me with the number of people that received it. While this gave me and my Extension collaborators in Colorado less control, I distributed it this way in the hope that more people would complete it and I would receive a higher quality of data than if I distributed it myself. For the interviews, sampling was a mixture of convenience and purposive (Bazeley, 2020). I had a limited network of personnel

from Extension that I knew and I reached out to for interviews myself. Dr. Ashley Stokes also assisted me by emailing every State Director in the region to ask them for suggestions of personnel in their states with the kinds of experiences that we were interested in. I emailed everyone that was suggested requesting an interview and worked with people individually to arrange them.

Participants' Locations and Descriptions

From the survey and interview participants, a picture of the current collaborations that Extension has with Indigenous communities emerged, along with information about where they are located and the kinds of professional positions that they hold. The participant groups in this work consist of those that responded to the survey and those that participated in the interviews. These Extension educators held a variety of professional positions including County Agent, Specialist, Advisor, Tribal Liaison, FRTEP Agent, SNAP Educator, Associate Director for Tribal Extension, FRTEP Program Lead, Regional Director, and Assistant Director of Extension and were located throughout the Western region of Extension. Participants' locations, universities, reservations, and specific job titles have been removed from their quotes to protect their identities, and pseudonyms were used here.

On the survey, there were 307 responses, the distribution of which can be seen in Table 3.1. Some State Directors chose not to participate, including Alaska, American Samoa, the Northern Mariana Islands, and Washington, despite many attempts to contact them. The rest of the states did participate and had response rates between 1.29% (Guam) and 35.71% (Idaho), with an overall response rate in the Western Region of 5.50%. Table 3.1 provides a further breakdown of these responses by State, and as an entire region, including how each State responded to Question 4. The responses to Question 4 are also how the data will be represented geographically

in the maps that follow. There were 131 respondents with current collaborations and 57 with past collaborations, indicating some amount of experience, so these 188 will be included together for most of the analysis. Information from respondents that had never collaborated with Indigenous communities and the barriers they face in these collaborations was informative also, and will be included separately to be able to better understand these barriers in the Finding section.

Table 3.1
Survey Responses by State

State/ US Territory	Number of Responses	Response Rate	Response to Question 4			
			Current	Past	Never-Yes	Never-No
Alaska	0	NA	•			•
American Samoa	0	NA				
Arizona	13	2.56%	8	2	3	0
California	78	3.13%	22	18	35	3
Colorado	19	3.41%	4	7	8	0
Guam	1	1.29%	1	0	0	0
Hawaii	16	14.81%	13	2	1	0
Idaho	50	35.71%	19	8	20	3
Micronesia	1	3.03%	1	0	0	0
Montana	9	2.21%	7	1	0	1
Nevada	32	12.75%	9	9	14	0
New Mexico	10	30.30%	8	2	0	0
Northern Mariana Islands	0	NA				
Oregon	29	4.04%	18	5	6	0
Utah	42	28.00%	18	3	15	6
Washington	0	NA				
Wyoming	7	6.42%	3	0	3	1
Western Region	307	5.50%	131	57	105	14

Note. Question 4 on the survey read, "Do you currently or have you ever served Indigenous peoples or communities?" Respondents had the option to choose one of three answers: "I CURRENTLY serve Indigenous peoples or communities," "I have in the PAST served

Indigenous peoples or communities," or "I have NEVER served Indigenous peoples or communities." If they chose the third option, they were directed to a question that read, "Would you be interested in serving Indigenous peoples or communities?" to which they could have chosen, "Yes" or "No." See Appendix for more information about survey questions.

Further, I have mapped the survey respondents across the geographic region based on participants' responses to Question 4 using geographic information systems mapping. To better situate these responses within their geographical and demographic context, I utilized two potential measures: Native Lands and demographic data for American Indians and Alaska Natives by County. This data is publicly available through the US Census. These maps (Figures 3.1-3.5, C1, and C2) were produced in collaboration with Sophia E. Linn at the Geospatial Centroid at Colorado State University (2020) and were created with ArcGIS Pro. These maps are all original and show original data from this study. To include the information layers in the maps, ArcGIS Pro 2.4.1. Service Layers were used (Credits: Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, OpenStreetMap contributors and the GIS User Community).

To begin, Figures 3.1 and 3.2 show maps of the current or past collaborations within the region with either Native Lands or demographic data displayed respectively.

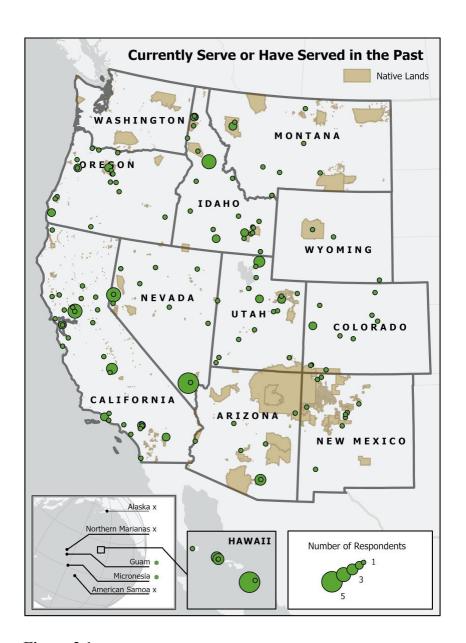


Figure 3.1

Map of Current and Past Collaborations with Native Lands

Large areas of Native lands in many of the states show respondents serving them, including all of the states with respondents. However, it is often seen that just one respondent from a large area said that they are currently or have in the past served an Indigenous community. Figure 3.2 represents the same survey data, but overlaid on population data of American Indian and Alaska Native peoples by County. This data was taken from the Race Demographics section of

the 2010 US Census, as it is included in the mapping software ArcGIS Pro (data on Pacific Islanders and Native Hawaiians was not a layer of data that could be applied from the 2010 Census, as this is not how the census gathers data). Importantly, county-level data, as represented here, is significant to Extension, as Extension services are provided at the county level.

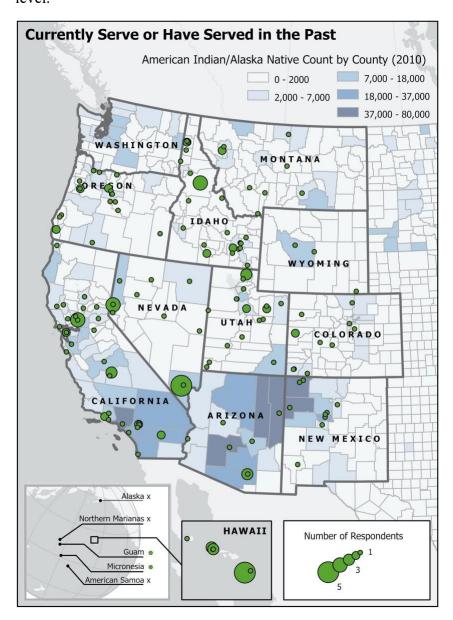


Figure 3.2

Map of Current and Past Collaborations with Demographics

While some of the same trends are seen here, including the relatively large numbers of Indigenous peoples populating Native lands from Figure 3.1, it is also important to not assume that most Indigenous peoples live on reservations, making this demographic data important as well. Again, there might only be one respondent serving Indigenous communities in a given area.

Next, the respondents that answered that they had never collaborated with Indigenous communities and whether or not they would be interested in doing so are represented in Figures 3.3 and 3.4. Figure 3.3 includes Native Lands data and Figure 3.4 includes demographic data. (For maps of the respondents that answered that they have never collaborated with Indigenous communities, but not broken up by interest, please see Appendix C1).

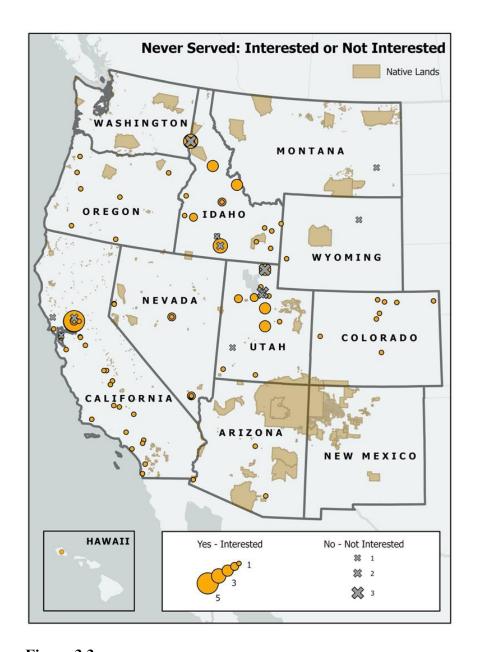


Figure 3.3

Map of Never Served: Interested or Not Interested with Native Lands

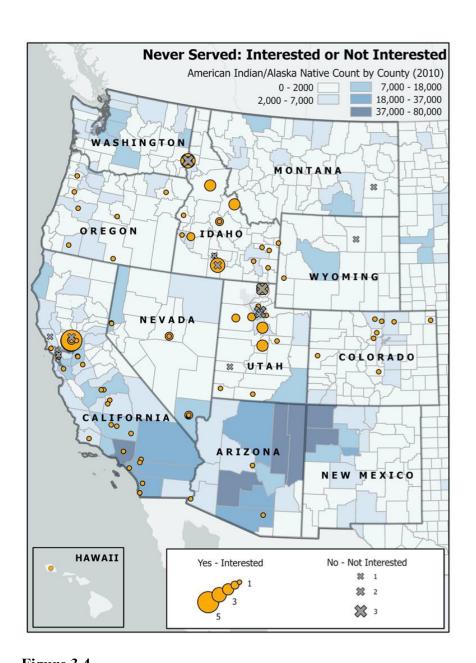


Figure 3.4

Map of Never Served: Interested or Not Interested with Demographics

From Figures 3.3 and 3.4, we see that many of the participants that said they had never collaborated with Indigenous communities are in locations that are not near Native lands or don't have a high population of Indigenous peoples. This is true in much of Idaho, Montana, Wyoming, and in some areas of Utah and Nevada. There are many respondents, however, that are located near Indigenous communities that are currently not collaborating with them. Some

respondents said that their particular positions in Extension are not community-facing, they don't see clients, or they are administrators, so they don't interact with communities directly. Others that are located near Indigenous communities listed barriers they face that could be overcome through support, education, and training; these barriers will be further explored in the Findings section.

The sample of respondents from the survey is considered unrepresentative, because everyone that received the survey was allowed to volunteer or self-select to be in the study (Gliner et al., 2017). No one that received it was required to participate. Further, an overall response rate of 5.50% is low, with some states' response rates being even lower than that, although the available literature on web-based surveys show that response rates vary greatly (Sax et al., 2003). The low response rate here might be attributed to many factors, including such unpredictable variables as the culture and climate of each state's Extension system, educators' workloads, and the very real influence that the COVID-19 pandemic had on people's willingness and ability to participate. Indeed, the survey was initially distributed in the middle of March, 2020, which was right when the COVID-19 pandemic was becoming a serious issue for universities, educators, and communities. This inevitably had a large impact on the response rate. The widely variable response rates between states might also speak to all these possibilities.

In addition to the locations and types of collaborations, the survey included qualitative questions about the nature of collaborations, respondents' opinions about what makes collaborations successful, what barriers they face to creating or sustaining collaborations, and what support from Extension would help make them successful. Many of the themes from current and past collaborations as to what makes collaborations successful and the barriers to

collaborations were also seen in the interview data as well and I explored these in conjunction with survey data.

In addition to survey respondents, I interviewed 20 Extension educators from 10 states and one US territory, including Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, New Mexico, Oregon, Washington, and Guam, to gain an in-depth understanding of the lived experiences of Extension educators. The numbers of interview participants in each state are represented in Figure 3.5. From State Directors, I received 43 suggestions for educators to contact for interviews, resulting in a response rate of 46.5%. These participants were from different geographical regions, held different kinds of professional positions, had varying levels of administrative power, and were both Indigenous and non-Indigenous in order to represent the varied perspectives that educators might have throughout the region.

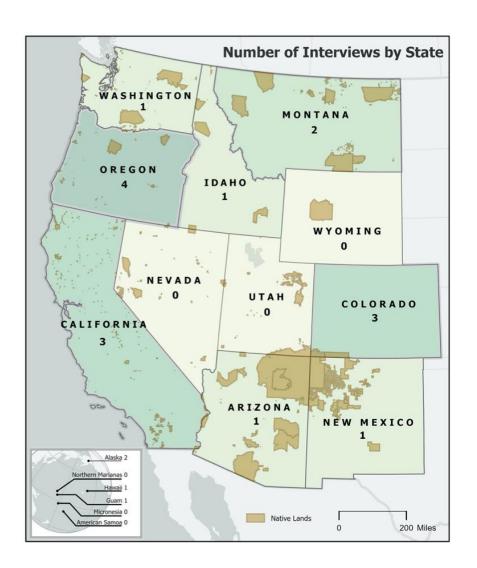


Figure 3.5

Number of Interviews by State

The participants in this work represent the wide range of professionals that work in Extension, their varied backgrounds, and the types of positions that they hold. County (or District, in the case of Alaska) Agents are assigned to serve an entire county, with some counties overlapping all or part of a given reservation. FRTEP Agents are assigned to serve a reservation in a similar way, but the funding for FRTEP positions is through a competitive federal grant. Specialists and Advisors are tasked with serving a whole state or a region of a state, but with a particular expertise. For example, I spoke with a STEM Education Specialist, Health and

Wellness Specialist, Natural Resource Advisor, and an Energy Specialist, to name a few. These Specialists might be housed at the university and hold joint professorship positions with instruction and research responsibilities or they might be in the field, serving the community with more of their time. Many people holding these positions work together within their state or across states, particularly if a reservation spans more than one state or if a Specialist is interested in working with a particular community that has an Agent locally. SNAP (Supplemental Nutrition Assistance Program) Educators, funded through yet another federal grant program, are tasked with educating participants eligible for SNAP benefits about nutrition and obesity prevention. Lastly, administrators, such as Directors, Tribal Liaisons, and Supervisors, most likely work at the LGI and manage the state or large parts of the state from there.

Data Collection

The survey questions were created in collaboration with the stakeholders of this work. I co-constructed a total of 20 survey questions, but because of the branching structure of the survey, the most questions that a respondent might answer was 11 questions. Respondents were directed to questions within the branching structure mainly based on their response to Question 4 regarding if they currently serve Indigenous communities, if they have in the past served Indigenous communities, or if they have never served Indigenous communities. Respondents that indicated that they currently collaborate or have in the past collaborated with Indigenous communities were asked about the kinds of programs they offer, how these are funded, what makes their programs successful, and what barriers they face. If they indicated that they had never collaborated with Indigenous communities, they were asked if they would be interested in doing so and what support or resources they would need from their LGI and Extension (see Appendix B2 for the entire protocol). I created the survey using Qualtrics, provided by

Institutional Research, Planning, and Effectiveness at Colorado State University. My Extension collaborators suggested that I allow for a two-week response window for the survey, so that was the protocol that I followed, based on when each State distributed the survey. State Directors were asked to remind their personnel about the survey after one week.

I created a semi-structured interview protocol in collaboration with the stakeholders of this work as well. While I did have a bank of interview questions to draw from, not all of the questions were asked in the interviews. Instead and in keeping with the concept that storytelling is important in decolonized knowledge creation (Brayboy, 2005; Delgado, 1988; Solórzano & Yosso, 2002), the direction of the interview was allowed to evolve as the participants' experiences and perspectives directed them, so as to best capture their stories. The interviews were more like a discussion, with an emphasis on the mutual co-construction of ideas and researcher reflexivity (Fierros & Delgado Bernal, 2016). This also serves to disrupt the traditional power dynamics of the interview process in which the researcher would traditionally guide the interview (Falcón, 2016).

I requested that each participant allow for at least an hour to be interviewed and that they allow me to follow up with them in the future if their experiences and perspective could be important in light of new information. Interviews were conducted over the phone or Zoom. I had planned to travel to as many interviews as possible in person, but the COVID-19 pandemic ultimately made this impossible. With permission from each of the participants, the interviews were audio recorded and transcribed for later analysis.

All of the survey and interview data were kept secure on my password protected computer. For the interviews and survey, a pseudonym was chosen for each participant and used instead of their name and all identifying information have been removed. Only I have access to

primary data, including survey results, interview transcripts and recordings, and names of participants.

Data Analysis

Because this is a mixed methods study, data analysis focused on the goals of each component of the design separately and integrated the results to form a more coherent picture of the research conclusions (Creswell & Plano Clark, 2018). It was possible to compare results and themes across the interview and survey data. In this way, important information was gained from both quantitative and qualitative data, but the results were compared, correlated, and integrated to properly inform equitable support of Indigenous communities.

This study was also convergent because I integrated the information during the interpretation of the results, after having collected the quantitative and qualitative components at the same time (Creswell, 2009). The quantitative and qualitative components had different scope and aims; the quantitative survey was distributed widely in order to understand large-scale trends in the Western region of Extension concerning collaborations with Indigenous communities. With this information, I was able to create maps of the current collaborations in the region because I was able to associate those collaborations with specific locations provided by respondents and to look for themes regarding success, failure, barriers, and needs in the region. The qualitative interviews were interested in the lived experiences of Extension personnel at 1862 LGIs regarding collaborations with Extension. After all of the data was collected, I compared the results and related them to the theoretical framework to enable overall interpretation to answer the guiding research questions. The integration of the quantitative and qualitative components of the study allowed for a more complete understanding of the research questions and the issues at hand and allow overarching themes to emerge from both.

For analysis of the survey, the survey software available, Qualtrics, has data analysis tools within it and allows for data to be exported. I also partnered with The Centroid, a geospatial and education center at Colorado State University, to help me visualize the data and create maps of the respondents and to visualize some of their unique answers to the questions. To analyze the interviews, I used thematic analysis (Bazeley, 2020; Braun & Clarke, 2006). First, I familiarized myself with the data by checking the transcriptions, reading and re-reading the data, noting initial ideas in research memos, and building open codes. Then, I search for patterns within my codes, to sort them into categories. These were then used to create themes by identifying analytical clusters. The analysis progressed from initially organizing data to show patterns in a descriptive way, towards interpretation of those patterns and their significance, broader meanings, and implications (Braun & Clarke, 2006) by evaluating the data as a whole, comparing to data from the survey and my research memos, and by engaging members of the community.

Because I have engaged the participation of the communities involved to develop the goals and the research questions, the data analysis remained closely associated with those goals in order to successfully represent the community's interests. Therefore, I paid special attention to the topics in the research questions, as well as counternarratives and unique experiences from people in the field. This ensured that I interpreted the data accurately and that the lived experiences of participants, particularly those with marginalized voices, are represented in the final conclusions. From there, I selected compelling examples and related the analysis back to the research questions and theoretical perspectives in order to write up conclusions and discussion (Bazeley, 2020; Braun & Clarke, 2006).

Further, I have used a semi-narrative analysis approach in addition to thematic analysis to better understand how participants conceptualize their collaborations with Indigenous

communities, the themes of colonialism, racism, and allyship, and how they convey those experiences to others. I kept participants' stories, "intact by theorizing from the case" (Riessman, 2008, p. 53). This allowed me to better understand how the participants linked ideas, made meaning, and applied that meaning to their work.

To stay in keeping with the CRT and a decolonizing framework, I prioritized the inclusion of counternarratives, particularly the goals and voices of Indigenous peoples (Brayboy, 2005; Delgado, 1988; Solórzano & Yosso, 2002). In recognizing the strong oral traditions for many Indigenous peoples, Brayboy (2005) prioritizes storytelling as data: "Stories often are the guardians of cumulative knowledges that hold a place in the psyches of the group members, memories of tradition, and reflections on power" (p. 439). Indeed, Indigenous peoples have traditionally used stories to cultivate deeper levels of collective understanding (Garroutte & Westcott, 2008; Thomas, 2005). Further, breaking apart people's stories into codable and quotable pieces has actually been found to be culturally inappropriate and contradictory to Indigenous ways of knowing because it dislocates the speaker from the story and it is possible for meaning to be lost (Hallett et al., 2016).

Identifying stories told by people not often included in Western discourse and keeping stories intact are important decolonizing aspects to this work. Because of this, I prioritized using whole quotes from participants rather than interpreting their stories myself, have included large sections of direct quotes in this work. In the case of the interviews, these excerpts were transcribed from spoken language and reflect the most accurate representation of that language as possible. In the case of the survey, these responses were written, so I included the responses here as they were written by respondents, with spelling and emphasis intact. This is in keeping with Indigenous ways of knowing, wherein individuals are expected to receive a story in its

entirety and then discover how it applies to their own experience (Hallett et al., 2016). In this way, I hope to preserve my participants' voices in as true a fashion as possible so that they can be interpreted by me, the Researcher, and you, the Reader.

During all stages of this process, I included my participants in the process in order to decentralize Western methodological practices and put the needs or the community at the forefront (Brayboy & Deyhle, 2000; Hallett et al., 2016; MacDonald, 2012; Stringer, 1996; Whyte, 1991). To do this, I gave the participants opportunities to provide feedback on whatever components of the process they wanted including reviewing transcripts, providing feedback on findings, and collaborating on discussion and recommendations from the data. After I wrote a rough draft of the Findings and Discussion, these were sent to participants so that they could provide feedback. From that feedback, I adjusted and made additions to the manuscript. This also served to increase the validity of the findings, while elevating the voice of participants. Further and in contrast to many research methodologies, participants' voices were included heavily in the Discussion section of this work. Participants had their own analysis and recommendations in regard to the outcomes of this research and, therefore, the Discussion section was co- constructed with me.

Figure 3.6 below provides a conception map of the research design as it has been described here, including the theoretical frameworks used, what literature informed the work, the design of the data analysis, and analysis of the data.

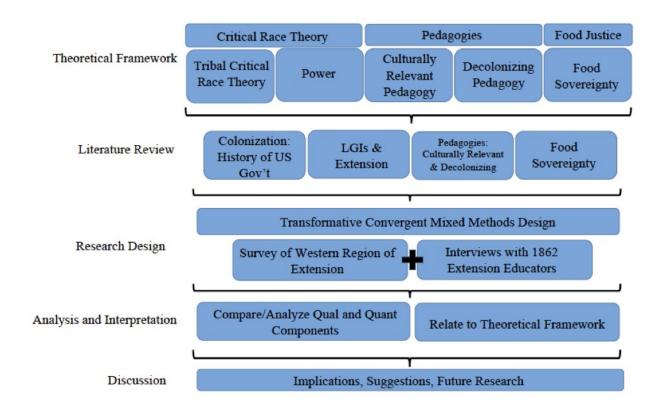


Figure 3.6

Conception Map of Research Design

I increased validity and credibility in the research through data triangulation between the survey, interviews, and my reflexive research journal. Through this triangulation and cross-referencing, I compared individual responses and major themes and related them to each other and the theoretical framework from across the interviews and survey. Also, I engaged in a lengthy member checking process in which participants were encouraged to discuss, expand upon, and amend any part of their contributions that they wished (Bazeley, 2020). Further, participants had access to the early findings from the entire study, so they could see and reflect on the contributions of the other participants as well (with the identities of all participants protected). This allowed the participants to see the larger picture of the findings so that they could discuss and make recommendations. The revisions and additions that participants offered were varied, but didn't constitute major changes. Some participants wanted to correct their

grammar, others included clarifications (Jack, for example, clarified some differences between his work with federally-recognized tribes or tribes that do not have federal recognition), and some provided updates on the programs that we had discussed (Amelia, for example, took the opportunity to update me on some of the new culturally relevant programmatic additions that she had made and wanted to include in this work). Through this process, the participants described the types of educational programs that they provide in Indigenous communities, their perspectives on the characteristics of successful educational programs and educators, and the barriers that they face in their work.

CHAPTER 4

FINDINGS

Outreach and access have become ideological cornerstones of LGIs, agriculture education, and Extension (Sorber & Geiger, 2014) and Extension services can be found in nearly 100% of US counties (Brewer et. al., 2016). However, LGIs have not lived up to this mission because they are not serving all communities equitably, including Indigenous communities (Brewer, et. al., 2016; Hiller, 2005). Further, LGIs were established through Indigenous land dispossession and conquest (Stein, 2017), so the perpetuation of alienation from Indigenous foodways through the inequitable access to Extension services, exacerbated these issues. Extension is a cornerstone of agriculture education and serves communities in many important ways that Indigenous communities should have equitable access to as well.

There are a small number of Extension educators from 1862 LGIs that do collaborate with Indigenous communities. This study sought their expertise and perspectives on what makes them successful in their collaborations, what barriers they face in their work, and what Extension could be doing to support them and potential future collaborations at a systemic level. Through a CRT and decolonizing lens, I employed a transformative mixed methods design in which I surveyed many Extension educators in the Western region and interviewed educators that currently collaborate with Indigenous communities.

This gave valuable insights into the types of programs that educators are facilitating in Indigenous communities as well as promising practices and significant barriers to this work.

Specifically, participants addressed what characteristics make programs and educators

successful; centering the community's goals, building and working with trusting relationships, and learning about the culture and context in order to deliver effective programs were essential for success. Additionally, participants highlighted barriers to successful collaborations including constraints imposed by the LGI including funding and time, as well as the larger societal, systemic, and historical issues of racism and distrust.

In this chapter, I begin with an overview of the kinds of programs that Extension educators are facilitating in the region. These include many programs that address traditional Extension topics such as 4H and Master Gardener programs, as well as programs that lie further outside of Extension's traditional reach including programs about public and community health, food sovereignty, and others that are determined to be important by the communities themselves. These were important and interesting because they spoke to the needs in Indigenous communities and how Extension educators are often in the best positions to meet those needs, regardless of Extension's traditional educational role.

In the next two sections, I identify characteristics of successful education programs and successful educators. Successful programs were centered on the goals of the communities they served, had collaborative support from an Insider to the community, and were culturally relevant. The educators also identified characteristics that made them successful, including making a long-term commitment and getting involved with their communities, building trusting relationships, developing an academic understanding of the historical, cultural, and educational context, being willing to learn, and developing allyship.

The last section of the Findings explores the barriers that educators identified to successful collaborations. These included a lack of funding, research logistics, issues with communities being remote and rural, their time as educators being spread too thin, community

distrust of government and universities, and racism that they and their communities face. Further, respondents to the survey that have never collaborated with Indigenous communities discussed the barriers that they found to be ultimately prohibitive to their forming or maintaining collaborations with Indigenous communities. Many of these prohibitive barriers confirmed the importance of the characteristics of successful programs and educators, as these barriers were often overcome in successful collaborations.

Extension Programs in Indigenous Communities: Going Above and Beyond

Participants identified a wide variety of programs that they facilitate in their communities. The subjects of these programs spanned from traditional Extension programming, to other, more community-centric programs having to do with traditional Extension subjects such as food and farming, and finally to programs that lay further outside of Extension's traditional models in order to meet community needs such as mental and physical health. In these cases, the Extension educator was often responding to community needs that were not being addressed in other ways. Lastly, many programs addressed needs surrounding food sovereignty, both to provide healthy, accessible food to communities and to help them maintain their traditional foodways and autonomy over their food system.

Some of the traditional Extension programs included 4H, community and school gardens, Master Gardener, SNAP and nutrition education programs, soil quality testing, and herd health programs. Participants also described other agriculture and food-related programs such as cooking classes, food safety, supporting tribal farms with coursework, workshops, and field trips, pest management, pesticide safety, aquaponics, forestry, native plant restoration, water quality, horticulture, Indigenous and Western crop production, and equine programs regarding breeding, vaccines, castration, and hoof care for both domestic and wild horses.

Many participants were also facilitating programs that addressed traditional agriculture and Extension subjects, such as community development or natural resource management, but the educators were approaching them in new and innovative ways. One Specialist described STEM-related educational programs about satellites and robotics and some 4H programs facilitated classes on public speaking and literacy. In one FRTEP program, Carrie took students to a conference about government and citizenship, where the students did a, "government presentation and talked about tribal government, how important it is to partner with our neighbors, and that was pretty remarkable." Jeff, an Associate Director of Extension described a community-based policing project looking at the relationship between the tribal community and law enforcement as well as a leadership academy he facilitated in a five-tribe collaborative effort. Jeff also described some of the natural resource decision making, planning, and stewardship programs he facilitated; he described one meeting as particularly "interesting:"

I've got a really interesting experience in a room facilitating a conversation about how to manage these sites. I had in the room both tribal elders who had been repeatedly arrested for what, at the time, was illegal tribal fishing and the state and federal officers who had arrested them for what had been illegal fishing. And which then, following a Supreme court case in 1974, was no longer illegal. So, really interesting experience trying to facilitate that group (laughs).

In another grant-funded program, Specialists from a university were partnering with both Indigenous communities and a close 1994 LGI in an interdisciplinary program to bring buffalo back to the reservation. They had various programs surrounding the buffalo including herd management, health and wellness, economics, meat processing, and a school-based curriculum.

Another category of programs even further removed from traditional agricultural services were addressing serious issues in communities surrounding public, mental, and physical health.

These were varied as well based on the needs of the communities in question. Physical health related programs promoted physical activity and nutrition, others fought childhood obesity or

opioid misuse, and provided preventative health screenings for children's ears, eyes, and teeth. Indoor air quality is also a physical health concern that Extension educators were helping their communities deal with. Frank described the need for indoor air quality programming:

A lot of the houses are very, intentionally for savings because of a lot of expense of energy out in the rural areas, a lot of houses are very closed up. It's like living in a Ziploc sack. So, I try to teach about getting carbon monoxide poisoning, staving off the lung cancer effects of radon, and other things that can happen when you have a really closed up house.

Alaska, where Frank is located, has issues with many respiratory-related illnesses such as asthma and tuberculosis, so air quality is integral to people's health and well-being.

Food safety was also a frequent topic connected to physical health. For example, because of climate change, the fish runs in Alaska have been altered. Traditionally, Alaska Natives would dry fish to preserve it, but the time period to dry fish effectively has shortening and food-born illness has become a problem. In response, Clay, a District Agent, has started teaching Alaska Natives to preserve their fish by canning. He also has programming about safe household cleaning practices, a particularly difficult issue because some of his community members lack running water. Dave also addressed food safety in his community by facilitating a grant program that assessed the food safety of vegetables grown in food sovereignty gardens across the 7 tribes that he works with.

Still another category of programming deals with mental health. One Specialist described working with rural farmers on stress management and mindfulness strategies, through a combination of online and in-person formats. On one reservation, the suicide rate among teens was concerning for the community, so a County Agent and a Specialist, in collaboration with the tribal mental health and school system, designed "Author Camps" where students would have the opportunity to write graphic novels. The Specialist, Diane, described the program:

We're doing this all year program with the high school students on developing their own graphic novel. There's been a rash of suicides in the community and hopefully through the drawings, they're going to become the protagonist in their story. So, they'll (the mental health experts) be able to better assess the mental health of the students, and then also finding ways to have a positive outlet when they (the students) get into these dark places.

The last large category of programs had to do with food sovereignty and, just like the other programs discussed, these were designed to meet the diverse needs of the communities they are in. While there were many programs that addressed Indigenous farmers, food production, and food safety, 7 of the participants referenced programs designed specifically with food sovereignty in mind. Julie, a FRTEP Program Leader, talked about food sovereignty as it relates to food access by providing affordable, sustainable, non-processed foods. She uses the words "food security," but what she is describing seems to be more like food sovereignty:

With the most recent submission (of their FRTEP grant), it had moved into more food security and gardening education and how to maintain your own food supply and things like that. [Reservation Name], like most Native communities, is a food desert, which is why we shifted in this most recent grant towards the food focus. It's more focused on building that food security and helping people make healthier choices when it comes to food, which is really hard. There's one grocery store in the town of [Town on the reservation]. I mean, you can get a very questionable quality tomato for \$4 or a Coke and a bag of Cheetos for \$2. It's really hard to tell people that those are the choices they need to be making when they don't have that sort of income to support making those sort of decisions. That's part of why we were working on building some of that garden education of, "You don't have to go buy fresh veggies, you can grow it in your backyard." And so, providing resources through seed packets and seed saving classes really helps aid some of that.

Julie is describing issues that are present in many rural communities where geographic isolation and the cost of living make the cost of healthy food prohibitive. In Indigenous communities, the higher rates of diabetes and other obesity-related health issues are worse than the US average, so making healthy, culturally relevant food accessible is important (Hoover, 2017).

Dave, an Advisor and County Director, also referenced the health disparities in his community and said that they are one of the reasons that food sovereignty is important to them:

The tribes were the best partners to work with. They were really interested in food sovereignty, and so I started working with them on their food sovereignty gardens. Mostly, I'm a technical resource, so when something dies, or they have some problem, or they want to know how to grow something weird, they give me a call and I get them in touch with somebody, or I figure out the answer... When the Food Safety Modernization Act was being implemented, there was regulation that looked like it was gonna apply (to the tribes), and since they were doing food sovereignty, they wanted to be able to grow things their own way, so I looked into the ramifications as best I could. And then I got a grant from the USDA, so we did an inventory of all the food sovereignty gardens in the [large area] for food safety. They're really concerned, 'cause they've got a high-risk population, 'cause of diabetes and obesity, so food safety is really important to the gardens.

For the tribes that Dave serves, food sovereignty isn't about producing enough food to feed the communities, even if these programs were originally started to make the food supply in his remote counties more secure. Now, they are more about health and autonomy:

So in our valley, because we can't really grow things and we're very remote, at any given time, the whole valley only has three days of food, and so there's always this interest in more resilience in the food supply. So, I think that was the original impetus. Now, these gardens are not raising enough to really make any realistic difference, as far as how much food they're getting. I think they're trying to demonstrate more than anything else that it can be done, to have some kind of control over things they have access to because they may not want to go to the grocery store, you know. So they do have local options, and they have a farmers' market, and it helps with that.

Here, we see the importance of food and farming beyond sustenance; growing food and providing that food to the local community in their own way is just as important to the Indigenous people in Dave's community as sustenance is.

Kent is an Associate Director for Tribal Extension and he described some of the programs that his FRTEP agents are facilitating with tribes in their state centered around bringing back traditional foods:

Some of the work they do, they do traditional foods. There is a lot of effort right now in food sovereignty and bringing back some of the traditional diets and the traditional foods

that were lost. And now that they're gardening more and gardening's picking up, they can pull back some of these, like squash, sugar cane, some of these things that were lost that the elders used to be aware of. And even hunting and, you know, eating pack rats and stuff was one of those staple diets of the state. One of our FRTEP agents partnering with nonprofits, they actually had a project where they map the old diets of the [Tribe].

Here, Kent highlights the cultural importance of traditional foods, in addition to the importance of health that Julie and Dave described. He describes the foods that "the elders used to be aware of," and gives examples of foods that have cultural significance to the communities. This is another important dimension of food sovereignty.

Carrie is a FRTEP Agent and identifies as Native American herself. She discussed the programming that she is delivering centered around tribal food sovereignty, her history with traditional fishing practices, and the importance of traditional tribal agricultural practices in her community:

We have been talking about tribal food sovereignty for a very long time, for a few years here... It's just a really slow process here, but it's starting to move a little bit, I think. And I don't know if the different tribes that you work with, if they have traditional tribal agricultural practices? Hunting, and gathering, and harvesting, that sort of thing. Really focusing on those things because food sovereignty, especially in Indian Country, is huge for business. There's tribes that are providing all the food for their casinos, it's affecting their bottom line, you know? Completely sustainable, and so it's amazing. And I'm hoping that we get to that point, eventually.

But more importantly, teaching tribal members, and people, not just tribal members, but everybody living on the reservation, how to grow their own food. I really took for granted as a kid, the abundance of salmon that we had. We had it in the freezer, we canned it, we had it dried, we had it smoked, we subsisted off of it, a lot of the time. Well, here in [local river system], the salmon were killed off by the dam, you know? Were taking away from the [Tribe's] people, and all these [local river system] tribes. What's really cool is the [Tribe] has been working really hard, we've had two years of salmon release programs into some of our ancestral tributaries. It's pretty remarkable.

And I guess my point that I'm getting to is, I would like to see more traditional foods incorporated at the schools. I went to the FRTEP Conference in Michigan, and I can't remember that lady's name, had talked about just incorporating one traditional meal into your student's lunches reduces things like, diabetes, hypertension, and different things like that. And that's just one meal a week. I just had a meeting with our elementary school principal... He was completely unaware that Natives had the highest diabetes rate. He was like, "What?" I was like, "These are your students!" So, we started talking about food sovereignty. He was like, "Okay, one step at a time."

Carrie talks about the importance of traditional foods and food sovereignty in a few contexts here; she talks about the economic importance of producing your own food and how that can affect a business' "bottom line." She also reflects on her own experiences as a child, when her family participated in traditional salmon fishing and how important that food was to their health and subsistence. Lastly, she connects these ideas to the health of her community, the school-aged children in particular, and how she might be able to collaborate with the school system to introduce one traditional meal per week to their menu. These themes- economic stability, connection to culture, and the health of the community- are all important aspects of food sovereignty and goals that Extension educators can assist their communities in achieving.

James also connects his early experiences with family and traditional foods to his current work on Guam assisting farmers:

When I was growing up, where I built my house, was my family farm. I grew up with my grandmother, with traditional crops. Breadfruit, and some mangoes, and then some corn that we would eat. For a time, a lot of the local farmers were going into growing crops that were brought in from the West. And they're growing well, we just had to put more input into it. There was a lot more fertilizer, we did a lot more things to make it grow.

But then, back in the early 2000's, they started going back, they had this word "sustainability." What are we gonna do to sustain the agriculture that we have here on Guam? It lit up, there was a light in everyone's head that said, "Hell, it worked out when we used to do our own crops, our traditional crops." That was actually the way to do it. For me, if you want a sustainable farm, especially when you get older, traditional crops are probably the best way to go, 'cause you're looking at agro-forestry, you know, permaculture, something like that, where by the time you're 60 and 70, you're just walking through a field of an orchard, picking stuff, rather than bending down and picking stuff off the ground. It's like a retirement plan. It's like a 401K plan.

My wife does 401K plans. She always mentions to me, "It's never too early to start saving." And I always take that same thought that I tell everybody, "It's never too early to start planting for the future," and that's exactly what I try and get my middle-aged farmers to think about is- their retirement plan. Going to traditional crops.

In James' experience, Western and Asian crops will grow on Guam, provided farmers use more intensive farming practices. If the sustainability of agriculture on Guam is the goal, however,

both for the security of local food and farmer's health, farmers should embrace the ease of traditional crops as part of their long-term goals, just like retirement plans.

Margaret's state is also interested in food sovereignty, but they make a point to not just focus on rural agricultural practices and recognize that much of the Native population they are serving live in urban settings:

One project we've been working on is sustainable farming, both in reservation communities, but also in urban Native American communities. I don't think a lot of people know this, but many of our tribal folks are living in major metropolitan areas. Right here in the state, we have a sizable urban Indigenous population, and we are partnering with our Extension unit, which is in an urban area, to talk about how we can help people do small community farming, how they can use traditional foods in healthy ways, how do you dry food, how do you preserve food. We've even created a partnership between our Extension in that area with our on-campus Native American community to engage in a better understanding of First Foods, how do we protect First Foods, and how do we help our urban Native community members have access to some of this knowledge and some of these foods. I think food sovereignty is really big. It's exciting to see that partnership grow.

Access to healthy, culturally relevant foods is equally important in urban settings, so Margaret's university prioritizes that as well, but maintains the important components of food sovereignty previously noted- traditional, healthy foods that people can grow themselves, and rely on as a source of sustenance.

The wide variety of educational programs that Extension facilitates for Indigenous communities speaks to how important it is that these communities have access to Extension services. These programs spanned many topics including traditional agriculture education programs to physical and mental health to food sovereignty. Extension is providing significant public goods for all the communities it serves, but Indigenous communities have unique and sometimes more severe issues to address. Based on community needs and challenges, Extension is filling an important role that might otherwise go unfilled.

Characteristics of a Successful Education Program

When asked what makes collaborations with Indigenous communities successful,

Extension educators tended to group their responses based on successful programs and
successful educators. First, I explore the components for a successful education program. These
include the themes: centering the goals of the community, finding collaboration with an Insider
to the community, and creating culturally relevant programming and pedagogy.

Centering the Goals of the Community

Nineteen of the twenty interview participants spoke to the need to center the goals of the community when designing and implementing educational programs. Even when facilitating programs based on more traditional models, such as SNAP Education of 4H, successful educators found ways to make sure that they understood the goals of the community within the context of the programming and presented the programming in a way that met the community's needs. This is so important to James, an Agriculture and Natural Resource Agent and a Native of Guam, that he described it as central to his job and, in fact, the reason that he loves it:

I do what my clients tell me to do. When they ask me about something, I say, "Well, let me check on that." And then, all of a sudden I become somewhat of an authority. Extension does that to people. It leads you in a direction where you don't expect to be, and it makes you uncomfortable. You know, when you hear something from somebody and you don't know the answer... I guess that's why I like Extension work- I like being uncomfortable (laughs). And that's why I love this job.

Because James centers the goals of his community, he is always learning as their needs and goals change. Randall, a County Agent, also communicated the same sentiment, "Especially among Native American peoples and tribes, you need to be completely upfront with them and don't tell them what they need. Let them tell you what they need. That is extremely important."

Survey respondents also commented on how centering the goals of their communities helps to make their programs successful. Twenty-seven of the 188 survey respondents that have

experience collaborating with Indigenous communities made comments about this. For example, an Advisor from California said, "Listening to tribal concerns is of high importance. Another important item is not rushing or trying to meet my goals, but let the tribes goals and objectives run as the primary driver of the project," and an Extension Educator from Wyoming said, "You have to have respect for the nations which usually means that you have personal connections or background on native nations. Knowing their culture and listening to their needs comes first before program development." Both of these comments highlight the importance of asking what the concerns of the communities are before implementing programs based on the goals of Extension.

Unfortunately, traditional Extension models and programs often don't meet the social, cultural, and economic needs of the recipients, especially in Indigenous communities, where the effects of colonization are unique (Emm & Breazeale, 2008), so this adaptation and attention to the community's voices was crucial. Karen, a County Director and former FRTEP Agent, alluded to this disconnect and how current Extension educators are learning to address it:

Colonizers around the world would initially go in and just try and wipe out the entire Indigenous population. And then they would go to a point where they were being very paternal to them, but not in a good way (laughs), and they would totally take away their culture. They couldn't dress the same way they had. They couldn't use their religion. They couldn't speak in their language. They couldn't worship in their own ways. They just took everything away from them and left them kind of floating out there. And then, as we got a little more enlightened, we would go in and say, "Hi, I'm from the university, and we're here to help." But we never asked them what they wanted. We were still like, "This is what you need to know." And so, in countries where they finally wised up and went in and said, "We're from the university, what do you need help with?" And that took, you know, a century (laughs) to get to that point.

Karen not only centers the goals of her community, but does so in the historical and cultural context of that community. By understanding how colonialism impacted her community

members and how universities contributed to that, she gives context to the relationship that she has with the community and highlights the importance of centering their goals now.

Diane, a Regional Specialist, discussed the historical, colonialist tension as well, discussing when predominantly White Extension educators enter Indigenous communities wanting to put on educational programs:

I think the most important thing, and it's the tool that would be most helpful to anybody working with any Native population, is figuring out how to ask the questions on, "What is it that we can do to support your programs?" It has to be driven by the people in the tribe or in the tribal community, because otherwise it's just White people saying, "Here, we know best." And, we don't.

Emily summed up the connection between centering the goals of the community and understanding their history of trauma by saying that, if an Extension educator doesn't understand, they could do more harm than good: "Know your audience. If you don't understand their background, the trauma informed curricula and approach needed, I think you shouldn't do it. I think you really could do more damage than good. I hate to be that blunt about it, but it's really coming from my heart."

Similarly, eight respondents to the survey explained challenges that they had faced when the goals of the community and the Extension program did not align. This was often when an Extension educator tried to implement an existing program in a community, while the needs or epistemologies of that community didn't match the program. A Program Coordinator from Utah said, "Tribes rightfully are not impressed with our white approach to natural resources management, and sometimes just do not want to be involved in discussions," and a Specialist from Idaho said, "Sometimes I don't have a good grasp of the needs of the Indigenous Communities relative to the programming content and support I have to offer." These are both

examples of when Extension educator's knowledge or approach to solving problems doesn't align with Indigenous methods or goals.

Acknowledging the traumatic history of Extension and universities dealings with tribes is only the first step. Even further, centering the goals of the community also recognizes tribal sovereignty by respecting tribes' authority to direct their path. Jack talked about this during a discussion about working with tribal administration and who within the tribe Extension educators need to gain permissions from:

Yeah, it's very, very confusing. And when I started to look into it, I realized there's kind of those pitfalls that you don't know are out there. Working with the tribal elected officials, tribal council, you want to try and keep their information confidential as best you can. You want to help them, but like any other public official, you're not trying to lobby them. So you have to be more careful about saying things like, "You really want to invest this money to do this type of a project." I mean, that's for the tribe to decide. With another type of an NGO, you'd be saying something like, "If you want to solve this problem, it's going to cost you \$10,000, and here's how you're going to build it." But you don't necessarily want to go into a tribe saying that type of a thing. It's their tribal sovereignty. They're going to want to solve it the way they want to solve it.

Jack makes the important point here that centering the goals of the community isn't just good educational practice, it is important for recognizing the tribe's sovereign status. With other clients, Jack might feel comfortable telling them what they need to do and how much money they should spend, but, as he puts it, those things are "for the tribe to decide." He can give his best advice and then leave it up to them.

Not only does centering the goals of the community make sure that their needs are being met, it also increases engagement and participation. Ann, a 4H and County Agent, said of her success in getting high participation, "I think some of the success is having those meetings with the community members before you plan it, and so you know it's something that they're interested in, that's a need." A few participants talked about the difficulty of getting community

participation, but involving the community members in the planning process could be a way to increase involvement.

In order to assess what a community needs, participants named a few ways they gather ideas. Some use advisory boards made up of members of the Indigenous community, some attend tribal meetings like tribal councils, some conduct formal needs assessments, and some have members of the community reach out to them directly. Julie has it written into the Memorandums of Understanding (MOU) that her FRTEP program has with tribes, stating clearly that Extension will provide services and programs based on the tribes' input. She says, "To my knowledge, we have a different setup than a lot of the other FRTEP programs and I know we're different than a lot of Extension in general, but that's sort of the way it should be."

Jane is Associate Professor in Nutrition and identifies as Native and she discussed the process that she and others that she works with have developed to understand the needs of the community; not only do they ask them what kinds of programming their community needs, they also asked them what they saw as possible solutions to their issues:

I guess that's the one thing about knowing your community and acknowledging when certain strategies are appropriate, by doing your due diligence... we had community meetings, we went out and interviewed people, and had in-depth interviews, and did all these things. So, even if you're not from the community, making sure that you do your part to get to know the community and see what the community thinks, is very important for you to be determining the most appropriate way to address an issue.

And the other interesting thing is that, in that process, when we had community meetings and we engaged with the community, we asked them what they thought their strategies would be to address this goal. And, we found that a lot of the strategies that the communities had brought up, it actually aligned with best practices. So basically, I guess the point of what I'm saying is that the community knows best.

In this way, Jane centered the goals of her community in the planning of educational programs, and also leveraged their knowledge to find solutions. This respect for the voices and knowledge

of community members is important for programs to be successful and relationships to be maintained.

Margaret also engages in discussions with tribal members to understand their goals and stresses the importance of doing this often, and with an eye towards to the future and the current issues that tribes face:

What does a 21st century relationship look like with a specific tribe? That's causing us to have some new kinds of conversations. As you know, some of the challenges that we're facing as a nation are issues around climate and how it's impacting the environment. So that's a topic with tribes. Broadband access. I think if anything, the lessons we're learning right now from COVID is the need for rural broadband access, and reservation and tribal communities are at the center of some of those conversations because there's just a sincere lack of that. So I know that we're working on that end to really further those conversations about where and how are we going to move things forward.

Margaret highlights that Extension and Indigenous communities are partners in an ongoing and changing process of community development, requiring us to, "constantly educate and reaffirm our commitment to tribal communities... that's just consistent, constant work." As needs change and crisis emerge, Extension needs to reevaluate their collaborations with Indigenous communities to make sure they are keeping up.

Regardless of the way the ideas reach Extension, many successful programs came out of employees' willingness to take them on in supportive roles, allowing the community to take the lead. Danielle, a Health and Wellness Specialist, takes this a step further and advocates for the community to lead the educational efforts, as well as inform them:

I would say, first and foremost, I don't know how one would expect to have success without having local voices on the team. I can't stress that enough, and not just once you have money and once you have a project design, but at the very beginning, so that there's buy-in and the project is meeting the needs of the communities. We are literally just there as a backup to support and, you know, to write grants, get money, and those types of things, but that's all secondary to, again, defining the problem and figuring out what would work best in the community.

She, and others at her university, make it a priority to provide backup support to Indigenous communities by writing grants so that the money goes to the tribe or the Tribal College, with the university being a subcontractor in a supportive role, flipping the traditional power dynamic, and allowing the goals of the community (rather than the university) take precedence.

While centering the goals of the community is an important practice for a programs' success, this is not without its difficulties. While Clay thinks it is very important and prioritizes it in his work, it does also present its own complications. Clay's educational and professional background is in public health, so many of his priorities for programming are centered on public health topics. For example, his Indigenous community's traditional method of preserving fish is to dry it, but because of timing changes in the fish run due to climate change, that was causing some food safety issues. To address this serious public health concern, he tried teaching people how to can fish instead:

One of the things that we've been interested in, especially in the context of climate change and with reduced fish runs, is canning fish. This is not a traditional Alaska Native practice, so it's different than drying fish or smoking fish in the smoke house. But, because there's been restrictions on fishing, people haven't been able to fish at the same times that they're used to, and get those fish up and get 'em dry when they're supposed to dry. It has been more difficult to do traditional practices of smoking, 'cause it's pushing into the rainy season. Then, we've been trying to push people towards canning as an alternate method of preserving fish, and it's been tough. You know, not everyone wants to change the way they do things. It does require some different equipment and it's kind of a different thing.

The health of his community members is very important to Clay and he sees it as his role to help educate healthy food preservation practices, but in this case, that has meant encouraging people away from their traditional practices due to outside forces. Clay understands his community members' reluctance to give up their traditions, but he also wants them to be safe and healthy.

Clay also acknowledges that what people say they want from educational programming and what he thinks they need as a public health expert, aren't always the same. Clay wants to deliver programming that benefits his community's health, and not just what they say they are interested in, keeping in mind whose voices might be the loudest and why:

A lot of times, people who might have needs for classes aren't always the strongest at advocating for those classes. A lot of times, people that come to the classes that I do in [City] or ask me questions... It is for things that are not urgent health needs. You know, people sort of like to learn how to pickle vegetables because it's a fun activity, or they want to know how to grow food, not because they're hungry, but because they're looking for a hobby. Whereas a lot of times, people who are resource-challenged don't have the same hobbies, right? You have to try to balance those things. And a lot of times, what is popular, or what you're getting asked about, or what people are saying you should do, may or may not fit the needs of the community.

Clay's connection to his community members and his prioritization of those most in need influence the decisions he makes regarding his educational programs, sometimes despite what the loudest voices are asking for. In addition to listening to the voices in his community, Clay does other things to make sure that he is meeting their needs, including collaborating with the hospital and volunteering in the community on city council and the fire department, so that he can take many perspectives on the community's needs into account.

Both Clay and Jeff also discussed the tension between their role as a content expert with "the best science" and working within a community with its own socio-cultural history. This can be a delicate balance for Extension educators to find, especially when the historical role of Extension was to bring the expertise of the university to the public, as Clay describes with an example of community concerns versus what he knows to be the actual cause of health issues:

As experts, do we have a responsibility to address things as we know them to be true versus addressing in a way that is responsive to community interest? We have this idea that we should be addressing the problems as people see them, this is what's important to the community. As an example, in air quality, the community really cares about road dust, right? And then we come in as a professional and say, "You know, that's actually

not what's making you sick. What's making you sick is RSV." So how do you balance those things? That's why computers can't do what I do (laughs).

I've always been in the camp that we have a responsibility to tell people things that are true. We have a responsibility to factual information. Of course, it's hard when you're going to a community and asking them what they're concerned about and they tell you something that isn't maybe what they should be concerned about. And that's, I mean, that's the job, right? Taking research-based information and delivering it to people at a usable level. That's what Extension is, right? That's always what Extension has been.

As he describes, Clay is highlighting a tension for anyone serving a community in a responsive way- the balance between community concerns and an expert's opinion. This is something that all Extension educators will face when centering the goals of their communities and a topic that Extension as a whole should be supporting educators in.

Jeff also talked about an important balance that he has learned to find over time by recognizing the limitations there are and working in collaboration with the communities he serves. In reference to a discussion about an Extension educator's role as an expert, Jeff describes the approach that he has learned over his years of service:

My experience has been two-fold on that. One is there's resistance to that approach because, as good as the science might be, it often is not the entire picture. And then I've also come to realize that sometimes the "best available science"... we have to unpack that label and it's the best we have at the time. It's not the ultimate answer. And "best available science" keeps changing.

Jeff tries to find a middle ground between the "best available science" and the needs of his community by recognizing that expertise has limitations and compromises have to be made in a collaborative way. He summarizes what it means to collaborate with communities perfectly, "What we can do is work together to achieve solutions for this time, based upon what we know together."

Centering the goals of the community is an important strategy for both the success of an education program and to make sure that that program is serving the community in the best way

possible. This requires the educator to try to learn from and involve members of the community and to change their programming accordingly. Inviting community input and involvement brings its own challenges, such as when the concerns of the community members don't align with what the science or experts are most concerned about, so finding a middle ground between sides in a collaboration is best for community development.

Insider Collaboration

Half of the interview participants and eight of the survey respondents with experience serving Indigenous communities discussed how having at least one member of the Indigenous community on your team is valuable to assist in the planning, teaching, and implementation of the programming. Kent called these people, "a champion. Somebody that is on your side." Having an Insider on their side was so crucial for a survey respondent, a 4H Coordinator from Utah, that they said, "Having someone within the tribal community is the difference between succeeding and failing."

This enabled the educator to ask questions, recruit more participation, and make the programming culturally relevant in a way that they wouldn't have been able to achieve on their own. The Insider was someone that the educators could get honest feedback from and that they could check-in with along the way. It also gave the educators semi-Insider status in the community and their programming legitimacy. For some participants, this was sometimes another Extension educator that had worked in the community for a long time, a member of organizations within the tribal government such as the school system, environmental and natural resources office, or culture and heritage office, the tribal administrator, a family member, or a Native professional trained in facilitating educational programming.

Jeff talked about how there can be distrust for Outsiders and that having an Insider on your team can help to overcome that distrust. Having someone that will vouch for you is important for the community to have buy-in from the start of a collaboration:

I had the advantage in most of the situations I've described to you of having had either a prior relationship or having the benefit of being vouched for by somebody who had that relationship. I think that's critical. You can't come in cold and say, "I'm here from the university, I'm the expert, and I'm here to help." You need people to serve as proxies for you that will say, "Yeah, okay, I know Jeff's from the university and he's an old White guy, but he actually is here to help, so let's listen to him."

Jeff includes the intersectional Outsider identities that he holds here, including his race and his affiliation with the university, as barriers to overcome. Having an Insider involved can lower those barriers so that collaborations can continue.

Both Randall and Diane work closely with the K-12 Education Director for the tribe they collaborate with and have maintained that relationship for many years. That relationship benefits the programs by giving the two Insider knowledge on the interests of the community and as a source of learning how to teach and communicate across cultures. Diane described their trusting relationship and her willingness to learn from the Education Director, "She's been very gracious helping me to understand better the taboos, and the things that are okay within the tribe. It's like, 'Smack me in the head when I do something wrong.'" Randall and Diane also include tribal elders in their educational programs; Diane offered the example of their "Author Camps," where students get to write poetry, graphic novels, and fiction. She described how she included elders in her first Author Camp: "The first author camp we did, [Indigenous community member], who works in the building, he brought his father in to tell stories. We have like one full hour is telling the Native stories." Diane used the stories told to help inspire and engage the Indigenous students that she was working with.

A few of the participants included their closest 1994 LGI in their educational programs. Hannah, a Family and Consumer Science Specialist, is working on a grant in collaboration with the 1994 LGI near her university, as well as the tribe, to bring buffalo back to the reservation. As part of the project, she trains student interns from the 1994 LGI to work with different groups interested in implementing projects with the buffalo. This gives students the opportunity to learn about their community, explore job prospects, and gain professional skills. Kent has also been collaborating with his closest 1994 LGIs for many years. They collaborate on grants and educational programs, and include students in their research projects. They are also in the early process of figuring out what it might look like to jointly hire faculty to be shared between the 1862 and 1994 LGI to work on issues that are common to both.

Other participants hired Native or local people to work on projects with them in various capacities. Karen found that hiring a Native member of the tribe to work with her in Extension enabled her to, "jump leaps and bounds over all the communication barriers," and gave her someone to ask questions to. Julie's team of FRTEP Agents are mostly tribal members; she said that this, "builds that level of trust that they understand what families are going through, what community members are facing, and can offer solutions in a culturally appropriate, respectful manner. It doesn't mean as much coming from me." Similarly, a Family and Consumer Sciences Educator from Idaho that responded to the survey discussed how they found success by partnering with a member of the tribe. They said:

Participants are recruited by an indigenous tribe member who knows all of her community members and is related to many of them. The contact and I determine programs which would be of interest to her community members and/or have been requested. My community contact handles all registration and pays for all materials and supplies.

This collaboration allows this educator to recruit participants, make sure that the programming meets the community's needs and split responsibilities with their Insider for better program success.

Dave had a grant from the USDA to look into food safety in the community gardens that he helped the tribes in his counties create as part of their food sovereignty programs. As part of the grant, he sub-contracted one of the seven tribes to do the work. He described his reasoning for the set-up:

Rather than having someone like me, who's not from the tribal lands and [University] doesn't necessarily have the best relationship historically with tribes, so I sub-contracted with the [Tribe] to do all the work. I gave them the hunk of 25,000 bucks and they used one of their employees, and she did all the side inventories, 'cause that way you wouldn't have some outside person like a [University] government person doing the safety assessment, it was a tribal person doing it.

Dave recognizes that he, as a university and government representative, wasn't the best person to evaluate the food sovereignty gardens for their food safety, so he hired someone from one of the tribes to do the work. This person was from the tribe with the "most-developed of the food sovereignty programs," and worked with all seven of the tribes in the area to meet food safety standards.

Danielle had the experience of hiring a consulting group of Native women to lead the facilitation of a program about opioid misuse. Danielle and her colleagues from the university work with them to plan the events, but left it up to them to facilitate because of their expertise and cultural understanding. She describes the group and their relationship:

They're this rockstar group of Native women who all have higher degrees in evaluation and facilitation, and so we, through our Tribal Liaison, have hired them to help us organize, facilitate, and run a lot of our tribal technical assistance training, and that's been really great because they're well known, and they're very culturally sensitive. One of them is from the tribe in [State], the other one's from a tribe in [State]... Having them

onboard has been great, to make sure that the content both meets the goals of the grant, but also is tailored in a way that is culturally appropriate. They know a lot of people from reservations up here, so a lot of our speakers are tribal members. That's been a really fruitful way I think of developing partnerships and making sure that our events are culturally appropriate.

Danielle and her colleagues worked closely with this group during the planning phase of their programs, but stepped back during the implementation phase. Her university makes a point of being in supporting roles, and allowing others to take the lead.

Six respondents to the survey cited not having an Insider to help them or the loss of one as barriers to program success. Sometimes, this was due to staff turnover within an Indigenous community, and Extension educators had a hard time maintaining those relationships. A Professor from Utah said, "The FRTEP program was never fully funded, so for many areas, there is not the local on-the-ground person that can facilitate programming. It is incredibly difficult, if not impossible, to do tribal related programming without someone with a lot of local connections and support." A Professor from New Mexico talked about an experience they had working with a great Insider, and how their collaboration with the tribe changed after she left:

I had a colleague that was the Registered Dietitian in the community. She is young, fun, creative, collaborative, and was loved. She opened many doors for me to do programming. When she left, things have been harder to navigate. She built long term relationships because she had consistent time with the people weekly through the clinic.

Of the survey respondents with past collaborations, 5 of those programs ended because the Insider left their job and took the relationships that they had built with them, making it more difficult or impossible for the Extension educator to continue.

Having Insider collaboration was beneficial to participants for entry into communities, to give their programs more legitimacy, to help them understand the needs and cultural norms within communities, and to make sure that their programs were culturally appropriate. The

Insiders that they described might have been members of the communities or hiredprofessionals. No matter the reason or the Insider's positionality, this collaboration increased the success of the education programs.

Culturally Relevant Programming and Pedagogy

Many successful educators either planned programming that was culturally relevant or adapted existing Extension programming so that it was culturally relevant. Fourteen of the twenty interview participants and 25 survey respondents talked about how they make their programs or pedagogy culturally relevant. They accomplished this in many ways, depending on the culture, values, and needs of the communities they were serving. For example, educators included Native stories in their programs, adapted existing programs to the specific contexts of their communities, and combined traditional and modern approaches to education.

A large number of participants included Native experiences and stories in the programming. Diane describes teaching "within the culture" of the Indigenous peoples in Alaska by bringing in elders to speak, "I worked at a science museum, and I found the best way to work with different cultures was to teach within their culture. I was up in Eskimo Villages, and I worked closely with the elders in the community to bring in part of the culture. That was a big thing." Diane worked to include information and examples that were relatable and important to the peoples in her community. Now, Diane works with a different tribe in another state, but continues to use many of the same strategies. For example, she has brought in Native speakers to teach the language to children and, in a program about writing graphic novels, Diane incorporates a novel written by and featuring Native people, along with other graphic novels too.

Ann also brings Native speakers into her educational programs. In the Native culture that she works with:

They need to know their clans and their family background and where they came from to be able to properly introduce themselves in their culture. We work on that as part of our 4H project too. I always get a grandparent or somebody that's fluent in the Native (language) to be able to introduce themselves.

Not only does Ann incorporate Native language, but, as we see here, she makes it a central part of a 4H project. 4H is a program that is an integral part of Extension programming, so Ann adapts the model to be culturally relevant in the community that she serves.

Creating culturally relevant programming was very community-specific, with educators considering the fact that each tribe had its own cultural history and including those cultural components into their programming. Emily made the point that Extension educators need to learn about the specific communities that they are serving and not categorize all Native American communities as the same, "I think being very sensitive to the cultural references is exceedingly important in delivering services to the Native American community... Not wanting to lock all Native Americans together in one pot. Understanding the nuances, really working on understanding their cultural references." This came up with participants in many forms including understanding how certain literary characters are perceived in different cultures, the importance of language in different cultures, and the different kinds of foods and diets practiced in different cultures.

Jane, who is Native and works with Native Hawaiians, was sure to point out that culturally relevant pedagogy is going to look different depending on the specific culture involved, and that one approach would not work with all communities:

We have some island communities where, so especially if you are an Extension Agent working on [Island Name] and access is restricted. A majority of the people who live there are Native Hawaiian and the Hawaiian language is still commonly spoken there. So there's a lot of different nuances. So if you're in [County Name], then you're actually serving three islands. And I would argue that each of those three islands are very different, and so the approaches that you have to take would be very different. What works here on [Island Name], it's most definitely not gonna work on [Other Island Name], which is much smaller.

To illustrate this point, Jane gave an example from her experience working on a childhood obesity prevention project. On some of the islands, where sidewalks and other outdoor spaces are safe and available, she could encourage community members to utilize them. On the other hand, there are islands where outdoor space is neither safe nor available:

In other communities, there's no such thing as sidewalks and then there's wild dogs. So you're gonna let your child go walking outside without sidewalks, and with the likelihood that they'll get attacked by dogs? So that strategy, to try to encourage physical activity, has to be very community-specific. Maybe in a community on [Island], that has sidewalks and where there's not concerns about dogs, that might be appropriate, but in the other islands where that's not the case, then you're thinking of other strategies that would work better for physical activity that probably wouldn't be encouraging families to go on walks. It might actually be working on dog control methods, right? Or, thinking about policies with the schools and their parks. We try to think about working with schools in changing their policies so that their playgrounds can be accessed by the community outside of school hours and things like that.

For Jane, this comes down to knowing and understanding the communities that are being served and adapting the programming to meet their very specific needs. She works by being creative and finding solutions to solve specific problems within communities.

Carrie, a FRTEP Agent, is Native as well and is working within a Native community. She has found success by both creating culturally relevant programming and adapting traditional Extension programming to her community's needs. She finds that incorporating culture in modern ways, along with traditional components, speaks to her students and makes sure that all of them find connection, "... With Native youth, obviously, incorporating culture, but in a modern way. To have kids get stuck on- you have to do beadwork, you have to be a hunter, you

have to be a fisherman- there's so many other ways that we can incorporate culture and tradition through contemporary activities." She does this by blending the traditional and the contemporary, particularly through art, which is both important to her and an important cultural element in the community she serves. Here, she discusses a literacy activity that she did, where young students read the book, *Gift Horse*, a trip she took older students on to a conference about government and leadership, and how combining traditional cultural elements with modern ones makes sure that all students are engaged:

It's always good to keep those traditional, cultural elements there, but, for instance... like, with *Gift Horse*. We could have done beading, but instead, we used the elements of Native people and horses, and we painted them, versus beading, or weaving, or different things like that. Taking cultural elements, and using different mediums of art. Then, with our teenagers, you know, leadership and government, that goes hand in hand with things that we've (the tribe's) been doing since time immemorial. We really focus on leadership with our 7-12 grade, and those are the types of things that they're seeing in (Tribal) Council, that they're ancestors were doing years ago, and fighting those modern day battles, like land use, natural resources, environmental issues, drugs, alcohol. Giving them those skills to use their voice, to stand up for themselves, and get back to remembering who they are and where they come from.

We do try to have different opportunities available to them. So we've offered different things like ribbon skirt making, we had moccasin-making last year, but we also have other things that they can participate in that don't center around those things, because it's not for everybody. My son, for instance, took a basket-weaving class, and his instructor was getting really mad at him because he didn't want to do it. She was like, "Well, you come from a long line of really successful..." He's like, "Well, that's not who I am. I would rather be a lobbyist, or a legislator, or a lawyer, or play basketball."

Carrie uses these two examples, the literacy project with the younger children and the leadership conference with the older children, to illustrate the importance of both including traditional, Native components in her education programs along with modern elements as well, so that the culture isn't essentialized and so that all students find relevance and growth. Further, some students, like her son, don't find relevance in some traditional practices, so she wants to make sure that he and others like him find opportunities too.

Carrie also takes advantage of long-standing Extension programs, like 4H, but makes sure that cultural elements from her community are included to make them relevant:

Our population is changing and our interests are changing. We do things like Lego robotics with the kids, leadership is something that we really focus on. Literacy and art is something that's kind of new. Trying just to make it relevant, and using Native stories and just making them come to life.

The tribe that she serves has what they call the, "five core values, so that's stewardship, membership, scholarship, guardianship, and spirituality. All of those are really traditional elements." Carrie sees significant overlaps between her tribe's values and the values of 4H and Extension, so she uses those to make her Extension activities applicable to her community:

I think, as Indian people, that we've used for a really long time, so any way that we can incorporate those five values into what we're doing here at Extension, we can do any activity and make it relevant. What's really funny is that our five values that we have for the tribe fit almost perfectly into the 4H values. It's just making kids into good citizens, and good people. So, I really didn't see the difference.

Carrie is great at finding overlapping goals and values between Extension and the community she serves to make the programs she delivers relevant.

Amelia, who partially grew up on the reservation she serves and is of tribal descent, also blends Extension programming, in her case its SNAP Education programming, with the interests and cultures of the tribes she serves. SNAP Education has fairly tight curriculum and requirements, but Amelia either finds or makes room for the addition of culturally relevant components. For example, she creates nutrition programming based on traditional foods, creates recipes that incorporate First Foods, and a seasonality calendar that tribal members can use when planning gardens and crops. She then tailors her programming about food preservation to those foods as well.

Finding ideological overlaps and common goals was a strategy that survey respondents found valuable when bridging cultural gaps between the university, Extension, and Indigenous communities too. A Nutrition Educator from California said, "I am able to adapt our allowable programming to fit the cultural guidance, so students can receive nutrition and cultural education together," and Forestry Advisor from California said, "Native people have a powerful voice on land management using fire as a traditional practice. Showing respect for their TEK (Traditional Ecological Knowledge) and involving them has made it successful." Educators need to be open to and thoughtful about finding and incorporating those overlaps, but this was a way for educators to find success in their education programs.

Many participants discussed their pedagogical approaches and how they deliver educational material to Indigenous communities. Emily, who also works in SNAP-Ed, makes her programming culturally relevant, not by changing the content, but by changing the context that the content is delivered in. She and her colleagues have found success in focusing on intergenerational programs with many of the marginalized communities that they serve, because of the importance that family plays for them:

When working with the Native American community, we want to work collaboratively with tribal leadership and particularly our intergenerational curricula. That doesn't just speak to the Native American community. It speaks to a number of other communities that we service that have multiple generations living in one home or respond most positively to intergenerational community work.

In order to make these changes and because SNAP-Ed is more prescriptive, Emily has to go through an approval process with SNAP-Ed, but she finds that it is worth it to be able to make the curriculum accessible and applicable to her community members.

Most people found that hands-on, experiential learning was more impactful than learning in a classroom or from written materials. Fortunately, much of what Extension teaches can be

taught in a hands-on way. Karen describes a native plants class that she teaches and how she approaches instruction:

Part of our (program) is talking about native plants and native plant uses, we just got out of the classroom and they had a little preserve there, and went walking out through the bushes, and identifying plants, and collecting plants and, then they really learned them. Then, you're not just sitting in class and saying, "Well, there were willows and they built this out of it." You can actually go out and touch it and say, "See how this bends or see how this would work for this." All of the Agents were finding ways to do that- to get out of the classroom, and into a setting where whatever you were talking about, there was some way to let them get real physical contact with something.

Participants said that this was the best way to deliver information for many reasons. By demonstrating a skill, for example, questions about technique or applicability come up more naturally when learning hands-on. Also, it allowed participants to differentiate their instructional level so that all of their community members could learn effectively. For example, Ann said that she tries to deliver her programming at a 6th-grade educational level and have little written material because many people in the community she serves are unable to read or write, or they primarily speak their Native language. Other recommendations from participants included the use of storytelling to convey information, incorporating all members of an extended family into the learning (with the understanding that "family" might look differently in different places), and taking a survey of how community members want their educational programming delivered.

Jane also talked about how she incorporates culturally relevant pedagogy into her online courses about nutrition. These courses are for nutritionists from all over the Pacific region, where geographic and cultural distance requires learning to be unique. She makes sure to emphasize that the science she presents is applicable and true anywhere, but the context and examples that she uses can be adapted to her students' contexts:

Within the science or nutrition fields, there's obviously very specific things that are the same no matter- the way that we digest food is the same no matter. (laughs) But the

things that we eat, the environments, and the access that we have, are all very unique and very different. We try to make sure that those basic structural things of nutrition are framed in a context that is much more relatable to the students. When we talk about carbohydrates, we don't focus on pasta and white potatoes, we try to talk about rice, because rice is very common here. Or we try to talk about our traditional staples like taro, sweet potato, and breadfruit. We just make sure that the context that we discuss things, and the examples that we use, and the case studies that we use, we make sure that it's very specific to our region, so that hopefully they can at least anchor it into something that they know and they're familiar with.

In this way, Jane is teaching students the important and foundational knowledge that they need, but in a contextualized and relevant way. Also, as part of her online program, Jane requires that students go out into their communities and apply their learning. Then, they reflect on and share their experiences with their classmates too. This brings their learning into their communities and teaches them how to apply it in contextualized ways.

It isn't only Extension educators delivering classes that need to adapt to be culturally relevant; many educators don't work in classrooms and engage with the community in the field.

Jack, a self-professed "highly trained technical scientist," often works with tribes on native plant restoration. He discussed the importance of understanding the culture of the communities that he serves through this story about an experience he had while consulting with a tribe about preserving oak trees:

Some of the tribal members who are more, I'm not a social scientist, but for lack of a better word, "religiously-inclined," they will talk about animals and plants in a very different way. One of the tribes I was working with, a lady was talking about how the oaks are their people and are their ancestors. It was eye-opening for me. She was one of the few people that have ever kind of described oaks in that way. Oaks are very important for [State] Indians, it was their main food crop.

It was interesting as a scientist and as somebody who is talking about managing oak woodlands and restoring oaks. What do you do with an oak that grows in a place that is obviously going to tower over your house or grow into your sewer line or your water line or your parking lot? Your arborist would come out with a chainsaw and chop it down, but she's talking about oaks as her ancestors and her people. That really threw me for a loop, because it was the first time I'd ever heard that. It was really difficult to grapple with. What tools would I use trying to maintain the health of my people? They're

very different from, what tools I would use to maintain the health of a tree? I haven't quite come to grips with that yet.

Jack's experience of his Western scientific worldview coming in conflict with the very different worldview of the Native woman that he describes is something that all Extension educators need to be mindful of, whether in a classroom or in the field. In this story, Jack is clearly showing respect for and valuing the worldview of the Native woman that he was working with, but he admits that he hasn't, "quite come to grips with that yet," and how he as a scientist can respect those beliefs in practice. He and others that he works with have started to explore, "traditional ecological knowledge as a valuable way of understanding how land is managed and a way of knowing information."

Further, Jack describes how what counts or doesn't count as "agriculture" differs between Western academics and the tribes that he works with:

One of the things that I've heard people talk about in [State] is that, "Native cultures didn't have agriculture." The counter to that is, "Well, they were managing land and they were maintaining oak stands, and they were maintaining shrubs, and they're maintaining wild flowers, and they were doing a lot of work to maintain these spaces to be beneficial." In some cases for thousands of years, in many cases for hundreds of years. So yeah, it's not domesticating seeds, but it's still domesticating land.

If you just step back from "agriculture" in one small step and move into the land, it's really similar, it just looks completely different. I'm on the same page as the tribes on that one. "Agriculture," yeah, you're totally managing the land, so I don't have a problem with that. But there are some tribal members I work with who definitely feel offended that people call them non-agriculturalists. They feel offended by that.

Again, Jack is describing an instance where Western and Indigenous worldviews are clashing in his work. He has embraced the Indigenous definition of "agriculture," as domesticating land, as opposed to what he describes as the Western definition, as domesticating seeds. Still, it is not difficult to imagine that Indigenous community members would not reach out to Extension or

similar programs to access the resources they deserve, given this disconnect and the devaluing of their traditional agricultural practices.

Survey respondents that also offered services that were more focused on scientific and farming subjects like Jack, also described some instances when Indigenous epistemologies and practices didn't align with Extension's. A Program Coordinator from Utah said, "Tribes rightfully are not impressed with our white approach to natural resources management, and sometimes just do not want to be involved in discussions," and a Livestock educator from Oregon said, "Many times I am told 'We are hunter gatherers, not farmers.' Why does America keep trying to make them farmers? Only 2% of our nation are actively farming so most people don't want to do this laborious work." Creating culturally relevant programs is not only restricted to classroom environments, but stretches into the field as well. Extension educators of all kinds need to be able to allow for different epistemologies, practices, and values in order to serve all communities well.

Seventeen survey respondents also cited the lack of culturally relevant programming or the inability to make programs culturally relevant, in the form of program structure, content, or delivery methods, as barriers to programs' success. Sometimes, educational materials or programs were created in the context of Western-centric content, reflecting the larger culture of Extension, and were incompatible with Indigenous culture. In the case of SNAP-Ed for example, the curriculum used by educators needs to be approved by the federal program, so they might not be easily adaptable to the educator's setting, despite their best efforts. A Nutrition educator from California said:

Our funding is linked to providing programming from approved curricula and recipes. There are only about 15 approved Native American recipes, and 1 approved curriculum. So, I have to adapt other recipes and curricula to make them culturally relevant. We have

sent in recipes and curriculum for approval, but have not received approval. Being able to provide more culturally relevant programming would help the programs to be more successful for the tribal community.

Also, the 4H curriculum was mentioned by an educator in Idaho as having similar cultural barriers, "Many of the tribal youth are new to 4-H and not familiar with the 'culture', we put in extra effort to make sure they understand how 4-H programming works, pledges, behaviors, etc."

A Professor from Utah expressed similar concerns about 4H, "The white middle class 4-H volunteer led model is not a good cultural fit with reservation community members."

The successful educators that made their programming culturally relevant did this in diverse ways that addressed the unique situations of their communities. They often created new programs to meet community needs, or they adapted existing Extension programming to the contexts in which they were teaching. The pedagogy that they used was different too, making sure to meet the community members where they were, whether in educational level or with examples that related to their daily lives. This made the learning more accessible and relevant to the community members.

Characteristics of a Successful Educator

In addition to comments about what makes for a successful program, participants also had advice for what makes a successful educator. These included making a long-term commitment to these issues, being involved with the community, building trusting relationships, having academic understanding, being willing to learn, and allyship. Many of these components overlapped and amplified each other, and would come together to make an educator particularly successful.

Long-Term Commitment

Half of the interview participants that I spoke with talked about how making a long-term commitment to the issues facing Indigenous and other marginalized communities is important to their success. Many had been working with Indigenous communities for many years, some for most or all of their professional careers, spanning sometimes 10 to 25 years. They were committed to the issues facing these communities, had developed useful strategies over this time, and proved to their communities that they would stay. Not all of this experience was within Extension. Some participants had been working with Indigenous communities in other capacities before joining Extension. This experience included a wide range of fields including social work, public health, public policy, nutrition, forestry, anthropology, education, and art. Many participants had made the decision to take their positions in Extension, as well as previous professional positions, because they wanted to work with marginalized communities on equity and access issues, and many had worked on these issues in previous jobs with rural populations, immigrant populations, and were concerned with race, ethnicity, and gender equity.

This commitment became important in participants' work because it is often difficult to work in and serve Indigenous communities for many reasons. Frank has experience with Indigenous communities from within and outside Extension and all over the US; when he was asked about how this experience affects his prioritizing Indigenous communities in his current work, he said:

I'd say that we (he and his Extension colleague) knew from our previous lives what events were big. We knew the people. I'd say that there was a familiarity to us. Although we're both White as snow, we are as familiar with the tribal side and the rural side because of our previous jobs, as we are with the urban (side). So, that just makes us all the more equitable and it's all the more advantageous for us to go and do those things.

This experience helped Frank navigate many of the issues that make this work difficult, which I examine more in another section below regarding barriers to this work, and caused him to prioritize working with Indigenous communities.

The fact that many participants had worked with Indigenous peoples for a long time might be due partly to participation bias; when I asked the State Directors for participant recommendations, they might have been more likely to recommend people that have been working in this field for a long time. It might also have been the case that the people most likely to agree to participate were people that care deeply about these issues and have a lot of experience to share. Even so, this wealth of experience over many years provides valuable information for others interested in collaborating with Indigenous communities.

Being Involved with the Community

Another characteristic of a successful educator is being involved in the community. For some, this included sitting on local committees (such as city council, or the Commission of Indian Affairs), going to local sporting events, or volunteering (for example, with the fire department or other community organizations). This allowed participants to meet people, build relationships and trust, understand the culture and expectations of the community, show that they were committed, and maybe most importantly, learn about their communities so that they could most effectively serve them. Six interview participants and 12 survey respondents highlighted this as being important for their success.

Ann brought up this idea directly when I asked what strategies she uses to be successful. She became integrated into the Indigenous community she served by attending events that were

important to them, namely high school sporting events, religious activities, and other community events:

I found I had to become part of the community. But I also lived there too. I was housed on the reservation. And let me tell you, 25 years ago, before satellite TV and this internet stuff, Friday nights on the res- high school basketball. I attended every game, every football game, every volleyball game. It showed I took an interest in the community, and I would attend events, which eventually led to getting invited to religious activities, to dances and stuff, participating that way as a community member.

Ann was eventually invited to attend tribal town hall meetings and Tribal Council meetings at the reservation chapter houses, where she would eventually plan and facilitate her educational programs. This also allowed her to hear what was going on on the reservation and what people were concerned about, so that she could plan her programs more effectively.

Carrie also brought up the importance of attending events, including high school sports, that don't seemingly have anything to do with professional networking. She recently had to explain this to a new colleague on the reservation in regard to learning about the community and building relationships:

What it really takes is just relationship building. We had to explain to one of our teammates- I was like, "Are you going to any of the basketball games?" She's like, "I don't know how to get a hold of parents, you know, it's really difficult," and I was like, "That's where you need to reach your parents, is the basketball game. I have to do the same thing!" And she was like, "Really?" And I was like, "Yeah, you have to go."

Carrie makes this comparison to herself because Carrie is Native and has been living in her community for 17 years, but she still tries to be present at community events. She also volunteers at the local schools and other community organizations, continuing the tradition from her grandparents, "I think tradition, tribal people, it's about service, serving the greater good, serving the community, serving your tribe, serving your family. And that just always resonated with me. I knew as an adult, I wanted to get involved."

James, who is from Guam and was educated there, explained this point with a funny story of how integrated into the community he is. It is hard for him to go to the supermarket without someone stopping to ask him questions, much to the annoyance of his family. In response to a question that the Director in Guam asked him, he responded in this way:

Dr. [Name] said, "Where's the weirdest space you've had a workshop?" She started laughing when I said this. I said, "When I was in Payless...," which is a supermarket here, "When I was in Payless, from aisle 8 to aisle 11, was the weirdest place I've had a workshop." Because if I meet somebody at the store, I'll be walking and we'll be talking from aisle 8 to aisle 11. My wife and my kids will leave me. And I've had instances where my kid will come in and say, "Mom's in the car, we're gonna go." Even though I'm like, "I've got to get milk and I've got to go home," you know, I end up talking. I like being able to help somebody and if they call me, then I know I've done my job.

While this story was told with good humor, it illustrates the depth to which James is incorporated into and valued by his community. He also recognizes the importance of this to his work.

For Clay, being involved in his Alaskan community set him apart from other professionals in other organizations because it allowed him to learn what he needed to serve effectively and gave him credibility with community members. Clay's community is remote and has serious social and health issues, making it a challenging place to work. Because of that, community members are used to people coming into the community to address these issues, but not staying long term. Clay explains the importance of becoming part of his community to gain trust and credibility and why this is imperative to his Extension work:

We do get a lot of people that come out here with Vista, AmeriCorps, volunteers, or church groups... they try to help because we've got a lot of problems- a lot of suicide, a lot of child neglect, a lot of poverty. The thing that I have observed over the years is, if you want to help, you really need to be part of the community. Folks are used to people coming out to help and then leaving. You know, the teachers don't stay. They come out here from somewhere else and, the first flight at the end of the school year, five o'clock, they're flying back to Iowa or whatever, right? You know, the nurses don't stay, nobody stays. And so it's sort of this thing of, "Who are you and when are you leaving?"

That is something that I've tried to say as we've gone through budget cuts- it's expensive to have me out here, right? 'Cause of the cost of living allowance, every time I

want to come to a meeting, it's \$1,000. So, why? And I think the reason for that is, in order to communicate effectively, you kinda gotta know your stuff. You gotta be part of the community. And you can't be somebody who visits, but can't stay. So the longer that you spend time, it allows people to listen to you and to hear what you're saying.

There's this joke about, I don't know if this is offensive or not... We call them WWPs, "Weird White People." Like going to the airport, there's all these "Weird White People" wandering around, who clearly don't belong. Fresh off the plane, they don't understand why their cell phone doesn't work, they don't know how to take a cab, you know? They have a ton of great ideas about how they're going to fix your community (laughs), and it is hard to take those people seriously, 'cause they don't know what to talk about. So that's the number one advice I have is- if you wanna contribute to the community, you gotta be a part of the community. You can't be a guy that just showed up to solve someone else's problems. So, get a job, buy a house, make some friends, and then you can start actually interacting with people in a way that they'll take you seriously.

Clay makes several points here, all having to do with the importance of integrating into the community. First, many people in his community are used to Outsiders coming in to "fix the community," only to leave after a short while, causing them to mistrust and not take Outsiders seriously. Not only that, but Clay emphasizes that there is good reason to not take them seriously; it is impossible to address the needs of the community if someone doesn't understand the community context to begin with. The way to understand the community is by becoming part of it. Further, Clay explains that this is why it is important for Extension to employ people like him. He agrees that it is expensive to have him on-sight, but that this is the only way for an educator to be truly effective.

Becoming a part of the community also teaches Extension educators what is culturally acceptable, both professionally and personally. Clay described how, in an effort to provide health aides to all of the local communities, a supervisor made an error because he didn't understand the culture and context:

(If you aren't part of the community), You don't understand how anything works with families. Because of that, you can't predict how people are gonna react with things. For example, when I worked at the health aide program, I had a new supervisor, and we have a hard time finding health aides in all the communities, and his solution was, "Why don't

we just hire somebody from another community and move them there?" And the room just got quiet, 'cause that's not how it works. No one wants to move to a different community to get a job. If people wanted to do that, they wouldn't live where they grew up. This is a totally reasonable suggestion that anywhere else in the country would make sense- you hire someone, doesn't matter, you know? But it was just totally inappropriate in that context. Understanding how these families fit together, understanding how people are going to react to things, what they would find inappropriate or offensive and what they wouldn't- it just takes time in the community. It's learning subtle bits of language and then enough history to know why things are the way they are and you just, you can't shortcut that.

While Clay acknowledges that the supervisor's suggestion was reasonable in other contexts, it was not culturally sensitive given the particular community they were talking about. Being a part of the community helps educators to understand the cultural nuances at play.

Survey respondents also talked about being involved with the community as an important component for their success for many of the reasons already discussed such as gaining trust and learning the community's needs. In response to the question about what makes their programs successful, an Agent from Hawaii said, "Having good rapport with communities, either a length of time spent that shows you are successful and genuine in your goals to educate and do research on topics these farmers are interested in," and a 4H educator from Idaho said, "I think that having long-term, community-driven programs is key. Brief, unsustainable programs driven by 'outsiders' is viewed as interference rather than any type of solution to problems of poverty, illiteracy, substance abuse, domestic violence, etc." These perspectives show how important trust and centering the goals of the community are, particularly when facing the serious issues that many communities do, and being involved with them allows for those things to happen.

Ultimately, becoming part of the community is something that has been built into the Extension model from its inception; Extension educators have always lived in the communities that they serve. This is particularly powerful in Indigenous and other marginalized communities,

especially when the Extension educator is not from that community. Emily described the importance of this and how Extension is perfectly able to fill these needs:

I really strongly feel in communities like this, we should be working on long-term sustainable programs. I think Extension coming in, delivering a service, and leaving, and not being members of the community... I feel like that doesn't work as well if we are in it for the long haul, if we are being honest brokers, and we're not just in it for our funding or our academic credential, but if we're really in it for the community... And one of the things that I think makes Extension particularly worthwhile in communities is how much these people live in the community. This is their community. They want their community to improve, right? That's the beauty of Extension, but it's getting that very heavily, culturally sensitive lens being put on in the Native American community, that I feel like we could be really successful.

Becoming involved, proving that the commitment to the community is long-term, and learning about the community's needs are all positive outcomes of this model.

Being involved with the community provides many benefits to an Extension educator including learning about the community's needs, building relationships, and proving that they were committed to improving that community for the long-term. Fortunately, Extension is particularly good at embracing this because of the long history of Extension educators living in the communities that they serve.

Building Trusting Relationships

Building trusting relationships was a major theme; nineteen of the twenty interview participants discussed how they have built long term, purposeful, trusting relationships with community members. This gives them insight and access into the community that they wouldn't otherwise have, allowing them to better serve the community, and increase participation. Often, these relationships are built through community involvement. Participants talked about relationships with tribal administrators, people working in the school district or hospital, youth, and all members of their communities. Much of the discussion on this topic had to do with a

perception in their communities that they wouldn't stay long and weren't committed to solving problems, because of a history of people in similar positions leaving quickly.

Building relationships was so important to participants that some described it as essential to the success of their programs. Margaret explained it simply, "I would say that the key to success is really developing relationships. And how do you do that? It's by being visible. It's by being transparent. It's by constant communication. And it's also by being seen in the community at community events." In addition to the interview participants, 69 of the survey respondents also identified relationship building as a necessary component to successful collaborations. They talked about collaborations in research, programs such as 4H, and funding opportunities being benefited by strong and trusting relationships. For example, an Advisor from California said, "As with any clientele group, a preexisting relationship is essential. I believe that my connections now will facilitate research and educational partnerships moving forward."

Interview participants talked about how they go about building relationships, and a lot of it is just about showing up. Randall spends deliberate time and attention on building relationships in the Indigenous community. Diane, a Regional STEM Specialist that often works with Randall, said:

I met with Randall right after I first started. I said, 'What would you like to see?' And he said, 'The relationship with the [Tribe] waxes and wanes, so I'd like to redevelop that relationship.' Since then, he's been working really hard on gaining the trust of the Native population, both on the reservation, and in town.

Randall has spent 11 years on his state's Commission of Indian Affairs and maintains strong relationships there as well as in the school system on the reservation.

When Danielle first started her Specialist position with Extension, she traveled to every reservation in her state during her first summer to make connections and meet people. She said that showing up in person is invaluable to building relationships and getting the work done:

The amount of benefit you get from a trip there very much outweighs the benefit you get going to an off-reservation committee. The more face time you have, you can build so much more trust, rapport, and get things done. On some other projects, I might be able to do everything over WebEx and email. It's really important to show up and be there, but also stay a few extra days and go to community events, and go places when you're invited. I've learned so much, and I think that's really helped shape good relationships.

Frank also talked about how he builds relationships and why he finds this so important, particularly as an Outsider. He does this to both show respect and to help educational programs be more successful. Frank builds relationships by meeting people and introducing himself faceto-face, while honoring people's status in the tribe:

You better respect and honor when you go into a tribal community if that's not where you're originating from. Introduce yourself to the Chief and to the Tribal Administrator, who really is the one that's going to be able to make things happen for you. If you just come in and say, "I'm gonna walk right over to where we're gonna have our meeting and I'm gonna have our meeting," you can do that, but it isn't wise. If you want information from the eyes and ears of the tribe on who might be good to contact to come to your class, who couldn't come to your class 'cause they're in the hospital, but they really need the information, and such like that, you better go in and check at least with the Tribal Administrator. And then if the Chief is there, you know, do your "Hello."

Frank not only wants to make his programs successful by getting an Insider's perspective, he also wants to make sure he is reaching the people that really need the content he can provide. The best way for him to do that is to build relationships with tribal members, show them the respect they deserve, and benefit from their Insider information. Frank also talked about the importance of "word of mouth" and learning when big events are happening in the community, such as a pow-wow or celebration, so that you can schedule your educational programs around them. None of that would be possible without a trusting relationship with the tribal leaders.

Diane also explained the importance of putting time into building relationships as an Outsider and that it isn't something to be rushed:

I've found that I need to work consistently with a group of people who don't look like me, or I don't look like them, for about three years before they accept that I'm not going anywhere. That I am there, I am listening to them, I am hearing them, and that my actions are impacted by what they say. So, you know, that's a long time.

Here again, we hear the concern from Indigenous communities that Outsiders will come in, but not stay. Diane utilizes relationship building to combat that and reassure members of the community that she is there to listen to them. Listening was a common theme among participants, who talked about it a lot in relation to relationship building, but it took on different roles for different educators, as we see below.

Ann also talked about the importance of listening as an Outsider; she said that listening is, "the biggest thing," to repair damage to relationships from the past and prove to community members that you are going to stay:

I still, to this day, go to a lot of tribal meetings and listen. Like when I first moved to [Reservation Name], you're obviously a White person, you're from the outside. And their first thought is, "How long are you gonna stay? Are you here for six months like the doctors? Are you here with the teachers from Teach America? You just get here to get your student loans waived? Are you really gonna be here to be a part of the community?" And to me, the biggest part is listening and learning how they do things.

Jeff called this "posture" one of "earnest curiosity," in which he acknowledges that he is not the expert on the issues in a community and that what he hopes to do is:

learn and help create an environment where we can learn together. That is the key to a collaborative decision making process- to establish a base level of trust, conduct a process that allows for mutual learning and then build agreement around outcomes based on that process of mutual learning rather than coming in and saying, "This is what you should be doing."

Kent has also had the experience of building relationships over many years by listening and getting to the point where members of the community call him to be involved in projects:

You have to develop that trust and you have to listen, listen, listen. I know it's frustrating for a lot of professors to go out there and only two people show up at the meeting because there was a death in the community, or because something happened, and so they just changed their mind and went to something else. You have to just keep working away, plunking away, and eventually you'll build the relations up to where they're a lot more open. To where they'll call you up and ask you questions so you don't have to go up there to do face-to-face anymore. But for the first part, I mean, for 10 years, I do face-to-face. I drive out there, meet with them, sit across the council, and talk with the Chairman, Vice-Chairs, the Presidents, or whatever they might be and that's important.

This kind of relationship has taken Kent 20 years, in some cases, to build. By putting in the effort, he can be more accessible and responsive to the community's needs. He also stressed the importance of not "over-promising anything" too. He said, "If you can't deliver it, don't promise it." That way, relationships can be preserved and not damaged by the lack of follow-through.

Clay said that, even though he has been a part of the community since 2002, there are still people that hadn't bothered with building a relationship with him because he was expected to leave, as an Outsider. By building relationships in the community, he can make more connections over time with others that share his relationships and experiences:

I still meet people who have lived out here their entire life and haven't bothered with me because I wasn't from here. The longer that you spend time and you start to make connections, it allows people to listen to you and to hear what you're saying. When I can talk to folks and say, "Oh, you're from [Village] and that's right next to [Village], right? So do you know [Name]? She used to be a health aide out there. I used to work with her in Anchorage." And when you can start to do that, people start to take you seriously and listen to you.

In addition to his work in Extension, Clay has held other professional and volunteer positions in his community, allowing him to build connections and relationships.

Even when an Extension employee isn't an Outsider, listening is still important to be able to teach community members. James, who grew up and was educated in Guam and is Chamorro himself, emphasized the importance of listening in relation to being a good teacher, and as a way to center the goals of the community through respect, especially when working with Indigenous peoples:

When I think of Extension, I think of the professionals that I've had. Damn, they were smart, but some of them were just lousy teachers. But they're smart, you know. The person I want in the field, I want them to be smart, but I want them to be a good teacher. Because, if you can't listen and then talk, there's a problem. I want the person who I'm talking to to tell me what they want me to do, then I can help them. Getting a good Extension person in an Indigenous area's hard. Getting a good Extension person who can listen, that is by far the number one thing right there. Listening, and not talking down to people, but talking to them. That's the key.

These are traits that James uses when working with Indigenous farmers on Guam, people that he and his family have strong ties to. Regardless, listening is a hallmark of a successful teacher.

Jane, also a Native to the place that she serves, also emphasized that that does not confer her "Insider" status because of the unique culture in each community"

Even for somebody like me who's from here, I'm only from one of the islands, right? There's multiple islands here, so there would still be that relationship building that would be needed to work in the other islands. Just because you're from one island doesn't mean you're automatically "in" on the other islands.

This is one of the reasons that Jane believes that it is important for people working in communities to be from that community, because of their "shared experience."

Jane also discussed the importance of relationships building as it relates to "following through," because of the lack of commitment that Indigenous communities are used to. Building trusting relationships proves that commitment, to the point that community members feel comfortable coming to you when they want to work on something:

Probably one of the most important things I've found is following through. Really being committed to a partnership even if it's not necessarily about serving something that you're doing, but if it's about serving what that person or that organization's doing. That just shows that you're vested in that relationship versus only what it can do for you. I'm at that point now where I've established relationships, and so people will reach out and say, "We have this issue, or we would like to do this. Is there a way that you can support me or is there a way that you can be a part of our team to do that?" So I think it's what happens over time, as you gain experience and establish relationships.

Jane has put in enough purposeful time in the community that she serves to establish relationships and members of the community have started to reach out to her for collaborations too.

Jane and James, both Native from the Pacific Islands, talked about the importance of family and other connections within communities as a way to show "shared experience." Jane describes how, "who your family is and who you're related to" is important in relationship building. If that isn't possible, sharing experiences is still a way for people to connect:

Whether it be family, and if you're from that same island, and of course there's that shared experience, if you went to the same school, the same high school, you have that shared experience. The more of those shared experiences that you have, the easier it is to build that rapport and establish those relationships. I think it's all about trying to show that there's all these linkages, that you have with that other person so that it makes you seem not that different.

Similarly, James brought up the importance of familial connections for relationship building, as well as knowing the Indigenous language:

I'm fortunate because I'm from here, and I know the families. A lot of the people that I work with, especially the local Chamorros, in some way or another I'm probably related to them. It's either me, or my wife, or they know my family. And that's actually the tie that ties us in, other than knowing the language. If you know the language, you're one step closer to making that contact. It's that familial ties that really help me and I use it all the time. I go and say, "Yeah, you're my uncle," or something, you know, and I use that to get in. And you've gotta have that. If you can make that tie to that person directly through a family member, you're way ahead of the game.

For these and other reasons, many participants, including Jane and James, talked about how hiring Indigenous people from the community helps to build relationships by utilizing these connections and shared experiences. I discuss this in a later section.

Julie safeguards the relationship that she has developed with the reservation she serves carefully because, in her experience, there are a lot of organizations that want to partner with the LGI or Extension to do programming because of the need there, and the outcomes of those programs reflect on her and Extension:

That's one of the things that we with Extension have to manage really carefully because we are a good way to get external funding into the community, but because it's also our name on the line, we're really cautious and we learned to be pretty protective. There's a history of different entities coming in with a grant, saying they're going to do something and not doing it. Which really kind of goes back to a lot of the historical trauma with Europeans saying they're going to do something, not doing it or doing something completely different, and just kind of running roughshod.

Despite the fact that an external organization might have funding to work with tribal communities, risking the relationship that she has built with them is not worth it to her. She and others that she works with have worked for years to repair the historical trauma that she references, so those relationships are more important than fleeting grant money or external partnerships. Amelia, who is in the same state as Julie, also talked about external organizations wanting to write grants for the community, and how this rarely impacts the community in a meaningful way:

They want to provide grants, but they want to write it. They want, they want, they want, and it never pans out to where [Reservation] gets anything. They maybe have professionals doing a couple of workshops here and there, but they're strangers in the community, so people don't attend. Why should they trust them? Just because they have "Doctor" on their title which, in more White culture, is something to be respected, which is entirely different for Native American communities because they're lied to half the time. Or they're not taken seriously. I truly believe that people have great intentions to wanting to help, they just don't understand that they have to go about it in a different way.

That "different way" is building trusting relationships, which is more important in Indigenous communities than, for example, educational attainment or grant funding. This mistrust of universities, because Indigenous communities are "lied to half the time," as Amelia puts it, is discussed as one of the barriers to program success.

Beyond making educational programs more successful and partnering on grants, Amelia stressed the importance of relationship building from another perspective, one of showing respect for the sovereignty that tribes have. She emphasized that tribal Nations are just that, they are Nations and the leaders of those Nations should be shown the respect they deserve by building relationships with the "big wigs" of the university:

Remember that this is another Nation. This is not just the state. This is an entirely different Nation. You need to treat it as such. Meaning that your Dean, or your high person, whoever's the big wig of your organization, needs to have face time with the big wigs of the tribe. That is where they're gonna be your equal. We're not their equal. Not at all, right? We're the peons that come and tell them what we're doing and they love it or they hate it or whatever. And we'll change and do as needed. But as for respect and helping us build that relationship, you need those higher up people to not be a stranger. Because that's how you build that respect- that they see that you see them as more than just, you know, a town with people in it.

The "peons" that she refers to are the Extension educators that come into communities. It is important to recognize the sovereign status of tribes and the status of their leaders by having people with power build relationships with them as well.

On the other side, the inability to build trusting relationships was cited by 22 respondents to the survey as a major barrier to their success. This manifested itself in various ways and there were numerous reasons why an educator would have difficulty with this. Many Extension educators cited high staff turnover in Indigenous communities and being an Outsider to those communities as significant barriers. Building relationships also takes a long time and some educators struggled with finding that time. An Advisor in California said, "Local tribes have

more to offer me in terms of knowledge than I have to offer them. I will need to continue listening and building relationships in order to identify niches where Extension can genuinely offer them services that they cannot find elsewhere or achieve on their own." A willingness to learn from the community and a commitment to keep listening are great ways to build the relationships that this advisor is after.

Building relationships serves Extension educators for many reasons including making their programming more successful, gaining trust and Insider information, and as proof that they are committed to the community. They go about building those relationships in many ways too, but listening, showing up, and being present were themes throughout. Building relationships takes time, but these relationships are integral to the success of educators.

Academic Understanding

Most of the participants showed a deep academic understanding of many issues facing their communities, from general diversity and inclusion issues in education, to the specific socio-cultural environment of their community or state, to settler colonialist culture and its implications today. Twelve interview participants either displayed academic knowledge that was important for their work or directly named this a part of their success. This academic understanding didn't just make them more able to navigate their context or make professional decisions, although these were outcomes; often, this understanding allowed the participants to better connect to the people in their communities and put many of the issues they were seeing in their social, cultural, or historical context. Academic understanding was something that participants had to seek out themselves, whether from their own study or participation in opportunities that Extension and their universities gave them.

Some participants had an understanding and passion for diversity and equity issues in education in general, and often applied that to their work in Extension. Diane, a STEM Specialist, understands that, "science is a diversity issue," and talked about how women and people of color are underrepresented in STEM-related fields, particularly in higher degree attainment. This understanding influences her professional choices and how she frames her work. Karen, a former FRTEP Agent, discussed at length how she and other colleagues working with Indigenous communities dove into the academic world of education because, "we found that traditional educational methods weren't working." To better understand educational issues in their communities and how to serve them better,

a bunch of us got together and did a huge literature search on that issue around the world to see if that was just us (having issues) or if that's around the world. And we found similar trends (in colonized populations), the issues are the same- working with Indigenous people, whether you're here or in the South Pacific, or Africa, or South America.

From there, her group wrote publications and presented at conferences, particularly at the Association of International Ag Extension Educators, and she found that, "it made more sense to go to those meetings than it did to go to the ag[riculure] meetings here in the US." She found more in common with educators working with Indigenous peoples around the world than she did with people working in traditional agricultural contexts in the US. She and her team made a scholarly impact regarding teaching in Indigenous communities around the world because of their academic understanding.

Health disparities in Indigenous peoples and access to healthy, affordable food were common topics that participants were concerned about. Many participants were specialists in health-related fields such as Health and Wellness, Nutrition, and Public Health. For example, Extension facilitates programming for SNAP Education and associated commodity food

programs to help people access benefits. Hannah discussed some challenges regarding how commodity food is viewed in Native communities, her historical understanding of these issues, and how that impacts her education program coming from a university:

[Something that] impacts universities now is SNAP Education. And that's connected with a commodity food program in the Native community. Commodity food programs have a pretty bad history, arguably have contributed to many health challenges in those Native communities by introducing things like wheat and processed food. But at the same time, now a lot of SNAP Education nutrition programs are connected to universities, and so navigating that historically not-always-great influence, and now people in Native communities definitely use the Native commodity food program, but having education come from those programs as well is not always top priority that they want to get more resources from.

It is important for Hannah and her colleagues to educate members of their Indigenous community about accessing the benefits of the SNAP program, so her understanding of the historical tensions between Indigenous communities, commodity foods, and universities is imperative for her to be successful in that environment.

Many participants also showed a cultural and historical understanding of the specific tribes that they were serving. This allowed them to not only understand their context better, but also incorporate the specific culture of their communities into their educational programs. Jack directly addressed this when asked about components of a successful educator:

I don't think we even talked about learning tribal history. That's another huge one. Many tribes will literally put their tribal history on the front page of their website. It's not hard to figure it out, because different tribes suffered to lesser or greater extents. I think that just learning that... some tribes fared decently well, during the Spanish missionary period and during the White settler rancheria period, and other tribes were completely decimated and enslaved, abused, in the name of religion, economic expansion, whatever. Understanding what that tribal history is, just understanding who these people are that you're working with, and why they are who they are. That's another big thing that I don't think gets enough attention.

As Jack points out, learning the history and context of the communities being served is important to an educator serving them because it speaks to who they are and why. Learning this history,

including the trauma that specific tribes went through, is important to the success of an Extension educator.

For example, Dave is a Farm Advisor and County Director, who works with tribes on their farms and gardens. He described how the reservation land is useful for farming, despite the original intentions of the colonizers:

We have about seven reservations in our two counties, and those two counties are huge, we're the size of Massachusetts and Connecticut together. So, there's lots of tribes, and our tribes are unique. Normally, they took the worst possible spot that they could possibly give the tribe and, you know, shoved them way off into the corner, but ours are actually... Well, they tried to screw 'em over, but it ended up working well for the tribes. It was swampland when they gave it to 'em, but it turns out that, since the water's drawn down, they probably have the best land in the valley.

This information is important for Dave's work. He understands the larger colonial context and ideology at play with the tribes and how that history impacts their farming ability now. For someone who is partnering with tribes to assist them with their farming and gardening practices, this is valuable and useful information. Other participants made similar comments about things like how their tribal communities were created, the history of traditional agricultural practices on the land, the history of the relationship between the university and the tribes, and an understanding of the tribal cultures themselves. They were also able to connect this understanding to their current contexts and their work as Extension educators. Creating culturally relevant programs was discussed in other sections, but it wouldn't be possible if educators didn't understand the particular cultures they are working within and the histories of their communities.

Perhaps most impactful, some participants discussed their understanding of certain aspects of settler colonialism, and how this history and culture continues to impact Indigenous communities today. Frank, in a conversation about applying for grants, discussed some of the historical and cultural issues unique to education in tribal communities that he would need to

explain in an application and how those issues continue to affect the perceptions of people in his community and their economic situation:

When you write the grant, you want to point out in the narrative just how unique things are. You want to make darn clear that you're working with schools that aren't independent school districts, but they're also not federal BIA schools. And there's a bad taste in the mouth of folks, in general, you know, we hear about efforts to bring BIA federal workers in federal schools operating in those villages. So you let them know that from the get go, that there's some historical baggage, when it comes to ed[ucation]. So, your resources that normally you would expect at a school, a school board that can do referendums and levies, they can't do that. So you let them know upfront in the grant that your grant resources are gonna be fairly substantial. There's not gonna be a lot of ability to match on the other end, or to provide infrastructure or supports that you would expect other places.

Frank connects colonial history to the perceptions that Indigenous communities have about federal money in schools, to their current economic situation, and to the lack of structural support, all in the context of needing to explain that to granting agencies. His understanding of these connections helps him to make sense of his context and be able to explain that context to outside organizations.

Jeff has gone out of his way to gain an understanding of the history of settler colonialism and values that knowledge in his work. He has done that through traditional higher education classes:

I have taken a fair number of academic courses, you know, Northwest History, History of American West, Native American History... So, I had sort of a basic grounding, I understood the progression of events and I had some sense of the horrific things that many tribal communities have suffered as a result of the conquest of the American West and the power dynamic that has really been out of their hands for most of the time we're talking about.

This understanding has helped him when he has worked in tribal communities. Here, he connects this academic understanding of the historical context directly to the disparities that Indigenous communities are subject to now:

I think to be successful you have to do a lot more research, in part because you're looking at a deeper dive into history- what we would think of as superfluous history and what in tribal communities is still present and real. It's a mistake to assume that the experience for any tribal member is the same as any other tribal member, and hugely a mistake to think that any of those experiences are like we have had as non-tribal members. That sense of history, I found to be different from the Western academic perspective. Part of it is more immediate socio-cultural history, just going back a generation or two. Some of it is really immediate, many of our tribal communities are amongst the most impoverished and underserved in our country. And if you don't have a sense for what that is and how long it has persisted and how it came to be, you're really at a disadvantage trying to work in those communities. Not that that's not the case in any community, but it's compounded by several levels in tribal communities.

Jeff's academic understanding helps him to make sense of his context and the mindset of the people that he is serving, but also helps him to be a successful educator in these communities. His academic understanding is important in his practical applications.

Randall's allyship encompasses many of the components that make an educator successful, including academic understanding of racism and colonialism, and his connection to them. Importantly, this academic understanding helps Randall to explain what he sees in the community he serves, and to form a deeper connection to them. For example, Randall describes in the passage below how he conceptualizes the violence the he has witnessed on the reservation:

You know, drugs, alcohol, violence, I mean [The Capital of the Reservation] was once called the murder capital of the United States of America because the per capita murder rate in that town was higher than any other place in the country. You know why? Because Native Americans are, um, are inherently violent? No, no. The environment, the conditions. Grown up with the alcohol, the abuse that they've suffered, their culture being torn away from them. We need to understand the situations that Native people live in, their history, the betrayal and deceit and lies.

Here, Randall uses these examples to show how Indigenous peoples have suffered, but importantly, the suffering is the result of the "betrayal and deceit" that Indigenous peoples experienced at the hand of the White colonists, not the fault of the members of the community.

Randall sees the effects of settler colonialist culture in the violence and poverty on the reservation, and this academic understanding helps him make sense of this violence.

When asked what Extension could do to assist educators in Indigenous communities,

Julie advocated for training in the academic topics listed by others, how those look in each
individual community, and how those impact educational programming, "Just the training,
getting that background into what it means to be working with tribes, what that history looks
like, especially in individual communities. 'Cause, there's a lot of overlapping similarities, but it's
going to be different for each individual community." She also gave an example of a past
employee that was not receptive to receiving training and the implications that that might have
for the success of someone in these positions:

Having Extension faculty that are willing and able to seek out that knowledge, faculty that are open to learning that sort of thing. The previous FRTEP Agent, he had a really hard time. Whenever he'd go to meetings and comments about, you know, "the White man" or something like that would come up, he took those very personally and he couldn't really separate himself from it. Being able to acknowledge all of the historical trauma, it is a huge deal. So much of it comes back to that, and so being able to acknowledge it and understanding how to adapt and create programming that acknowledges it is pretty critical. As much as we would like to think, you know, "I'm going in to teach about livestock, I just have to teach about livestock," there's more to it than that.

In addition to just having academic understanding, Julie is advocating that educators be able to connect it to themselves in an open and accepting way. Only then can an educator create programming that "acknowledges it," because this history is always influencing educational programs regardless of subject.

Ten survey respondents said that their lack of academic understanding or expertise in working with Indigenous communities was a barrier to their success. A Specialist from California said, "It's hard to know how to interact appropriately at times. How can you get past

the devastation inflicted on Indian communities in the 1800s?... I'd like to learn about the Native American culture, but feel awkward asking about it." This Specialist shows an understanding of the socio-historical context that they are working in, but that understanding doesn't go far enough. If anything, it makes them better comprehend their lack of knowledge about Indigenous culture and they are having a hard time figuring out how to move forward from that. Further, an Educator from California that worked with a pesticide regulation program described how their lack of knowledge negatively impacted members of the Indigenous community trying to access their services:

I struggled with a lack of knowledge of what the tribes are up against in terms of pesticide regulation. Our nomination process required that we evaluate people's eligibility for the courses by reviewing their responses and determining how relevant their responses were to the course. However, unlike the state pesticide programs with hundreds of employees, tribal pesticide program employees are often tasked with doing all aspects of their program, with far fewer resources than are allotted to the states. I think knowing that right off the bat would have helped me in understanding and evaluate nomination packets more fairly, rather than learn it along the way.

This is an example of how understanding the historical, social, cultural, and economic situations that marginalized communities are in, including Indigenous communities, is so important for educators. Had this educator known more, it might have helped the community collaborate with them better.

Academic understanding of the socio-cultural histories of the Indigenous communities being served was an important component of educators' successes. This understanding might have been contextualized, in the case of a specific community or how a specific subject would be viewed in that community, or the understanding might have been about the broader impact of settler colonialist culture. Regardless, issues surrounding this context underlie all the education programming that Extension facilitates, so it is important that educators know about it, how they connect to it, and how it impacts their programming.

Being Willing to Learn

The most successful educators expressed a willingness to openly learn about the community, themselves, and from their own mistakes. This learning could be about the particular tribe(s) they were serving, about all of the Indigenous communities in their state, or about the larger scale histories, cultures, and experiences of Indigenous peoples in general. Also, being willing to learn about oneself and one's identity is important to this work as well. Half of the interview participants displayed this. This willingness to learn is in contrast to the culture of expertise that academia and Extension traditionally has, where the educator is an expert coming to impart knowledge on the community members.

Often, it was someone that the educator had developed a close relationship with from the community, their "Insider collaborator," from the section above, that was there to teach them about working in the community. Diane told a story about a lesson she learned from the Education Director at the reservation, with whom Diane was developed a trusting relationship with over many years:

I have taught dissection classes to kids, and comparative anatomy, things like that. So I mentioned that to her, and she said, "Oh no, we couldn't do that here. There's some [members of the tribe] that don't have that problem, but the traditional [members of the tribe] would." And I said, "I've always found that when I teach this class, kids walk away with a lot more respect for life." And she said, "But that's in a different culture. I know that about you, but here we can't do it, because I would consider it disrespectful to do that to an animal." I said, "Then I'll never do it." So you know, she's great, because I can say these stupid bone-headed things and she'll correct me very kindly.

Despite dissections being a common practice in science classrooms in other cultures, Diane was open to hearing from her Insider Collaborator that this was not an appropriate lesson in the reservation school.

Karen also relied on her Insider Collaborators to help her learn about the community she serves and would often ask them questions. She, like Diane, benefited from that relationship by learning what was culturally appropriate and what was not, and she was open to learning that:

I got to be really good friends with one tribal Chairman and I could just talk to him. I could say anything I wanted, and he would give you an honest answer. I had a few people like that. One of our agents was [Tribe Name] and he lived on the reservation, and so, the rest of us would ask him, you know, "What's the deal on this? What are we doing wrong here?" And, so we made a lot of mistakes and we asked a lot of questions.

Jeff has also made it a point to hire members of the Indigenous community to work for Extension. He has many reasons for this, but one is definitely so that he and others can learn from their experience and serve their community better, just like Karen does.

A few participants discussed the importance of learning about oneself and how their identities impact their work in Indigenous communities. Certainly, some discussed the impact of being White or being Native, or the importance of hiring Native Extension educators, but a few connected this to their willingness to learn and reflect on their identities on a deeper level. As seen in the previous section, Julie had experience with a previous Extension educator that had issues when connecting his identity with this work in Indigenous communities. Specifically, when issues about "the white man" would come up, "he took those very personally and he couldn't really separate himself from it." Ultimately, he was not successful working in this environment.

Amelia reflects on how her identities impact how she shows up in the community that she works in and, for her, this is ever evolving and not straightforward. She identifies as "of tribal descent;" she has family that are from the reservation and are Native, she lived and went to school on the reservation for some of her childhood, and values that part of her heritage and experiences, but she also feels that she presents as White and understands that she has privileges

because of that, "I'm aware of my White privilege a whole hell of a lot, and I am also Native American and I'm totally aware of my White privilege." While discussing important things for educators to know when working in Indigenous communities, these themes came up:

Knowing your audience, of course. I feel like a lot of that is true to any culture that you're gonna be dealing with, when you're not a part of that culture. I will say that, because of my personal background, I have an advantage, but I also have an advantage that people who don't know me don't realize I have. Because I grew up on the reservation and my family is Native American, but I don't look it. So, when I go on the reservation and people don't know me, I'm meeting them for the first time and they're from there, they assume I'm this White girl, and so they're just brushing me off and will say things and I'm like, "I know what that means!" (laughs) Then, out comes this knowledge and then they're like, "Wait a minute. What?" And then, "Oh, no. She's related to so and so." And they're, it's like, "Oh." So then I get a little change there which is different and unique for me than other people who are working with the population.

Amelia is conscious of how her intersecting identities and how she presents impact her work with the tribes, for better and for worse. Indeed, she advocates for Extension educators to be educated about their identities and how they show up in their work:

I feel like people just need more diversity trainings, and they need to take that to look in and learn about their own diversity and to understand it, 'cause that's the only way you're ever going to really help other people. Right? Is that you understand where you're coming from and you understand your bias and you know how you're seeing something. But I think that's a big thing too, is people need to not be afraid to admit they don't know. They're not gonna get mad at you for saying, "I don't know anything and if I offend, please let me know." People acknowledging where their expertise starts and where it ends is powerful. And that goes a long way to building that relationship. When you're like, "I don't know this, but if you think that it would be great for me to learn, I am eager and happy to learn."

Here, Amelia is connecting the ideas about the importance of diversity training and understanding one's own identity to a willingness to learn and how that improves relationships with Indigenous communities. Her openness to these ideas and ability to seek out these opportunities are some of the many things that make her a successful educator.

Often, this willingness to learn was in contrast to discussions from many participants about the culture of academia and Extension and how faculty are used to "being the expert," relying on the "best available science," and telling people, ""This is what you should be doing," all perfectly summarized by Jeff. Many agreed that this is not the most effective way to approach Indigenous communities and that being open to learn and to being told when you are wrong is important. Jeff continues:

In some of these processes I've deliberately built, as part of the initial phases, an opportunity for learning. Again, that earnest curiosity coming into a community and saying, 'I know enough to know that I don't know enough about this place and your people. Can you help me? Can you teach me?' In a lot of places, that's pretty well received.

Julie also talks about the culture of expertise in Extension and how the approach an Extension employee should take in tribal communities is different than in other places; she emphasizes the importance of listening, asking questions, and not presenting as the expert:

Just don't be scared to admit that you don't know the answer. A lot of Extension is trained to say, "Here's the answer, I know this," rather than being the liaison between the research side of things and the real world and when the realistic answer should be, "That's a really great question, let me find out for you" or something like that. It's kinda human nature- we're scared to admit we don't know something or that we don't have all the answers, but that's one of the most essential traits for Extension.

Lastly, Margaret also talked about the culture of academia, "the savior complex," as she called it, and how a willingness to learn should come before that. She advocates not entering the community assuming that the expertise, knowledge, and resources from a university are what a community needs:

Taking the time to learn about them and from them without coming in with all the big ideas and this savior complex that sometimes higher education tends to have. I think it's really important to enter in as a guest, be willing to learn, and be willing to partner. It means being able to listen to some difficult things. I mean, there's a lot of history between institutions of higher education and tribal communities, and sometimes it just hasn't been the best. And I think institutions of higher education need to be okay with hearing that,

but not okay with continuing with business as usual. They need to be bold. They need to have courage to say, "I think we can do this. Uh, I think we can partner."

She also included the historic tension between universities and tribes as something that educators need to be willing to learn about, connect to, and overcome in order to listen to the needs of the community effectively.

Many of the successful educators expressed a willingness to learn, both from the Indigenous communities they serve and from their own mistakes. Often, it was an educator's Insider Collaborator that provided guidance and knowledge about what was needed and appropriate in the Indigenous community. A willingness to learn is not the traditional culture of academia or Extension, where people are trained to be the experts in their fields, but it is an important trait in a successful Extension educator.

Allyship

While many of the participants would probably consider themselves allies of Indigenous peoples, there were two participants that explicitly discussed the topic: Randall, who identifies as White, and Carrie, who identifies as Native. Randall is quick to identify himself as an ally to Indigenous peoples. While Randall acknowledges that he is separated from Indigenous peoples because of his race, he feels a strong connection. Randall warns me very early in the interview that he has strong opinions and strong feelings about the subject, particularly given his allyship:

I'm certainly willing to give my perspective or my experience with practically any question. Sometimes, I could probably forewarn you a little bit, but if we get to historical incidents or perceptions where Native Americans are either treated as less than human or viewed as less than human, I get angry. I get pissed off and I can sometimes jump up on the soap box and I will, sometimes, I will rant. Affects me very deeply and I feel very close. I'm an ally to the Native American community, even though I don't have any Native blood in me or anything. But I feel very connected.

Further, he brings up the idea of being an ally again as he describes his early career by connecting his academic learning about Indigenous peoples and his own life experiences. Indeed, Randall has worked with and been committed to serving Indigenous communities for most of his professional career, and he identifies that as beginning with his early education and allyship:

I have been an ally of Native American communities and people for most of my life and I'm not sure how or why that happened. I think that book [Custer Died For Your Sins by Vine Deloria] was the beginning of my real education about the social status and the perception of Native Americans and then various things throughout my life contributed to that.

This connection between his personal life experiences and what he knows about Indigenous communities is foundational to Randall's allyship and his feeling of connection.

When discussing his work, Randall also talked about how important he thinks it is to bring this connection that he feels to the people he is serving. Below, Randall discusses how a feeling of compassion is important when serving any marginalized community. In his case, this compassion is something that he describes as, "just seemed to be something that happened to me," but also as something that needs to be "cultivated" by talking to and spending time with the community:

I think especially when you are trying to engage marginalized community, you have to have that emotion. You have to have that compassion. You have to have those feelings. You have to have that identification with the people you're serving... I feel a very deep connection to Native Americans and I can't really explain it except that just seemed to be something that happened to me. I think that's important, but that has to be cultivated. You know, it's not something you can just go to a seminar and get. It has to be developed with one-on-one connections where you need to be exposed to the people. You need to talk with them. You need to do things with them. You need to share with them.

Here, we see another of the components of a successful educator exemplified-being involved with the community. Randall advocates for community connection and relationship building in order for Extension educators to become better allies.

Carrie is a FRTEP Agent living on the reservation she serves. She is Native and has lived in Native communities most of her life. She has prioritized the concept of allyship in her educational programming with Native youth and personally in her life. For example, she recently took a group of students to a government and leadership conference called Know Your Government where they gave a presentation about tribal government. She describes that experience and why she feels it is important for Native youth to "have a seat at the table," and the mutual benefits that would come from allyship:

I started our presentation with that comment. I was like, "You're probably wondering why we're doing a thing on tribal government, how it applies to me," and then I put up our traditional tribal territory map of the whole state of [State Name] with all of the tribes on there. I was like, "You guys are surrounded by Indians! All the time! And we're your partners. We're your allies. Same things that you guys are challenged with- land use, with environmental research, with climate change," I was like, "This is why you need to work together. And you guys forget that we're still here. You know, you forget that we're here, and we're still here."

But yeah, [Native peoples are] completely underrepresented. People don't know what's going on. And I guess just that general awareness and not forgetting. Making sure that our youth have a seat at the table and have a level playing field. Getting them involved with 4H and Extension activities is making sure that they are represented. You know, we're talking about Know Your Government- then you need to know about tribal sovereignty, and what that means, because eventually, you will run into a tribe, even when you're farming. "Where does my farmland go? Do I have an opportunity to work with a tribe to farm?"

Here, Carrie highlights the importance of allyship being connected to the common goals of land use, environmental research, and climate change. These overlapping goals unite people and provide a basis for allyship and collaboration. Further, she emphasizes that, "you guys [White people] are surrounded by Indians," and that people often forget that "we're [Native people] still here." Along with our common goals, this necessitates allyship and, as is always Carrie's priority, she includes the need to involve Native youth, because they will continue to be allies into the future. Carrie has some advice for people hoping to be allies with Indigenous peoples:

Walking alongside them, and being partners, and letting them take the lead, you know? I think, non-Indian, non-tribal members I think need to, instead of thinking of leading, I think it's really important to foster leadership in our Native youth and Native adults that didn't have that opportunity, and walk alongside instead of leading Natives to a certain place. I don't know how to describe that, I'm not trying to be offensive, but I think it's more important to be an ally and a partner than it is to be a leader, because what our ultimate goal should be, whether we're tribal or non-tribal, is fostering this ownership and leadership, you know? That's what we need to work ourselves out of a job, and have our Native youth take over these jobs as program managers, and as scientists eventually. That's our ultimate goal. So I guess just keeping that in mind, you know? You're an ally, you're a partner.

Again, Carrie prioritizes the importance of working with Native youth and highlights common goals. She also makes a distinction between being an ally or a partner and being a leader, encouraging people to walk alongside of Native youth and letting them take the lead.

Participants highlighted many important qualities for a successful educator: making a long-term commitment to these issues, being involved with the community, building trusting relationships, having academic understanding, being willing to learn, and allyship. Many of these qualities overlap and amplify each other, and highlight themes that have been discussed before. Extension needs to find ways to encourage these qualities in educators that will be working in Indigenous communities.

Barriers to Successful Collaborations

In addition to what makes an educator or a program successful, the participants were asked what barriers were common in their work. These were varied and dependent on the particular contexts and communities that participants were working in. The major themes in barriers that participants experienced were funding, research logistics, rural issues, Extension educators being spread too thin, distrust of the government and universities, racism in communities.

Funding

Funding was a major theme in regard to barriers, with twelve interview participants and 32 survey respondents discussing it in reference to common barriers in their work, including 4 respondents with past collaborations that said the program ended due to lack of funding.

Additionally, 57 survey respondents included funding as a form of support that they need from Extension in order to be successful. The particular issues surrounding funding were unique to each participant's context, however, and the need was from both the universities' and Indigenous communities' sides. Common issues were a lack of funding, difficulties in obtaining funding, and how to explain working in an Indigenous community to granting agencies, particularly given the unique issues found in Indigenous communities. Decisions around funding bring their own ethical dilemmas, even when obtaining funding isn't the issue.

Some states have experienced budget cuts in the last decade, leading to cuts in personnel and the budgets of those that remain. This makes serving Indigenous communities more difficult because of the unique logistics, requirements, and goals of serving rural and traditionally underserved communities. Budget shortages require Extension employees to become creative when figuring out how to serve Indigenous communities. Frank, who talked often about the creative ways he finds to serve Indigenous communities, talked about how he capitalizes on his collaborations with other universities and finds every opportunity that he can to teach:

Some of that comes down to funding in the sense that, for instance, I'm going down to [City Name], which is tribal and non-tribal, Lord willing, next week. I'm able to do it because I'm teaching on indoor air quality, which is a specialty that I do. [University in Another State] has a national center for indoor air quality, tribal air quality, is going to pay my way. And then, that frees me up to do classes at night, if possible, or extend my schedule to go into some of the other villages.

Frank also looks for large events where he can attend and make a larger impact. For example, he will attend and buy a table at conferences that targets Indigenous communities such as the Tribal

Environmental Health Conference, the Rural Solid Waste Conference, the Bureau of Indian Affairs Providers Conference, and the event for the Federation of Tribes in his state. Then he and colleagues can do outreach from their table and reach many people, while only needing to pay for one trip.

Clay also describes how he travels to larger events to reach more people, but he also highlights the ethical implications of that. First, he describes how expensive it is to work in rural, under-resourced communities and how his impact numbers might look different there, but also how important it is to do work in these rural communities despite the cost:

When I started, I had a lot more money for travel. It's very expensive to travel to these small villages 'cause it's small plane travel, there's not always a place to stay, folks try to do a day trip and a lot of times, you get weathered in. It's also difficult when you're submitting all this stuff. You know, it could cost me \$500 to fly out there. While I'm there, I will probably get to interact with six people that I workshop. And then I'm gonna fly back and, you know, when you look at lodging, and per diem, and all this stuff, it's sort of... it's difficult. It can be difficult to justify the expense versus doing just traditional routes. So, as our travel budget has dropped, I have focused more on meetings in [Big City]. Then, you can catch folks there. It would be very unusual for me to get a room full of 30 people if I traveled to the village, but if I go to [Big City], then I can get 30 people from the village or different villages there, so it's just a little more efficient.

So that programmatic discussion that we've had over, you know, the last 10 years, it's kind of balanced that rural presence with trying to be efficient with the money that we have. It always sounds a little funny to people- if you work out in [Small Town] and you're supposed to be working with rural residents, why are you always traveling to [Big City]? And that's sort of the reason. Not totally satisfied with that, but it's been the best way I can figure out how to do it.

Clay finds great value in serving his rural, largely Indigenous community, but has to make decisions based on funding, rather than what is best for them. While he sees the merit in serving more people in larger cities and saving on costs, he also wants to do what is right for the people in his rural community.

Writing grants to support work in Indigenous communities can be tricky because, as many participants described, the unique environment (social, cultural, economic, geographic, etc.) needs to be explained to the granting agencies and it is important to communicate realistic expectations on deliverables. Frank describes some of the tactics that he and his colleagues have used and some of the unique aspects to applying for grants in Indigenous communities including explaining the socio-historical context, the different funding structure of tribal schools that won't allow them to provide much funding or infrastructure, and the unique needs of the population:

You often have demographics (in a grant), right? And you let them know that, in general, 1/5 of the state-wide population is Native and that the village population can fluctuate during a year as much as like 20%. Because you have elders that move into [Big City] or [Big City] during the winter and then go back in the summer to do fish camp and traditional things. You'll have students who go through K-6 education, but because you might have one teacher-generalist in smaller villages teaching everything, then you might have the kids coming in for school in [Big City]. And so, we're gonna have high migrant ed(ucation) numbers.

All that has to be spelled out ahead of time (to the granting agency) because they're never gonna understand the full context that we're going to try to work in. They better understand when you write that grant that the resources are not as constant and not as abundant as other places. Because a good qualitative narrative is gonna go a lot farther in describing the situation, even than giving them a bar chart of, "This is how many people are there in October." That whole thing isn't going to fly in trying to communicate some of the dynamics of why that's happening.

While traditional ways of communicating demographics to granting agencies are important (such as bar charts), Frank stresses the need for a descriptive, qualitative narrative to describe the unique situation he works in that a quantitative explanation would miss. He finds that it is imperative for granting agencies to understand the context that he works in and simple numbers aren't enough.

One hurdle that participants described regarding grants in Indigenous communities is that it is uncommon for things in the real-world to conform to the expectations in grants. There can be a tension between meeting the changing needs in a community and meeting those grant

expectations. Hannah described this tension, "Just knowing that not all communities function the way that we would like them to in the research sense. But that's okay because this component is really about the outreach in terms of being able to understand what the community needs and help them to achieve their goals." She goes on to explain how this tension is a part of working with underserved communities in general, because of the unique challenges that they face:

Any time you're working within communities, there's always challenges of how things function in the real world versus how you hope they function in the grant world. That's the challenge that I found with working in rural communities or underserved communities in particular, just because they have even more... not challenges..., but maybe demands on their time. Because they also have the factor of distance in terms of how do you get from place to place, or cost in terms of things just costing more in rural communities. It's really taking the intersectionality of being both rural and underserved at the same time. And then, trying to also encourage those people to participate in a research program that is looking for some sort of consistency. So, understanding that it's not always gonna work out that way. I think that Extension- we have the opportunity to be able to understand how things actually work out in the real world.

Because of the challenges in rural, underserved, and Indigenous communities, participants advocated for honesty, transparency, and realistic expectations when applying for grants.

Fortunately, as Hannah explained, Extension is in a great position to address concerns of communities in the real world, so it is just important to communicate those concerns to granting agencies.

Survey respondents also discussed the incongruencies between granting agencies' expectations and timelines versus what it is like to actually do research with Indigenous communities. A Professor from Hawaii, in response to a question about common barriers to successful collaborations, said, "Length of time to build relationships and time to go through proper decision making protocols in the community vs. timelines of funders." Building trusting relationships is critical for collaborations to be successful, but this time is rarely built into research collaborations. Also, a Specialist from Nevada discussed the tension between research

and being respectful of culture and sovereignty, "Facilitating grantor requirements for grant reporting and research design vs. indigenous cultural, sovereignty, IRB, and design concerns from the tribes."

Jeff discussed how outcomes from a grant in a tribal community might look different than in other communities, so it is hard to judge them on the same basis. The priorities of the tribe and of the grant rarely match, so navigating those differences successfully is important. In particular, because relationship- and trust-building are so important and potentially time consuming in Indigenous communities, it might take longer to see measurable outcomes from a grant-funded program:

It's not just in the tribal context, but it's magnified there. A typical one- to three-year grant cycle is not long enough to demonstrate impact in a lot of cases from the grantfunded work, and that's really the case in tribal communities. I'm being careful here because it's easy for me to say it's the same problem, only worse in tribal communities and that's partially true, but it's a different kind of concern. I'll back up a little bit. The guy who recruited me to put together the Tribal Leadership Academy gave me the best advice I've had about working in tribal communities. He said, "When you go to meetings in tribal communities, you need to flip the usual advice on its head and don't just do something, sit there." That was his shorthand for, "The tempo is different in many tribal communities." It is much more based on long-term relationship and engagement, than it is on short-term outputs and quick products. And that's inconsistent with a lot of grant cycles.

Because of this tension, Jeff also describes the need to be as descriptive and upfront as possible when applying for grants, so that granting agencies know what to expect, what is realistic, and what "success" is going to look like in a particular community:

Depending on the grant funder, you can try to clarify expectations, even in the grant proposal, about what you're going to be able to do and what you're going to be able to demonstrate. Often we're stuck doing, in any grant cycle, we're doing output measures rather than outcomes. We are counting delivery, the number of people served, the number of contacts and all that sort of stuff. So, trying to clarify expectations to articulate a modified set of expected standards for evaluation.

Others talked about how assessing the success of a program might look differently in Indigenous communities as well, and how that can be explained to granting agencies. Laura brought this up in the context of how evaluation of program success in Indigenous communities will look different than in other communities for many reasons, including participation numbers. For the reservation she serves, she feels that it is critical to offer programming locally and not require tribal members to travel off reservation, even if that might be better for participation numbers. This is particularly important because of the racism that Indigenous peoples might suffer in neighboring communities (further explored in a section below). Because of this, it is very important to Laura to offer programming on the reservation that is culturally appropriate and safe, knowing that that might mean that the numbers of attendees might be lower than if the program was held off reservation.

Danielle and Jeff both talked about how they center the community's feedback as part of the evaluation process, perhaps in addition to more traditional forms of evaluation. Danielle explained how she and other colleagues are using new methods, such as distributing cameras to community members and asking children to draw, to center the community's feedback:

We're doing an entirely different evaluation of our project. We're having folks use cameras and taking photos and pictures of project outcomes, because we've read that that is a more successful method. Also, I know that our teams on the opioid grant that are on reservations, they're doing a lot more illustrative public health outreach material- so posters, art drawings, you know. We'll have kids draw, getting the point across, to prevent opioid misuse through drawings instead of words. That's been really effective in rural communities.

Jeff also talked about how, when he has needed to provide evidence in an evaluation of a program, he has solicited community feedback, but has felt uneasy about it:

Jeff: Occasionally, I've resorted to... I have to confess to not being entirely comfortable with this as a strategy, but sometimes having approval or testimonials from the tribal community carries more weight than you think it would in other circumstances. A

resolution from the tribal council, who are thanking you for the work, a statement of impact from the tribal or government department, and things like that. I have occasionally been able to substitute that for what we would think of as a more robust evaluation. Then, I'll also say that I've had what I think is an advantage from an academic perspective in most of my work, not being the sort of work that lends itself well to precise evaluation. How do you evaluate the success of a process to engage, um, former combatants in a collaborative process around resource stewardship? (laughs).

Interviewer: You ask them about it, right? Isn't it too bad that we don't think of that as a good process of evaluation? To actually ask them?

Jeff: Yeah, "How did we do?" Yeah, it is exactly. (laughs).

While asking for community feedback might not be a traditional way to evaluate an education program, perhaps it should be considered important to Extension educators to ask the communities they serve about the impact of their programs. This can be paired with more quantitative and traditional measures of success as well.

Another hurdle described by Clay was that it isn't necessarily true that, just because you can get funding for a project, that project is really what the community needs. He described this challenge with an example of a grant program that he is currently working on. Despite the fact that the community he serves has "loud killers," such as respiratory diseases, Clay must focus on a "silent killer" because they received a grant to "keep the doors open:"

Because of our funding situation, much more is being driven by what we can get paid to do. An example of that is- I have been doing a lot of work on radon lately and that is because we have an EPA grant to do radon. This is not a pressing health concern for the people in my region. You know, we have real problems (laughs). We have things that are killing people right now, you know? This idea that like, "Radon's a silent killer"... We have really loud killers, right? But in order to keep the doors open, sometimes we gotta take on projects like that.

And so part of my time is paid for by radon, we've been getting radon tests out to people. Where I live, our houses are built on posts and pads, so they're sort of on stilts, right? I think some of them were built on sand pads over glacial fields, so there's really no risk of radon in the community where I live. So we've been concentrating on villages that are upriver. We have found radon levels that are unacceptably high in communities where no one's ever done testing. So that is an outcome that we're happy to report to the EPA. But that's an example of something nobody out here asked for, it's not a pressing

concern for anybody, and the public health community has not concerned itself with it because there's so many other more pressing problems. Unfortunately, it looks like that's kind of the way things are going, is that if you don't have funding for a project, it's getting harder and harder to spend time on it.

While Clay was able to help some members of his community by detecting radon levels that were too high, his public health background, the lack of concern about radon in his community, and the very real and pressing issues that his community faces makes Clay reluctant to spend his time addressing radon levels. Still, his state's lack of funding makes it necessary that Extension takes on projects based on funding availability.

While grant funding is important for making these collaborations happen, it does present the issue of "soft money" that Diane describes, "Soft money- it's great while you have it, it sucks when it's gone." This can lead to situations where universities come into communities for a short while, and then leave when the money expires, leading to some of the situations described already and continued below that promote distrust of universities and damage to trusting relationships. Not only is this true for grants funded by outside agencies, but FRTEP is also a grant-funded program with a limited number of awards, that is on a competitive, 4-year cycle. It is important for universities and Extension to think about the sustainability of programing that are grant-funded so as not to promote distrust.

Another way that states manage to fund Extension programming and personnel in Indigenous communities is to have the tribe(s) chip in some of the funding, which presents its own challenges. Julie described this set-up in the Indigenous community that she serves; in her state, the university puts in money, the tribes put in money, and FRTEP "helps fill in some of those gaps, along with smaller grants." They are hoping to relieve that pressure from the tribes in the future with more public funds because, "they [the tribes] have more pressing issues that that

money could go towards." In her case, FRTEP helps fill gaps when the tribes have to make decisions about repairing a failing water system, for example, or other essential services, and don't have the money to pay Extension. When this happens, Julie says, "[FRTEP funding is] not enough to fund the entire unit, but it definitely helps fill gaps when, you know, in the past they've been two or three quarters behind in paying us. And so, we've had to use FRTEP to kind of absorb some of that until it does come through. Without that cushion there, it would have been really difficult to continue." Creating stable funding sources would ensure that "soft money" and funds from the tribes would not jeopardize the relationships built with tribes.

Additionally, Julie, Amelia, and Laura, who are from the same state, said that they don't have issues securing outside grant funding because there are funds available to address the systemic issues that are present on the reservation and for Indigenous communities in general. What they worry about is the conduct of outside agencies within Indigenous communities and how that impacts the relationship that Extension has there. They are picky about who they bring to the reservation, making sure that the programming and personnel with outside programs are reliable, trust-worthy, and culturally sensitive so that Extension's relationship with the tribes isn't damaged because of others' actions. Further, a Program Coordinator and survey respondent from the same state described how, even when there is funding, making sure that it can be used by the Indigenous community can be challenging, "As an indigenous Nation with poverty issues, food security issues, unemployment, economic issues, etc. we receive a lot of funding, but in reality, there is little to no resources. This is very misleading, and in some cases, it's restricts a lot of things that a tribe can and cannot do."

Funding was a major barrier that most participants identified. Ethical issues come up both from the lack of funding and how to allocate funds when they are available. Participants talked

about the importance of how to describe the socio-cultural context to granting agencies so that they understand the population, their needs, and what to expect. Also, there is always the possibility of damaging relationships if and when an educational program doesn't go as planned.

Research Logistics

Whether for a grant or a research project, collecting data and the logistics of research are sometimes more difficult and complicated in Indigenous communities. Collecting data and doing research in Indigenous communities and with 1994 LGIs can require 1862 LGI employees to go through additional or different processes than they might be used to including additional IRB approvals or approvals from tribal administration.

The IRB process is more complicated and different in every situation and with every tribe. Some tribes have their own IRB process and some rely on umbrella organizations, such as the Rocky Mountain Tribal Institutional Review Board through the Rocky Mountain Tribal Institute, to handle the IRB process. Sometimes it is possible to partner with a 1994 LGI, who will also have their own IRB processes. All of this is in addition to the IRB process at the 1862 institution. Depending on the situation, project, tribe or tribes in question, and whether a 1994 LGI is involved, this process will change. Jeff described some of the difficulty of this process when explaining expectations to granting agencies:

Institutional review boards are aware of the cultural concerns associated with conducting research on or about tribal members. It may be that the uses of data collected, to honor about tribal communities, are really restricted, and the process itself is much more cumbersome. If you've not been warned about that, sometimes those are unpleasant surprises.

Anyone doing research in Indigenous communities will need to make sure they have the correct institutional and tribal approvals at every step of the process.

Not only is this important for ethical research reasons, but this process allows for setting expectations between the 1862 LGI and the Indigenous community, engaging the important collaborators, and making sure that the project is in line with the community's goals. Jeff describes an experience when expectations had not been communicated clearly and how to navigate research issues when they arise:

Some of it goes back to expectations, right? If we've not been really deliberate about confirming that we all have the same expectations from an activity and then, for instance, there's a change in tribal government, which happens with surprising regularity in tribal communities, then you may have a different interpretation of expectations and that can create some conflict. Then, if there's conflict there's a need for far more (A) engagement and (B) formality. I've had the misfortune of a couple of these things going to the level of quasi- government-to-government consultation over disagreements about how a grant program has been managed, for instance, and that can be really awkward and it has the potential to undo whatever good work you've done in terms of building relationships.

We've not been and I've not been blameless in that. You know, we run on defaults. We've got two Co-PIs, one of them retired and the other one has taken it over. Six months later, Whoops! We forgot to coordinate with the tribal government. That was not something they thought they had to agree to and they didn't agree to it. So, now we've got to do a formal letter of apology and open up a consultation and now you've got a bunch of damage control to do. That would not have been necessary had I reminded myself early on, "Nope, we gotta coordinate on this." This may be allowed for federal grants, but that's not our only concern here because of the community we're working with. That's for me, from an administrator's perspective, I have to be really deliberate about that. Reminding myself that business as usual is different when we're talking about engagement with tribal communities and that I do have to make the extra effort.

For Jeff, setting expectations on timeline, the activities that will occur, and control of data usage and publication is important, as well as getting those expectations "memorialized" in case there is personnel and leadership turnover on either side to avoid confusion and damaged relationships.

Kent also talked about the importance of speaking with the "right people" in the tribe, for clarity and to get things done the right way. This is going to be different from tribe to tribe, so it is important to know who needs to be sought out for approval:

Another trick is making sure that you're talking with the right people, and that's hard. Sometimes you don't need to have the Chairman involved with everything, sometimes you don't need to have the main government involved with everything. Could just be a local chapter house, depends on the structure of the tribe. But sometimes you do. And sometimes if you have a (graduate) student that says, "Oh, yeah, I have everything covered," you better do a double check to make sure they even have authority to say that. 'Cause if you're on a research project talking about cultural, historical- there's certain things they can talk about and certain things they can't. The younger folks may not know those yet, even though they're a tribal member themself.

Sensitive cultural and historical information will be handled differently in different tribes, as well as who has the authority to give permissions for educational and research projects. It is important for researchers to know these structures, in addition to the institutional structures at their universities.

Publishing itself can be different in Indigenous communities too. Kent talked about how research and publication in some tribes is never allowed, unless initiated by the tribe itself:

Research can be tricky, because you may not be allowed to publish anything that you do with them because of sovereignty and a whole bunch of other issues. So you've got to be willing to just let that go. Eventually, you could, like we have one case over here on the [Reservation Name], they typically have had a moratorium on research, but they actually came to one of our Specialists and asked them to do some research. Because they knew us and her grad student is actually [Tribe Name], so that helps, and they need it, they need the help there.

This can be difficult as a faculty member because, even if doing the work for the community is a high priority personally, many can't sacrifice the time and resources if they won't be evaluated on it through traditional promotion and tenure processes. Often, this can be the limiting factor as to whether or not collaborations emerge.

The logistics of doing research in Indigenous communities can often be more complicated than in other communities. This is because there might be more IRB approvals to go through, expectations need to be explicitly laid out between the university and the sovereign tribal government, there are certain people within tribal government that need to be included, and

researchers might not even be able to publish the results of their research in general. When research outputs are important for faculties' promotion and tenure, these research barriers can be a significant consideration for successful collaborations to exist.

Rural Issues

Many of the communities that participants work in are rural and remote, which itself presents challenges. Seven interview participants and 12 survey respondents described issues common to all rural communities that make them harder to serve. These included long travel times and lack of transportation, utilities, technology, the internet, and even food. These basic services tend to be more expensive or hard to find and Extension employees are often working in these remote places alone. Because of these difficulties, facilitating educational programs might need to look different in rural communities.

The logistics of working in rural communities can be more difficult and require more planning. Frank explained how working in remote places requires more logistical planning and is more unpredictable:

You better be used to trucks not showing up to take you a half an hour back to the village, 'cause you need four wheel drive because of washouts and stuff. It may be a while to wait before the truck gets to you. You better be ready, when you can't fly out of the village, you better have the extra food with you to spend an extra night, an extra day.

Just accessing some Indigenous communities is difficult, requiring special transportation such as 4-wheel drive or a plane, and that transportation can be unpredictable.

Hannah has done some work investigating the best educational delivery methods in places that she calls "the ruralest rural," reservations and other remote communities in her state.

Often, having in-person classes is difficult in places like this because it is a challenge for people

to travel long distances to access services. She doesn't want reasons of distance or transportation to mean that her programming can't be equitably accessed:

That's a long commute to be able to participate, or it's only the people that are in the town center that can do that. So, thinking about how do we work in different ways? Maybe working with organizations or the school system, or different things to make, this is a little cliché, but to make the healthy choice the easy choice within the communities. Extension is very comfortable with direct education, and that works sometimes, but not always. I do think there are some potentials for direct education through technology types of things. I think there's varying uses of different types of technology or maybe different social media platforms, for example, are more prevalent in different communities. Exploring what some of those trends might be in areas, hoping to explore as we see what kinds of programming will be best in these different communities.

While direct instruction or hands-on demonstrations might be the preferred and most comfortable method of delivering educational programming, rural communities might require programs that they can access remotely.

Participants described how it is often just one Extension employee serving a reservation or very large area alone, and that the challenges of serving rural communities are often difficult to navigate. Karen described the experience of one of her colleagues working on a reservation alone. Not only was the remoteness a challenge, but also navigating the job on her own was too:

They hired a woman who worked on the [Tribe Name] reservation at the same time that they hired me, and she was really out in the middle of nowhere. You had to get down to the bottom of the canyon, you had to hike down or ride a horse down (laughs), or hire a helicopter to take you (laughs). She had a lot of challenges. I remember in the first couple of weeks she called me and she goes like, "Well, what do you do when you first get in the office? You know, what am I expected to do?"

Karen went on to say that this isolation and the challenges of working in rural communities are particularly hard for young employees that are new to Extension, "I think for the young people that come out of school, that just get thrown out into some of these offices, it can be a little disconcerting, and a lot of times they're not in an Extension office, they're in one of the tribal buildings. So, they are kinda out there." The combination of physical and professional isolation

can be difficult and can lead to high turnover in these positions. As seen in Figures 3.2 and 3.3, educators that serve Indigenous communities are often geographically spread out and not close to one another to offer support.

Dave, who works in a very isolated and rural location, described his community as "an island," where basic services like doctors are hard to come by and commodities are expensive.

This makes working in these locations, "tribes aside," more difficult:

Dave: The spatial remoteness of most of the reservations is a huge factor for Extension, and for the tribes too. Just trying to find somebody who's willing to work, tribes aside, in these remote places where they stick tribes is a challenge. Most states, the tribes are very remote, and it's hard to find anybody, you know? It creates its own special problems aside from all the other issues that you have to deal with.

Interviewer: Like what?

Dave: Just like, existing, you know. My kids have a specialist we have to go to [Big City] for, so it's like six hours, and food is very expensive. You're kind of like on this island, even though I'm in a beautiful place that I love. I think it really needs to be taken into effect, just that geographic isolation.

James, who actually works on an island, compared the isolation of Guam to remote places that he has been to in the continental US as well:

I've been in the States many times, and I've driven to places where you're forty minutes from anything. That reminds me of where I live and the same problems, where they wanna have that self-sustainability. They may go out 10 miles to a farm and they call it "local." And then anything after that is imported. That's like on Guam, we have to wait 21 days for a ship to get here. We get two ships a week. That isolation is just like in the States where, if you shut off the highway, then that town is gonna feel the brunt of what's happening. That isolation brings on that anxiety of not being able to sustain yourself. It's magnified 10 times by being on an island, but you know, kind of like the same principle.

This isolation makes people feel the need to be self-sustaining, an "anxiety" that is shared by people on literal islands or the "islands" of rural communities.

One of the most extreme examples of the challenges of serving rural communities was in Alaska; Frank, who serves the whole state, described some of the remote places he works in:

In some areas of Alaska, there is no borough government even. It's basically a large swath of land. And then all of a sudden, a hundred miles from the next community, historically because it was a trapping or hunting intersection, or whatever the reason is, all of a sudden now you have this community popping up. Some of them might be traditional tribal ones, or it might be like the community [Name] that is in no borough, but it was kind of a crossing of waterways. It's not historically tribal, but they tended to gather there because White gold miners and trappers gather there too.

Nomadic, seasonal, or unincorporated communities are particularly difficult to serve, but Frank still does his best. He also describes how, because of the lack of government structure, these places have no mechanism for taxation, part of the traditional way that Extension is funded, making funding programs there difficult. Clay, also in Alaska, described some of the challenges his community members face in the remote and under-resourced places they live:

It's a challenge. How you eat food, how you prepare food... you look at something like cleaning practices and food safety around canned food preservation, and you're working with folks that traditionally have not had running water, some people still do not have running water. So, introducing things like bleach into the household or talking to people about some of these things, I think is probably a significant challenge compared to my counterparts in other places of the country where, when you say "clean a surface," everyone knows what that means. Like when I say, "Okay, we need to clean the surface," that might mean a different thing to someone in a house that doesn't have running water.

This speaks to the importance of knowing the community that is being served, understanding its socio-cultural conditions, and centering the goals of that community. Clay facilitates programs, such as food preservation and clean household practices that look very different than programs in other parts of the country, but he understands his community's needs and tries to meet them there.

The remoteness of many reservations and tribes can be a significant barrier for Extension educators to overcome. Issues such as educational methods, lack of access to resources, and professional and personal isolation (as also seen in Figures 3.2 and 3.3) were cited by participants as barriers. It is precisely because of the issues in rural areas and the lack of other

resources, however, that make Extension services so important to the development and sustainability of these communities.

Extension Educators Spread Too Thin

Navigating all of the challenges of working with marginalized communities, including Indigenous communities, becomes more difficult when Extension educators are spread too thin in their time and professional responsibilities. Working with Indigenous communities takes more time to build relationships, more skill to develop culturally relevant programming and pedagogy, and more attention to negotiate funding barriers. When serving Indigenous communities is often left to the discretion of the Extension employee, making Indigenous communities a priority is difficult when an employee's time is spread too thin. All of the participants in this work *do* make this a priority, but six interview participants and 14 survey respondents talked about how difficult that can be.

For some, this is because of budget cuts and funding issues. For example, Extension in Alaska has experienced some budget cuts in the last few years, resulting in what Frank called, "a skeleton crew." This crunch on employees results in decisions about where Frank can and should spend his time and resources, "If I'm going to work 40 hours in indoor air quality, then it's up to me as a faculty member to decide, am I gonna spend all that time in villages? Am I gonna spend all that time on the road system, or a mix?" Frank does make it a priority to spend time in Indigenous communities, but, as he says, this is up to his discretion. Clay, also in Alaska, is responsible for "an area the size of Oregon," that is often difficult and expensive to access. This large land area would be difficult for anyone to serve, let alone when many of the communities are remote, under-resourced, and in need of specific programming.

For some, being spread thin is because they are responsible for a large area as a Specialist, either regionally within a state or statewide. Diane, for example, serves 21 counties in her state, including non-Indigenous and Indigenous communities, and Dave serves an area the size of, "Massachusetts and Connecticut together," again with both non-Indigenous and Indigenous communities together. Danielle, who is trained as an anthropologist, also described her difficulty serving a large area with diverse communities:

As an anthropologist, I worked a lot with ethnic minorities in Nepal, but I lived there for years and you get to know the communities really, really well, and I think what's been challenging for me in this role (in Extension) is you have the entire state, you know? There's differences among reservations, but that's only one portion of this giant state and you are asked to do programming. So, when you're spread so thin, and so you just don't have the time required to do the work the justice it deserves.... Does that make sense? I find myself very frequently being like, "Eh, do I actually have enough time to engage in another relationship with another tribe and do other work because I feel like I'm already traveling a lot and teaching classes and so I think it was a lot easier as an anthropologist working with one community- get to know them really well, get to know the language, and that transition to Extension and working with other cultures has been really difficult.

As discussed above in regard to what makes programming and educators successful, spending time building relationships, becoming involved in the community, and centering their goals are important components to success. It is difficult to do that, regardless of how committed an Extension educator is, when they are spread over a large area.

For other participants, they were spread too thin because of their time allocation per their position description. Jane's position includes only 20% Extension time, with her position being split between that, research, and a heavy teaching load. This results in her being "pulled in three different directions." Between those responsibilities and her home life, she feels that she isn't able to be as present in the community as she would like. She explains that she doesn't want to do what university researchers have been criticized for doing often-coming into a community and having to leave quickly, "It makes me sad because that's what they always say, right? You

just come in and you get what you need and you leave, right? That's like what we hear all the time, and you really don't want it to seem like that at all, because that's not how it should be."

Because of her time commitments, it is sometimes difficult for Jane to change that paradigm.

Similarly, Jack serves as both an Advisor and as a County Co-Director. He described himself as, "one of those highly trained technical scientists," but he splits his time between science and administrative responsibilities This requires his to "dilute his time" in his scientific role. Also, since he isn't an administrator by trade, he thinks that it would be better for Extension to get, "professional directors who are bureaucrats or MBA-type people who really understand how to run and finance an organization and then leave us more programs-people to run the programs." That way, people that are trained and more experienced in things like applying for local funding, collaborating with local government, and managing personnel could tackle those responsibilities and perhaps be more successful at it.

There are many reasons that Extension educators might be asked to take on too many job responsibilities, from funding shortages to working in rural places where it is difficult to justify a large staff, but spreading educators too thin has its own difficulties. Working in Indigenous communities takes time, commitment, and special skills, and it is often the case that Extension educators are deciding for themselves how to allocate their time. If they feel overburdened or under-prepared, Indigenous communities might not get the support that they need.

Distrust of the Government and Universities

Many of the participants discussed how, when building trusting relationships with Indigenous communities and making long-term plans for educational programs, they were often challenged with distrust that tribal members have for both the government and universities. Six interview participants and 17 survey respondents identified distrust as a major barrier. Sometimes, this was because of a general distrust for outsiders and from the historical trauma that tribes have experienced and sometimes it was a distrust born out of specific examples of broken trust from the past. Jack summed this up well in a common-sense way, "They're a group of people who are not going to be reaching out to mostly White governments or university people and ask for help. Because I'm part of the government, and say, 'Hi, I'm here to help you.' They've had 150 years of being screwed over by that message." Creating trusting relationships with tribes and tribal members is crucial to the success of educational programs, so this barrier was an important one to overcome.

Many tribes and their members are distrustful of the government and, by extension, LGIs because of the historical trauma and broken promises that they have endured. A survey respondent from Hawaii described how they see this history of trauma manifest itself in his educational programs today:

Our population in general is often one of "wait and see," which means there are few early adopters and the best source of marketing is word of mouth from those early adopters who participated. This is to be expected, as the indigenous population in Hawaii, like other indigenous populations in the US, has experienced significant trauma at the hands of colonizers. Large institutions such as a University are often viewed as an extension of the colonizers, so it takes significant time to build trust with the target population prior to their willingness to register and participate. Again, this is to be expected as the indigenous are recipients of trauma at the hands of colonizers.

Again, the importance of building relationships is evident here, especially in light of the distrust that Indigenous peoples feel towards government and universities. As this educator from Hawaii recognizes, this is to be expected, and they understand this tendency because of their academic understanding of the context.

Jeff describes how this historical perspective is alive in tribal communities in a way that it isn't in others and how he embodies that historical perspective when he comes into tribal communities:

I'm an Outsider coming into a geography and a situation that is weighted by a tremendous amount of history, right? In every tribal community you're dealing with what, from our Western perspective, we think of as ancient history, right? The last Indian War was in 1898. That's so long ago that we think of that as ancient. For most tribal communities, it's still part of their active oral tradition and, for them, very fresh. It's still a frequent, if not daily, frame of reference for how they deal with government. And coming in from the university, we're seen as, in some respects, a representative of government with all that baggage attached. So, yeah, you've got a credibility gap and an uphill battle.

Jeff has a great academic understanding of the socio-cultural history alive in Indigenous communities. In addition to that, here he is describing the importance of how that understanding affects Indigenous community members' worldview currently and how that differs from the Western worldview. The traumatic history that tribal members have experienced in reference to the government and universities is not "ancient," as it might seem to Outsiders, and this informs their trust of Extension educators today.

Participants also described how they were rebuilding trust in the government or universities because of damaged relationships from the past. Hannah talked about how universities often come into an Indigenous community to conduct a program, but don't have long-term strategies to make that program sustainable. This breed distrust in the communities when the next person from a university comes along:

When researchers go into Native communities, does a research project, and then leaves, and the next project also leaves- that does not speak well (for the university). The community says "Did you just use us to collect that data?" What about this program that we were having success with, and now we no longer have funding? I think that Extension plays a role in trying to help other researchers, as well as Extension researchers, to understand the importance of sustainability in communities. Ensuring that you're not just going in and saying, "We've got this funding," and then once the funding's gone, so are

we. And you may not know what we found out or it may not inform anything in your community in the future. That is a challenge that has tainted relationships, I think.

This history of universities and other governmental programs coming to Indigenous communities, facilitating a program, and then leaving was cited by participants in many contexts and from all over the Western region.

Participants described specific examples of how relationships were damaged because a university didn't consider the sustainability of a project. In the community that Diane serves, another university in the state had built computers with students over one summer. Now, the tribe has a few of the computers remaining in a publicly available computer lab for the community to use, but the other university didn't set up structures to make sure that the computers could be maintained. As Diane put it, "[The University] never came back." Because of that, the tribe is wearier of future relationships with universities in general. Karen also described an incident from the past that she and her colleagues were still feeling the repercussions from years later, and for good reason. She took her explanation a step further and connected the incident to larger issues of prejudice:

It wasn't actually [Karen's University], it was [Another University in the State] sent some researchers up to the [Tribe Name] reservation, and they actually collected blood samples. I don't know how they even got permission to do that, but they did. And they said they were going to do something with genetics "cause, you know, they had some obesity and some diabetes issues. And then (the researchers) turned around and wrote more of a genetic study on where (the tribe) came from that totally disregarded their creation story or how they got there. It was a huge lawsuit. All of the universities or colleges in [State] were banned from the reservation. The tribe was trusting and letting them collect those blood samples. I mean, especially blood samples! I mean, come on! But again, it shows that disregard- "Well, they don't fit our Judeo Christian beliefs, so, therefore that must just all be myths that we don't have to account for."

University faculty and staff behaving badly in Indigenous communities came up often in the interviews, as well as what Extension employees have had to do to mend those relationships. While it didn't seem to be the case that faculty and staff were meaning to do harm, cultural

insensitivity and a disregard for Indigenous epistemologies (as Karen describes), a lack of follow-through and sustainability, and not understanding the policies and procedures within a tribe were often the main causes of damaged relationships.

Because of both the distrust from a history of universities not following through and their propensity to do that again, Julie is very careful about who she partners with on new projects. She said that, because the tribes she works with need help and the "numbers" prove that, grants funds are accessible for researchers that are interested. Despite this, preserving her relationship with the tribes is her highest priority when deciding who to work with, regardless of who has funding:

Numbers at [Reservation Name] really do help you get a grant. Sometimes it just feels kind of shady and feels like we're being used. We're really protective about who we will partner with. That's mainly our primary concern. Our primary focus is how this is going to affect our relationship with the tribes. We work so hard to build and maintain the little bit of trust that we have with them that, if we vouch for some group that they're going to come in and do something, but they do it poorly or they do it in an inappropriate manner, then that makes everything harder for us because, not only did we destroy that little bit of trust we had, we have to now work to rebuild it. So we try really hard not to put ourselves in that situation.

Here, Julie uses the word "we" to both describe her relationship to her university ("not only did we destroy that little bit of trust we had") and the relationship between her and the tribe ("Sometimes it just feels kind of shady and feels like we're being used."), displaying her allegiance to them. Funding was another significant barrier to successful collaborations, but Julie and others at her university prioritize the trusting relationship that they have with the tribes they serve above anything else, including money.

Distrust of the government and universities was a very common barrier that participants described. This distrust was born out of the large-scale trauma inflicted on tribes by the government, and from specific examples of universities entering Indigenous communities and

either acting badly or leaving without thinking about the sustainability of their programs. Extension educators needed to overcome this distrust, plan for the sustainability of their programs, and be thoughtful about what outside agencies they bring into Indigenous communities.

Racism

Three of the interview participants and 2 of the survey respondents described how racism from within Extension and in communities towards Indigenous peoples was a barrier to their success in programming and as educators. When discussing what the essential qualities of a successful program are, Laura stressed that place matters, not just to keep programming culturally relevant, but also because other places are not safe for members of the Indigenous community that she serves as racism is a factor in the community. Because of this, Laura makes facilitating programming on the reservation a priority even if participation numbers will be lower, rather than asking tribal members to attend programming in non-tribal communities.

Randall described experiences he has had in Extension all the way back at the beginning of this career that he found to be racist. As described above, Randall has always been passionate about engaging Indigenous peoples in Extension; he described his first experience with Extension when he was interviewed for a position as a 4H Agent. Randall included prioritizing Extension services for Indigenous communities in his interview and, as he describes it, he didn't get the job:

I really had no experience with 4H. You give a presentation for the job interview, and the assignment was, "How would you grow the 4H program?" My main thesis was expanding services to Native Americans in the community and bringing more Native Americans into 4H. And I was received very, very coldly and there was a lot of resistance to that. They'd take you out to dinner after the interview and, just in the conversation I heard having dinner with the committee, I heard a lot of them make comments about

Native Americans and how they weren't welcomed in the community and things like that. And I was deemed not appropriate for the position. I think actually the search was a failed search. I think nobody who interviewed for the position was qualified, but that was an experience. That was, I would say, my first experience with Extension and Native Americans and really kind of left a bad taste in my mouth.

Later, Randall would get a job in Extension in the county that he continues to work in now. In this county, Randall continued to experience racism towards the Indigenous members of the community, "just in casual conversation around the community. I heard a great deal of berating Native Americans, mainly by the cowboy ranching community."

In his job, he interpreted some of the things that he was seeing in the public schools as racist treatment of Native students:

I recognized that there were gifted and talented Native American kids who were not in that program and they should be. And we're saying to ourselves, "Why? Is it because they're not targeted that way? They're not seen that way?" So a lot of these kids get frustrated... The kids tend to be quiet, especially Native American kids. They say they're not comfortable, for one thing. Some of them get more comfortable, but for the most part, they be quiet or they act out. I know all kids act out, but when Native American kids act out, sometimes they really act out. And then they get labeled as the troublemaker, the one that needs attention, the one that needs discipline. A Native American mom once told me, "The way we see our kids is that they're born perfect until they are corrupted by becoming an adult," (laughs) by society, you know, so they're given a lot more freedom. I don't think that's recognized.

The combination of Native students' intelligence not being recognized and their being uncomfortable in school, compels them to "act out," in Randall's experience. This prompted Randall to get very involved with the local schools; he created after-school programs at the middle school and facilitated many education programs in collaboration with members of the school district, both on the reservation and off.

Randall has also had to contend with the distrust of universities in this community, combined with a racially charged incident that affected both. In dealing with the incident, Randall displayed his commitment to strong relationships and how he deliberately maintains

them. A few years ago, someone that was visiting campus called 911 because two Native American students who were also touring the campus "were 'real quiet' and wore dark clothing." Randall, in order to try to repair some of the damage to the relationship between the tribes in the state and the LGI, helped to facilitate a presentation from some of the people working in diversity and inclusion at the LGI and the state's Commission of Indian Affairs. Randall knew that everyone had heard of the incident and would want to both know what the LGI was going to do about it and have the opportunity to have their voices heard. Of the presentation, Randall said, "I don't think anything concrete came out of [the presentation], but I think in terms of relationship building and unification, that it was a very positive thing to do." This kind of intentional relationship building and understanding of the larger socio-cultural contexts that they operate in is imperative for long term involvement in a community.

Randall's allyship with the Indigenous members of his community has caused him personnel issues within his community, making him the target of their bigotry. Diane, a Specialist that serves the county that Randall works in, describes how Randall's allyship with the Indigenous community has caused the White community to "shun" him:

Diane: It's like you have this White community that's trying to maintain its Whiteness, and then you have the others. It's very di... It can get very ugly there. And so this is part of the politics that are going on in the community. And I think that's one of the reasons why Randall is so adept at working with the Native community, he's been pretty much shunned by the White community, and Randall's White. (laughs)...

Interviewer: For his empathy?

Diane: I think that's part of it. It's hard down there. They want to maintain the White culture at any cost.

In order to further illustrate the situation that Randall and she work in, Diane recalled a story to explain the racial issues in the community. Here, she tells the story of what she called a "hate crime," to describe the climate of the community that she and Randall work in.

I have a story: the last time I was down there... they have this little, one of those silver bullet trailers, and it's a coffee place. So, I go there and I have coffee when I'm headed from between the tribe and Extension office. I heard that the woman who was there most mornings is a native [Tribe Name]. The day before, she was there, somebody with an Ohio license plate drives up, and he said, "What size is the coffee you have?" So, she got different sizes out, he took them and swiped them off the tray. And then he said, "Why don't you go back where you came from?" And then he pushed the tray into her head and knocked her down. And she had this big gash on her head from that. All right, she's a [Tribe Name], she comes from here, we don't. That is an Ohio license plate, she got the license plate, so she called the police, they came and they said, "Well you should go to the hospital," and they didn't follow up on the license plate. So she was attacked by a hate crime and nothing was done. It's hard down there. I don't think it's as bad in [Neighboring County], you know, there's city people that are not there to maintain the white culture at any cost.

Diane was upset by this story for a few reasons: the violence of the "hate crime," the fact that the Native woman was told to "go back where you came from," and that the police didn't follow-up on the attack. All of these factors compound to show that racism is a significant issue in the community that she and Randall serve.

One of the survey respondents, an Agent from Montana, described how their identities and history of experiencing racism has helped them to build relationships with the Indigenous community that they serve:

In my personal opinion, the fact that I am Mexican has really helped me to understand the way to build relationships with our tribal communities... I understand some of the struggles of the indigenous communities because they are some of the struggles my family went through; like racism, discrimination, and stereotypes. The [Indigenous Nation] people see that I am genuine when it comes to my intentions to help them in what they identify they need, and I think that is why I am successful.

The shared experience of racism, along with the Agent's ability to center the goals of their community, helps them to make connections and be successful. Hiring members of Indigenous

communities to facilitate Extension programs was a suggestion from some of the educators because of that shared experience as well.

Racism in communities was described by a small number of participants, and not everyone said that there was racism in their communities at all, but when it was present the effects were severe. It forced Extension educators to change the locations of their programs for the safety of their participants, witness violence to members of their communities, and experience marginalization within their communities themselves. Depending on the context and larger community, Extension educators might face some of the same issues with working with any marginalized group.

Which Barriers Were Prohibitive? Experiences of Educators That Have Never Worked with Indigenous Communities

A unique aspect to the survey that was not present in the interviews was the opportunity to hear from Extension educators that have never worked with Indigenous communities. They were asked about why that is and what they would need to be successful in creating new collaborations. The group that said that they have never worked with Indigenous communities were also asked whether they would be interested in working with them or not. Of the total 307, 105 respondents to the survey answered that they had never worked with Indigenous peoples or communities, but that they would be interested in doing so. When they were asked about what support or resources would be helpful for them to serve Indigenous communities, they had many great suggestions and brought up significant barriers. These included the need for more academic understanding, help with relationship building and Insider collaborations, funding, and greater systemic support. This affirms what was found above in the previous sections as characteristics that make educators and programs successful in their collaborations, including the need for

academic understanding, the importance of trusting relationships, and Insider collaborations. A respondent from Nevada summarized the needs well: "Expertise, relationships, funds, FTEs, supportive administrators."

A need for more academic understanding was mainly in the form of better cultural awareness, including the histories and cultures of the Indigenous communities in question, learning what the needs of Indigenous communities were, what has worked and not worked for them in the past, and how to create culturally relevant educational programming to meet those needs based on the educator's expertise. Thirty-four respondents said that they needed more academic understanding in some way. Of those 34, 9 explicitly said that they would be interested in trainings or other professional development opportunities to gain this expertise.

Additionally, some of the respondents specifically named that they were Outsiders to the Indigenous community, either because they are White or just because they don't originate from there, and that they had apprehensions about engaging with the community because of their lack of knowledge. A Program Coordinator from Arizona expressed their concerns about this because of experiences that they had; they described an unpleasant experience at a conference when a Native teacher didn't follow the custom of including her lineage when introducing herself and a group of Native students. She then received criticism that she received from her colleagues that the Program Coordinator heard for the rest of the conference. That experience has made the Program Coordinator "scared" to approach these topics, especially as a non-Native person for fear of making a mistake:

I felt like from what I learned is it's really important to become an expert on the culture. I got the sense if you weren't going to put in the time to do the work well, it's best not to do it because you could inadvertently offend the community or damage the relationship... I realized in that moment that one really needs to dive deep into understanding the culture, especially a non-native person. I felt like I knew I wasn't going to become an expert and have been scared to approach this work.

With some encouragement and training, especially around issues of identity, educators like this would feel more empowered to engage with Indigenous communities.

Twenty-four respondents said that they lacked relationships or collaborators in Indigenous communities, making contact or gaging interest from the communities difficult. Some also said that not having relationships with members of the community would make it difficult to attract participants, to understand the goals of the community, and to create culturally relevant programs. Many acknowledged that they need an Insider Collaborator to help with everything from understanding the culture of the community to gaining the approval from the tribes in order to facilitate educational programs. For many, a needs assessment was the first step to building those relationships, by helping the Extension educator to better understand their needs and how Extension could help.

Seven respondents identified funding as a barrier to creating collaborations. There were a few reasons for this. One respondent from California said that funding would help to facilitate cooperative research of agricultural commodities. Another from Idaho said that, "It would be helpful to have a member of the community to work with. Funds would be needed to hire them as an assistant. This person could help navigate the culture and introduce you to members of the community." This idea combines the barriers of building relationships, gaining expertise about the culture, and funding. A respondent from Utah combined the barriers of funding and educators being spread too thin in their work by saying that their staff would need to be expanded in order to serve Indigenous communities, in addition to their other programs, and that this would require financial resources too.

Lastly, some issues that respondents highlighted were concerned with lack of systemic support. Sometimes, the lack of systemic support was stated explicitly, such as the need for a

Liaison between Extension and the Indigenous community, the need to gather and maintain contact and other information about communities, the need for help in the IRB process, or explicitly stating that their university or Extension office currently doesn't work with Indigenous communities well. A respondent from Colorado said, "We need more programs which can serve indigenous peoples or communities. I have conducted a workshop for [Tribe] youth, but this was just once. This was on main campus and they came to us. I do not think the university has good connections to our Indigenous Communities." Another from Nevada said:

More opportunities for interaction and outreach with the many indigenous communities in our area. As a horticulturist and an aspiring anthropologist, we could be learning so much from each other! To my knowledge we do not work enough with these communities through our particular Extension office.

Fourteen survey respondents said that they have never worked with Indigenous peoples or communities and that they are *not* interested in doing so. Of these fourteen, three were from California, three from Idaho, one from Montana, six from Utah, and one from Wyoming. After responding "No" to whether they would be interested in working with Indigenous communities, they were asked why this was. Five of the respondents indicated that the question wasn't applicable to them; three said that there isn't a significant population of Indigenous people in their area, if any at all, and two explained that the position that they have in Extension doesn't interface with the public or take on clientele, so the question didn't pertain to them.

Additionally, four respondents said that their time is already taken up with their current projects, and they don't have more to give. This is in keeping with one of the significant barriers found; Extension educators' time can be spread too thin to be able to work with marginalized populations effectively. Further, three respondents had negative reactions to the question, either because of a lack of "interest and expertise" or with negative perceptions of Indigenous peoples

as clients. One Professor from Utah said, "Not an ambitious reliable clientele," and an Agent from Montana said:

I have found that the program collaborations in the tribal populations are only looking for a partnership with off-reservation professionals in order to increase the odds of obtaining funding and not strongly concerned with how I can assist in improving program success. Not interested in lending my name to waste funding on programs that have no expectation of improving or changing this population's behavior. I am an educator, not a handout purveyor.

These negative perceptions of Indigenous peoples and communities as undesirable clients for Extension may be due to many factors, including some of the findings from this work: divergent epistemologies, differing needs than other communities, the difficulties associated with funding and doing research in tribal communities, and many others. Still, this small number of Extension educators seem to dismiss all Indigenous peoples and communities as not worth their investment.

Moving Forward

The interview and survey participants had valuable perspectives to share, many from years and years of experience. A few of the participants made a point to say that being successful in this work is possible, if one enters with kindness, respect, and recognizes that "we're all just people." When asked about the common barriers to her success in Indigenous communities, Laura made the point that it is common for people to either romanticize the work or worry too much about difficulties. To overcome this in herself, she makes a point to leave behind her preconceived ideas and engage with people as they are. Clay also addressed this feeling and stressed the importance of good intentions and respect, while not getting overly worried about getting everything right:

People are very worried about acting in a way that won't offend people. You know, like, "Tell me about the culture so I don't mess anything up," you know? I don't know if this is true everywhere. I'm just speaking for where I am. My experience has been that good

intentions are understood universally. People out here are used to folks coming from other parts of the world or other parts of the country. They don't expect you to be Yupik. They expect you to be yourself. And they expect you to be kind and respectful. People get really freaked out about, you know, is this okay, culturally? And for the most part, yeah! It's all fine because you're not part of the [Indigenous] culture, right? You're separate from the culture and if you're trying to be respectful, people will see that. There's not some secret handshake.

He concluded with advice of anyone working in marginalized communities, "You know, it's all basic stuff you teach your kids. Listen more than you talk. Be nice to people. Understand that you're at their community, and their home, and act like it."

The types of programs that Extension facilitates in Indigenous communities are varied and address critically important issues, including agricultural education topics traditional to Extension and topics that are less traditional including mental and physical health and food sovereignty. Participants also discussed the characteristics that make for a successful program including centering the goals of the community, having Insider collaboration, and creating culturally relevant programming. Additionally, the characteristics of a successful educator were identified as making a long-term commitment, being involved in the community, building trusting relationships, academic understanding, being willing to learn, and allyship.

Participants identified the barriers to making this work successful included funding, research logistics, rural issues, Extension educators being spread too thin in their work, community distrust of the government and universities, and racism in communities. Additionally, the perspectives of respondents that have never collaborated with Indigenous communities speak to the barriers that they perceive to be too prohibitive for these educators to overcome in their current contexts. Further, all of their perspectives provide implications and recommendations of this work. In keeping with my decolonizing commitments, the recommendations in the next

section have been co-constructed with my participants in order to inform Extension and future researchers about changes that need to be made to support these collaborations.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

The fact that we are here and that I speak these words is an attempt to break that silence and bridge some of those differences between us, for it is not difference which immobilizes us, but silence. And there are so many silences to be broken.

- Audre Lorde (2007, p. 44)

The dispossession of Indigenous lands for the establishment of LGIs alienated Indigenous peoples from their food system and, as traditional foods decline, so too do the language, stories, and cultural practices associated with them. Deloria and Lytle (1984) emphasize this point, stating, "It is important to understand the primacy of land in the Indian psychological makeup, because, as land is alienated, all other forms of social cohesion also begin to erode, land having been the context in which the other forms have been created" (p. 12). Cooperative Extension is present in nearly 100% of US counties, but only in about 10% of Indigenous communities, and serves important roles in community health and development. Only when LGIs and Cooperative Extension provide all members of the states they serve with equitable access to resources, including Indigenous communities, can the Land Grant mission be realized and the violence of dispossession begin to be atoned for.

Extension educators at 1862 LGIs can collaborate with the Indigenous communities in their states in order to provide access to educational services. To highlight the importance of these programs and their connection to traditional Extension programs, Brewer et al. (2016) state:

The challenge of creating a model for 1862 Land Grant Extension work in Indian Country remains. Classic Extension models are built on community-based professional

educators being directly linked with supporting research and teaching functions at campuses and experiment stations. Tribal Colleges and universities are steadily developing their teaching, research, and extension capacities. A closer relationship between them and the 1862 Land Grants would probably benefit not only American Indians on reservations, but Extension as well as the entire Land Grant system. Although tribes continue to steward over 48 million acres of potential agricultural opportunities, lack of consistent and equitable access to funding, land tenure resolutions, human capital, and enterprise of technology hinders their ability to act. (p. 19)

Because of the importance of agriculture and food to culture and community development,

Extension at 1862 LGIs should prioritize collaborations with Indigenous communities for the
benefit of all involved.

Given the need for Extension services in Indigenous communities and the lack of research about and systemic support for these collaborations, this study served to lay a foundation for equitable access to Extension services for Indigenous communities through a transformative mixed methods approach, utilizing CRT and decolonizing methodologies. The survey gave an overview of the collaborations in the Western Region of Extension, showing where there are strong collaborations and where there is still a need. Further, interviews with educators that collaborate with Indigenous communities gave greater depth and understanding the needs in the region and what makes their collaborations successful. In the following sections, I discuss the implications and contributions of this work, as well as make recommendations for both Extension and future research in collaboration with the participants of this work.

The Use of Participant Voice

In the academy, it is traditional for the Discussion section of a paper to not include "new data," as all data is usually confined to the Findings section. This "new data" might be in the form of quotations from participants, or in any other way that data is traditionally presented. In contrast to many Western-centric research methodologies and in keeping with the decolonizing epistemology and methodology that was used in the preceding sections, I continue to

operationalize these paradigms in the Discussion section as well, including using participant voice. While I understand the importance of research and writing conventions, decolonizing methodologies must embrace the relational and collaborative nature of Indigenous knowledge creation systems, the connectedness between people, communities, and the natural world (Battiste & Youngblood, 2009; Cajete & Pueblo, 2010; Latulippe, 2015), and explicitly address issues of power by interrogating the research methods themselves and the outcomes of the research (Mertens, 2010). In order to accomplish this, many of our Western-centric research approaches need rethinking in light of these decolonizing commitments, requiring scholars to be creative and the academy to be reflexive (Falcón, 2016). Therefore, I am embodying these perspectives by continuing to value my participants' voices and lived experiences as they discuss the implications and make recommendations based on this work.

Here, that will take the form of participants' voices being included heavily in the Discussion section of this work. Participants had their own analysis and recommendations in regard to the implications of this research based on their expertise, thoughtful deliberation, and understanding of the research context. As a researcher, I could never have captured these valuable insights alone and made the decision to co-construct this knowledge with all involved, including my Indigenous participants and Non-Indigenous participants that serve Indigenous communities, as they made recommendations and discussed implications of this work based on their knowledge and expertise. Thus, in continuing to operationalize a decolonizing lens and having engaged Participants' voices in the Findings section, I pivot in this Discussion chapter to now engage participants' voices as Discussants. In this way, we practice "participants guiding researchers," as Brayboy and Deyhle (2000, p. 168) suggest: "Who is better, after all, to assist in the construction of categories than the very participants about whose lives we write?"

Because of my positionality (White, educated at a LGI), I must endeavor to set up the conditions under which my participants' voices can be heard and to share the power inherent in the research process with them in order to arrive at outcomes that honor their values and lived experiences. Implicit in the academy's notion that *only* the Researcher's voice should engage in discussion, is the notion that it is *only* the Researcher's recommendations and implications that are of value. I hope to replace myself as the *only voice of value*, as the academy might require, and enter into a collaborative and co-constructive process through which my voice and expertise as the Researcher and the voices and expertise of my Participants can combine to their greatest affect. Therefore, the interpretation, meaning-making, and implications of this research have been discussed and co-created in collaboration.

Scholars have used mixed methods research in this way; not just by mixing quantitative and qualitative approaches, but also mixing Western and Indigenous approaches. Botha (2012) suggested a mixed methods approach to combine current qualitative research practices and the "aspirations of indigenous communities" (p. 313). This has been done by gathering data in a Western way, but analyzing it considering the values of the Indigenous participants and communities in the study. Hill et al. (2010), evaluated the cultural validity of a personality assessment with mixed methods research, but prioritized Indigenous values and opinions in the analysis and incorporated involvement of the community at all phases of the process. Similarly, and in conjunction with the theoretical commitments I have made, I used Western components of mixed methods research, while prioritizing community participation during all parts of the process and prioritizing voice, story, and the goals of the participants and Indigenous communities while analyzing data. One of the contributions of this work is to further the understanding and implementation of decolonizing mixed methods research by embracing the

tenets of decolonizing research at all phases of the study, from the data collection and analysis, to the writeup of the Findings, to the interpretation of recommendations and implications of the work.

Creating Systemic Change: People, Education, and Culture

Based on the findings of this work and in collaboration with its participants, implications and recommendations can be made for educators, researchers, and Extension administrators to better serve Indigenous communities. In conjunction with my participants' voices, I coconstructed recommendations based on the theoretical commitments, the findings from the work, and my participants' experiences about what Extension needs to be doing to encourage collaborations with Indigenous communities. These suggestions were wide-reaching in their topics and scope, but ultimately, when viewed together, provide ways for Extension to create systemic change.

These recommendations include the broad categories of People, Education, and Culture. In regard to what Extension can be doing to support the people involved, we include recommendations about encouraging engagement and collaboration between Extension and others, allowing educators to have freedom in their work to make the best decisions for the communities they serve, and giving value to this work on employee evaluations. Next, we provide recommendations regarding Education, and advocate for culturally relevant program development and for Extension to provide professional development opportunities to educators. Last, we explore the culture within Extension regarding serving marginalized communities and recommend possible ways to improve the culture including cultivating allyship among educators and these communities and directly addressing and prioritizing a culture change.

People

Systemic change needs to involve the people within an institution, how they collaborate, and what is valued from the work they do. Major themes for how to create systemic change through the people in Extension include encouraging engagement and collaboration, allowing Extension educators freedom in their work, and giving value to this work in employee evaluations. Many participants also provided some promising practices to make these changes happen.

Encourage Engagement and Collaboration. If Extension were to encourage engagement and collaboration among Extension educators and with other personnel at their universities, with other universities or organizations serving Indigenous communities, and with members of those communities themselves, they would be in a better position to serve them in impactful and culturally relevant ways. Many of the findings of this work regarding successful educators and programs require these collaborations, including the need for Insider collaborations, educators being involved in the communities, and the use of culturally relevant programming. Some possible ways that Extension might achieve this could be by creating a professional network among educators serving Indigenous communities and by partnering with 1994 LGIs, tribal organizations, and Indigenous community members. Participants discussed some ways that this could be done, such as including multiple groups in grants and hiring Indigenous educators to work with Extension. All of this necessitates systemic support from Extension, both professionally and personally, for Extension educators in these communities. This support can come in many forms including professional networks and personnel dedicated to these issues at universities, but it should be institutionalized to make sure that all educators are supported.

First, Extension could create networks of support for Extension educators to help them to learn what others are doing to be successful and to provide them with colleagues for feedback. Several survey respondents suggested this as a support structure that Extension could provide to help them be successful in their collaborations with Indigenous communities. For example, an Advisor in California recommended,

A community of practice within Extension would help to streamline statewide and regional efforts and ensure that we are all aware of the efforts going on in various parts of the region. Most importantly, maintaining a network of Extension folks working with indigenous communities would improve our ability to collaborate to address these communities' priorities.

and a Professor from Idaho said:

It would be extremely helpful in our state to have a special meeting with Extension Educators that serve the Indigenous Communities to better understand the educational/service needs and opportunities. These meetings need to be separate from our typical meetings with Extension Educators. If a portion of these meetings included leaders from the Indigenous Communities that would be important.

Creating an intentional community for educators to share experiences, promising practices, and get professional development opportunities would allow Extension educators working in Indigenous communities to have the personal and professional support they need to be successful in this challenging work.

Karen discussed the need to support educators in these roles because of how difficult this work can be. Because of this, Karen brought up the importance of support systems and the ability to ask questions, which isn't as prevalent when working in Indigenous communities:

Extension Agents work very closely with their neighboring counties. There is a network from the minute you come onboard. If any question comes up about, 'How do I teach this, or how do I do this,' then, I have somebody I can call. It's not so widespread in the Native American [communities], 'cause they're not that many Agents.

Indeed, the maps of current or past collaborations created from survey respondents showed some educators with near-by colleagues that they could potentially work with, but others were very geographically isolated from other educators collaborating with Indigenous communities. Also, educators not having enough time to create and sustain collaborations was a major barrier found in this work, so creating networks with other educators might be a way to lighten the load. Creating this network of Extension educators, whether locally or among educators working with Indigenous communities throughout the region, is important to provide support for people working in these challenging places.

Even further, some universities had a designated professional or Office to support and assist employees working with Indigenous communities. Jeff and Kent both advocated for something like this. They have both been serving tribal communities for over 20 years and are currently both in supervisory positions. As Jeff described it:

If a university wants to support faculty or staff, academic departments, any work with tribal communities, then it behooves the university to set up a process and maybe an office that can help coordinate that, can provide training, can do some of that education. What do we need to know about working, in my case, with the [Tribe] Reservation? Or how were the [Tribe] different from the [Tribe]? I think it helps from an Extension perspective to have a bit of cover and a frame of reference that can provide educational resources and maybe introductions at the university level, so it's not solely an Extension activity.

This kind of position or Office could provide cultural support, make sure that educational resources were being equitably distributed among tribes, and provide support to Extension employees. Additionally, having more people on an Extension educator's team disperses responsibility, gives them someone to work on ideas with, and troubleshoot issues that arise.

Kent is the Associate Director fulfilling many of the roles described above. His role has equal power to other Associate Directors (such as Agriculture and Natural Resources and 4H),

giving the position more ability to get things done, to work across programs within and outside of Extension, and making him more visible to the people that might need his help. This is a fairly new organizational development, and Kent is seeing the benefits already:

It's working pretty well, where I'm getting calls from researchers and from Extension folks to say, "Hey, I'm thinking of doing a grant, what do I need to do?" So, we have protocols in place. Say, "Well, you need to be thinking ahead of time, you don't just go jumping out there, and which tribe, and make sure they talk to the right people."

He is also the person that knows where educational programs are being done in the state and what those programs are, so that efforts aren't duplicated and resources can be best utilized. In addition to Kent's position, there are others at his university to assist with these issues, including the Office of Tribal Relations to the President, an office in the College of Medicine that works in tribal communities often, and someone that helps track and support grants that are being done in tribal communities.

Julie also advocated for this type of position and explained in more detail how this works in her state. There, the Tribal Liaison is able to speak to the tribe, answer their questions, and interpret university systems for them:

[State] has County Liaisons and then for [Reservation], it's a Tribal Liaison, where, rather than talking with County Commissioners, she goes and talks with Tribal Council and the Department Head that we are housed under. She's the primary contact and then everything filters down. It's really great having the Tribal Liaison because it creates a little bit of needed distance. She's there to listen, be a sounding board for the Department Head, and that really helps everybody. Having the Tribal Liaison that can go and talk with people and say, "Yep, I understand, I hear what you're saying, let me get some answers for you."

Julie finds it helpful for the Tribal Liaison to be someone associated with Extension and that understands the university system. Often, the Tribal Liaison needs to explain how the system works to tribal leaders and she needs to know who within the university system to contact when the tribe has specific questions.

Two survey respondents discussed the need for a Liaison directly. A Program Coordinator from California said, "Perhaps a liaison, someone who could connect us to that community and knowledge of their needs that fall within our educational parameters and abilities." Importantly, 23 survey respondents discussed how Extension could aid in building relationships in Indigenous communities, including help with research, writing grants, and creating MOUs, providing contact information, and understanding the community's needs. A Professor from Oregon suggested:

Systematic and robust engagement of Indigenous people, communities, and leaders to identify what support and resources are needed would serve the needs of diverse populations and communities at all phases when planning and implementing programs, conducting research, establishing or securing funding, and evaluating impacts would improve service.

A Liaison might be the missing piece to creating the support that these educators are looking for.

They could provide the academic understanding and long-term commitment that are so important to successful collaborations, as well as assist educators in overcoming some of the significant barriers such as funding.

Creating support structures, either between Extension educators or with other university professionals, is important for educators working in Indigenous communities to be successful.

Often, these educators can feel isolated or just need someone to support them in their programming. Because working in Indigenous communities is unique in its demands and skills, this is particularly important for educator's success and retention.

Another way to encourage collaboration is between the 1862 LGIs and other organizations that are partnering with Indigenous communities, such as 1994 LGIs. Hannah suggested an increase in collaborations with 1994 LGIs and hiring Indigenous Extension educators:

I think that for Native communities, we're still really trying to get to know and understand what's working there or what's not. I think some of the ways we can do that is by partnering with the 1994 colleges and tribal Extension, but also within tribal communities. Which is kind of a challenge to even find people that are interested, but the way that people find out about Extension is often through some sort of experience with it. So, maybe it's getting interns to work with Extension at those community colleges, so that they understand that could be a potential job possibility in the future. Different things like that that, maybe not rapidly, but would potentially grow, both an understanding for Extension and the community.

Engaging members of Indigenous communities in various ways will lay the groundwork for more community engagement and collaborations into the future, while strengthening the relationship between the tribes and Extension.

While collaborating with 1994 LGIs is important, 1862 LGI educators need to be mindful of how they approach these collaborations. When collaborating with 1994 LGIs, it is important to use the components of successful educators and programs that were found in this work, including centering their goals and building long-lasting, trusting relationships. This was expressed by a survey respondent, a 4H Agent from Colorado:

I think 1862 Institutions need to ASK what they can do to help. Tribal College extension professionals know what will/won't work in their communities, and often they are very short on resources. The difficulty is when you are approached by an 1862 Extension Agent with a pre-formed program that they want to "check the Native box" on. That isn't collaboration. Instead, that adds extra burdens on the Tribal College extension professionals to help the 1862 achieve their goal.

Centering the goals of the community from the beginning of a project is vital and is really what the foundation of collaboration is.

Kent also discussed the best way to work with 1994 LGIs. He and his university have worked with 1994 LGIs for decades, "even before they were 1994s, so before they got that designation, we were helping them out," and still prioritize this work. They work to integrate them on grants and in conferences, and have set up academic programs to make transitioning from the Tribal College to the university easier for students. Still, there are challenges; most

1994 faculty have heavy teaching loads and don't have promotion and tenure requirements like 1862 faculty do. This creates different priorities, timelines, and expectations. Kent works hard to overcome these issues and he described the best ways to do that:

Sometimes if I have a grant or a program that's getting started, then we will say, "Hey, are you interested in participating on this?" We just did that with the [Tribal College]. Said, "Hey, here's an opportunity to partner. You guys interested in this? Let us know." We gave them like a year, okay, to think through it, to look through it, and gone out there and talked with them and everything. It's not like we're surprising this on the last minute. You have to space it and give it time.

Because of Kent's long-term commitment and his understanding of community needs, context, and research logistics, he is in a unique and powerful position to support collaborations and educators.

Another way that Extension could encourage collaboration with Indigenous communities is to hire Indigenous community members to work for or with Extension. This encourages Insider collaborations and relationship building, both important characteristics for success. For example, Dave found success with his food safety and community gardens project by hiring a member of the tribe to facilitate it and Danielle hired a consulting group of Indigenous women to facilitate programming about opioid misuse.

Emily discussed this as a way to build capacity within Indigenous communities and to meet their needs. This also makes the learning from an educational program sustainable by keeping the knowledge in the community and addresses some of the distrust that Indigenous communities might have of Outsiders facilitating programs, "It's actually training trainers from the local community to deliver curricula that is modified or adapted to their environment, needs, and cultural experiences that makes service delivery the most sustainable." Emily has worked in international public health for years and now works in SNAP Education. She acknowledges that,

given the importance of food sovereignty in Indigenous communities and the history of trauma inflicted by government entities, two concepts that have been thoroughly discussed in this work, Outsiders teaching about nutrition education might be suspect. All of these are great reasons to teach members of the community to deliver programming.

Three participants that identified as Indigenous- Carrie, Jane, and James- specifically highlighted the importance of hiring Native people in Extension and the benefits that brings to collaborations. Carrie, who is particularly interested in engaging Native youth in her community, suggested including Native adults as a way to engage youth in programming:

You know, I'm Native. It kind of makes it easy for kids to identify and relate to people, and so I would say if there's a staffing position open, volunteer positions open, you're really going to generate more interest if you have Native adults that are vested in Native youth, participating as leaders in your program. That might be a challenge there, you know? How do we get adults into the classroom, you know, but really focusing on those different types of things, and identifying those Native adults that can really identify with Native youth.

Jane also talked about the importance of hiring people that are Native to the communities they will be serving based on many of the findings of this work that make a successful program and educator, such as relationship- and trust-building and understanding the community's goals:

I'm not sure how many of the people that you've interviewed were actually from the communities that they serve. I'm actually born, raised, and I'm from here. So I'm from the island that I work and where the university is. I think that's important to acknowledge. I think there's very few of us who actually are from the communities that we serve. Where you come from is very important. It can make a difference.

Despite this importance, Jane described how hiring Native people from the community can be difficult because of hiring requirements at universities. In her opinion, people's experiences with Native communities might make them the most qualified to work in these communities, outweighing things like degree attainment that universities usually prioritize:

The traditional academic way of viewing whether or not somebody has the appropriate credentials does not necessarily always align with those individuals who are probably the most qualified to serve in those roles. But because they don't have those specific credentials, they wouldn't be eligible for those positions... If you're truly thinking about serving the communities that you're trying to serve, then you need to think about what are those actual credentials that are really the most important for you to be successful working within that community, in Indigenous communities. Just because you have a PhD doesn't necessarily mean you have what it takes to be successful. And so how do you balance that? Every once in a while, I hear these discussions come up about trying to find those people who are appropriate to work in the community, and then, because they don't have those specific credentials, then they are not eligible, right?

Jane advocated for criteria other than academic credentials be included when hiring Extension educators to work in Indigenous communities, including cultural competency and shared experiences with the community. If this is a practice that Extension would like to adopt, they need to think about potentially changing their hiring practices and priorities. For example, Laura also tries to hire members of the Indigenous community as much as possible and acknowledges that it is her responsibility as a supervisor to support young Native people in their professional development if they don't have the traditional experience to make them successful. This mindset is a way to bridge the gap that Jane is frustrated by; hiring Native people should be viewed as an asset for Extension, as Laura views it, so she is prepared to assist her employees in other professional areas.

James also discussed the merits of hiring a member of the Indigenous community, a "local" as he put it, as well as the potential drawbacks to focusing on this one aspect of a potential Extension educator too much:

The easy way out would always, and this is probably what Extension has been trying to do for years, is educate a local, get them in the field to do it, but you're not always gonna have that. Even if you get a local to get in the field, is that the local you want in the field? Well, there's a-holes everywhere, you know, so a-holes are not restricted to a certain culture, you know, they're across the board. I mean, I'd love to tell you, "Yeah, get a local in there, he'll do the job," but that ain't gonna happen all the time.

The personality that I see from a good Extension Agent is their willingness to listen. The one thing that I, and my other boss is always telling me, "Just shut your mouth and listen." When they're done, you can talk. But when you talk over people, or you talk down to people, then that's the number one way to get yourself kicked out. But, if you can find somebody who's not a local, but has that personality where they're open, they're willing to immerse themself in the culture, they're willing to say "yes," and just leave it at that. Those are the people that Extension needs to reach out to and get.

James, like the findings of this work would suggest, mentioned listening, being respectful, and being involved in the community as being important traits in an Extension educator, whether they are a local or not. Also, just being a local doesn't guarantee success because, as James says, "there are a-holes everywhere," regardless of culture.

Having dedicated Extension staff that work on a reservation is important for relationshipand trust-building. Julie, who oversees an Extension office dedicated to serving just one reservation, explains the benefits of this arrangement:

Having that dedicated personnel, it really does make a difference. It does help build a little bit of trust, which is kind of our biggest hurdle for Extension, is building and maintaining that trust and it's really hard to maintain it when a funding crisis comes up. When Extension across the board has funding cuts and we wind up losing positions at various Extension units and [Reservation] has been hit pretty hard with losing personnel for a variety of reasons. So, we're in a rebuilding phase and it's getting better, but it's still just rebuilding that trust that, "We are here to support you. We're doing everything we can."

Having the Extension office on the reservation communicates the commitment that Julie's university has to the Indigenous community, as well as allows Extension educators to get to know the community and build trusting relationships, all of which were important findings of this work. Additionally, survey respondents suggested hiring specific Extension educators to exclusively work in Indigenous communities. Some had experience with this already; an Agent from Arizona said:

In this state, the program is made successful due to the [University] Cooperative Extension extending its reach by employing Extension agents within these communities

so they are boots on the ground ensuring that their communities are informed of the program's delivery, and aiming to match that with the needs of the locals.

When educators work exclusively in the community, they are better able to build relationships and understand their needs.

In order for Extension to better serve Indigenous communities, it is in their best interest to encourage engagement and collaboration with other organizations serving them, hire Indigenous community members to be a part of Extension, and prioritize that work by having a dedicated presence in the community. This ensures that programs will be culturally relevant and will decrease some of the barriers also discussed above. Many participants had direct experience with this and discussed how important it is for Extension to encourage collaborations.

Allowing Extension Educators Freedom in Their Work. One of the tenets of the Extension model is that educators should live and work in the communities that they serve. This allows them to understand the community's goals and makes them the best person to decide on educational programming needs. Because of this, it is important that Extension give educators freedom to make decisions and design programs as they see fit. If an educator has adopted the characteristics found in this work that would make them and their programs successful, they should be the best judge of how to create impactful educational programs.

Because Indigenous communities vary so greatly in their histories, cultures, and current needs, giving freedom to educators is an important ingredient to participants' success because they are the ones in the best positions to understand the needs of their communities and to build trusting relationships. Some participants expressed that they have a lot of freedom and autonomy in their jobs to decide how to best serve their communities. Clay explained that this freedom was given to him overtly when he was hired, its importance, and the trust that it requires from

supervisors, "I've been doing it for 10 years, and that was basically my marching orders. I asked, 'What am I supposed to be doing?' And the answer I got was, 'Well, this is your community. You tell us. We don't live there.'" Karen also said that this freedom is what enables her to serve her community's needs with the recognition that every community is different:

Nobody's really told me what to do here. I've gone out and talked to people and asked, "What do you want? What can I do? I have this kind of programming, is that what you want?"... I think that the FRTEP agents I work with, they all had a lot of freedom because every reservation is different. And so, there's no one model, like "this is what they need or this is the best way to get it for them."

Both Clay and Karen display many of the traits of a successful educator, including being involved with their communities and centering their goals. These, along with the freedom in their work that they enjoy, allow them to deliver programs that are tailored to and needed by the communities that they serve.

Extension's history of hiring experts in their fields to bring the academic knowledge of the university to their communities serves these educators well. The expertise that they bring and the fact that they live and work in the communities that they serve, gives them the freedom to meet the needs of their communities as they see fit. In the case of these participants, they have chosen to serve their Indigenous communities thoughtfully, and often do so with little to no oversight. It is important to the success of their programs that they be given this freedom because of the trust they have built in their communities and their expertise on the needs there.

Giving Value to This Work in Employee Evaluations. Because there are so few

Extension educators working with Indigenous communities and the unique needs of those
communities, "success" needs to be evaluated in different ways than in other Extension settings.

This can be more difficult to capture in employee and program evaluations and to compare to the "successes" in other faculty positions. It might be the case that additional or non-traditional

methods of evaluation will need to be implemented for educators that are working in unique communities.

Clay discussed how Extension and universities assess merit in terms of budgets and funding. The worth that he brings to the community is hard to quantify, especially with the traditional, academic measures that other faculty members may be evaluated against:

I think one of our big challenges in Extension is, how do we prove that there's value in the work that we do? It is very challenging. If you were a university professor, you know how many classes you teach. Are you a good teacher? How many papers did you publish? There's metrics. We really struggle in Extension to have metrics to be able to prove our worth. And a lot of it is being quite subtle. 90% of my workload is service and that ends up being the hardest to quantify and evaluate. If, for example, there was crazy budget cuts, somebody wanted to know, "Is this efficient use of resources?" And I fire back, "Well, you know, I talked to this lady on the phone and we had concerns about her pressure canning..." You know, it just doesn't translate.

It's expensive to have me out here. Somebody always asks this question of "bang for the buck," you know? And it's like, "Well, we can get an Extension Agent in [Big City] who can see 20 times as many people and have a hundred times as many interactions than somebody out in the boonies." So, why are we doing this? While I feel like I can articulate the value and I can speak passionately about it, it's hard to put down on a piece of paper when we're looking at numbers.

This is particularly pressing for Clay because of the budget cuts that his state has experienced in recent years. Members of his community have serious needs that Clay cares deeply about, so justifying his impact to his community is important to him. Still, it takes a long time to build relationships, create culturally relevant programming, and be involved with the community, leading to longer timelines and lower impact numbers.

Kent discussed this issue too in terms of faculty seeking promotion and tenure. When the impacts in Indigenous communities take a long time to see and are difficult to measure, evaluating faculty for promotion and tenure purposes is difficult. He stresses the need to, "try to get faculty where they could be recognized for engaging in those [partnerships], which is tricky.

If they're trying to get tenure, they don't lend themselves very well to that. But, you have to have some way to integrate that in too. These are vital programs." Laura, also a supervisor, stressed the importance of supervisors understanding the differences in tribal communities and that they need to evaluate faculty differently. Timelines often need to be longer and there might be smaller participation numbers, but the impacts on these communities will be larger in the long run.

Jack also stressed the need to acknowledge that working with Indigenous communities will take longer and have smaller participation numbers, but that programs like this are still important and impactful:

It would be really nice to see that our merit and promotion system can accommodate working with the slow grind of learning these tools. It takes a while to be able to figure out how to do this, and there's not really anyone who's teaching these types of things. You really have to kind of learn it on the fly. Traditional things are grants, publications, workshops, people reached... I wouldn't want to see it be this completely different category, but some sort of acknowledgement that working with tribes can be very slow and you're not going to get a lot of those traditional items on your promotion package for it upfront. I mean, if all goes well, you should hopefully have something that works for their needs, but it's just tribes are different to work with.

In my area, there's a couple of reservations that are less than a hundred acres or so and they don't have a lot of tribal members. If I'm doing a project with them, chances are I might reach a handful of people. And that's okay. It's still meaningful. It's still impactful. I could find way more people who are interested in whatever, working in a more populated area, that has volunteer groups that are twice as big. Ensuring that the career of Extension professionals can still be successful, accommodating for all the idiosyncrasies of working with tribes compared to just standard non-tribal clientele.

While the traditional measures of success might look smaller than when Extension is serving other communities, the impacts in Indigenous communities are no less important. Understanding the time needed and the different impact numbers is important to understand the work in these communities.

Dave, who lives in a very remote place and works with many tribal communities, also discussed how traditional evaluations won't incentivize Extension educators with research and

publication expectations to work in tribal communities, again because of the time that it takes to develop these programs:

You're expected, when you first start out with a job in [State], to get your research and Extension program going, and so there's an expectation you're going to be building a program that's going to be generating research and publications down the road. So, if you had interest in wanting to work with tribes, you're not gonna be rewarded for that, because it takes a while for a relationship to come out of it, and there isn't much output, it dribbles, right?... I get the impression from our leadership they're grateful that those of us who do work with tribes are doing it, but there's also not any incentive built into the system to do so, because you're gonna get all the promotion material you need working with regular farmers.

When research and outputs are prioritized for promotion and tenure, it is easier for educators to spend time with "regular farmers" to generate those outputs, than it is to work in marginalized communities. Ultimately, Dave thinks that this comes down to funding and incentivizing what is important to Extension. Indigenous communities have "never been a priority audience" because "traditional agriculture and those large projects keep the bills paid." This is not to suggest that Dave thinks that his administration doesn't want to support programs in marginalized communities, just that their financial constraints are such that they have to worry about their bottom line. He sums up the implications this way:

You get the result that you incentivize. If you are incentivizing outreach in the community, then you're gonna get a lot of that. You're gonna get less of the research. If you're expecting publications and impact factors, then that's what you're gonna get. I've just kind of ignored what the expectation is for my position and hope that I don't get fired.

Survey respondents talked about all the issues discussed above as well including the time it takes to build relationships in Indigenous communities and that administration needs to value this work, despite the fact that it won't lead to traditional measures of success. In response to the question about what supports are needed from Extension for these collaborations to be successful, a Professor in Idaho said, "an understanding by the university of the actual amount of

time needed to do this kind of work with tribes - it is NOT the same as working in non-tribal community schools," and a Professor in Utah said, "Administration doesn't put much value on serving these people, unless it leads to publications, grants or big measurable impacts. These are more difficult to do, because the people served don't value the same things that administration does." The mismatch in priorities between administration and the communities that Extension serves needs to be rectified for educators to be able to serve them equitably.

In all of these cases, supervisors could use non-traditional methods of evaluation, perhaps in addition to the more traditional methods discussed. In the Barriers section above about Funding, participants talked about alternative methods that they have used to explain impact to granting agencies, such as asking for community input and allowing for community feedback. Perhaps these and other community-specific and community-centric methods could be used to evaluate educators as well. Regardless of method, supervisors need to acknowledge the differences in serving marginalized communities, if Extension is going to consider this a priority.

Evaluating Extension educators working in Indigenous communities can be more difficult than evaluating educators working in other communities because of the differences and challenges there. Often, this work won't produce outcomes that are traditionally evaluated as forms of success such as publications and high participation numbers. This work can take longer and need longer timelines as well. Administrators need to be more flexible, and understand that it might take longer and the impacts look smaller compared to other community efforts, but the importance of those impacts is larger.

Education

If collaborations with Indigenous communities is going to be one of Extension's priorities, there needs to be adequate education for both the educator and the community that they serve that is culturally relevant and useful to the partnership. Academic understanding and culturally relevant programming were both identified in this work as important parts of educator and program success. Some of the skills that participants identified as needs were how to create culturally relevant programming, diversity and inclusion issues, and the history and context of Indigenous communities. Professional development opportunities or university coursework could be a way to teach these skills to Extension educators, as well as taking advantage of the knowledge of experienced educators through mentoring.

Culturally Relevant Program Development. The use of culturally relevant programming was one of the findings that made programs successful. As Extension works towards improving programs in Indigenous communities and creates new collaborations, this will be a topic that is important to address with people that develop curriculum. As seen above in the findings, 14 of the interview participants and 25 survey respondents said that using culturally relevant programming helps them to be successful in Indigenous communities. Additionally, 16 survey respondents discussed how Extension could support them in these collaborations by either providing professional development opportunities so that they could learn how to develop culturally relevant programs themselves or by providing the curriculum to them at the systemic level.

Some of the interview participants discussed how they both develop new programs for Native communities based on their culture and needs and use existing Extension programs by adapting them to the needs of their community. Hannah talked about these two approaches to

program development, although she wasn't sure that she had found a balance between the two methods yet:

I have a number of efforts that are starting the exploration process of seeing what that might look like in Native communities. We're looking at seeing- is it something that can be adapted or incorporated into Native communities? Because another interesting thing-do we adapt evidence-based programming to fit within Native communities or do we need to develop new resources and materials within Native communities? I don't know what the answer to that is, but I work with a variety of different state partners as well that are trying to better integrate Native communities into their efforts too and have taken a variety of approaches to that.

Participants took both approaches, picking one or the other when the needs of the community or the needs of the program required it. Extension should support educators using either tactic-developing new programs for the needs of the community and adapting existing ones to be more culturally relevant.

Carrie was a great example of an educator that integrated the community's culture into traditional Extension programming, such as 4H, and advocated for this way of developing curriculum. She incorporates tribal values into her 4H program, making it culturally relevant. She is also working on a national-level 4H curriculum so that 4H educators throughout the country can reach Native youth:

Now, I'm actually on the AEBC, it's the Access Equity and Belonging Committee for 4H, it's a national group, and my champion group is Native youth. So, we'll be working on a 4H Native youth curriculum. Because I think a lot of struggles with 4H leaders and Extension workers that are non-Indian have been struggling, trying to reach Native youth that they're serving. And we want to make sure that anybody can pick up this curriculum.

Carrie has found success by utilizing the overlaps between the culture and expectations of both the tribe and Extension when adapting her programming to the needs of the tribe. She is so committed to this goal that she has joined a team of 4H educators developing a 4H curriculum for Native communities.

Amelia is another example of someone that has adapted traditional Extension programming for the Indigenous community that she serves and advocates for this approach. Amelia is of tribal descent herself, and has grown up both on the reservation and off. She feels that this has given her a unique perspective that she brings to her educational programming. Amelia is a SNAP educator, which is a federally-funded program and has strict programming requirements and federally-approved educational materials. Despite this, Amelia has found creative ways to make the programming culturally relevant. On the one hand, she appreciates the structure and evidence-based curriculum, but finds ways to adapt it for her community and pushes back on the federal guidelines when she thinks it appropriate. MyPlate is the curriculum that is approved to teach nutrition programming in SNAP-Ed and Amelia has argued to her state that the Native MyPlate is what should be used in her community:

There's nine federally-recognized tribes in [State].... One thing for [Reservation], because we have our own [Extension] unit and we are on a reservation where 99% of our population is Native American, we get to flex [in the curriculum] a little bit. And I say just a little bit. (laughs) But, you know, we make the case that there is a USDA Native MyPlate that is more culturally relevant. That includes water, not milk. No dairy because Native Americans are traditionally lactose intolerant. Which is a huge step for the USDA to even acknowledge that, first of all! And most Native communities, water is life and that is what's taught since they're little. And, you know, the grains look different. The whole plate looks different.

In this quote, Amelia displays many of the qualities of a successful educator, in addition to making her programming culturally relevant; she displayed academic understanding about her community and she centers their goals because of the barriers that members of her community face when accessing healthcare. She thinks that adapting existing curriculum to the community's needs and interests is an important part of being successful.

Amelia also teaches about the importance of physical activity and uses a curriculum that is more applicable to her community as well. The physical activity curriculum that she uses is

not totally appropriate for the culture on the reservation, so Amelia has gone out of her way to find another that is appropriate in both its content and pedagogy:

We also have a Be Physically Active Today Physical Activity Kit, that is aligned with [State] standards for PE and nutrition, which is fantastic. Unfortunately, there are some cultural differences that make some of the exercises not quite appropriate. So, we have also gone through the Native American Physical Activity Kit. Obviously it's geared towards Native American kiddos, but it has some really nice stories, 'cause the culture is very story-driven and that's how things are passed down. And there's wonderful stories. There's one with Coyote and we make masks and the kids play and you go on this mountain trek, and so it brings in so many great aspects of what they're gonna hear at home because they're similar stories and it just reinforces how important physical activity is. And how your culture and everything should be blended and melded within all of your life and what you do.

Amelia is able to use traditional methods of teaching, story-telling in this case, to show how culture, activity, and learning can be accessed in culturally relevant ways. This makes it easier for students to integrate the learning into their lives and communities.

Both programs discussed here, 4H and SNAP-Ed, were discussed by survey participants as being particularly difficult to make culturally relevant. For example, in response to the question about support that Extension could provide to educators, a nutrition educator from Montana said:

Materials from federal agencies that are appropriate for use with tribal communities. For example, resources that feature photos that are relevant, foods that are relevant, and messaging that has been developed with and for tribal communities. There are very few evidence based health resources to use with tribal communities that are culturally relevant.

4H has curriculum, traditions, and structures that didn't connect to Indigenous youth and SNAP-Ed has a very specific, federally-approved curriculum that has difficulty taking the unique characteristics of communities into account. While both Carrie and Amelia have found ways to make these programs culturally relevant, leaving this up to individual educators might be more of a barrier than they are prepared to handle. Extension can work to create programming in 4H, SNAP-Ed, and beyond more culturally relevant.

Extension also needs to be more flexible in its curriculum requirements in order to allow educators to adapt curriculum to their communities. A 4H Coordinator from Utah said, "I think that we are good with our 4-H programing, keeping in mind that the 4-H program structure will be tweaked club by club, based on the needs of the Indigenous community, and as a whole, the 4-H organization (e.g. management at the top) needs to be ok with that." By both creating new curriculum that is culturally relevant and allowing educators the freedom to "tweak" existing curriculum to the needs of their communities, Extension can support the success of educators in marginalized communities.

As illustrated in Jack's stories in the Findings, it isn't only Extension educators in classrooms that need to make their programming culturally relevant. Jack talked about his experiences when Western scientific and agricultural worldviews clashed and his ability to deal with that. Indeed, inconsistent epistemologies and worldviews between academia, science, and the communities that Extension serves, and the possible devaluing of those epistemologies by Extension, has been named as one of the reasons that distrust might be created (Hassel, 2004). Extension needs to expand their worldviews and epistemologies to understand and be able to work with communities whose histories and epistemologies are different than their own, inside and outside of the classroom.

Creating culturally relevant programs is important for Extension in Indigenous communities both inside and outside the classroom. This can be done by either developing new programs to meet community needs or by adapting existing Extension programs to center the

goals of the community. Further, Extension and its educators need to take the worldviews and epistemologies of the communities they serve in account and how they might clash with the Western academic worldview. Showing respect for community needs and culture while delivering services is vital for healthy collaborations.

Professional Development Opportunities. Working in Indigenous communities can be more difficult and require special experience and skills compared to other Extension positions. Creating educational and professional development opportunities for Extension educators to develop these skills is critical for collaborations to be successful, particularly because of the unique history of Indigenous peoples and the effects of colonialism. Some of these were discussed by interview participants and survey respondents, including coursework about Indigenous history and colonialism, generalized diversity and inclusion training that may already exist at a university, education about creating culturally relevant programs and pedagogy, and perhaps best of all, education specific to working with Indigenous communities. Indeed, a willingness to learn was a characteristic of successful educators, and many of the participants displayed an understanding of many or all of these concepts.

Danielle said that her university was very supportive of professional development opportunities concerning things in diversity and inclusion including, "cultural diversity, and implicit bias." She believes that, no matter your specialty in Extension, trainings in diversity and inclusion are important, but that an emphasis on that needs to come from administration:

If you're working on mindfulness with adults or you're doing nitrate testing, all of this involves a human, and, therefore, involves some cultural aspect. I definitely think that could be implemented. It has to come from the admin[istration] at Extension, you know? Have it be more of a cultural shift. We're working on that, but we're certainly nowhere near where we need to be.

Also, Amelia talked about how understanding her own identities and how they impact her work has been important for her success. Extension could facilitate this kind of learning as well.

Another subject that would be beneficial to Extension educators working in Indigenous communities would be how to create culturally relevant programs and use culturally relevant and Indigenous or decolonizing pedagogies. Examples and case studies could be used, perhaps from many of the participants in this work, in addition to educational theory and promising practices. Training in how to create culturally relevant programs wouldn't just be helpful for Extension educators working with Indigenous communities; these could also be helpful for educators working in other marginalized communities as well.

Extension should also develop training that is specifically geared towards working in Indigenous communities, including the components of successful educators and programs as well as the barriers outlined here. At Jack's university, he and some of his colleagues that are also interested in these issues have designed a training along these lines and have offered it to Extension educators in their state. To develop these opportunities, he has included tribal members and incorporated their input as to the content of the training:

Sometimes I work with tribes for professional development opportunities, so I've led or co-lead a couple of workshops within ANR to teach our Extension personnel how to work with tribes. Some of that is me reaching out to tribes, asking how they can teach us how to better work with tribes.

The need for this specific training makes "obvious sense" to Jack because, "Working with tribes is not your standard clientele. Really need to understand how to work with them properly, (1) so you're not disrespectful and, (2) so you're not doing anything illegal because you wouldn't imagine that they're their own government." Working in culturally sensitive ways and respecting

the sovereignty of tribal governments are both important components of a professional development curriculum about these issues.

Survey respondents were interested in professional development opportunities as well and said that Extension could support them in these collaborations by offering training. They, like Jack and his colleagues, were interested in programming specific to working in Indigenous communities and how to support them in their Indigenous ways of knowing when collaborating with Extension. An Educator from Nevada suggested topics, "Tribal members on IRBs, cultural competence training among Extension professionals, and support for indigenous ways of knowledge and process," and a Research Coordinator from Oregon suggested, "More professional development around Sovereignty, Building relationships, Respecting Elders, Cultural Appropriation, the limits of Land acknowledgement." A Program Coordinator from Utah expressed their desire for Extension to not only respect Indigenous ways of knowing and management practices, but also to learn from them:

When working with natural resources, it's very difficult for euro-centric ideas of management to mean much at all to tribes, other than a twist on exploitation and oblivious failures of listening to what the resources are saying. I wish there were a way for extension to play a role in educating natural resource managers on how to think more like Native Americans when managing natural resources, but I fear that unless extension does some serious introspection about their antiquated (even from a white perspective) approach to how it provides services and looks at where legitimate knowledge comes from, it's fighting an uphill battle.

If Extension is going to collaborate with Indigenous communities in formal and informal ways, respecting Indigenous practices and epistemologies is essential, and learning from them should be the goal as well.

Educational opportunities to explore the ideas presented in this work are integrally important for Extension educators to be successful working with Indigenous and other

marginalized communities. These trainings could be in Indigenous history and colonialism, general diversity and inclusion topics possible including allyship, and the specific concerns regarding working in Indigenous communities with Extension. Administrators and supervisors should encourage educators to participate in these educational opportunities and there should be ways for educators to be recognized for that.

To both provide this support and some education about working with tribal communities, both Jeff and Clay suggested mentoring as being a tool to achieve these ends. Jeff has implemented this idea recently because of a staffing transition that is happening soon. He is looking to extend the overlap time between the employee that is retiring with the new employee so that the new one can learn from the many years of experience:

Our one Extension Tribal Liaison is heading towards retirement, so he and I have been having conversations about how do we stage that so that we have a longer transition than we would otherwise have. You know, hire somebody to be the new Tribal Liaison, let them work together for maybe 6-12 months, right? And that's unheard of, right? As a practical matter, we don't hire until the positions are open. So, we're trying to figure out how to make that happen within the university system. And then, working with our President's Office of Tribal Relations, we were having some conversations about, how do we engage them? Can we put on some training, maybe hosted by our university level tribal relations office that builds awareness in Extension folks. What it means to work in tribal communities, what you need to be aware of, and do differently.

Jeff is working within a system that doesn't have the option for long-term mentorship by overlapping employees, so he is trying to figure out how to do what is best for his educators within that system. Here, he also talks about who might be best equipped to provide training for his educators in how to engage tribal communities.

When asked about how to teach people the skills that he has learned from 10 years of working in his community, Clay directly advocated for mentoring and referenced Education's long history of using this method of preparing educators:

What was helpful for me is that I didn't need a lot of mentorship, in terms of how to get along with my community because it was already my community. You know, I had already lived here for almost 10 years. I had some exposure to the Native population and the village populations. And then I was able to get the mentorship from Agents in other places on the delivery and university expectations or what are some ideas that work for you? And try to translate that into what would work for me in my community. I'm not sure there's another way to do that. The whole idea of mentorship and of apprenticeship... I mean, it's certainly an old one in the world of Education, right?

This approach would require extra work by senior Extension educators, and perhaps an overlap in educators' professional positions, but leveraging people's experience in this way could be invaluable to educators new to working in Indigenous communities.

If Extension is serious about serving Indigenous communities, there are some things that need to be improved, from program development, to how educators are allowed to work and be evaluated, to providing support and education. Right now, it seems that many of the participants thought that Extension was on the cusp of making positive change, and had often acknowledged that serving marginalized communities, including Indigenous communities, is important to them and the Land Grant Mission. Jack summed up the place that he thinks Extension is at in his state regarding their progress in these areas, "Is this a priority within Cooperative Extension? No. They're shifting towards it, but it's still mostly just, 'We value diversity. We want everyone to feel included.' But there isn't, 'Okay, now how do you actually include this group?" The suggestions here will help Extension take that next step, from recognizing the importance of serving Indigenous communities, to actually making it happen through a change in Culture.

Culture

Finally, systemic change within Extension will only be achieved if there is a culture change that prioritizes working with marginalized communities, including Indigenous communities. A major finding from this work was how certain participants positioned

themselves as allies with the communities they serve and their understanding of what allyship means. Also, participants described a culture within Extension that isn't conducive to these collaborations for many reasons, including a perceived lack of value, differing epistemologies and worldviews, or because of racism within Extension and the communities they serve. For educators and programs to be successful, the climate within Extension needs to be conducive to their success and supportive of their learning and development.

Allyship. Some of the most successful educators in this work conceptualized their positionality as being an ally. Importantly, Randall, who is White, and Carrie, who is Native, both positioned themselves this way and talked about the importance of allyship between Indigenous and non-Indigenous people. Indeed, the idea of the "allied other," has been explored and held up by Indigenous and non-Indigenous scholars as a way to deconstruct systems of power from within and to elevate marginalized voices (Denzin et al., 2008; Jankie, 2004; Kaomea, 2004).

Allyship has many definitions and looks differently in different contexts, but in general, allies are "...individuals from a privileged group who make intentional choices to support or work for the rights of those from the oppressed group" (Goodman, 2011, p. 157). Allies for social justice, according to Goodman (2011), act based on an understanding of "...their own socialization and privilege, the oppression experienced by the target group, and the intersecting nature of systems of inequality" (p. 160). In various definitions of allyship, a constant is a recognition of an inequitable distribution of power and the associated privilege that comes with that, and an active support of the marginalized group (Bishop, 2002; Brown & Ostrove, 2013).

In order to recognize these inequitable distributions of power, members of an alliance need to examine themselves and how their own identities manifest in the work. Anzaldúa (2013)

says, "When you are doing alliance work, it is very important to say who you are" (pp. 627). This is important because it allows allies to hold each other accountable, challenge each other on positions, and build trust. Further, Lorde (2007) would encourage us to embrace these differences, as sources of creativity and community-building:

... We have been taught either to ignore our differences, or to view them as causes for separation and suspicion, rather than as forces for change. Without community there is no liberation, only the most vulnerable and temporary armistice between an individual and her oppression. But community must not mean a shedding of our differences, not the pathetic pretense that these differences do not exist (p. 112).

It is this recognition of difference and how we each show up in an alliance that is both necessary to understand how systems of oppression affect people differently, and as a source of power to fight against them, "In our world, divide and conquer must become define and empower" (p. 112).

What does it look like for White citizens of a settler colonialist nation to be allies of Indigenous peoples and vice versa? Certainly, it requires allies to acknowledge the systems of oppression imposed by colonialism and racism, and their role(s) in those systems. Importantly, these systems don't just have outward-facing effects, such as lack of access to educational resources. Allyship also requires the understanding that colonialism wasn't only about the conquest of land, it was also about the conquest of ways of knowing, what de Sousa Santos (2014) called "epistemocide." Settler colonialism privileges Western epistemologies and silences marginalized voices (Denzin et al., 2008; Smith, 2012) for the production and maintenance of privilege (Greenwood, 2009). For settler colonialism and its culture to be overturned, allies will need to practice epistemic decolonization, "epistemic disobedience," as Mignolo (2009) named it, by questioning Western, Eurocentric ways of knowing. Mignolo (2009) continues, "... a task of decolonial thinking is the unveiling of epistemic silences of Western epistemology and

affirming the epistemic rights of the racially devalued" (p. 162). To do this, allies will need to reject colonial ideology including the prioritization of individualism, militarism, and dislocation from place, in favor of Indigenous epistemologies, practices, and cultures (Kluttz et al., 2019).

The concept of allyship is not without its criticisms. Scholars have questioned whether it is allyship that we should be striving for, as opposed to a solidarity to decolonizing practices (Kluttz et al., 2019; Tuck & Yang, 2012) in the case of Indigenous and non-Indigenous allyship, because of the unique ideology and effects of colonialism. There are potentially several reasons for this. Allyship implies a separation between the Indigenous and non-Indigenous members of a partnership and, while this distinction is important to understand differential social treatment and political roles, it further emphasizes the colonial concepts of "us" and "them," furthering separation. Land (2015) stresses how important it is for all members of an alliance to determine their own intersectional positionality, outside of the political and structural categories of race.

Further, the concept of an ally might decenter the goals of Indigenous peoples for their own self-determination, and allow non-Indigenous "allies" to deny Indigenous agency through self-serving "support" actions. Solidarity, on the other hand, creates goals for all involved based on social change that eliminates all forms of oppression, recognizing that our futures are interconnected. Land (2015) explains this distinction between understanding that we are all connected by a system of oppression and wishing to address that system, instead of engaging in allyship for self-interest:

We are part of the system, we are the system, we are colonialism. To be a reliable ally, then, is to critique the system, to attempt to change the system, to reduce our level of colonial involvement, to undermine its logics and to try to convince ourselves and others that the system – which does its most violent work on Indigenous people – is also not in our (enlightened) self-interest. (p. 215)

In this way, solidarity also centers Indigenous epistemologies and goals, while respecting sovereignty and self-determination and is not about working towards settler goals or futures (Kluttz et al., 2019; Mignolo, 2009)

Solidarity also acknowledges that decolonization is an on-going process of learning, especially within colonized societies, because colonization itself was not an event; it is a structure that still informs our epistemologies, politics, and social interactions. While being an "ally" might be interpreted as an identity to claim, solidarity is a process of actions and relationship building. Because of how colonization has embedded itself in our minds and discourse, Boudreau Morris (2016) emphasizes that decolonization is a practice that, "includes nurturing a habit of discomfort" (p. 456), while building relationships between Indigenous peoples, non-Indigenous peoples, and land. Tuck and Yang (2012) also call for non-Indigenous peoples to take up decolonizing colonial practices, but stress that, "this joining cannot be too easy, too open, too settled. Solidarity is an uneasy, reserved, and unsettled matter that neither reconciles present grievances nor forecloses future conflict" (p. 3). Still, as complex as solidarity may be as we unlearn and relearn within this context, it is also a,

... process whereby we intend the conditions we want to live and intend the social relations we wish to have. It is a process that forces us to reconnect with each other and the Earth. This means not just being present for blockades or in moments of crisis, but developing an ongoing commitment to the wellbeing of Indigenous Peoples and communities on a daily basis. (Walia, 2012, p. 251)

Here, there are themes of long-term commitment, a willingness to learn, and centering the goals of Indigenous peoples, all of which were findings from this work that made an educator or a program successful.

This relationship building discussed above is another important aspect of solidarity. Scholars have called for the building of fair, meaningful, and authentic relationships (Klein, 2013). Storytelling and Indigenous narratives have important roles in relationship building, as a form or resistance and of coming together (Boudreau Morris, 2017). Building intentional, trusting relationships was a major finding in this work as well, with 19 of the 20 interview participants emphasizing its importance. In many Indigenous cultures, the ideas of connectedness and relationships are central to their interactions with each other, animals, plants, and land (Castleden et al., 2009; Deloria & Wildcat, 2010). These ideas have been incorporated into practice by educators and food sovereignty scholars as well (Grey & Patel, 2015; McKeon, 2012; Ruelle, 2017). If decolonizing epistemology and actions is the goal, then emphasizing connectedness in of Indigenous/non-Indigenous solidarity could be an avenue.

What would it look like for Extension to embrace a culture of allyship or solidarity with Indigenous communities? Two participants directly discussed the idea of allyship: Randall and Carrie. Randall was quick to say, and on multiple occasions, that he was not Indigenous, but that the connection that he feels with Indigenous peoples makes him an "ally." As Randall pointed out, it is difficult to teach these personal qualities; they must be "cultivated" through experiences with members of the marginalized community and by prioritizing emotion and connectedness. Carrie also highlighted that many of the important issues to both Indigenous and non-Indigenous peoples and communities overlap, such as climate change and natural resource management, so finding those overlaps and talking about how everyone can collaborate on them is a promising way to enact change.

Achieving some form of allyship or solidarity among educators could be a goal of Extension in all the marginalized communities that they serve. This can be a challenging endeavor and would require a commitment from both Extension administration and educators themselves. This challenging work requires that people confront the violence of colonialism,

how their own intersectional identities impact power and privilege, and a reconstruction of interests and epistemologies. This might be achieved through explicit trainings and educational opportunities through transformative learning theory (Kluttz et al., 2019), "acting politically with self-understanding" through self-reflection and reconstructing interests for long-term change (Land, 2015). Understanding the way that my participants viewed their allyship might inform how to create educational opportunities as well. Randall, for example, was adept at identifying with the "Other" in a narrative (Omi & Winant, 2015), Carrie found shared interests and priorities that all people could work towards together, Amelia did the hard work of examining her own identities and how they impact her collaborations with Indigenous peoples, and Jack remained open to Indigenous conceptions of how to care for plants and what constitutes "agriculture" in his work.

Ultimately, the approach to cultivating solidarity in Extension educators will be up to the needs and resources of the places Educators work. It will also need to be encouraged by Extension administration. Also, Extension could encourage some of the other characteristics of successful educators in addition to allyship into the institutional culture, such as a willingness to learn and having academic understanding, to help make this shift. This culture shift will ensure that these lessons remain long-lasting and produce change from within, with the understanding that the work of solidarity is on-going, institutionally and personally.

Prioritization for Culture Change. Extension in Indigenous communities has been underfunded, underrepresented, and lacked support at a systemic level. In order to address these issues, there will need to be a systemic prioritization for the programs and professionals that serve Indigenous communities in the form of resources, personal and professional support, and a culture change at the state and regional levels. Survey participants called for this culture change

through their concerns for the current state of Extension in Indigenous communities and the issues that they see as pressing. Additionally, respondents cited funding as a major way that Extension could support them in these collaborations. While funding is a common issue for educational programs in general, if Extension could support the ways respondents are needing funding now, it would help to prioritize this work.

Some survey respondents described a culture within Extension that is unwelcoming to Indigenous communities, inflexible about serving them well, and that doesn't value or support the people working with them. These perspectives centered on the culture of Extension at the systemic level, whether in regard to the culture of a state, university, or the administration, or the things that need to be done to change the situation. It was clear from these respondents that they and the Indigenous communities that they serve do not feel like Extension is with them, requiring a shift in priorities and culture. Indeed, distrust of universities and racism within communities were major barriers to these collaborations. For example, one respondent described how members of the Indigenous community that they serve feel disconnected from Extension at the state level:

I have been fortunate enough to have daily conversations with tribal members, and a lot of them feel distant and hesitant with [State] Extension. Tribal members often expressed that they feel that things, opportunities, and basic rights that an extension office should provide isn't being met. I have had to maneuver difficult questions and conversations about my programming, but they have strengthened my programming and have helped others.

This work has already provided some recommendations for change that these respondents also advocated for, such as training in culturally relevant programming, but these respondents discussed these needs within the context of a culture change within Extension and a need to prioritize these communities. A respondent described their experience losing a 4H program

below because it wasn't meeting the cultural needs of the community and stressed that change needs to happen at the administrative level:

I lost the 4-H club that was on the reservation after one year. Their feedback was that the structure was too western and there wasn't enough flexibility. In my opinion we need more training around cultural competency and cultural knowledge. This also needs to come from the "higher ups" not from me as an agent. We need to create more genuine welcoming environments.

Finally, another respondent, when answering the question about what support Extension could provide to make these programs successful, said:

Programs aimed at "changing the context" and addressing the socio-environmental determinants of health and behavioral disparities among populations (1) require policy, systems, and/or environmental interventions for which resources are unavailable/unfunded; (2) program collaboration across institutional systems and among sectors, including tribal governance, and consequent outcomes and impacts, are often more time intensive than funding mechanism cycles take into account for cycles (years), evaluation and reporting (indicators/metrics)

This respondent calls out many of the recommendations from other participants in this work already in one succinct quote: the need to change policy and systems, the need to fund those changes, collaboration across institutions, and the need to recognize that these changes in Indigenous communities will take longer and need specific evaluation and reporting accommodations. All of these recommendations need to happen at the systemic level and involve a change in culture to prioritize them.

Three respondents that called for the need to change culture at the systemic level were all from the same state and describe a place that hasn't prioritized Indigenous communities, that isn't welcoming to them, and that hasn't put the structures in place to make those things happen. In response to the question about what support Extension could provide to make their programs successful, the first respondent said, "The establishment of Tribal Extension in the state of [State Name]. A commitment from [University] and the State 4-H program to create culturally

appropriate and accessible programming to Indigenous communities." This respondent is asking for many of the recommendations already made in this work: systems within the state and university, a commitment from the university to these programs, and the creation of culturally relevant programming. Another respondent from this state also discussed the culture of Extension in Indigenous communities and painted yet another picture of an unwelcoming environment:

Maybe inviting Tribal members to engage with Extension more broadly, which I'm not sure is a 100% welcoming place. For example, if a Tribal member wanted a different type of expertise that I don't have, but if the individual who has that expertise within extension is culturally tone deaf, I would feel awkward about engaging/connecting. There are areas where I lack cultural sensitivity/grounding/experience myself, so this is an issue for me too. But I would not want to refer to a colleague where the experience could be negative for the individual.

Taking advantage of the expertise of colleagues is an important part of what should make Extension successful. Creating a culture where all members of a state can be served is vitally important for Extension to be successful, and this is not happening in this state. Last, a respondent from that state explicitly requested culture change by transforming the organization from within and building relationships with Indigenous communities:

Increase cultural competence within extension so that Tribal members would be welcomed, valued, and feel seen and comfortable when/if they interacted with Extension is probably a priority. This doesn't solve the issue that relationships are not built among Extension and Indigenous people in [State], but maybe we need both (transforming our organization internally and building bridges through listening?).

This respondent acknowledges that there is not a welcoming relationship between Extension and the Indigenous communities in this state, but discusses ideas for how to create it- systemic change through cultural competence and relationship building.

One of the ways that priorities manifest themselves is through how programs and projects are funded. Funding was a significant theme in regard to how Extension can support these

programs, as previously discussed, with 57 survey respondents mentioning it in some way. The ways that funding was mentioned were varied and included needing more staff, prioritizing FRTEP, and funding for programming. Unsurprisingly, funding is a common barrier to educational programs, but the contexts and requirements that respondents described in regard to funding communicate larger themes of prioritization, culture, and how important these programs are in Indigenous communities.

Fourteen survey respondents simply requested general funding, without getting too specific about their needs. A Specialist from Hawaii said:

For the Pacific, there is a lack of institutional commitment to sustaining regional collaborations- these have all emerged via externally funded grants or opportunistically via individual projects. Our budgets, also, are always gobbled up by travel costs- so these may appear less competitive on one hand, but also limit what we're able to spend funds on to actually get the work done especially on smaller grants/projects.

This educator says explicitly that the lack of funding that they have experienced is linked to a "lack of institutional commitment" to sustaining collaborations, particularly because all of the Pacific Islands are geographically isolated and require more funds for the travel needed to collaborate. Instead, educators have to look for external funding, such as grants. Other general funding needs were for things like technology and the internet (4 respondents), infrastructure and buildings (3 respondents), and evaluation and assessment. Another Specialist from Hawaii said, "Having funding and resources to conduct more regular community-wide surveys to get feedback on what kinds of services would be most valuable would be great." Centering the goals of the community was a finding from this work in regard to creating successful programs, but having funds to be able to evaluate the community's needs is a prerequisite for that.

Funding for staff was also a need in the region. Respondents asked for more personnel, either in the form of more people or being allowed to use more of their employees' time. Indeed,

when describing what makes programs in Indigenous communities successful, survey respondents said that having driven, educated, and passionate Extension educators is key. By having more staff and time dedicated to Indigenous communities, their needs can be met and relationships can be maintained. There were also 3 respondents that explicitly asked for more prioritization and funding for FRTEP. A Coordinator from Oregon said:

Support for FRTEP through increasing funding to the program, and also making the grants competitive hurts all of the Extension programs that are trying to serve Indigenous peoples and communities. Serving the people of these communities is our passion as Extension employees and allowing the FRTEP program to serve only a small fraction of these communities is disappointing.

FRTEP is a competitive grant program that allows 1862 LGIs to apply for funding to support educators on reservations. There are a finite number of grants awarded every cycle, so LGIs have to compete with each other for funds and, when one LGI receives funding for a program, it means that another won't have any funding at all. Another Educator in Idaho also discussed FRTEP, but asked that the culture around FRTEP educators be improved in Extension, "FRTEP educators are not given the same level of respect or treatment compared to county Extension programs."

Lastly, respondents discussed the need for funding for educational programming. This is particularly important in Indigenous and other marginalized communities because of the unique issues that they face, including poverty, lack of transportation, and living in remote areas.

Sometimes, a tribe might want to help facilitate a program, but lack the funds themselves to do so. An Advisor from California explained their situation and need, "More grants, funding, or projects that I could deliver to low SES tribes. Some of the low SES tribes that I work with want to do projects, but do not have funding to do projects (community tribal garden, cultural plant improvements)." There are also unique expenses having to do with the culture and customs of

the communities being served. For example, an Agent from Hawaii talked about funds that they need to help build relationships through culturally appropriate methods:

Funds that allow culturally appropriate expenses, including, but not limited to food expenses. Sharing a meal is a culturally appropriate strategy to build relationships of trust. This is one essential expense which is very challenging to have covered. In discussions with faculty at 1994 Tribal colleges, another expense that is culturally appropriate/necessary with their population are tobacco leaves which are used for ceremonial rituals that relate to cooperation.

Building relationships in Indigenous communities is important for educators to be successful. This might be time consuming and require more funding, but it isn't something that can be forgotten. A Specialist from California explained that they need, "funds to ensure that relationship building continues, this is not a quick process, and can be seen as a waste of time when it does not instantly secure further funding or bring in income." If these programs are going to be prioritized, Extension administration will need to understand the different funding needs that might exist in Indigenous and other marginalized communities, and that a return on those funds might take longer to see than in traditional Extension programming.

Importantly, the themes of not prioritizing the work done in Indigenous communities have been seen in other parts of this work as well, from not valuing this work on employee evaluations to not being flexible about culturally relevant curriculum needs to not having adequate funding. Certainly, some states and programs are doing this better than others and some definitely displayed a commitment and prioritization of Indigenous communities, but a large scale, systemic change still needs to be made so that Indigenous peoples and communities have equitable access to Extension services.

Next Steps

This study highlights the difficult issues that Indigenous communities face and the important role that Extension services have in helping them overcome them. I explored the practices that make educators and programs successful, the berries that they face, and made recommendations to Extension and researchers based on those findings. If Extension is committed to serving Indigenous communities, there are some changes that could help facilitate that, such as encouraging engagement and collaboration, culturally relevant program development, allowing Extension educators freedom in their work, giving value to this work in employee evaluations, and providing support, education, and mentoring to lower the barriers to collaborations. Additionally, this study, in keeping with the commitments to CRT and decolonizing methodology utilized participant voice, narrative, and the co-construction of knowledge throughout the process. Further research needs to be done in regard to how Extension's collaborates with other partner programs, such as with 1994 LGIs and members of Indigenous communities, how Extension can partner with Indigenous peoples in all of the various settings that they live in, and how Extension can partner with other marginalized communities too.

Future research needs to be done on various aspects of this work including gaining the perspectives of all sides of the collaborations described, investigating how Extension can collaborate with Indigenous peoples in the many settings in which they live, and how Extension can collaborate with other marginalized communities as well. First, there are many perspectives to any given collaboration and this project focused on the perspectives of Extension personnel at exclusively 1862 LGIs. A parallel study should also look at the same kinds of research questions, but with a focus on Extension personnel or employees that work with Extension at 1994 LGIs. Further, investigating the perspectives of Indigenous peoples that collaborate with Extension is

an important next step. Indigenous communities and the personnel that serve them have been largely forgotten within Extension's work and research. These programs are underfunded, underrepresented (Brewer, Hiller, Burke, & Teegerstrom, 2016), and there isn't a systemic system that supports them. Understanding the lived experiences of Extension personnel in the field and the Indigenous communities that they serve will inform practice and policy within Extension, aimed at providing equitable access to the benefits of this system.

Also, this work mainly focused on Indigenous communities on reservations and in rural settings. This is by no means representative of where all, or even most, Indigenous people live. In fact, depending on the state in question, more Indigenous people live in urban settings, with 70% of Native Americans and Alaska Natives living in urban settings nationwide (Lakhani, 2020). In reference to the differences between serving rural versus urban communities, Hannah wanted to highlight this:

Native communities are everywhere! You can't really group or classify everybody all together. We know that for many different perspectives, but I think particularly in the Native communities, there is so many variations, then also, a lot of similarities, but, just recognizing that we say, 'working with Native populations' that's a whole host of things.

Jack also acknowledged that he, and Extension as a whole, doesn't reach all Indigenous peoples well, including those in urban settings and those that belong to tribes that are not federally-recognized (modifications in brackets requested by Jack after reviewing the initial transcript):

I used to talk about tribes as on-reservation and members, but there's also a lot of people in tribal communities who are working and living in urban areas. I haven't quite figured out what to do about that, what kind of Extension program to build with them. And same thing with non-federally recognized tribes. We have several groups in [State] that are not federally-recognized. So, they're tribal, they're definitely a meaningful community, they have some of those similar issues, but they don't have a [federally-recognized] tribal government, they're not a [federally-recognized] sovereign Nation. I'm not quite sure what to do about them and how to reach them, how to figure out what their needs are, how to work with them, what kind of programs you can partner on. That's a whole group

of people that kind of falls off my radar because they're difficult to figure out how to work with and how to contact.

When Jack was given the opportunity to provide feedback on the findings, he made a point to clarify that, "Some of our non-federally recognized tribes have a tribal government, some do not. And some states recognize tribes as sovereign nations, but not at the federal level." All of these possibilities for tribal government organization will have an impact on how Extension, as a federal program, interacts with the tribes in their state. Future research will need to investigate the promising practices and barriers to working with Indigenous communities in urban settings as well as those with the various kinds of sovereign status.

Further, while this work was focused on collaborations with Indigenous communities, these same findings could be applied to collaborations with other marginalized communities. Indeed, some of the participants identified the need for Extension to increase their access and reach into all marginalized communities, particularly participants that had a diversity and equity background themselves. Randall included all marginalized communities when he discussed the importance of empathy and connectedness to his success and Hannah drew parallels between her work with Indigenous communities and her past work with Latinx communities:

There's obviously differences within communities as there is with any community, marginalized or not, but I found a lot of parallels within the Latino immigrant community and many of our Native communities here in terms of similar potential needs or maybe successful delivery formats, for example.

She went on to explain why she thinks these efforts are necessary and important:

We do have Native communities across the country, and Extension has done a good job of serving the easy-to-reach people, but I think that as Extension continues to evolve, we'll also continue to try to figure out those ways that we can reach the underserved populations, of which Native communities are definitely one.

Future research should investigate educators that collaborate with other marginalized communities to see if there are overlaps or similarities to their successes and barriers as well.

Given the mission of equity and access that LGIs ascribe to (Sorber & Geiger, 2014) and the history of Indigenous land dispossession that created LGIs (Stein, 2017), Cooperative Extension has a responsibility to Indigenous communities to provide equitable access to the benefits of this system. This study provided characteristics of successful educators and programs, as well as common barriers to successful collaborations, and what systemic supports are missing for successful collaborations. From the findings of this study, my participants and I co-created implications and recommendations for Extension to more equitably serve Indigenous communities and support these educators in their important work.

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APPENDICES

Appendix A: COVID-19 in Indigenous Communities: The Lived Experiences of Extension Educators, Submission to the Journal of the Association for International Agricultural and Extension Education, Special Issue

Abstract

Cooperative Extension is present in nearly 100% of counties in the United States, but can only be found in a small percentage of Indigenous communities. Much of this inequitable access to educational and agricultural resources can be attributed to the lasting cultural, social, economic, and political effects of settler colonialism in the Land Grant System and the US in general. The COVID-19 pandemic highlighted these inequities, as well as lack of access to traditional foodways, healthcare, and other basic services. Extension educators already working in Indigenous communities were uniquely situated to respond to the crisis, and assist the communities they serve in meeting the new challenges. This study explores the lived experiences of some of these educators through qualitative interviews and advocates for their continued and expanded support. For the Land Grant System to live up to its professed mission of access and inclusion, it must provide equitable access to Extension services in Indigenous communities, and the COVID-19 pandemic proved how vital Extension programs are to their development and survival.

Keywords: Indigenous communities, COVID-19, settler colonialism, Cooperative Extension

Introduction

Cooperative Extension services have been a staple in the development of rural America for decades, but access to Extension services and resources in Indigenous communities is inequitable. While Extension offices are found in nearly 100% of US counties, they can only be found in a tiny percentage, less than 10%, of Indigenous communities in the United States (Brewer et al., 2016; NCAI, 2010). Indigenous communities are particularly in need of Extension services because of the significant issues they face in regards to health (Hoover, 2017), food access (Hoover, 2020), poverty (Maure, 2017), and other effects of settler colonialism, land dispossession, and the associated disruption to Indigenous agricultural systems.

During the COVID-19 pandemic, Indigenous and other marginalized communities were disproportionately affected because of the existing systemic inequities they were already experiencing. Providing these communities with equitable access to Extension services is important for the Land Grant Mission, but has been systemically overlooked due to the cultural, social, and economic histories at play. Extension educators in those communities are able to respond to their communities' needs during a crisis, and are therefore integral to the communities' development and recovery. This paper explores the lived experiences of Extension Educators serving Indigenous communities during the COVID-19 crisis, how they are integral to the communities' responses, and the barriers that they face.

COVID-19 in Indigenous Communities

The COVID-19 pandemic has hit Indigenous communities particularly hard, as it has with many marginalized communities (Bowleg, 2020). For example, the Navajo Nation (Diné, in the Native language), the largest tribe in the United States, had the highest infection rate in the country, surpassing New York, at 2,680 cases per 100,000 people. Currently, under the strong

leadership of their President Jonathan Nez, they have flattened their curve. Still, although Native Americans are only 9% of New Mexico's population (where the Nation is located), they account for 57% of its COVID-19 deaths in the state (Parshley, 2020). New data from smaller tribes looks to be even worse; the infection rate in the Pueblo of Zia is currently 3,319 per 100,000, which is 10 times the rate of New Mexico in general. These numbers are probably not accurate, however because of lags in reporting, so the actual infection rate may be much higher.

These tribes are facing this pandemic with long-standing issues forced upon them by colonization and land dispossession, that make the spread of disease easier including poverty, a lack of running water in homes making frequent hand-washing difficult, and a lack of reliable electricity. Further, structural and economic issues such as overcrowded housing, hospitals being fewer and farther apart, and a lack of internet access make fighting the pandemic even harder (Lakhani, 2020). Native Americans have higher rates of obesity, diabetes, and heart and lung disease, all of which are risk factors for severe COVID-19 illness. In an NPR article, Dr. Laura Hammitt, the director of Infectious Disease Programs at the Johns Hopkins Center for American Indian Health, was quoted as saying, "Native American communities are often invisible in terms of their health inequities... IHS (Indian Health Service) is chronically underfunded" (Morales, 2020).

Despite the alarmingly high infection rates, Indigenous communities were often the first to respond to the crisis and did so vigorously. In an article from The Guardian, Desi Rodriguez-Lonebear, a demographer from the University of Arizona and a member of the Northern Cheyenne tribe, attributed this early response to Indigenous peoples' history of responding to pandemics, brought along with White colonists, that wreaked havoc on communities, "More than any other population in the country, the shared experience of surviving a pandemic is in our

blood, it's not historic, it's current for American Indians, it's our reality. We took it seriously because we had to" (Lakhani, 2020). In response, tribes across the country have done things like set up roadblocks and field hospitals, even before stay-at-home orders were implemented in the rest of the country. The Navajo Nation, for example, has tested 13% of people in the reservation, compared to 4% in the US (Lakhani, 2020). Even so, the high infection rate persists because of the systemic and health inequities and lack of access to resources that Indigenous peoples still experience.

All of this has served to highlight the systemic inequities that already existed, from access to healthy food and healthcare to the internet and information. When disaster strikes, it is going to hit hardest in places that were already marginalized and disadvantaged, now and into the unknowable future. Issues of equity and access are exacerbated in Indigenous communities because of the historical and systemic oppression that they have suffered, and this crisis highlighted that in a new and disturbing way.

Purpose and Objectives

These data and findings emerged out of a larger project, whose goal was to better understand if and how Extension is collaborating with Indigenous communities, what makes Extension educators that collaborate with Indigenous communities successful, common barriers to successful collaborations, and what practical tools are missing for successful collaborations to exist at a systemic level. During the data collection phase of this larger project (January 2020-June 2020), the COVID-19 pandemic began, inevitably affecting the perspectives and experiences shared by participants. This current paper aims to share those perspectives, highlight the work being done by Extension educators in Indigenous communities to assist them during this crisis, and to explore the barriers that educators face. By investigating the vital work that

these educators are doing in Indigenous communities, particularly in response to this global crisis and given the disproportionate health, economic, and political inequities experienced by Indigenous communities, this study provides a further argument for greater attention and funding from Extension for these services in Indigenous communities.

Conceptual Framework

Much of these inequities and the lack of resources to address them can be attributed to the lasting effects of settler colonialism. Settler Colonialism is a distinct type of colonialism that seeks to remove and replace Indigenous populations with the invasive colonizer society in order to develop a distinct identity and sovereignty in perpetuity. Through social and material relations, colonizers claim ownership and political rights over Indigenous peoples (Stein, 2017), eliminating the challenges posed to their sovereignty by Indigenous claims to land through genocide and forced removal. This domination of place and people's bodies and minds is for the production of privilege and maintained by military, political, and economic power, as well as other systemic structures of cultural control, such as education (Greenwood, 2009).

Dunbar-Ortiz (2015, p. 2) states that the history of the United States cannot be understood without this particular view of colonialism, "The history of the United States is a history of settler colonialism- the founding of a state based on the ideology of white supremacy, the widespread practice of African slavery, and a policy of genocide and land theft." Race is evoked to justify structures of inequality, differential treatment, and subordinate status. These categories are subject to variation over historical time and space and are reflective of specific social structures, cultural meanings and practices, and of broader power relations. Further, this mentality doesn't just hold during the colonization of a place, but continues to permeate the social, cultural, economic, and political relations between the colonizers and Indigenous peoples,

since these power relations must be maintained in order to continue systems of oppression and the accumulation of privilege.

In today's romantic idealizing of the Land Grant system, principles of democracy, equity, and inclusion are often included. Less talked about is the LGIs' origin in colonialism and Indigenous land dispossession. Once lands for LGIs were obtained through forced removal, broken treaties, and genocide, the natural resources were used to accumulate wealth for the colonizers and the Land Grant system. LGIs are still linked to their colonial and capitalist past, requiring the continual accumulation of wealth, and are a key site in the reproduction of White citizenship and property rights. It is this accumulation of wealth, knowledge, and the reproduction of White citizenship at the institutes of higher education that allowed and continues to allow for the systematic oppression of Indigenous peoples (Stein, 2017).

Methods

I investigated the Western Region of Extension through a qualitative interview study. The Western region of Extension encompasses 13 states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming), American Samoa, Gaum, Micronesia, and the Northern Mariana Islands. I interviewed educators from 1862 Land Grant Institutions (LGIs) in the region that collaborate with Indigenous communities to better understand their lived experiences. In this work, the methods of research (the techniques for collecting data) are prevalent in colonized, Western research, but the methodology (the theory for analysis, prioritization of ideas and voices in the research process, and the criteria used to evaluate the findings) strived to be decolonizing, with an emphasis on counternarratives, the co-construction of knowledge with participants through their lived

experiences (Fierros & Delgado Bernal, 2016), and the liberatory effects of the research for Indigenous peoples.

For the interviews, sampling was a mixture of convenience and purposive (Bazeley, 2020). During recruitment, I was certain to prioritize interviewing a diverse group of participants that held a variety of professional positions, and were both Indigenous and non-Indigenous, and spread over the large geographic region. I conducted 20 interviews in total, but not all participants are included in the present study; only the participants that commented on COVID-19 are represented here. Interview participants' universities, reservations, and specific job titles have been removed from their quotes to protect their identities, and each was given or chose a pseudonym.

Interviews were completed over the phone or Zoom due to travel restrictions during the pandemic, and were audio recorded and transcribed for later analysis. While I did create a semi-structured interview protocol, in keeping with the idea that storytelling is important in decolonized knowledge creation (Brayboy, 2005; Delgado, 1988; Solórzano & Yosso, 2002), the direction of the interview was allowed to evolve as the participants' experiences and perspectives directed them, so as to best capture their stories. The interviews were more like a discussion, with an emphasis on the mutual co-construction of ideas and researcher reflexivity (Fierros & Delgado Bernal, 2016).

To analyze the interviews, I used thematic analysis (Bazeley, 2020; Braun & Clarke, 2006). First, I familiarized myself with the data by checking the transcriptions, reading and rereading the data, noting initial ideas in research memos, and building open codes. Then, I search for patterns within my codes, to sort them into categories. These were then used to create themes by identifying analytical clusters. The analysis progressed from initially organizing data to show

patterns in a descriptive way, towards interpretation of those patterns and their significance, broader meanings, and implications (Braun & Clarke, 2006) by evaluating the data as a whole, comparing to data from the survey and my research memos, and by engaging members of the community.

Further and to more thoroughly understand the stories of some of the participants, I used a semi-narrative analytical approach to better understand how participants conceptualize their collaborations with Indigenous communities. In this work, I kept participants' stories, "intact by theorizing from the case" (Riessman, 2008, p. 53). This allowed me to better understand how the participants made and applied meaning to their work, to prioritize the inclusion of counternarratives (Brayboy, 2005; Delgado, 1988; Solórzano & Yosso, 2002) and include participants' ideas and feedback. I gave the participants opportunities to provide feedback on whatever components of the process they wanted to, including reviewing transcripts, providing feedback on findings, and collaborating on conclusions from the data, and many took this opportunity to further engage with the work.

Findings

One of the many themes that emerged from the interviews was the difficult and sometimes dire situations that members of Indigenous communities live in. When COVID-19 began to sweep the country, the nation saw how marginalized communities were often hit hardest, due to inequitable access to resources and the systemic effects of racism, colonialism, and discrimination. The Extension educators in this study took advantage of their positionality, the trust that they have gained in their communities, and the knowledge that they have of their needs to help them face this pandemic. This speaks to the importance of Extension in Indigenous communities, as without the educators' expertise, these communities would have had fewer

resources to meet the new demands of the crisis and less powerful voices to speak on their behalf.

Already in Crisis: Extension Programs in Indigenous Communities

Participants in this study described the issues and barriers that they and the Indigenous communities that they serve face daily. Some of the folks I talked to live or work in communities that can only be accessed by 4-wheel drive, by horse, or by plane, where there is no county or borough government to provide services, and where Indigenous communities "pop up" to access traditional food sources by hunting, fishing, and subsisting. Some participants work in communities that don't have running water and still heat their homes with indoor, wood-fire stoves. Some suffer from issues with wild dogs making their communities unsafe. Social issues such as suicide, sexual assault, poverty, unemployment, domestic violence, and substance abuse were common. Illiteracy and language barriers were other issues that educators faced; it wasn't uncommon for people to only speak the Native language or to not be able to read or write in English well due to a lack of formal education. Access to technology and the internet often make work difficult and access to information scarce. Racism was also a serious issue for both the members of the Indigenous communities and the (usually White) Extension employees working with them.

Health disparities in Indigenous communities was a common theme across states as well, including issues with illnesses, healthy living environments, and access to healthy food.

Respiratory illnesses, like respiratory syncytial virus, tuberculosis, asthma, carbon monoxide exposure, and lung cancer were major concerns. Lack of access to healthy food and the health effects of that were also common issues that participants help their communities deal with. Many states are educating Indigenous communities about how to preserve food in healthy ways, grow

traditional crops that will provide healthier alternatives to processed food, and safe cleaning practices for food preparation. Still, traditional foodways continue to be disrupted with restrictions on hunting and fishing, lack of resources like clean water, and equipment required to harvest or preserve food safely.

All of the issues discussed above had an associated Extension program being facilitated to try to combat them. For example, Frank, a Specialist in indoor air quality, discussed the need for educational programs because, "a lot of the houses are very closed up, intentionally for savings, because of the expense of energy out in the rural areas. It's like living in a Ziploc sack." Danielle, a Specialist in health and wellness, has a current project that partners with the Center for American Indian Health Equity to provide institutional support for faculty to address health equity in Indigenous communities. Carrie and Jane, who both identify as Native, discussed how, "When you look at all the health outcomes and health disparities, Native [Group], they're the worst in comparison to all the other groups," and "Natives had the highest diabetes rate," respectively. Carrie, a Federally Recognized Tribes Extension Program (FRTEP) Agent located on a reservation, has discussed incorporating traditional Indigenous meals into her local school's menu because of the known health and cultural benefits associated with that and Jane, an expert in nutrition, encourages those in her community to seek out safe and healthy exercise opportunities to fight childhood obesity. Randall and Diane, Extension educators from the same state, work with their local reservation's Director of Education to facilitate opportunities for students to learn creative writing skills in an effort to address the alarmingly high suicide rate among Native children.

The wide variety of programs that are being facilitated in Indigenous communities speaks to the importance of serving these communities and of Extension's role in their health and

development. In this study alone, participants were facilitating programs to address everything from gardening to livestock management, literacy to robotics, indoor air quality to food preservation, obesity and opioid misuse to the maintenance of traditional foodways and their connection to culture and health. Most of these educational programs were developed in collaboration with the communities themselves and addressed needs that they found to be important. When COVID-19 reached these communities, these same educators were able to respond in new and innovative ways that still prioritized their communities' needs while meeting the pandemic's new demands. Had they not been there, these needs might have gone unaddressed.

Extension's Importance in Indigenous Communities in the COVID-19 Pandemic: Stories from the Field

Clay's interview was done on March, 18th, 2020; this was right when universities, colleges, businesses, and other public places were beginning to be shut down, but not far enough into the progression of the pandemic for any of us to really know what we could expect. Clay is an Extension educator in rural Alaska, and has a high percentage of Native Alaskan members of his community. After my formal interview with Clay was over, we continued to chat about the state of the world and the issues we were both facing with COVID-19. Beginning with what our respective universities were doing to contain the pandemic, Clay explained his fears about what this would do to his community:

We sent all our dorm kids home. You know, they had to vacate. Yeah... I don't know. I'm really troubled. I mean, we closed the schools down. People don't have childcare, and we shut down 4H 'cause that's through the university. So, we don't have after-school activities... It really feels like we're dismantling all of these social services and community things that we put in place because we have unsupervised children and we have all these terrible problems. So, the cost of having unsupervised children, the cost of having under-supervised children, the cost of not having any positive outlets for anyone... You know who gets sick a lot, is poor people. People who can't work, you know?

I mean, we got housing problems. All this stuff, what is this gonna do to the rate of adverse childhood events, child abuse, domestic violence, of all these problems that we built all these structures to help try to mitigate? What about AA? What about people that need to go to meetings and can't because they've all been shut down? Is the risk of them getting coronavirus worse than the risk of them missing two months of meetings and being socially isolated? I dunno, man. I can't speak for Colorado or Los Angeles, but for my own community, I just really worry about people. Like, not having child care? How's that going to affect a single mom living in poverty not to be able to go to work?

Clay's discussion here highlights the severity of the issues that his community faces- poverty, violence, housing, and substance abuse- and his fears about how the pandemic will exacerbate them, by taking away the social, educational, and health programs put in place to address them. He even makes a comparison to other parts of the country, and expresses how his community is at a higher risk. When weighed against the risk of contracting the coronavirus, Clay isn't sure what is worse.

At the time of his interview, James, an Agriculture and Natural Resource Agent and who identified as Native, was in the early stages of a significant and impactful program to help his farmers and the residents of Guam face supply chain disruption due to the pandemic:

Before this COVID virus, I was gearing up to work out an MOU with EPA to take over the Pesticide Safety Education Program. And then when this happened, there was a new focus now, and it was the production of agriculture here on Guam. So, I went from talking about pesticide safety education to, how in the heck am I gonna keep my farmers employed?

Now, the program that we're looking at doing is reinvigorating the farm production here on Guam, because we're an island and we're isolated. 90% of the produce that we buy in our stores are from off-island. Only 10% of it is grown here on Guam. The shippers are not gonna stop shipping, but we're worried about the farmers in the States. If they get sick, if the workers get sick, if the truckers get sick, if the workers in the meat plants get sick, everything's gonna collapse.

When the COVID virus hit, they lost everything, you know. And just like in the States, there are farms that are producing to accommodate the retail stores. There's a lot of farmers that depend on schools and the restaurants for their livelihood. In Guam's case, I'd say it's 70-80% of the farmers that don't deal with retail stores, deal with restaurants and the tourist industry, and they've lost their livelihood. The farmers of Guam said,

"Hey, I've lost everything, we have no market, you need to help me." So, we changed. Hopefully in the next few days, we get a consensus from the Governor of Guam to help fund the buying of local produce, and we can infuse that back into the local economy. So, I have no idea how in one month, I went from pest management to ag marketing. I don't know. I don't know.

James, whose job it is to serve farmers in the field, was able to pivot from his typical responsibilities, including pesticide safety education and advising farmers about Native and Western crop production, towards meeting the new needs of the pandemic. He was able to listen to his community's needs and to respond quickly to both save their livelihoods and make sure that the people of Guam had access to food. The fact that he was already present in the community, knew their concerns and goals, and had pre-existing relationships with the farmers there made him able to respond to the crisis quickly and in ways that will significantly impact his community. Also, the power of his voice and positionality allowed him to bring the community's concerns all the way to the Governor in order to bring about action.

Margaret, someone who is also in a position to make an impact on the state-level, talked about how she and others in her state are collaborating together to support their Indigenous communities during the pandemic:

I am setting up a statewide conversation between all of the people who serve as liaisons (to tribal communities) for each of the universities in the state because one individual talked to me last week and said, "We need somebody to convene us and we need to have a conversation about COVID, its impact on tribal communities, and how are we going to work with our students who are living in rural communities and don't have access to internet." So as a matter of fact, just before I was talking to you, I was pulling that meeting together.

Margaret has spent a significant amount of time building relationships with members of both the Indigenous communities in her state and members of the academic community, so she was uniquely able to bring these people, their knowledge, and their resources together to address the pandemic. This state-wide conversation that Margaret was able to coordinate among the people

that serve Indigenous communities in her state is an important example of the invaluable work that Extension educators can do to help the most vulnerable communities, including Indigenous communities, to respond to a crisis.

Randall has also been put in a position that will allow him to impact the COVID-19 crisis on the state level for Indigenous communities in his state. In addition to his position in Extension, Randall has long been a member of his state's Commission of Indian Affairs because of his significant relationships with members of the reservation he serves. Through this membership, he has been able to make an impact on his community in positive ways for many years and has formed many important relationships that have helped him in his Extension role as well. Their Commission has recently formed a COVID-19 committee, consisting of 5 subcommittees, to address issues related to the pandemic. Randall is co-leading the Education Subcommittee and plans to continue this work past his retirement in the summer of 2020. This will allow Randall to continue making an impact on his community, especially in light of the needs from the pandemic. Randall was able to take advantage of his relationship with Extension, the committees he serves, and members of the Indigenous community to take significant action when he was most needed.

The experiences of these educators were captured during the early days of this crisis, so the outcomes of their responses are still to be seen. However, their preexisting relationships with community members, their knowledge and expertise about their goals and values, and their resulting ability to respond quickly to the crisis were vital. In addition, many of the educators were also able to leverage their social and political standing, as well as their financial and educational resources, to assist their communities as well.

Conclusion and Recommendations

The interviews with participants in this study highlight the important role that Extension is playing in marginalized communities and, without Extension, vital services might not be getting to them. The COVID-19 pandemic has overlaid the pressure of a global crisis on the effects of the systemic marginalization that they face and Extension provided people to help these communities address it. While this present study emerged out of a larger one and was not designed to specifically investigate Extension's response to COVID-19 in Indigenous communities, it does highlight the importance of Extension to these communities and some of the ways that educators were able to rise to the challenges that COVID-19 presented. The educators' strengths were that they were present in these communities, understood their goals and needs, and had the resources and power to address them. This is ultimately the strength of the Extension model itself.

If Extension and the larger Land Grant System in the United States is going to live up to their commitments to access and equity, serving Indigenous communities will need to be a priority, especially in light of the history of land dispossession in the Land Grant System's creation. Extension in Indigenous communities has been underfunded, underrepresented, and lacked support at a systemic level (Brewer et al., 2016). In order to address these issues, there will need to be a systemic prioritization for the programs that serve Indigenous communities in the form of resources, personal and professional support for educators, and even cultural change. There may be many ways to achieve this, and it will look differently at each LGI and in each Indigenous community, but some suggestions are increased funding for programs and personnel within Indigenous communities that center their goals and values; professional development opportunities for educators regarding topics such as allyship, culturally relevant pedagogical practices, and working across sovereignty; and valuing this work on employee evaluations

alongside research and other scholarship. This work will not be easy, requiring a shift in culture, a broader understanding and appreciation of non-Western epistemologies and worldviews, and a willingness to tackle difficult cultural, political, and economic challenges.

Additionally, 1862 LGIs could strengthen collaborations with other groups serving Indigenous communities including those from within our own Land Grant System, namely the 1994 Tribal Colleges and Universities. In addition to traditional Extension educators that might be serving Indigenous communities, FRTEP, housed at 1862 LGIs, places Extension educators in Indigenous communities, and most 1994 LGIs have Extension personnel on their campuses as well. All of these educators together might provide a system of support and collaboration by taking advantage of the strengths and complimenting the weaknesses of each other's positionality, funding opportunities, and relationships within communities to best serve them as a cohesive Land Grant System.

Further, as we have seen during the COVID-19 pandemic, marginalized communities, including Indigenous communities, will be more severely affected during times of crisis due to systemic inequities. As we face other global crises such as climate change, Extension must play a role in the United States and around the world to address them. Extension will need to work with communities that have non-Western epistemologies and foodways to do this, making it vitally important to understand how to best serve them. More research should be done regarding Extension's work with Indigenous and other marginalized communities, the components to successful collaborations, and the common barriers that educators will face.

Appendix B1: Survey Protocol

Q1. What is your job title?
Q2. Where are you located?
Q3. Should any of your responses be used in research, a pseudonym will be used in place of your name. If you want to choose your pseudonym, please enter it below.

Appendix B2: Interview Protocol

- 1. Name, location, job title
- 2. Tell me about yourself (job, history, what brought you here?).
- 3. Tell me about your context (population, demographics, staff that you work with).
- 4. Do you have or have you ever collaborated with Indigenous communities?
- 5. How were these projects funded?
- 6. If so, tell me about the projects or programs that you have collaborated with Indigenous communities on.
 - 1. How did you decide to do that?
 - 2. What were the successes?
 - 3. What were the barriers?
 - 4. What were the outcomes of the program?
 - 5. Is this current? Why or why not?
- 7. If so, what resources or support were helpful during your collaboration?
- 8. What resources or support do you need now to be successful?
- 9. If not, what resources and support would you want in place?
- 10. Can I contact you again if I need more information?

Figure C1: Map of Never Served with Native Lands

