

INTEGRATING DINÉ CULTURE AND LANGUAGE
TO TRANSFORM CONSTRUCTION MANAGEMENT CURRICULUM

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To Roselena and Walter Dean Fitch

ABSTRACT

INTEGRATING DINÉ CULTURE AND LANGUAGE TO TRANSFORM CONSTRUCTION MANAGEMENT CURRICULUM

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Using Critical Oral History (COH) methodology, this study examines the difference between Diné (Navajo, man, woman, or the people) and Eurocentric and Eurocentric derivative construction management practices to transform existing Diné construction management curriculum through culturally responsive pedagogy. This study highlights the significance of Diné stories, traditions, sovereignty and how these elements promote transformative change to Diné construction management curriculum and Diné professionals' practices. Drawing on Tribal Critical Race Theory (TribalCrit), this study provides an opportunity for current construction management curriculum to integrate indigeneity and make the curriculum culturally responsive to, with, and for the communities involved. TribalCrit and COH underscore how integrating Diné ways of knowing are central to the transforming the curriculum and practice.

Integrating Diné language and culture into construction management curriculum could benefit Diné in critically needed ways; to value and validate local knowledge bases and construction expertise that best serve their communities. Existing construction management and construction education programs are currently guided by Eurocentric and Eurocentric derivative concepts. Integrating Diné language and culture into construction management curriculum would empower Diné communities to use local knowledge and reinforce the importance of their language and culture. Indigenous knowledge promotes collaboration between and within Diné communities. Diné have been very persistent in implementing their culture and language in their

K-12 curriculum; this effort needs to be extended beyond this level to underscore the importance and application of culture and language through the education process. The current study draws on Diné ways of knowing to explore how current practices align and differ between Diné and Eurocentric and Eurocentric derivative constructs.

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CHAPTER ONE: Introduction

Being a part of a younger generation in the 21st century, I find that my age group has lost a part of our culture. Due to standardized Eurocentric and Eurocentric derivative educational settings, Diné culture and language has not been a part of our everyday curriculum at higher educational institutions. As a tribal member, I feel both a right and responsibility to highlight the significance of Diné culture and language, specifically within the Diné Nation. Many people may not understand the reasoning for why Diné culture and language should be incorporated into a higher education curriculum, but as a Diné growing up within a sovereign nation, it is a highly deemed skill to be able to understand the “way of life” from a cultural perspective. Since the Treaty of 1868, Diné were given the freedom to live their lives, in which they choose to emphasize their traditional values and their upbringings. Diné people are taught to respect their culture based on their historical stories, which have been passed down from generation to generation.

As a young Diné woman, I find that the elderly people are looking to the next generation to be able to sustain Diné in order for it to thrive within Diné communities. I want to be able to use my cultural background and educational knowledge to be able to give back to Diné communities. As I begin to work on the Diné Nation as a Project Manager, it has opened my eyes, because now I am able to see how important culture and language are to Diné people. The people have many cultural reasons on “why” they carry out certain construction projects the way that they do. It’s a whole new world when you try to work on the reservation; you have to be able to greet people in Diné, converse in Diné, and show respect to first be accepted. As a Construction Management Professional (CMP), you have to understand that there are literal as well as figurative culturally responsive building guidelines and processes that have to be followed based on Diné Nation

policies. It is an entirely different process than what is taught at a westernized higher education setting. CMPs need to be ready to read between the lines of culture, language, and sustainability. Being a sovereign Nation, Diné have power to implement their own processes and rely on the managers to take on responsibilities that adhere to policy and protocol. So, to use this power in meaningful, relevant, and significant ways for now and, most importantly, for the seventh generation, there needs to be a strong background of professionals that understand, respect, and value Diné culture and language in order to sustain its rich historical traditions (Jumbo-Fitch, 2018).

Diné culture and language have guided the ways and words of Diné construction management techniques and practices for generations. The practice of construction management by Diné has evolved, but the underlying cultural traditions have remained constant and often conflict with Eurocentric and Eurocentric derivative 21st century construction management practices. Learning the differences between Diné and Eurocentric and Eurocentric derivative construction management practices will further inform Diné and more so non-Diné if there is a need for change in the existing construction management curriculum beyond K-12. As higher education continues to move forward, closely grounded in dominant ideologies, Indigenous people want to thrive by implementing their cultural values into their teachings of modern business practices.

Diné professionals need to adapt, change, and go forward, while simultaneously listening to and hearing traditional knowledge (Taiaiake, 1999). The significance of Diné Construction Management Professionals (CMPs) who are highly educated and are practicing within the Diné Nation has not yet been documented. This dissertation intends to underline the important Diné

ways of knowing and use these elements to more comprehensively align the existing higher education construction management curriculum to Diné ways of knowing.

Chapter One introduces the statement and significance of the problem, research questions, research design, and working definitions. chapter two provides a literature review which describes scholarship relevant to this inquiry to provide a foundation and further context for the study. Diné stories and history will be introduced based on Diné creation stories. Diné educational philosophy will also be introduced along with construction management education curriculum and practices. chapter two also provides Tribal Critical Race Theory (TribalCrit), the theoretical framework for this study. The work will focus on four of the nine TribalCrit tenants: 1) Indigenous peoples have a desire to obtain and forge tribal sovereignty, 2) The concepts of culture, knowledge, and power take on a new meaning, 3) Tribal philosophies, beliefs, customs, traditions, and visions for the future, and 4) Stories are not separate from theory, they make up theory. chapter three presents the research methodology, Critical Oral History (COH); I will use storytelling to discuss my research topic through a critical inquiry topic, my research processes through community-based accountability, and my research outcomes through transformative justice. I will draw on relationality, responsibility, respect and reciprocity, elements of Critical Indigenous Research Methodologies (CIRM), to highlight the critical need for community-based accountability during and after the research process. chapter four will present the findings of this study through a CRDCMCP model. The findings are critical to my contributions and give back to the communities who afforded me the knowledge and wisdom. This study concludes with chapter five, which includes implications of these findings and recommendations for future directions in CRDCMCP.

Statement of the Problem

Many non-natives and the younger generation of Diné people fail to recognize and respect Diné culture and language and the importance of practicing Diné within the construction management field, specifically on the Diné Nation. The majority of the younger Diné generation did not have extensive experience of Diné culture and language compared to the older Diné generation. The benefit in understanding and being able to practice Diné culture and language through and with construction management practices strengthens Diné, particularly the next (seventh) generation of professionals. Higher education (Diné and non- Diné) institutions currently do not offer a construction management curriculum with an emphasis in Diné culture and language. This creates barriers for Diné CMPs to understand the complexities of historical and contemporary contexts in order to best serve the Diné Nation; the lack of knowledge reflects a lack of understanding of Diné, their culture, and their land. The seventh generation needs to be able to combine their academic knowledge, cultural knowledge, and survival knowledge (Brayboy, 2005), which empowers Diné to thrive, adapt, and contribute to their communities in culturally responsive and meaningful ways.

Purpose of the Study

The purpose of this study is to examine how and why Diné ways of knowing and Eurocentric and Eurocentric derivative construction management practices align and conflict with each other. My research will address the following two questions to focus on how Diné language and culture among construction managers and administrators influences construction management practice:

1. How do Diné language and culture among construction managers and administrators inform construction management practices on the Diné Nation?

2. What implications does this have for higher education construction management curriculum and education?

Context

The context of this study is a construction management curriculum on the Diné Nation. The lack of commitment to enacting Diné culture and language and an even greater lack of integration of this knowledge base in a higher education setting, provides a backdrop for this study. The curricula, teaching methodologies, and assessment strategies associated with mainstream schooling are based on a worldview that does not adequately recognize Indigenous notions (Kawagley, 1998). Diné CMPs who draw upon Diné culture and language to transform their communities will enable transformative changes within higher education construction management curriculum.

Indigenous knowledge systems comprise all knowledge pertaining to a particular Indigenous people and its territory, the nature or use of which has been transmitted from generation to generation (Daes, 1993). For many years, Indigenous knowledge has been marginalized while mainstream education has been committed only to Eurocentric or its Eurocentric derivative knowledge. The need to recapture Diné knowledge and apply it to construction management professional (CMP) practices can be restored through the knowledge and teaching of Diné Elders. Indigenous knowledge is seen as a way to continue healing; an educational remedy that will empower Indigenous students if applications of their Indigenous knowledge, heritage, and languages are integrated into the educational system (Battise, 2005). The CMPs on the Diné Nation need to be able to understand their construction practices from a Diné viewpoint in order to practice in a considerate manner towards the community.

With a growing population of 173,667 Diné people residing on the Diné Nation and 300,048 enrolled members (Donovan, 2011); there is and will continue to be an increased need for employment in building and infrastructure development. The reported employed population on the Diné Nation has 1.88 percent employed in the construction industry, which consists of 30,890 people (Comprehensive Economic Development Strategy, 2009-2010). This survey of employment on the Diné Nation is incorrect, as it does not account for all of the population reported in the Census data. The construction occupation indicates a growth of 21.4 percent by 2022, to those that have obtained a bachelor degree (Bureau of Labor, 2012). There are currently 78 accredited construction management programs in the United States and the number is growing; accreditation sets the basis for the educational requirements (American Council for Construction Education, 2013). The Diné Nation higher education institutions currently do not have a construction management program, but they offer an accredited general engineering program (Diné Technical University, 2014). CMPs require a considerably different, but overlapping, knowledge and skill set from engineers to be successful in their careers.

While there are many opportunities to expand the construction management curriculum, it will take a significant effort to implement Indigenous knowledge systems into a construction management curriculum. Knowledge of Diné culture and language can help construction management professionals better understand how construction practices are applied to Diné communities. Many Indigenous people are beginning to emphasize the need to decolonize themselves and their communities (Battiste, 2005). These aspects, when added to the difficulty of incorporating Diné culture and language into an existing construction management program, contribute to the challenge of introducing Indigenous notions and practices to CMPs on the Diné Nation.

Significance of the Study

As the demand for the construction industry rises on the Diné Nation, there will be a need for CMPs who are simultaneously knowledgeable in the construction field and Diné traditions and beliefs. The goal of this study is to underscore the importance of Diné culture and language and how Diné culture needs to be included in planning higher education construction management programs. Tribal Critical Race Theory (TribalCrit) (Brayboy, 2005) allows a focus on specific issues of culture, knowledge, and power. Culture reminds individuals of who they are. Knowledge offers links to what people know. Power through an Indigenous lens is an expression of sovereignty- which is community based (rooted in community conceptions of its needs) (Brayboy, 2005). With an integration of TribalCrit tenants in construction management practices and curriculum, Diné will have the ability to learn, respect, and acquire practices that benefit their communities and enable them to honor relationships, engage responsibility, be respectful and reciprocate to their communities. The overall intention of integrating culture and language is to empower Diné communities, repair their broken dignity (Adichie, 2015), and respect their own academic teachings to revitalize their culture and language through construction management curriculum and practices.

Definition of Terms

The following terms are foundational and used through the dissertation. Additional terms found throughout the dissertation are noted in Appendix D.

Hózhó: “At the core of its meaning, Hózhó is about balance. It is about health, long life, happiness, wisdom, knowledge, harmony, the mundane and the divine.” (Drake, 2014).

K'é: “K'é refers to the Diné (Navajo) Kinship System. K'é refers to affective action and solidarity, including such concepts as love, compassion, kindness, friendliness, generosity, and peacefulness.” (Carey Jr., 2013).

Summary

This study will gather Diné stories on how CMPs practice construction management using community-based accountability, a tenet of Critical Indigenous Research Methodologies (CIRM) (Brayboy et al, 2012). Diné communities' needs will be documented to highlight where Eurocentric and its Eurocentric derivative construction management practices align and conflict with Diné ways of knowing and acting. The outcome of this study is to integrate Diné language and culture in higher education curriculum to promote transformative change and culturally responsiveness within Diné construction management policies and practices.

CHAPTER TWO: Literature Review

As I continue to gather literature regarding Diné culture, language, and construction management, I am at a standstill. There is limited to no literature available. I conduct this study to make a contribution to the research field. As I gather information on Diné, I also have difficulty finding accurate stories that I've heard before from Elders. Any information that I do find about Diné is written by non-natives or information published which references non-native literature. How can I expect Diné from the Diné Nation to believe what I write, if I don't tell the story correctly, through their stories?

As a doctoral student, I want to be able to publish scholarly work, but does that mean I have to follow the current system? As I dig deep and think about my study and my methods, I am writing to unmask, expose, and decolonize systemic oppression. I am challenging the Eurocentric system! That is somewhat intimidating, but as I sit and discuss my study with my advisor, we discuss that it is possible to do, because Diné have empowered me with knowledge that I need to now transmit. I realize one rich data sources are the stories; I need to talk to people to gain more information and make sure I'm telling stories that need to be told in accurate ways. TribalCrit supports my work by blending cultural and academic knowledge, being that it is the key to survival knowledge.

During my literature collection process, I try and correlate the information I gather from my published sources with Diné. This process helps to illustrate some patterns and themes as well as critical anomalies. The stories feed me. Although it is a process, it is difficult, because Diné are very protective of their stories. I met with a medicine man from the Diné Nation and he informed me that he would not share Diné stories with any random person. He mentioned that the stories are sacred and should not be told to just anyone, because they could interpret the story

incorrectly. He also informed me that Diné stories should be only told to Diné, as it is for them. This to me is very true; some stories may be told, yet the survival of some stories needs to follow traditional ways, being passed on from generation to generation and not be documented. I need to respect that and hope academics understand this, too.

Overall, the backbone of this study is to provide information that will continue to empower Diné. It is a reminder to Diné that they have the power already in place to implement their own systems. I hope they may continue to stand up for what they believe is most sacred- Diné language and culture (Jumbo-Fitch, 2018).

This chapter starts with Diné creation stories to tell the beginning of Diné people, where we came from. The creation stories include, among other things, a focus on Diné culture, language and history. I will review Diné educational philosophy to connect to the way curriculum is developed on the reservation. I will include an overview on construction management program educational philosophy to highlight how existing CMPs focus solely on Eurocentric and Eurocentric derivative concepts that do not align with Diné educational philosophy. I will introduce Tribal Critical Race Theory (TribalCrit) (Brayboy, 2005) to illuminate underlying foundations of Diné traditional values. TribalCrit and Diné traditional values connections will further be examined through my findings in chapter four.

Diné Creation Stories

Diné describe their way of life through their stories. “In the stories about the past, primordial times comes alive as storytellers reiterate accounts of events that led to the establishment of the world, how the boundaries of Diné land were set and how the People learned the rules for proper living” (Denetdale, 2007). The most prized possession of Diné are

the stories told by their Elders. Elders are considered the most respected people on the Diné Nation, because they set the guideposts for Diné.

In the beginning, it was said that Diné traveled through five worlds; first world (black world), second world (blue world), third world (yellow world), and the fourth world (white world), and the fifth world (glittering world). Very limited resources were available in the first world, as it was the beginning of spiritual life, it was dark and quiet. The second world began to welcome life; insects, birds, mammals, land, and sea were being created and adapting. The third world began the creation of Diné in that the first woman and first man gave birth to twins. The fourth world provided the growth of Diné population and provided the first Hogan for Diné to live in and conduct ceremonies. The fifth world is the world we live in now, (see Figure 2-1). With each world, Diné evolved and adapted (Nez, 2016).

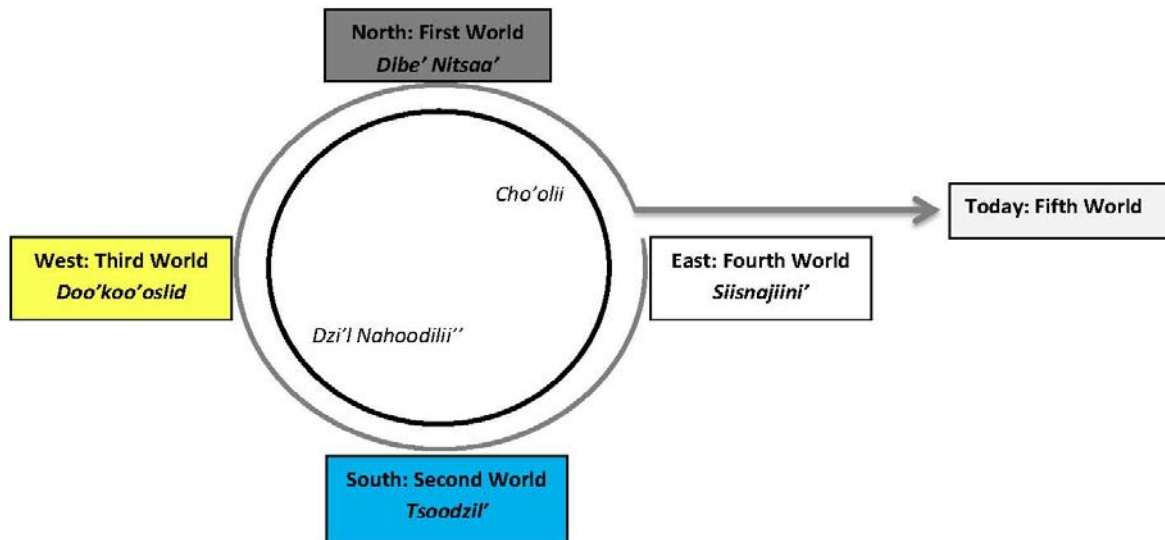


Figure 2-1: Diné five worlds and direction of travel

Diné creation story begins with First Man and First Woman in Dinétah (the Holy Place). Dinétah is known as the birthplace of Diné. Huerfano Mesa (Dzil Na'oodilii) was the location of First Man and First Woman's Hogan when they came from the place of emergence in the La

Plata Mountains. It was from here, Huerfano Mesa, that First Man saw the cloud set on Gobernador Knob (Ch'óol'í'í). After four days First Man and First Woman went on top and found Changing Woman (also known as White Shell Woman, Naadleelí) who was a small baby. They brought her home and with the help of other Holy People, they raised her (Roessell, 1983).

Dinétah is not some place that exists only in our stories, some place that no one has seen. Dinétah is a place, a beautiful place, where the Diné lived and where much of the relationship between the Diné and, the Holy People took place: It isn't too far away. It is a place which has canyons and rocks and bushes and plants and trees. It is a place where our stories began. All Diné need to' know about Dinétah (Insert from Sam James, Roessell, 1983).

Changing Woman later gave birth to the brave twin warriors (Monster Slayer and Child Born of Water). The twins were said to have been fathered by the Sun. The twins' journey to visit their father sets the underlying foundations of Diné. During their journey, they found Spider Woman (a Diné deity also known as Na'acdjeiiesdzaa), and they were given prayers and tools with which to enable them to go safely to see their father. The prayers gave the Twins strength to kill various monsters during each journey (Roessell, 1983).

The twins were challenged by many obstacles during their journey and were bestowed with guidance and tools to overcome each obstacle, in providing hope and strength to Diné. The warriors (naabaahii) through their journey developed the guiding principles, used by Diné to help them shed the damages of colonization. “The lessons of service, teamwork, using appropriate tools, setting goals, compassion, preparation, adaptability, discipline, belief, consistency, organization, and following a spiritual approach provide strategies to use and expand on” (Lee, 2011a, p. 24).

Following the creation story, Diné have continued to create additional landmarks. Diné specifically honor the six sacred mountains that were built with items provided to the people in the Fourth world. Dzilna'oodilii, or Huerfano Mesa, which is located south of Bloomfield, New Mexico. Ch'ól'í'í, or Gobernador Knob, which is located west of Bloomfield, New Mexico. In the east they made Sisnaajini, or Sierra Blanca Peak, which is located east of Alamosa, Colorado. In the south they made Tsoodzil, or Mount Taylor, which is located near Grants, New Mexico. In the west they made Dook'o'oosliid, or San Francisco Peak, which is located in Flagstaff, Arizona. In the north is Dibe'nitsaa, or Big Mountain Sheep, which is located west of Durango, Colorado (Long & Carey, 2016). These mountains are the guide posts for Diné; they provide Diné with a sense of safety and well-being.

Diné creation story describes who we are as people. It describes our meaning and how we translate life. Each perception of life; earth, fire, water, and air are respected by Diné. Each story creates our decisions of how we will continue to move forward as a distinct people. We choose to stay on our lands to protect our ways of life. We choose to believe in our own spirituality. We choose to create our own laws. We choose to protect our earth and livestock. We choose to protect our stories. Our Diné stories will be integrated throughout this dissertation. They are the crucial factors of informing how construction management practices are carried out on the Diné reservation and this knowledge will transform the existing construction management curriculum to reflect Diné way.

Diné Educational Philosophy

Diné philosophy is a process, for which the creation story provides the underlying foundation. The creation story describes our deities, mother earth (Nohosdzaán) and father sky (Ya'dilhil), who provided guidance for Diné in each of the four cardinal directions. To the east

mother earth placed that which gives direction to life, to the south sustenance (nihigaal) was placed, to the west is the gathering of the family (alha'ana'oo'niil), and to the north she placed rest and reverence for all creation (haa'ayiih doo hodilzin). Mother earth's spiritual offerings focused on Diné teachings and traditional wisdom, in which, Diné find strength and stability (Vogelbacher, 2013).

In particular, each Diné is charged to care for their spiritual and physical health. Family is essential in assigning Diné their roles and responsibilities. Diné are also taught to respect nature and understand its offerings. By Diné learning, respecting, and paying it forward, they are living in happiness.

That Which Gives Direction in Life

Knowledge developed by Diné provides the proper development of the mind, skills that will enable survival, understanding and appreciating positive relationships, and understanding and relating to home and environment (Vogelbacher, 2013). Diné focus on spiritual teachings and traditional values based on their family upbringing, for which each person finds strength and stability. Diné develop a consciousness and spiritual awareness providing a basis for learning and living (Benally, 1994).

Only Diné themselves can empower and encourage themselves to learn and adapt. The regeneration of an Indigenous way of life begins with the individual (Lee, 2008). Many Diné have settled with modern Eurocentric or derivative societal norms and do not see the need to work together as a group to empower their communities. These individuals can learn from the Elders' stories that it takes a team of individuals to reclaim their Indigenous ways of knowing to adapt, change, and go forward, however listening to the traditional Diné knowledge at the same time (Lee, 2008). Diné must refer to both the past and the future throughout their decision-

making process. Diné should not ignore their ancestors' struggle for survival. They need to continue to confirm Diné way of thought. If they do not, Diné will no longer exist as a distinct people (Lee, 2008).

Sustenance

Diné believe that every part of the earth and every person on earth are connected and should remain in balance for there to be order. Holism, references life, as an expression of beauty and interconnection, but if one part falls out of place, it will affect everything else, and therefore the cycle of life becomes dysfunctional (Vogelbacher, 2013). Diné need to take care of their physical as well as mental health to remain in balance. Both physical and mental health are cleansed through traditional ceremonies. The ceremonies provide a sense of relief to Diné, because the harmful substances are expelled from the body (Benally, 1994).

Culture is a major factor in Diné holism. Culture reminds individuals, in a group, who they are. Knowledge also relates to culture in that it offers links to what people know (Brayboy, 2005). It may be academic or cultural knowledge, but the foundations link to survival knowledge. Diné will embrace their culture and traditions to change, adapt, and move forward in a vision related to power in the form of sovereignty (Brayboy, 2005).

Gathering of the Family

Family is defined by Diné as K'é and is the primary support system of Diné. Each Diné needs to hear others and feel appreciated. Mixed signals about sense of belonging create doubt, which breeds alienation, loneliness, frustration, and anxiety (Benally, 1994). It was known that each Diné was assigned a role or responsibility based on their kinship clan system. Knowing your role and responsibility kept the system balanced. Elders are respected and they care for their families and direct them in their proper roles (Nez, 2016).

Elders provide proper guidance to keep the family in harmony. Families were taught to address each other based on their clanship. Greeting and welcoming individuals based on their familial relationships, is considered respectful. Clanship defines Diné because it tells us who and where we are from. Each Diné has four clans that represent their mother, father, maternal grandparents, and paternal grandparents' clan (Carey Jr., 2013). The clans were given to us by our creators, our ancestors, and as the population of Diné has grown; the clan system expanded to include conditions relating where Diné were from (geographically).

Rest and Reverence for all Creation

Diné have established an intimate relationship with nature, which begins with the acceptance that all creation is intelligent and beneficial in and of itself (Benally, 1994). Learning the ways our mother earth has provided for Diné through culture. Mother earth provides our food, water, shelter, and ceremonial needs. Nature and living with nature is part of a reciprocal system (Vogelbacher, 2013). This natural reciprocal system is delicate and should be cared for and respected. Diné shall understand all that surrounds them is to fully become a part of the “great universal consciousness” (Benally, 1994).

Diné Pedagogy

Diné pedagogical philosophy is centered on four basic life processes, represented by the four cardinal directions: Thinking (nitsahakees) is the perturbation of a natural system and represents the east, planning (nahat'a) is change or feedback in the system and represents the south, in response, life (iina) is a new equilibrium state and represent the west, and fulfillment (sihasin) is the continued stability of the new equilibrium under the altered conditions and represents the north (Semken, 1997). There needs to be continuous interaction among the

dynamic process in order to maintain Hózhó (balance, happiness, and peace of mind).

Altogether, Diné become more aware of their surroundings, physically and emotionally.

As we get confused and need to clear our minds, we pray to the east, to the morning sunrise. We pray to the east, because the morning sun brings a new day. If we are preparing for the next step in our future, we pray to the south. If we are worried about our family, we pray to the west, into the sunset. The north is usually not recognized, as it is not considered to represent much good. Overall, we go full circle with our ways of life (Emry, 2016).

Language is an entry door; the point of departure for gaining cultural knowledge (Vogelbacher, 2013). Learning, is known by Diné to internalize the knowledge of the Holy People, the Blessing Way (ceremonies, prayers, stories, which all embrace the knowledge of how to live a life in happiness and beauty) (Vogelbacher, 2013). Holy People are created through a male and female, positive and negative force, in which they both balance each other to create harmony and beauty in life. Beauty Way (Hózhóogo Ina) represents the harmonious, peaceful, and happy way of life (Vogelbacher, 2013).

Life itself is sacred; therefore, knowledge, the process of learning, is sacred (Benally, 1994). The importance of having Diné language and culture taught in school is having the students: 1) understand and appreciate their heritage; 2) strengthen and preserve their culture; 3) respect their own people and parents; 4) feel more secure and not forget who they are; and 5) respect and understand themselves (Witherspoon, 1968). Curriculum should incorporate Diné philosophy, language, and value system to work successfully in a Diné populated community.

To create a successful learning environment for Diné requires observation and comparison, structure and function, cause and effect, and recognizable patterns. These concepts

meet the knowledge demands found within Diné philosophy; the proper development of the mind, skills that enable survival, understanding and appreciation of positive relationship, and understanding and relating to home and environment (Vogelbacher, 2013). Diné curriculum requires cooperative learning, multiple sources of learning, and holistic learning. The main goal of Diné curriculum is to motivate Diné students, help them develop problem-solving strategies, and the ability to locate needed resources.

Construction Management Program Educational Philosophy

The purpose of a construction management curriculum is to provide students an education that will lead to a leadership role in construction and to prepare the student to become a responsible member of society. The curriculum should be responsive to social, economic and technical developments and community-driven as well as community-specific and should reflect the application of evolving knowledge in construction and in the behavioral and quantitative sciences (American Council for Construction Education, 2010).

In this program, students will develop skills in oral and written communication, knowledge of methods and materials, knowledge of engineering principles, knowledge and skill of construction management principles, and knowledge of ethical principles (Northern Arizona University, 2011). The program analyzes the current needs of the marketplace during their annual reviews in order to ensure that each student is learning current construction management principles within the industry. The curriculum has to be able to produce individuals that are capable of solving technical, management, social, political, and leadership problems as tough as those faced in any other engineering discipline (Abudayyeh, Russell, Johnston, & Rowings, 2000).

American Council for Construction Education

The American Council for Construction Education (ACCE) was formed in 1974 with the mission “to be a leading global advocate of quality construction education, and to promote, support, and accredit quality construction education programs” (Segner, 2007). By 2011 the number of accredited construction management programs had reached 78 (American Council for Construction Education, 2011). Construction programs accredited by ACCE, by contrast, require 18 semester hours of business coursework and only 15 hours of math and sciences combined, and have more of the curriculum devoted to construction sciences (American Council for Construction Education, 2010).

Accreditation Board of Engineering and Technology

Some construction engineering programs are accredited by Accreditation Board of Engineering and Technology (ABET). ABET requires that the graduates have: proficiency in mathematics through differential and integral calculus, probability and statistics, general chemistry, and calculus based physics; proficiency in engineering design in a construction engineering specialty field; and understanding of legal and professional practice issues related to the construction industry; an understating of construction processes, communications, methods, materials, systems, equipment, planning, scheduling, safety, costs analysis, and cost control; an understanding of management topics such as economics, business, accounting, law, statistics, ethics, leadership, decision and optimization methods, process analysis and design, engineering economics, engineering management, safety, and costs engineering (Abudayyeh, et al., 2000).

Interactive Construction Management

University curriculum in construction and construction management need to become more interactive to the communities which surround them and the communities which the students will work in order for them to gain hands on training. Most universities bring the

industry into the classroom in a variety of ways, such as, guest lectures, student chapter house presentations, site visits, work experiences, general donations, funded research, or even named professorships or buildings (Abudayyeh, et al., 2000). Students are also encouraged to complete capstone projects, conduct independent research projects, internships, or other fellowship opportunities. When students become more involved with the industry; it allows them to learn skills that are not taught directly in a classroom. These soft skills gained are then used by the students to help become more interactive and collaborative in the classroom.

Construction management courses are best taught in a culturally responsive role-playing setting and community needs are taken into account where students demonstrate a better understanding of the subject matter and show more positive attitude towards construction as a profession (Bhattacharjee, 2014). Culturally responsive role-playing teaching is a holistic teaching method that inculcates the process of critical thinking, instigates emotions and moral values, and informs about factual data (Bhattacharjee, 2014). Construction management programs should steer away from traditional teaching methods of lectures, seminars, and tutorials, and move towards problem-based teaching methods. Culturally responsive role-playing provides students a real life scenario (experiential learning) and in return provides effective student learning. This culturally responsive method creates more interactive students that acquire knowledge through problem solving and realistic scenarios (Bhattacharjee, 2014). The culturally responsive “student centered” pedagogical approach increases student interests in the subject and overall understanding of the course material.

By using critical based teaching methods, the teacher has more effective and efficient use of teaching resources and the student gains more knowledge. Engaged students are better able to use their skills to become a more productive construction managers. Students learn to work with

others and develop team building skills. Students learn to act, reflect, and make an effective decision. A culturally responsive construction management course should offer students an active learning environment that balances theory and practice while equipping students with skills necessary to make decisions. In addition problem based learning with culturally responsive role playing for analyzing real life cases, allows students to develop critical thinking and logical reasoning skills (Bhattacharjee, 2014).

Tribal Critical Race Theory (TribalCrit)

Tribal critical race theory (TribalCrit) is “based on a series of traditions, ideas, thoughts, and epistemologies that are grounded in tribal histories thousands of years old” (Brayboy, 2005, p. 441). TribalCrit evolved as a part of Critical Race Theory (CRT) in the mid-1970’s and “emphasizes that colonization is endemic to society while also acknowledging the role played by racism” (Brayboy, 2005, p. 430). One of the main goals of TribalCrit is to make connections of the different forms of knowledge (culture, survival, and academic) in order to help and meet the community needs. Both “Critical Race Theory and Tribal Critical Race Theory offer the possibility of unmasking, exposing, and confronting continued colonization within educational contexts and societal structures, thus transforming those contexts and structures for Indigenous Peoples” (Writer, 2008, p. 1).

Brayboy (2005, p. 429) provides the following nine tenets of TribalCrit:

- 1) Colonization is endemic to society, 2) US Policies toward Indigenous peoples are rooted in Imperialism, White supremacy, and a desire for material gain, 3) Indigenous peoples occupy a liminal space that accounts for both political and racialized natures of our identities, 4) Indigenous peoples have a desire to obtain and forge tribal sovereignty, tribal autonomy, self-determination, and self-identification, 5) The

concepts of culture, knowledge, and power take on new meaning when examined through an Indigenous lens, 6) Governmental policies and educational policies toward Indigenous peoples are intimately linked around the problematic goal of assimilation, 7) Tribal philosophies, beliefs, customs, traditions, and visions for the future are central to understanding the lived realities of Indigenous peoples, but they also illustrate the differences and adaptability among individuals and groups, 8) Stories are not separate from theory; they make up theory and are, therefore, real and legitimate sources of data and ways of being, and 9) Theory and practice are connected in a deep and explicit ways such that scholars work towards social change.

I will focus on four (1) Indigenous peoples have a desire to obtain and forge tribal sovereignty, 2) The concepts of culture, knowledge, and power take on new meaning, 3) Tribal philosophies, beliefs, customs, traditions and visions for the future, and 4) stories are not separate from theory, they make up theory) to support my theoretical framework. These four enable me to recapture the Diné ways of life and use it to empower the Diné communities. All nine are inextricably intertwined and inform one another.

While dominant Eurocentric and Eurocentric derivative “thought, knowledge and power structures” (Brayboy, 2005, p. 430) dominate our society, a TribalCrit objective is to recapture Indigenous ways of life (past, present and future) and use it to empower Indigenous communities. For many years, Indigenous peoples have been removed from their lands, framed as racialized groups, and stripped of their culture. TribalCrit provides the Indigenous peoples a chance to reframe how to use their cultural values to shape who they are and create knowledge. Using TribalCrit, they will use the acquired knowledge to “recognize change, adapt, and move forward with the change” (Brayboy, 2005, p. 434).

TribalCrit addresses three types of knowledge: (a) cultural knowledge, (b) knowledge of survival, and (c) academic knowledge, to be combined to create “power that is situated, dynamic, and historically influenced” (Brayboy, 2005, p. 435). Cultural knowledge is an understanding of what it means to be a member of a tribal Nation; knowledge of survival is being able to understand how and in what ways change can be accomplished, and academic knowledge is acquired from educational institutions (Brayboy, 2005). In order to persist as sovereign Nations, Diné people need to learn to change, adapt, and overall grow as a community.

Indigenous Peoples Have a Desire to Obtain and Forge Tribal Sovereignty

TribalCrit provides an “open door” for Indigenous peoples to take action (praxis), in order to move away from “colonization and assimilation and towards a more real self-determination and tribal sovereignty” (Brayboy, 2005, p. 441). As stated by Friere (1970, p. 39), human activity consists of action and reflection: it is praxis; it is transformation of the world through reflection and action. TribalCrit provides Indigenous people the opportunity to research and practice, in order to create a more understandable educational system and society to benefit the Indigenous communities.

Diné have been a sovereign Nation since the Treaty of 1868 (Shebala, 2018). By having their own governance in place, they have the ability to introduce a new program into their existing higher education institutions. A new construction education program, Diné developed for local higher education institutions, will provide a new opportunity for Diné to integrate their culture and language into a forward looking and culturally sensitive construction professional community.

The Concepts of Culture, Knowledge, and Power Take on New Meaning

Culture has always been the main principle in defining the Diné ways of life. It is the “base for knowledge that ultimately leads to power” (Brayboy, 2005, p. 436). Culture is the “totality of socially transmitted behavior patterns” of the community or population (Giroux & McLaren, 1989, p. 10). Culture defines all Indigenous peoples’ traits and their ways of life. In order to be a successful member in society, a person needs knowledge in order to solve problems. Indigenous peoples understanding who they are, where they come from, and increased knowledge of their surroundings, are able gain power. Education, “according to TribalCrit, might also teach American Indian students how to combine Indigenous notions of culture, knowledge, and power with western/European conceptions in order to actively engage in survivance, self-determination, and tribal autonomy” (Brayboy, 2005, p. 437).

Tribal Philosophies, Beliefs, Customs, Traditions, and Visions for the Future

Using Diné culture and tradition as a foundation for education will empower American Indians to use what they value and validate in their own knowledge bases and overall help empower their communities through culturally responsive pedagogy. Diné have centuries of tribal philosophies that have evolved from the creation stories. Diné have already successfully introduced their tribal beliefs into their education systems in the early 1960’s (Yazzie, 1971). Although Diné have introduced their philosophy into educational programs on the reservation, those educational opportunities remain within the Diné Nation.

Language and culture are used within Diné curriculum to teach Hózhó and Ke’, often Hózhó is translated as notions of “the beauty way” and Ke’ is translated as family. The concept of Hózhó ´ is heavily supported by Diné because it represents where the people come from. Hózhó can be represented in many forms, but the underlying reasons are rooted in positive thinking and planning and it represents the beauty way. The beauty way is known by Diné as a

traditional ceremony used to purify and cleanse a person. The current President of Diné Nation states that “As a Nation, this is who we are. Our language provides a way for us to move back into these teachings of Hózhó (beauty way) and Ke’ (family)...” (Shebala, 2016, p.1). Through language Diné enhance their teaching ideologies. “Long explained that Hózhó teaches people to act a certain way and say things a certain way, as opposed to finding fault in what people say” (Shebala, 2016, p. 5). Hózhó keeps Diné in balance and in harmony.

Stories Are Not Separate From Theory; They Make Up Theory

In order to transmit their culture and knowledge, Indigenous people tell stories. The stories are passed from generation to generation, are heard and explored by the tribal members, and serve as guideposts for the Elders and other policy makers within tribal communities (Brayboy, 2005). All Diné teachings have been passed down since the beginning of life through the creation stories. The Diné Nation President states “Our children listen to us and learn from us,” he said. “I don’t want the next generation to be raised without knowing Hózhó and Ke’” (Shebala, 2016, p. 5).

Diné Elders strongly believe in the creation stories. The telling of the creation stories have created generations of Diné knowledge for the people to use to gain strength. The stories also provided Diné ceremonial purposes. Prayers and ceremonies are essential to reaffirm and celebrate the notion of duality, and the descent of the Holy People (Vogelbacher, 2013). Following this path of the Holy People, Diné internalize the knowledge of the Holy People. By internalizing the knowledge, Diné embrace the knowledge of how to live a life of happiness and beauty (Vogelbacher, 2013).

Summary

TribalCrit is driven by notions of sovereignty and self-determination, which makes unique and important (Brayboy et al, 2012). By focusing on cultural values and beliefs, curriculum will be guided by the Indigenous communities needs and helps create a curriculum that will assist Indigenous people and take into consideration the long term effects on the people. By using CIRM, it “necessitates careful thought, consultation, and collaboration to care for both the ideas, or knowledge, it generates and the living beings those ideas influence” (Brayboy et al, 2012, p. 438).

I gathered literature to provide insight on Diné stories and understanding how much an influence culture can have on curriculum. Diné have a sovereign Nation and could recapture their Indigenous roots in their higher education programs. In this instance, “it is the great humanistic and historical task of the oppressed: to liberate themselves and their oppressors as well” (Friere, 1970, p. 44). In order to become free from dominant systems of power, Indigenous people need to be constant and responsible in pursuing their goal. The underlying causes of oppression need to be determined by the oppressed as well as the oppressors to reduce or prevent dehumanization and fear. The oppressed, Diné, need to be aware of the underlying causes of their condition. Once both the oppressed Diné and the oppressors are committed, it begins the process of permanent liberation (Friere, 1970).

The road to revolution causes the oppressed to think about themselves and others in order to liberate each other. “A critical pedagogy and cultural studies thus attempt to give voice to students to articulate their criticisms of the dominant culture and to form their own subcultures, discourses, styles, and cultural forms” (Kellner, 2001, p. 234). The revolution involves openness and communion with people. It allows the people to connect knowledge to power and take action. “People will be truly critical if they live the plentitude of the praxis, that is, if their action

encompasses a critical reflection which increasingly organizes their thinking and this leads them to move from a purely naïve knowledge of reality to a higher level, one which enables them to perceive the causes of reality” (Friere, 1970, p. 131). Diné need to make changes and transform themselves in order to free themselves from alienation.

CHAPTER THREE: Methodology

I continue to read what I write, and I see that with this study that the Diné graciously agreed to be a part of are providing a great advantage to Eurocentric epistemologies. As I search existing construction management programs at Diné higher education institutions, they have very limited programs available. Being that there is currently no construction management program available on the Diné Nation, I hope that there is room to provide suggestions for such a learning opportunity.

The issue that I foresee as most critical is gathering the data from my people. I want to be able to document the stories for Diné to use for years to come. But then I am left with guilt. As I ask traditional Diné Elders for their opinions on creation stories, they tell me information, but also explain how sacred it is. But I ask middle age Diné and the younger generation and they say “write it”, because once grandpa and grandma¹ leave us, we have no more traditional storytellers. I know that there is the need and desperation to write about Diné thinking, and how it needs to be incorporated with Diné language and culture in order to create the ultimate curriculum for Diné students to be able to comprehend. I will respect the stories and convey the knowledge.

I think about creating the curriculum that helps my people gain knowledge and comprehend multiple cultural and language aspects as well as the basics: English, math, science, and social studies. I am researching to find what empowers Diné people to learn from and with the cultural and language knowledge they already possess. Anyone can gain knowledge, but to actually be able to use the knowledge and apply it with your culture and field of work is a different form of knowledge. This is the knowledge I seek (Jumbo-Fitch, 2018).

¹ Grandma’s ways of being is shared below in chapter four.

Integrating Diné language and culture into construction management curriculum would benefit Diné and non-Diné in critically needed ways that would value and validate local knowledge and construction expertise that know what is best for their communities. The existing construction management programs are currently guided by Eurocentric and Eurocentric derivative cultural constructs. Integrating Diné language and culture into construction management curriculum will empower Diné communities to use local knowledge and to learn more about the importance of their culture and language. Indigenous knowledge promotes collaboration between Diné sub-communities. Diné have been persistent in implementing their culture and language in their K-12 curriculum (Benally, 1994); this effort needs to be extended beyond this level in order to underscore its importance and application. The current study draws on Diné ways of knowing to explore how current practices align and differ between Diné and Eurocentric and Eurocentric derivative constructs.

This chapter describes the methodology used to explore current practices through, critical oral history (COH) (Lemley, 2018). COH uses critical inquiry topics, community-based accountability process and transformative justice outcomes to collect and analyze data and highlight inequities that have marginalized underserved populations in order to promote justice and equity.

Research Design

Using Critical Oral History (COH) (Lemley, 2018), I will (1) contextualize, both historically and contemporarily, anti-oppressive topics of inquiry, (2) honor storytellers individual and collective self-determination, and, as possible for storytellers, (3) commit to co-analyze and co-present the process, content and outcomes of the project with storytellers and community members.

Contextualize stories

Construction Management Professionals (CMPs) will be interviewed on how they see Diné culture and language intertwining with current practices and how this is an issue worth exploring. The goal is to document how construction management has evolved and how any contemporary movements may have effected how construction managers practice. Through the process, I am learning from and with Diné to identify how adding Indigenous ways of knowing may enhance a construction management education program. There has been no documented literature on how construction management practices or programs have been integrated with Diné culture or language. There is little literature on how construction management practices have evolved on and off the Diné Nation.

Honor storytellers self-determination

The storytellers are honored through the stories they provide, their importance will be documented and shared. The storytellers will be recognized as those who encouraged their people to continue to embrace their culture and language in their everyday lives. Yet some of the younger storytellers did not have this competency. The storytellers have been determined to be most confident in sharing their stories within their own community, discussing scenarios of personal practices, and providing information as they currently practice as a CMP. Storytellers are invited to tell their stories through interviews and artifacts, such as photos, documents or other objects important to them and their work; these artifacts are essential to allow me to better understand their lived experiences as CMPs. Most of the older generation of storytellers described their artifacts as how they presented themselves with the Diné language or Diné attire; they each wore traditional attire or a piece of jewelry to present themselves as Diné. During the process, I will prioritize and respect the storytellers' cultural and traditional ways. As I approach

them, they share their personal lived experiences according to their comfort level. I assure the storyteller that their voice is critical to the seventh generation understanding how and why to include Diné language and culture in everything they engage. I highlight the stories importance and how they will be documented with care.

Co-Analyze Data and Co-Present Findings

Data will be gathered through storytelling with interview prompts. If the storytellers are interested and able, they will co-analyze and co-present findings to whatever capability suits them. The data will be voluntarily co-presented at local Chapter house meetings and shared with the community members per the Diné Nation requirements. The presentation of the data will take place before the fall of 2018, and data will be kept for one year per Diné Nation and University requirements (Appendix A and B). The storytellers will be reminded that their participation in interviewing will contribute to promoting great change to a higher education curriculum. I will document how storytellers identify what Diné language and culture will be most important to include in construction management curriculum to promote transformational change. The goal is to gather data to help the community move forward and provide the people with sustainable policies and practices to continue to implement change for and by them.

Critical Oral History

Critical Oral History focuses on three aspects: critical inquiry topics, community-based accountability processes, and transformative justice outcomes (Lemley, 2018). Critical inquiry underscores choosing topics of inequitable relationships that are based on three elements: structure, power, and agency. Community based accountability is used as a process to promote agency and value historically marginalized community member stories, which are often unheard or listened to and includes the 5 R's: 1) Respect, 2) Relationality, 3) Responsibility, 4)

Reciprocity, and 5) Reflexivity (Lemley, 2018). Transformative justice focuses on the outcomes of the research and has the ability and purpose to empower people to transform their outcomes and improve their lives. “Identifying inequitable power and knowledge dynamics through subjugated voices, COH seeks to transform these inequitable imbalances to create spaces and places where people may proudly and confidently contribute and participate” (Lemley, 2018, p. 32).

I have identified a critical inquiry topic, respecting Diné cultural values, which to me describes Diné ways of life. I will use community-based accountability and the 5 R’s throughout my research process in order to recognize culture as a form of power. Importantly, an Indigenous conception of power defines power as an energetic force that circulates throughout the universe-- it lies both within and outside of individuals; hence both the tribal Nation and the individual are subjects to previous dialogue (Brayboy, 2005). The goal is to validate and act on identified inequities provided in these stories in meaningful ways that counter dominate power structures (Lemley, 2018). The guideposts refer to the storytellers’ positionality and lived experiences, establishing trust with storytellers, practicing with care, understanding the storytellers’ values, and overall give back to the communities. I strive to accomplish the following transformational justice outcomes, to (1) provide recommendations for a culturally responsive construction management curriculum and (2) to identify possibilities for culturally responsive construction management practices. In order to accomplish these outcomes, I will draw specifically on community-based accountability processes through notions of relationality, responsibility, respect, and reciprocity that I will discuss in the next section.

Community-based Accountability Processes

Community-based accountability processes involve five R's: 1) Respect, 2) Relationality, 3) Responsibility, 4) Reciprocity, and 5) Reflexivity. These elements will be used to gather data about current construction management practices on the Diné Nation. Diné knowledge has been dismissed, discredited, or misinterpreted by the dominant Eurocentric culture for many years; it is appropriate to reclaim Diné intellectual lives by developing new Diné-based practices.

Respect.

Through respect, I will collaborate with the storytellers to learn about the communities in which they are involved to better understand what they value and what traditions they practice (Brayboy et al, 2012). Culture and language is a priority as the research commences within Diné communities and it needs to be practiced with care. Diné have many traditional stories that have not been documented, and out of respect, it is my duty to document any stories and refrain from sharing sacred knowledge. But the overall goal is to thoroughly document the information received and communicate it to the community correctly.

Through respect, I collaborated with the storytellers to learn about the Chinle, Arizona community in which they are involved in to better understand what each storyteller values and what traditions they practice (Lemley, 2018). From beginning to end of the interviews, I had full respect for all storytellers. Each of their stories has a massive amount of data that is so important to my research study.

Each of the storytellers shared each of their four clans in Diné language. By stating their clans in Diné language, this shows a sense of respect and pride. Six of the eight storytellers were 4/4 Diné; one was 3/4 Diné with one clan being from the Ute tribe; and one was 2/4 Diné with the other half as white. The storytellers understood that with their Diné background they have

power. This power was described as culture, language, and family. With one or all of these qualities, the storytellers felt empowered based on their stories.

Respect can be simply described as 1) asking the storyteller for permission, 2) asking the storyteller to lunch or coffee, 3) asking the storyteller to share their story, and 4) thanking the storyteller for their valuable information. At the time of each interview, I was careful to warn each storyteller that some questions would be awkward or sensitive, like sharing their age or their childhood upbringing. I also stated to each storyteller that some questions may sound repeated, but the goal was to get more information as they continued to share their stories.

Respect throughout this process was first- don't look at the individual and make them uncomfortable, especially for a first meeting. Also, I gave the storyteller time to sit with me and introduce themselves in their own way. I explained the process of the study interview and offered lunch and a gift card for their time and valuable information. There was never once any pressure put on the individual. I gave each the opportunity to answer questions as they felt comfortable.

Out of respect, I shared my personal story with the storytellers. I introduced myself in Diné language. I shared who were my family from Chinle until one family member was recognized. Once we found that one relative that is connected or known, it released a moment of ease. By my sharing who I was, where I was from, what I have done in education and in work and what my future goals are, we formed a respectful connection and shared commitment to Diné communities.

Many describe this process as common courtesy on the Diné reservation. It's as if you must provide a full biography of yourself to first gain respect from those you are acquiring information from. But the outcome has many rewards. Each storyteller was a relative to me in

clan relationships or shared sub-community. I gained another family member and out of respect they and I will be recognized and introduced to each other from that day forward.

Each storyteller valued family and their traditional practices. Family was what made them who they are and made them value their Diné culture and language. The respect of our Elders is what guided each of the storytellers to continue to believe in their culture and language. “We respect our Elders and listen to them when they are talking” (Adzaa’ Dugi, 2017).² I was raised with the same principal that we should respect all Elders, and it is good to hear that many Diné still respect this teaching. Our Elders’ knowledge is what continues to enhance our thinking process. This is the greatest respect and each want to continue, this community-based knowledge.

Relationality.

Building relationships is critical in order to establish trust with the storytellers and become aware of issues important to the storytellers in given Diné communities (Brayboy et al, 2012). This study requires support and guidance from Diné communities to create a methodology that will be successful. Understanding Diné provides a great advantage when expressing how certain artifacts affect their thinking.

Many people may assume that a piece of Diné pottery is just art, but until the person hears the stories and meanings behind the pottery, they then can understand why Diné treat pottery as a prized possession or as an enemy. It is not as simple as our ancestors said “to create” or to “stay away” from that, it is a matter of the story behind the artifact that sets the pretense. This is the reason why the relationship between and among Diné and the worlds they inhabit should be ‘closely’ examined before developing any new Diné methodologies.

² Hosteen and Adzaa’ it will be further explained in the author’s note below.

At the beginning of each interview, I understood that as a researcher and a community member that I had to have an “open door and open mind”. I have to be able to use my Diné culture and language background, but at the same time, understand that I have been living outside the Diné reservation for many years, and I have to be sensitive in gaining information for my study. I offered each storyteller the opportunity to help me gain and document information for Diné people. I emailed, called, and texted each storyteller to build rapport and establish trust. I had to be patient and not over step my boundaries. I offered to purchase each lunch and explained the process of the interview beforehand. I gave each the opportunity to choose the place and time of the interview. I wanted to make sure they were comfortable with the process. I don’t know how to explain the feeling, but in Diné tradition, you cannot be pushy, it is all about time and patience.

During the interview, I had to be ready to speak Diné language and show respect for each storyteller. I explained to all storytellers that each question was voluntary; I knew that inquiring about some of the information could be considered intrusive and I wanted them to know they could choose to skip any question. I also explained that my wording in each interview question may sound awkward to them, but consistency and asking the questions the same way was required as a part of my dissertation process. Each storyteller understood that “translation can be misinterpreted in the books”, so we reviewed questions and responses in English or Diné for any clarification (Hosteen Tso, 2017). These explanations and underscoring their voluntary participation helped to make each interview smooth. At the end of each interview, we were acknowledging each other by clanship and speaking Diné language.

It is essential to redefine relationships between and among researchers and the researched to establish truly collaborative relationships in which power is viewed as a shared resource

(Brayboy, et al, 2012). This serves an important role in (re)defining the nature, scope, and function of research such that the needs of communities can be addressed in meaningful, productive, and respectful ways (Brayboy et al, 2012). The community itself provides its own best assessment of their needs; they are fully aware of the challenges, surroundings, and resources. Through relationality, it is important in the way it empowers Diné to share their knowledge and it provides them the opportunity to recommend new ways of learning.

Responsibility.

Throughout the research process, I will strive to ensure more equitable outcomes for the storytellers, and at the same time practice storytelling with care (Brayboy et al, 2012). The study faces cultural and language impediments. It is my responsibility to ensure that I take into consideration Diné feelings during and after the session and recognize what is shared. Diné include their communities “way of life”, which includes all that surrounds them mentally and physically, Hózhó. Each story told carries massive amounts of knowledge, so it is my responsibility to focus the information shared to construction management practices with the possibility of integrating it into a Diné centered curriculum.

Diné people are entitled to have a sustainable process to continue their thinking, planning, life, and fulfillment. By continuing to think, document, and share Diné people knowledge, we will continue to plan and think of new and innovative ways to teach our children. My research will provide an opportunity to create new practices and curriculum for Diné future generations and create Hózhó.

I chose my storytellers based on their age, gender, employment, and Diné background. I was responsible to include a variety of storytellers who spoke from multiple perspectives. In order to gather data for my research study, I wanted to make sure I was diverse in gaining data

from four different generations. I also wanted women's and men's perspective on their academic and employment careers. I chose my storytellers based on their diverse occupations in a construction related field. I also required that each storyteller be a part of the Chinle, Arizona community, so they understood the traditional Diné ways of life from this communities' viewpoint.

My topic affected each of these storytellers mainly through Diné culture and language. Each of the storytellers underscored the importance of the language and culture and the importance of continuing tradition, as noted by the following storyteller "Culture is found in the language" (Hosteen Shirley, personal correspondence, 10/27/2017). By Hosteen Shirley stating this, it meant that I had a responsibility to incorporate Diné language as I documented their stories within my study. All storytellers were open to sharing information in both Diné language and English, to contribute to construction management practices and curriculum. They all felt the need and responsibility to preserve and promote the traditional Diné ways of life.

Reciprocity.

Reciprocity is a way we commit to determining how and why we give back to the communities in which we work in relevant, significant, and meaningful ways (Brayboy et al, 2012). Through this process we are able to provide transformative contributions, the need to sustain and promote the use of Diné language and culture in higher education curriculum, to the Chapter houses. There is an opportunity for the Diné Nation to reform curriculum to value and validate Diné epistemological (ways of knowing), ontological (ways of being), and axiological beliefs (ways of valuing) (Brayboy et al, 2012). As a sovereign Nation, Diné tribe has the capacity to "talk back" to every oppressive system, be heard, and "talk forward" to become the leading voices for their people and their future (Freire, 1970). As a sovereign nation, Diné have

the ability to implement a culturally responsive Diné construction management curriculum and practices (CRDCMCP). Once the knowledge is reclaimed and redeveloped, it will contribute new information to our community members based on their world experiences.

Each storyteller believes in YES, write down our Diné stories and pass on our knowledges. Collectively, I bonded with each storyteller, whether it was community, family, language, education, or culture based. Each storyteller understood my underlying goal of integrating Diné culture and language and informing construction management practices on the Diné Nation. They each believed that it would be successful to implement into a higher education setting.

The “how” to give back to the Chinle community is to document Diné language and practices within the construction management field and implement these teachings to our young. The “why” was answered based on its importance of keeping traditional values and beliefs alive. All storytellers believe that my studies’ focus to inform and implement construction management practices will work, because Diné language and culture will always be significant to the Chinle community. Even though my focus is construction management practices and curriculum, the information gained will be used in productive and meaningful ways. The majority of Diné storytellers, believed that “the information will be lost, if we do not teach our young” (Hosteen Shirley, 10/27/2017). The storytellers want to be able to teach the younger generation with what they have to offer within their stories. The traditional Diné ways of life is found through their stories and what they have learned from their Elders. I want to be able to document these Diné culture and language teachings for our younger generations; even if it is specifying only one topic, such as we are doing in this study.

Reflexivity.

“Reflexivity is about understanding and problematizing the way particular structures and institutions have shaped our view of the world” (Lemley, 2018, p. 8). With this research, we will be contributing to the great change by taking the stories we hear and developing new construction management practices and curriculum that emphasize Diné culture and language. The Indigenous views should be carefully analyzed to benefits the community and not follow the same objectives and goals of Eurocentric and Eurocentric derivative research.

I am providing information as a Diné community member as well as from a CMP perspective, based on what I have encountered in the field. I will also share my educational background and 14 years of experience in the construction industry as a laborer, manager, administrator, and owner. I am ready to challenge the Eurocentric and Eurocentric derivative aspect of construction management education programs and highlight the importance of Indigenous notions because I am committed to creating new opportunities for Diné communities.

Being an educated 31-year-old Diné woman from Chinle, Arizona, I have gained a great deal of respect for Diné ways of life. Growing up on the reservation since birth has given me the opportunity to see what it means to be Diné. I understand Diné hardships; rural living came with opportunities as well as barriers. We had to travel long distances for water, food, and shopping. I remember hauling water for my paternal grandmother and making sure I respected her as I carried out chores at her home. I had to be able to listen to Diné language as I learned from my family experiences. Although I did not fully learn to speak fluent Diné language, I became fully competent. I understand that working on the Diné Nation requires family clanship and comprehension of Diné language. Every experience came with understanding the language and respecting our Elders.

To be Diné to me is growing up with family, land, livestock, farming, culture, traditional ceremonies, language, and respecting each experience. Respect means listening and always doing what we are told. With each experience, we listen, because each task we carry out, there is a traditional Diné reasoning. For example, I learned that with family, clanship, K'ée, is very important. This teaches us respect and provides us knowledge of who our family is, both maternally and paternally. We learn our ancestral stories of where our families lived and learned about our family roles. Diné reasoning behind these experiences is what provides Diné people privilege and power. With all my life experiences on the Diné Nation, I have become a dedicated member of the Chinle Chapter community to help identify how Diné language and culture amongst construction management professionals inform construction management practices and curriculum on the Diné Nation.

Data Sources

I triangulate my data through the following three qualitative sources: (1) storytelling with Diné CMPs located on the Diné Reservation, (2) personal observations of construction projects located on and off the Diné Reservation and (3) Diné artifacts from the storytellers that will help prompt storytelling and understanding storytellers in nuances ways. All this information will enable me to generate stories directly from Diné CMP storytellers.

Storytelling

Diné CMPs will provide data in regards to residency, gender, age, ethnicity, education, employment, preferred language, traditional upbringings, and community involvement. I will also ask the CMPs to define construction management based on their experiences. The storytelling will be limited to one hour sessions. Each storytelling session will be conducted at the storyteller's choice of location, a place where they are comfortable sharing their stories. Each

storyteller story will be documented based on the themes that emerge, therefore, excerpts of the storytellers stories will be used that best reflect each of the themes.

Observations

I will collect notes of my personal observations of the Eurocentric and Eurocentric derivative construction curriculum and various construction projects that will provide data (journal entries) located on and off the Diné Nation. I have obtained a Eurocentric construction management curriculum degree, which I have gained knowledge from a Eurocentric viewpoint. I have worked as a Project Manager and managed projects on the reservation (Kayenta, AZ, Holbrook, AZ, and Pinon, AZ) and within the Flagstaff city limits. I will document daily project observations, worker ethnicity, gender, age, client guidelines and requirements in regards to job progression (codes, schedule, traditional values, subcontractor office location, and cost). By monitoring the job, it will provide information on how different the construction processes are in regards to ethnicity and location.

Artifacts

I will guide storytellers to bring or be ready to describe artifacts (photos, documents, objects) important to them and their work as CMPs. As the storytelling begins, the storyteller will be provided an option to share a photo or artifact that they use as a component that represents how they view construction management practices on the reservation. The component will be documented in regards to its form, age, and what, if any traditional Diné values it represents. The storytelling session may focus on this specific component or it may be just an ice breaker, but it will be a valuable step in developing a relationship and overall gaining respect.

Storytellers

The primary storytellers in this study will include eight tribally enrolled Diné members from Chinle, Arizona Chapter house. Their ethnicity will qualify if a person is 2/4 Diné. The chosen storytellers will have lived on the Diné reservation for at least 10 years to be considered from the Diné Nation. The eight Diné storytellers will also be selected based on age, employment history, education history, and traditional Diné upbringings. These areas will be reviewed in order to determine patterns among the storytellers.

Age Group of Storytellers

The storytellers will vary from age 18 years to 65 years old; I would like to interview at least one Diné from each age group: 18-25, 25-35, 35-45, and 45-65 years old. This diversity provides a variety of information based on differing generational upbringings.

Employment History

The storyteller's job descriptions will vary from administrative positions to on project site labor positions. Administrative positions would be those that are a part of their community development department, zoning and planning departments, business department, and the code compliant department. On site positions would be project managers, superintendents, equipment operators, surveyors, and laborers.

Education History

The storytellers' educational backgrounds will vary from high school diploma to higher education degrees. If they are enrolled or have completed a higher education degree program, we will focus on those with construction management trades, community development, and business management. The higher education institution will be documented to indicate location and program availability.

Diné Knowledge

Finally, each storyteller will be questioned in regards to knowledge of Diné culture and language. It is assumed that each storyteller that has resided on the reservation has some Diné story to tell; in this case, we will require that the storyteller have at least some knowledge of Diné language and culture. The storytellers will be asked how competent and fluent they are in Diné language. Fluency describes their ability to speak Diné language clearly. Competency describes their ability to hear and understand Diné language. Stories will be invited to focus on (a) traditional upbringings, (b) educational philosophy, and (c) employment influences.

Data Collection

Coding and comparison will be used to allow for themes and patterns to emerge from the qualitative data and highlight any inconsistencies that may exist. The goal is to promote social change and provide recommendations that will empower Diné communities to add culture and language to higher education institution curriculum and practices. Qualitative data resulting from the storytelling sessions, observations, and artifacts will be analyzed to determine where Diné and Eurocentric and Eurocentric derivative construction management practices conflict and align.

Coding

As I code, I would also conduct memo-ing to determine what the data says and interpret what it means. I will search for commonalities in themes and codes that relate to Diné pedagogy. Coding will be completed using Microsoft Excel spreadsheets. The spreadsheet will allow me to compare and contrast large sets of data and allows for secondary analysis. Note that when we reflect on a passage of data to decipher its core meaning, we are *decoding*; when we determine its appropriate code and label it, we are *encoding* (Saldana, 2008). The purpose of coding,

recoding, and analyzing data is to find meanings, commonalities, cause/effect relationships, and overall interpret what the data means.

Coding is thus a method that enables you to organize and group similarly coded data into categories or “families” because they share some characteristics – the beginning of a pattern (Sadana, 2008). Using the research question as the base of this study, I would create multiple themes based on Diné perspective on language, culture, construction management practices on the reservation, and higher education curriculum. These themes would continue to be broken down into sub-categories. Overall, we develop a matrix of codes and themes to assist in data interpretation.

Validity

The purpose of the Critical Oral History approach is to be able to explore and recapture Diné voice and describe the meaning and impact of practicing culture and language in a construction management curriculum setting. The study is positioned using an Indigenous framework and methodology and is committed to interrupting the status quo. COH is seeded in this context. COH focuses on representing the people that have been historically marginalized. COH also draws on the communities’ stories and values each member’s stories, which are often unheard or unlistened to.

According to Oelosfe (2011) a key aspect of oral history is the retrieving of memories of the people being interviewed and who are given a chance to convey their story. My research is valid because I am using voices of Diné people represented in the data. Data will be gathered from four different age groups, which will draw on their personal identity and experiences. Diné storytellers will be representing one Diné Nation sub-community and have years of lived experiences to relate the reality of current life and practice on the reservation and border towns.

Each Diné storyteller will have the same critical history (understanding community poverty levels and personal familial hardships) and cultural context (respecting traditional upbringings and language) that supports this study.

Credibility

COH requires multiple views in order to contextualize the stories and create collective understandings versus individual stories, creating a credible database. In this case, the data will be cross checked among the four age groups from the same community. Each of the eight storytellers will be provided the same set of questions, so the data received from the storytellers can cross check each other. COH includes community based accountability, which includes the 4 R's (relationality, responsibility, respect, and reciprocity), so storytellers are empowered in sharing their stories. This element of COH helps to provide credible data from the stories that are told by the storytellers.

Author Note

Diné bizaad involves Diné culture broadly and Diné language specifically. This dissertation presents excerpts from the stories my storytellers shared with me according to identified themes. I present the sections that align with the themes. The full transcripts will be available through Diné Nation Review Board after 2019 (Appendix A). These stories include Diné ways of knowing as well as Eurocentric and derivative construction management practices. These stories may be more coherent to Diné, in both language and content, and may take time for non-Diné to understand.

The naming of storytellers, out of respect, was transcribed using Diné bizaad for man and woman. Hosteen and Adzaa' were used to define gender and was written before each

storyteller's last name. This presents each storyteller with their traditional Diné names, so Diné families can relate to the stories and understand their rationale.

A feature sometimes thought of as a local variation is that of making use of a word in as many situations as possible. It may not always be the best word, but is permissible in the setting. This stretching of vocabulary at times seems incorrect to fluent Diné speakers or to different Diné generations. They can often think of much better ways to express themselves (Goossen, 1995). When the English translation from Diné is read word by word, the translation tends to be quite fuzzy and written in broken English. When writing Diné, what appears to be written in a forward and direct manner in English, Diné begins with a verb followed by a noun.

Although Navajo language is basically the same throughout the reservation, a number of dialectical areas exist. There are also some differences in pronunciation and expression from one clan to another. As with any language, individual preferences are sometimes vigorously defended (Goossen, 1995).

Summary

The main objective of this study is to be able to relate to Diné people, understand their values, and use this information to collaboratively empower the community to identify ways to continue to self-determine and thrive. A TribalCrit framework (Brayboy, 2005) necessitates that Diné people contribute based on their worldviews and experiences. TribalCrit will be used in chapter four to analyze the four pedagogies: 1) Thinking (Nitsahakees), 2) Planning (Nahat'a), 3) Life (Iina) and 4) Fulfillment (Siihasin), as presented in chapter two. COH methodology necessitates that I, as the researcher, use critical inquiry to analyze data and highlight any inequities that have marginalized Diné people. Diné need to contextualize their views and then

responsively analyze their stories so that the process and outcomes benefit the people in the community instead of oppressing them.

Overall, we remain hopeful that research methodologies centered on promoting cooperative, collaborative efforts between formally trained researchers and Indigenous communities can serve an important role in (re)defining the nature, scope, and function of research such that the needs of communities can be addressed in meaningful, productive, and respectful ways (Brayboy et al., 2012). Only the sovereign Diné community itself can provide the best assessment of their needs to benefit the seventh generation; they are fully aware of their own history and epistemology as well as challenges, surroundings, and resources. As we continue to move forward, we focus on Diné constructs in relation to construction management and how it could influence the creation of a construction management curriculum, which in whole, creates survival knowledge.

CHAPTER FOUR: Findings

As I continue to gain support from Diné people, they remind me of the good that I am doing, but at the same time, the forces that I may encounter. Many of the Elder's children, who are now 45 years and older are afraid. They are afraid of how much valuable information will no longer be available to their children. They are afraid to lose Diné language and cultural traditions that were taught by our Elders. As I begin to think about it, it is scary, because we cannot ask anyone after the Elders are gone. My children would not be able to get traditional stories from our Elders, because their stories will be gone. I am committed to documenting our Elders stories for the seventh generation.

I attended a ceremony within the last year, and at this ceremony, another medicine man stated the same fact that we will lose information if we don't pass it on to our children. He talked about his father and grandfather and the traditional knowledges that they taught him. I find these types of stories very admirable and educational, being that I never got to have that experience with my grandparents because they passed on before I was old enough to comprehend their stories. This itself shows that once someone passes on, the information carried on only by those that have heard it. I wonder how many Diné people that get to hear the traditional stories feel a responsibility to share them with the youth so they can continue to be carried on.

My goal is to gather these stories and honor them by passing them on orally as well as documenting those that I have permission to, in order that future generations may prosper from this knowledge. It may be considered non-traditional to some, but the outcome will have many rewards to Diné in the future. The stories we share between our Diné communities is truly understood by Diné themselves, being that it is told for them and helps to provide Diné Hózhó (Jumbo-Fitch, 2018).

This study is committed to rethinking the importance of integrating Diné language and culture practices among construction management professionals. Furthermore, this study is committed to reviewing how the construction management professionals' practices are influenced by Diné language and culture. Most importantly, as noted in chapter one, this study is committed to answering the following research questions:

1. How do Diné language and culture amongst construction managers and administrators inform construction management practices on the Diné Nation?
2. What implications does Diné culture and language have for higher education construction management curriculum and education?

The findings presented in this chapter are the result of eight interviews, with Diné Construction Management Professionals (CMPs) as described in chapter three, all gathered during Fall 2017 (see chart 4-1). In this chapter, I will provide my interpretation of the storytellers' stories. As described in chapter three, storytelling is immensely important to Diné people. Once each storyteller started storying a topic, they continued to provide valuable information based on each of the themes: language, culture, family, and community. A few of the storytellers shared certain words of their stories in Diné language to better translate the traditional meanings. These parts will be documented in Diné language with noted translations as these passages are most accurately conveyed in Diné language.

I intentionally invited storytellers who were diverse based on gender, age, employment, and education. Of the eight storytellers, two were women and six were men. The age groups varied with one ranging from 18-25 years old, three ranging from 26-35 years old, one ranging from 36-45 years old, and three ranging from 46 years and older. All storytellers have resided in northern Arizona for more than ten years. Two are elected officials, two are in management

positions, two are in specialty fields, one is a planner, and one is currently in retail. Each of the storytellers attended high school on the Diné Nation, and seven of the eight attended a technical school or higher education institution. All storytellers are from a Diné background and have experience working in construction related fields; administration, labor, specialty, or management. In the data collection, I used pseudonyms that used Hosteen for male, then a last name and Adzaa' for female, then a last name (see chart 4-1). Hosteen and Adzaa' are defined address the storytellers as male or mister and female or misses per their gender.

	Name	Gender	Age	Navajo	Chinle Residency	Education	Employment	Navajo language
1	Hosteen Shirley <i>Tódich'ii'nii</i> <i>Tábqahá</i>	Male	69	100%	Life	High school, college, universities (honorable doctorates), boarding school	Apache County-Elected official: 23 years	100% fluent and competent
2	Hosteen Tso <i>Tsénjikini</i> <i>Tódich'ii'nii</i>	Male	65	100%	Life	High school, college, universities (masters), boarding school	Chinle Chapter-Elected official: 36 years	100% fluent and competent
3	Adzaa' Dugi <i>Nóóda'i dine'é</i> <i>'Áshjiji</i>	Female	57	75% Navajo 25% Ute	6 years+	High school, university (bachelors in progress) boarding school	NTUA District Manager	100% fluent and competent
4	Hosteen T. Begay <i>Tó'aheedliinii</i> <i>Tsénjikini</i>	Male	44	100%	4 years+	High school, university (bachelors), boarding school	Chinle Chapter Planner (administration)	80% fluent 100% competent
5	Hosteen D. Begay <i>Kinyaa'aanii</i> <i>Mq'ii deeshgiizhiiii</i>	Male	35	100%	34 years	High school	Metal fabricator/combo welder	50% fluent more competent
6	Hosteen Jumbo <i>Kinyaa'aanii</i> <i>Mq'ii deeshgiizhiiii</i>	Male	29	100%	18 years	High school, tech school	ADOT technician	25% fluent more competent
7	Hosteen Horton <i>Tótsohnii</i> <i>Bilagáana</i>	Male	28	50% Navajo 50% White	13 years	High school, university (bachelors)	Project Manager	50% fluent little competent
8	Adzaa' Jumbo <i>T'í'izi láni</i> <i>Mq'ii deeshgiizhiiii</i>	Female	23	100%	18 years	High school, university (bachelors)	Part time retail, previous construction	25% fluent more competent

Note: Maternal and Paternal Clans noted, in order, below each storyteller's name

Chart 4-1: Storyteller Data

Out of respect of our Elders, I'll introduce them first. Hosteen Shirley, a full Diné, fully believes in his Diné language and culture. He is 100% fluent in Diné language and practices both daily on Diné Nation. He has represented Diné Nation as a leader and family member, and continues to influence his Diné community as the Supervisor at the County Department. Hosteen Tso, a full Diné, lives through the traditional Diné ways of life. He is 100% fluent in Diné

language and has lived on Diné Nation all of his life. As a committed member to the community, he works with the local Chapter house in the Land Remediation and Grazing Department.

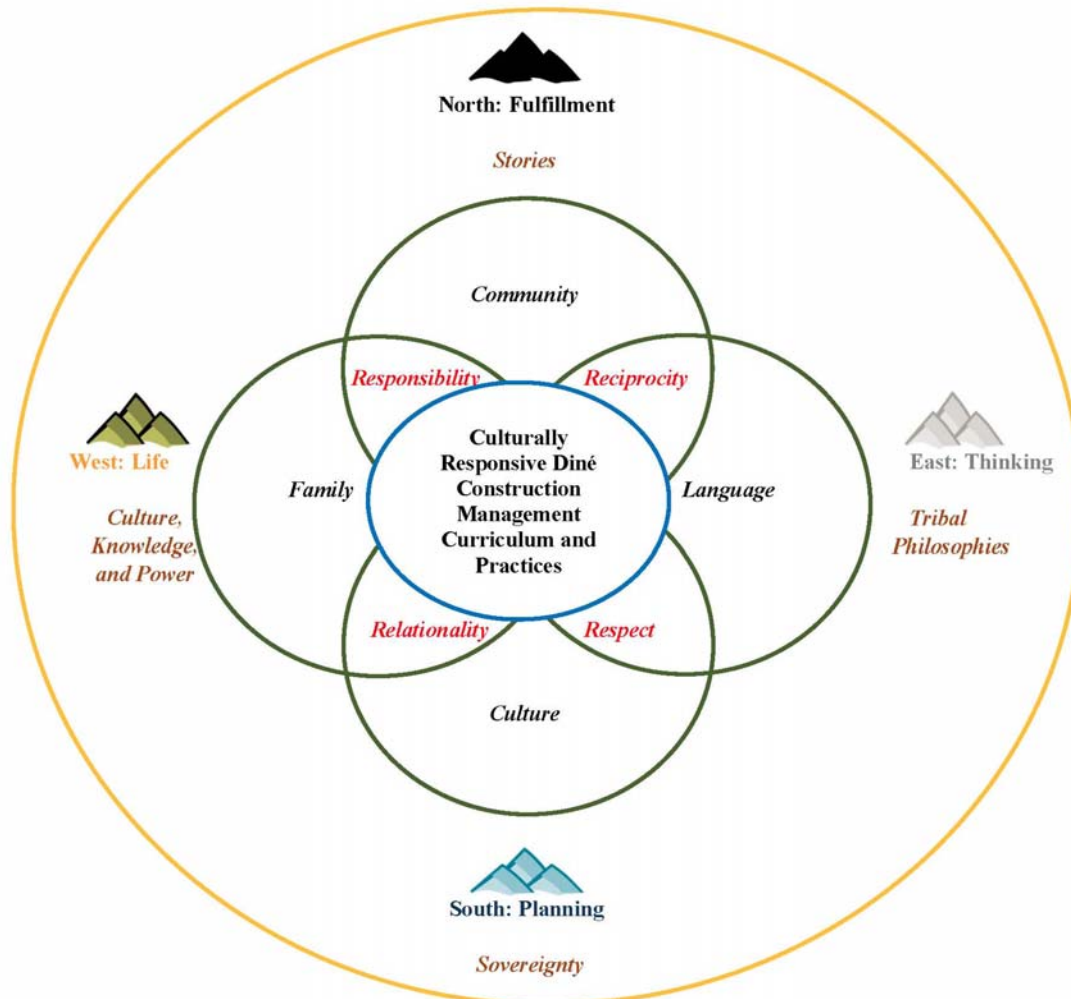
Adzaa' Dugi, a 75% Diné and 25% Ute, highly respects her Elders teachings. She is 100% fluent in Diné language and practices her Diné culture and language with family and co-workers. As the District Manager of Navajo Tribal Utilities Authority, she fully embraces and practices her Diné language. Hosteen T. Begay, a full Diné, respects his Diné culture and language. He is 80% fluent in Diné language and believes in teaching others in the local community. As a Planner at the local Chapter house, he is able to work with the people of the community and practice culture and language.

Hosteen D. Begay, a full Diné, is committed to sharing his Diné culture and language. He is 50% fluent in Diné language and shares his knowledge with his own children. He is currently residing off Diné Nation, working as a welder and continues to use his culture as a career reference. Hosteen Jumbo, a full Diné, left Diné Nation after high school. He is 25% fluent in Diné language and still believes in preserving his Diné culture. As a technician, living off Diné Nation, he reflects on how certain objects and people remind him of his Diné heritage. Hosteen Horton, a 50% Diné and 50% Caucasian, has observed years of Diné culture and language from his childhood friends and family. He is 50% fluent in Diné language. Although, his family was not keen to Diné altogether, he has massive respect to still learn and embrace his Diné heritage as he continues to work as a Project Manager off Diné Nation. Adzaa' Jumbo, a full Diné, is a young woman who respects her traditional Diné ways of life. She is 25% fluent in Diné language and resides on and off Diné Nation. She has used her Diné culture to guide her in academia and future career goals.

Research Design

Each of the eight storytellers provided valuable stories to empower Diné communities and Eurocentric curriculum to reconsider construction management practices and curriculum. Each contributed to my understanding of four Diné pedagogy philosophies: 1) Thinking (Nitsahakees), 2) Planning (Nahat'a), 3) Life (Iina) and 4) Fulfillment (Siihasin), as presented in chapter two. These four pedagogies will be analyzed through four tenets of tribal critical race theory (TribalCrit) (Brayboy, 2005), which include community based accountability (the 4 R's: relationality, respect, and responsibility) as described in chapter three (Brayboy et al, 2012). Lastly, I have included my Critical Oral History methodology (Lemley, 2018), specifically drawing on community-based accountability and the 4 R's: relationality, respect, responsibility and reciprocity. These four Rs explain the process I used on how I gathered the storyteller stories. Below is a graphic that illustrates the interconnected relationship between and among all these various philosophies, approaches, and tenets (see Figure 4-1). I intentionally focus on four philosophies, four themes, four of the TribalCrit tenants, and four R's in order to honor Diné philosophies revering this number.

Diné have recognized the number four in many ways since the creation stories were told. There have been the four worlds throughout Diné creation stories. The four worlds created life, peace, happiness, and fulfillment for Diné. Through each world traveled, Diné were given different necessities. These necessities were used to help Diné adapt and change. Now, out of respect, the number four is used throughout this study to honor Diné culture.



* The Diné Creation Stories Influences All: Four Diné Pedagogy, Four Indigenous Concepts, Four TribalCrit Tenants, and Four R's

* The placement of my R's (Respect, Relationality, Responsibility, and Reciprocity) was driven by my storytellers

Figure 4-1: Culturally Responsive Diné Construction Management Curriculum and Practices (CRDCMCP)

Each story shared was powerfully multi-layered in meaning and will be honored and presented based on the four different Diné pedagogy philosophies: 1) Thinking (Nitsahakees), 2) Planning (Nahat'a), 3) Life (Iina) and 4) Fulfillment (Siihasin). This is the outer ring on the graphic, represents the four sacred mountains. Each philosophy is based on Diné philosophies that are heavily informed by Diné language and culture. The philosophies will be further presented through four Indigenous concepts I identified as prevalent themes among and between

the eight interviews: 1) Language, 2) Culture, 3) Family, and 4) Community (See Figure 4-1). These four concepts are captured in the green inner circles. The Figure 4-1 will be presented first from the East direction in order to reflect the Diné creation stories, moving into the fifth world as stated in chapter two (Figure 2-1). I begin with language in order to highlight the importance of translation and meaning of each storyteller's story. Second, is culture, being it provides the meaning of Diné existence. Third, is family, as they promote positivity and guide Diné. Lastly, is community, as it relates to the overall needs and supports the preservation and promotion of Diné.

Based on recurring themes that resonate with TribalCrit foundations, I will also analyze the stories each storyteller told about themselves and others with the following four TribalCrit tenants which are also shown in the outer ring of the graphic. These include (1) Indigenous peoples have a desire to obtain and forge tribal sovereignty, 2) The concepts of culture, knowledge, and power take on new meaning, 3) Tribal philosophies, beliefs, customs, traditions and visions for the future, and 4) stories are not separate from theory, they make up theory) (Brayboy, 2005). TribalCrit recaptures Indigenous ways of life (Brayboy, 2005). Although sometimes we fail to express ourselves in ways that may challenge dominant societies' ideas about who and what we are supposed to be, how we are supposed to behave, and what we are supposed to be within the larger population (Brayboy, 2005). The Diné Nation, each generation, remains strong and each of the storytellers' interviews shows these strengths through the TribalCrit tenants. Through the four tenants I will underscore the strengths and acknowledge struggles.

To illustrate the multiple layers as shown in the graphic I will share each layer in order. First, I will present how I use Diné pedagogy philosophies (representing the four sacred

mountains) as an analytic tool to illuminate the language in the storytellers' voices. I will further present these philosophies based on the storytellers' stories and further study through: Language, Culture, Family, and Community (inner green circles). Next, I will compare the TribalCrit tenants (in the outer ring) to the four Diné pedagogy philosophies (four sacred mountains) to identify any connections and disconnections as well as any significant anomalies. This process helps to determine where the storytellers aligned or differed based on their intersectional identities (gender, age, employment, and education). Diné pedagogy and TribalCrit empowered me to translate and interpret the data. Simultaneously, I draw on respect, relationality, responsibility, and reciprocity from community-based accountability (highlighted red) in Critical Indigenous Research Methodologies (Brayboy et al, 2012) to explain the data collection processes as stated in chapter three (See Figure 4-1). I will synthesize the stories at the end to identify construction management practices and curriculum that storyteller's highlight which leads to the center of the figure and proposes culturally responsive Diné construction management curriculum and practices (CRDCMCP).

Diné Pedagogy Philosophy

Diné pedagogy philosophy, represents the four sacred mountains, is centered on four basic life processes, which represent the four cardinal directions. Thinking (Nitsahakees) represents dawn, and white shell. Planning (Nahat'a) represents the day, and turquoise. Life (Iina) represents dusk, and abalone shell. Fulfillment (Siihasin) represents the night, and obsidian (shown in Figure 4-1). The four sacred stones represent the four cardinal directions and traditional story spoken is the first man and first woman used the four stones to create the first Diné Hogan. The philosophy is contextualized by Diné creation stories as documented in chapter

two. It is important that as I analyze the storytellers' stories, I draw on Diné creation stories, as these creation stories are what make meaning of the storytellers stories.

The four philosophies can be defined in Eurocentric and Eurocentric derivative terms and used in many different philosophies, but in this study, I will use them in relation to the Diné creation stories. These philosophies are a part of Diné culture to help guide Diné communities. The responsibility is given to each family to relate to, respect, reflect, and reciprocate Diné language and culture. Although each storyteller's story may be told differently, each story references culture, knowledge, and power, which will be discussed through TribalCrit themes of tribal philosophies, sovereignty, culture, knowledge, power, and stories (Brayboy, 2005).

The stories have much importance in regards to how Diné practices are carried out. They provide guidance for Diné through thinking, planning, life, and fulfilment philosophies. Throughout this study, I will be sharing the storytellers' stories and simultaneously reflecting on how Diné history has influenced Diné construction management practices and curriculum throughout the different generations.

Based on their individual stories, each of the eight interviews will be related to each of four Diné philosophies. Not all interviews completely correspond to all of the four philosophies, but excerpts within each interview demonstrated connections to at least one philosophy. The four philosophies heavily focus on Hózhó, discussed in chapter two, which has valuable meanings. Many translations of Hózhó refer to balance, happiness, and peace of mind; but others simply define Hózhó as "being in the positive way of life" (Hosteen Tso, personal correspondence, 10/26/2017). This meaning heavily supports Diné philosophy and overall helps to identify the importance of each of the four philosophies.

Nitsahakees (Thinking)

Thinking is defined as our consciousness or thought (Diné Community College, 1992). In Diné way of thinking and translation, there are multiple meanings for one word; each translation varies based on the context. I chose the interview excerpts presented in this section that best described Diné way of thinking; each of the storytellers included in this section defines their way of thinking differently. All eight storytellers have a Diné consciousness, meaning that each believe in their traditional Diné ways of life. Four of the eight storytellers, who were from the oldest generation interviewed, had the most profound explanations of their traditional Diné upbringing. Each of these storytellers told a story that describes who they are and how they think from a traditional Diné way. The younger generation provided less elaborate understandings of their Diné consciousness. I will honor and respect Diné teachings by presenting through the four themes (language, culture, family, and community), they help to tell each storytellers story that emphasizes thinking.

Language.

Adzaa' Jumbo shared, "by knowing Diné language, I am able to help translate for my employer" (personal correspondence, 11/8/2017). Adzaa' Jumbo sees that Diné language opens doors for more opportunities. She also understands that by using her Diné language, she helps to interpret and make meaning of her Diné culture. Hosteen D. Begay shared the following, "I get recognized for understanding and speaking Diné language at work" (personal correspondence 11/09/2017). Hosteen D. Begay also describes his cultural teachings as being around the Diné language at grandma's house or being exposed to the different Diné ceremonies or practices. Both storytellers learned the Diné language by observation from living on the Diné Nation and apply it at home and work. This helps them both to represent their people in a positive way. By being able to use and represent Diné language, they think on what has influenced them to learn

the language in the first place; this gets them thinking on how important their Diné ways of life are and how grateful they are to be able to apply these ways and life and share their culture with other people. It is hard to learn Diné language, let alone not be able to gain the language from family. The next storyteller shared how he learned Diné language. Although it was not easy, he was able to learn and become proficient with the language.

Hosteen T. Begay shared the following,

But unfortunately my traditional teachings didn't encompass the language. I contribute that to my grandparents, who were products of the traditional boarding schools. Not being able to speak the language at boarding school. This contributed over to my parents. I picked up Diné when I was sent off to see my paternal grandparents during the summer (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay uses his traditional Diné experiences with his grandparents as a strong learning point for both Diné culture and language. He identified a struggle that his grandparents were not able to acknowledge and use their Diné ways of life in boarding schools due to oppression inflicted on them by the Europeans. This oppression was carried down to his parents, so he was unable to fully comprehend Diné language at home. Even though his grandparents attended boarding school and were forbidden to speak Diné language, years later they were still able to teach him the traditional Diné ways of life through farming and livestock. Through these ways of life, he obtained certain Diné meanings through his grandparent's stories and began to understand the importance of Diné teachings. Today, he continues to learn Diné language and now teaches his own children. The language is what he finds most critical when presenting to his family and the community members. Diné language helps to provide meaning and clear interpretation of Diné culture.

Culture.

Hosteen Shirley shared the following,

[Culture] is very important. It is who I am. Culture is my way of life. The traditional Diné ways of life defines me. Everything else is considered foreign. Culture is found in the language. I learn from my wife's father, a medicine man, traditional prayers and ceremonies ... I am trying to learn from him to preserve and promote traditional Diné ways. Working on Diné land; you must know the culture, Diné ways, and the Diné language (Hosteen Shirley, personal correspondence, 10/27/2017).

Hosteen Shirley expressed many times how Diné culture and language influences his thinking. This is the only way of life he was exposed to as a child growing up on the Diné Nation. He learned to respect this way of life. His daily routines are influenced by Diné culture and language. He applies culture to learn more and make new meanings of “why” we speak certain Diné words, and “why” we practice certain ceremonies. He wants to continue to preserve, promote, and share his Diné thinking with others as a Diné Elder. The next storyteller also understands how her traditional Diné childhood has also played a role in her Diné thinking today.

Adzaa' Dugi shared the following,

I was the youngest of five kids. I had no dad, he was deceased. I was raised by my grandma. We were raised with a traditional life; no utilities, hardships, herding sheep, hauling drinking water, and having no food. We had to get up early and staying busy all throughout the day. We worked hard with these teachings. No challenges existed while growing up; we had to make ends meet (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi traditional Diné upbringing affected her Diné thinking in a positive way. As a product of the boarding schools, she had to work extra hard to maintain Diné culture and language. She explained how she reminds herself that with her traditional upbringing, she cannot let it overcome her. She reminds herself that she is a strong, Diné woman. She has always been influenced by her Diné culture. Adzaa' Dugi represents culture and she believes that with her cultural strength, she can overcome many obstacles. She takes every challenge that she has faced as a reason for her success. Although, she states that every step was hard to take, she understands how much commitment is required to get where you want to be in life. She uses her actions to be a role model for her family and her Diné people. The next storyteller understands the importance of sharing his Diné thinking as well and being a role model for his nieces and nephews.

Hosteen Jumbo shared the following,

My family used to carry out certain traditional events. I remember the language spoken and family duties given. Culture is very important. The ways need to keep being passed down. The Diné people attitudes may never change, but it is what defines the Diné people. The Diné have their set ways and that is what makes us stronger” (Hosteen Jumbo, personal correspondence, 11/9/2017).

Hosteen Jumbo story focuses on the importance of preserving Diné culture. He is influenced by his culture. As another force of oppression, Hosteen Jumbo moved off the reservation after high school in order to obtain higher academic knowledge. Through his experiences of oppression, he still holds onto the traditional Diné stories from his childhood. Hosteen Jumbo understands grandma's stories and ways, but at the same time shared that we have to adapt in order to have employment in his desired field. But his underlying reasoning will always refer back to

respecting his traditional Diné ways of life. The next storyteller also respects her Diné traditions and uses her Diné teachings to guide her.

Adzaa' Jumbo shared the following,

Every morning at dawn, I pray with white corn to the east. I use my Diné morning prayers to help guide me physically and mentally. I am empowered by the Diné creators. I use the Diné creators to guide me on my daily paths. I went to Chinle High School, and received my Bachelors in Criminal Justice at Northern Arizona University, AZ in 2016. I find that this small use of culture has continued to guide me in the right direction in my life (Adzaa' Jumbo, personal correspondence, 11/08/2017).

Adzaa' Jumbo story was focused on how she uses her morning prayers to guide her in her thinking. Her morning prayer is her most prized cultural possession. This is what she was taught to uphold within her culture. She was taught to always refer back to our creators and to use them as protection and guidance. She continues to use her traditional ways of life to guide her through her academic and employment endeavors. Similarly, the storyteller below shared how he was exposed to Diné culture and he continues to learn from it.

Hosteen Horton shared the following,

There are many different Diné philosophies. I was exposed to culture classes as a kid. I learned stuff from my Diné families and friends. My best friend was traditional. I have an overall respect and understanding. There is lots of philosophy, such as male and female roles (Hosteen Horton, personal correspondence, 12/05/2017).

Hosteen Horton learned traditional Diné values through observation of his friends in K-12 school on the Diné Nation. Hosteen Horton experienced oppression through the lack of family teachings. His maternal side was not keen to teaching Diné philosophies, so he learned through

observation from his friends and community members. He understood the need to thrive and learn his Diné culture, even though he was not directly exposed to culture at home. Throughout his interview, he continued to acknowledge that there are many different Diné cultural philosophies. He continues to observe Diné and sees the connection of culture and family. Diné culture promotes positivity to family.

Family.

Hosteen Tso shared the following,

I was raised by my grandmother and was taught traditional Diné ways of life. All I did was read the bible and herd sheep. I learned that everything has to be positive. K'é, Family, is described as the constitution of the Diné people. It's encouraging the way of life with positive emotion; through what we say and think. Our creator, Nadehel', provided our universe and it's all natural, so we must treat everyone and everything with respect, because were all connected (Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso's Diné beliefs are heavily influenced by his Diné family. Hosteen Tso reflects back on how his grandmother was the key family member that taught him about his traditional Diné ways of life and has a lot of respect for her. He experienced oppression by having to read the bible as he herded sheep. The bible was the first Eurocentric text introduced to the Diné communities and may have been the beginning of the boarding school era. Throughout his interview, he was persistent in promoting positive emotion. He states that this helps remind people of their family, their duty, and overall guides their thinking. He understands the underlying reasons of the traditional creation stories, in that we will continue to respect our mother earth and be thankful for all that she provides. Hosteen Tso truly understands and

respects Diné culture and traditions. He believes in presenting himself with Diné language and supporting Diné clanship rights. The next storyteller resembles Hosteen Tso thinking on how important family teachings are.

Hosteen Shirley shared the following,

I was raised by my great grandmother and through her teachings; I learned respect for the Diné language and culture. I learned that family is the center of each community. I remember in grade school and boarding school, I was highly discouraged by the teachers to not speak the Diné language and not practice or acknowledge Diné culture. I attended boarding school, Intermountain school, UT, Chinle High School, received Bachelors in Business at Albany Christian University, TX, received a Master's in Social Work at Arizona State University, AZ in 1978, and received a Doctorate of Human Letters at Northern Arizona University, AZ in 2005. Through my years of learning, I have stuck to my Diné roots. I commend the Diné people I have worked with and also my family that continues to teach the sacred Diné ways (Hosteen Shirley, personal correspondence, 10/27/2017).

Like many of the Elders, Hosteen Shirley faced oppression in his early years of Eurocentric boarding school and was not allowed to practice Diné traditions and language. Hosteen Shirley family and community members highly encouraged him to be a leader, or as he describes in Diné language, Nabaa'hi', "we are warriors" (Hosteen Shirley, personal correspondence, 10/27/2017). Hosteen Shirley, like many others from his generation learned that Diné way is the only way. There is no question that his family teachings are what he uses to make new meaning, both at work and at home. These family influences continue to motivate him and guide him. Similar, the storyteller below shared how his family influenced his Diné thinking.

Hosteen T. Begay shared the following,

My maternal and paternal grandparents taught me the meaning of respecting my Diné tradition. My paternal side taught me the traditional reasoning behind farming and livestock. I grew up with traditional teachings. The concept of livestock was around me 24/7, with cattle, horses, and on my paternal side was sheep. Primarily cattle. My paternal side was planting of corn and squash. I got a different variation depending on the side of the family I was hanging out with (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay heavily focuses on family teachings. He believes in instilling traditional beliefs in children, both Diné and non-Diné. Like the other storytellers, Hosteen T. Begay understands the importance of sharing his Diné knowledge in order to preserve it for the younger generations. By learning Diné language and cultural values from grandparents, he finds it important to teach to his children, as their parent. He respects his experiences with livestock, planting, family, and language and understands them as Diné way of life. Many stories that his grandparents told him while he was growing, in regards to how and why to care for livestock and plant certain vegetables and fruits. The teachings came with learning about the mother earth; the importance of water, land, and air; and why we respect our animals. These traditional stories provide meaning for the next generation to use and adapt from. The goal is to carry on the stories and pass them onto the youth. As the next storyteller states, the stories are what are most respected in Diné teaching and thinking.

Adzaa' Jumbo shared the following, "I listen to my mom, dad, and grandparents about culture. I believe in implementing Diné culture like my parents and grandparents" (Adzaa' Jumbo, personal correspondence, 11/8/2017). Adzaa' Jumbo has been following the traditional

route of always respecting and listening to your Elders. In this case, she states her parents and grandparents as her role models in learning and practicing the traditional Diné ways of life. Her family taught her to respect and appreciate Diné living through traditional ceremonies. It helps her to see the importance of teaching others. Similar to many other peers in her generation, the next storyteller sees the importance of sharing traditional Diné knowledge with family.

Hosteen D. Begay shared the following,

I hold onto the traditional Diné ways of life for my boys. The boys' grandma continues to teach my kids the traditional Diné ways of life. We go to ceremonies and participate with kids in events. Grandma speaks to kids. Kids are happy (Hosteen D. Begay, personal correspondence, 11/09/2017).

Hosteen D. Begay promotes his family teachings. He is heavily influenced by his family, and being a good role model for his children. He understands that grandma stories are very valuable in teaching the youth. With that, he has gained great respect and is thankful for grandparents in his family. Although, not all grandparents are the same, the next storyteller still took it upon himself to learn about his traditional Diné ways of life.

Hosteen Horton shared the following,

My grandfather did not share his Diné culture and language with me or my mom. My grandfather was a veteran and moved off the reservation. There was no real explanation, but as a child, I didn't ask. I learned most of the traditional ways through my friends. I had a single mom, so I saw the female role more stronger-oriented. I have high respect for Diné women and what they do for their families. Family orientation will always stay with me (Hosteen Horton, personal correspondence, 12/05/2017).

Hosteen Horton defines Diné as a family-based culture, based on what he saw from his mother and friends. He again notes oppression through the loss of Elder teachings from his own grandfather. He sees all Diné as family. He learns from Diné that there must be strength to live and lead on the Diné Nation. He understands that Diné need to be mentally strong within their roles to care and provide for their families. Together Diné need to be able to plan and provide more cultural meaning, to provide a better life for the next generation. To Diné, it takes a community effort to teach and guide the younger generations.

Community.

Hosteen Tso shared the following,

My family was a part of the community planning, farming, and grazing process. This influenced me to be in this position. I attended Chinle boarding school, Chinle High School, received my Masters at Eastern Arizona College, and attended several multiple colleges (Sheraton, WY, Northern Arizona University, AZ, Diné Pioneer College, AZ, and Diné College, AZ) and I am continuing my education to date at Diné Technical University, AZ. There is too much negative thinking now in the Diné community. It should always be taught in the positive mindset, like how grandma taught me. I use my experiences to try and help the Diné people adapt and change for a better future (Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso family was given a community role many years ago. This role has carried on to what he supports in office today. He uses his experiences, but at the same time is adding onto his education to turn around and teach Diné people. Hosteen Tso wants to remind his people that as a Diné member, we need to first acknowledge all of life with positive emotion. With an intentional focus on thinking positively, we can all work together. Similar to the next storyteller,

it is important to conduct traditional ways of life with community members in order to continue promoting Diné thinking.

Hosteen Shirley shared the following, “I attend ceremonies within the community, such as sweat, and we do a cleansing with herbs to maintain good health. Throughout these major ceremonies, all families within the community helped” (personal correspondence, 10/27/2017). Hosteen Shirley understands the traditional Diné stories told by the Elders and uses them as a guide to help him translate meanings of traditional Diné ceremonies. He believes strongly in Diné language and the influences they make. He very much respects what he has learned and wishes to pass his teachings on to the younger Diné generations. Similarly, the storyteller below shared how she was exposed to different community influences.

Adzaa’ Dugi shared the following,

I was raised by my grandmother and moved a lot around the Diné Nation. I got to experience different community traditions. I remember having hardships and this taught me to be a stronger person. I attended boarding school and Utah public schools. I am currently working on my Bachelors in Business Administration at Grand Canyon University. I reflect back on my upbringing, and use these experiences to guide me at work. I take pride in being a Diné woman in a management position. I understand that my hardships and the Diné language is what helped me succeed (Adzaa’ Dugi, personal correspondence, 11/11/2017).

Like much of the older generation, Adzaa’ Dugi lived in multiple Diné Nation communities and experienced many hardships. These hardships (oppression) are what motivated her to better Diné thinking. As one of the few Diné women in a construction management position, she learned that the hardships she experienced can provide a lot of positive outcomes. They also motivated her to

learn more of Diné language and use Diné language to present her findings and recommendations to the community members. By implementing Diné language at work, she has gained respect from her male employees. The next storyteller also shared how using Diné language helped her.

Adzaa' Jumbo shared the following, "With my background, I speak at schools or to the community. I inspire the youth with what I have learned from my parents and grandparents. By implementing culture, this helps you develop skills" (personal correspondence, 11/08/2017). As a younger generation Diné woman, Adzaa' Jumbo is beginning to see what she can share and provide for her community. As a role model from her previous community presentations, she is already an empowered as a Diné woman. These life experiences continue to help motivate her to be proud of her Diné community values. She represents her Diné language and culture; it helps her to be more focused. As another younger Diné, the storyteller below also shared how he still respects his Diné community.

Hosteen Jumbo shared the following,

I attended Chinle High School and graduated from Universal Technical Institute, CA in 2007. I may have moved off the Diné reservation, but I still see language and community very important to the people. I see the differences in climate and how the reservation is never an easy place to live, but it will always be my home. I honor our mother earth and recognize the good she provides the Diné people. I want to encourage the Diné people to continue to value and care for the land. The Earth provides resources for our everyday traditions (Hosteen Jumbo, personal correspondence, 11/09/2017).

Like the majority of young Diné students that graduate from high school, Hosteen Jumbo chooses to live in a border town, so he is close to home and Diné culture. As he continued to

describe the Diné Nation, he describes the harsh weather conditions, specifically the mud, and difficulty of trying to make ends meet, financially. Even though he resides off the Diné Nation, he is still committed to community and culture and recognizes it through the Earth. These experiences remind him of the (climate and financial) challenges that exist in communities on the Diné reservation. But like many of his generation, he moves and resides off the Diné reservation for employment. Even though he lives off the Diné reservation, he still believes in educating other Diné members. In a similar way, the storyteller below shared his story of the traditional Diné ways of life he was exposed to within his local Diné community.

Hosteen D. Begay shared the following,

I had full exposure as I was growing up in the local community. I was happy that I got to experience Diné ceremonies, hear and speak the Diné language, butcher sheep with family, and I hope to pass these on to my boys. I attended Chinle High School and I learned different trades throughout the years. I use my traditional Diné teachings to help me at work. I am proud to show my community that by having a Diné background, I gain more respect (Hosteen D. Begay, personal correspondence, 11/09/2017).

Hosteen D. Begay highly reflected on his Diné upbringing and how it has continued to guide him to be a role model for his children and hometown. His Diné community's culture and language empowers him and guides him to be a positive influence on many others of his Diné peers. The storyteller below shared a similar story of how his traditional thinking and upbringing has guided him to be a mentor for the Diné community.

Hosteen T. Begay shared the following,

I attended Crownpoint High School, NM, Northern Arizona University, AZ, New Mexico State University, NM, and received my Bachelors in History at University of New Mexico

in 2000. I learned the majority of the Diné language at the University, in which I was disappointed to learn off the Diné Nation. During my younger education, I was forbidden like many of those from my generation to speak Diné language at school. These experiences guide me today to be a mentor for my children as well as my community (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay experiences in learning Diné language off Diné nation is what influences him to deepen his commitment to community and family and present to Diné members. The oppression of his grandparents was carried through his parents' generation and his own. Hosteen T. Begay family was so oppressed that they began losing their Diné language, which forced him to learn Diné language elsewhere off the Diné nation. He does not believe that a Diné should have to be forbidden from learning their own language. They should be able to learn from their family and not be afraid to present and represent themselves with Diné language. As the storyteller shared below, Diné learn from sharing with one another. By one speaking Diné language, others become influenced to commit to maintaining community and learn the heritage and how Diné ways of life came about.

Hosteen Horton shared the following,

I attended Chinle High School and received Bachelors in Criminology/Criminal Justice at Arizona State University in 2012. I value how the Diné people support one another in every setting. The Diné communities are strong when they work together (Hosteen Horton, personal correspondence, 12/05/2017).

Hosteen Horton understands the need to support his community and acknowledges that they should have the ability to continue to work together as a nation. He believes in Diné and that they are able to empower one another through their actions. He has observed on many occasions

that Diné support one another in their daily routines. Although individual Diné may not acknowledge or notice their actions, they are providing a difference and inspiring others to think, act, and learn what it means to be a Diné.

Thinking Summary

Diné thinking always reflects the origins of the creation stories. The creation stories influence Diné culture and knowledge in meaningful ways. Every storyteller shared what they have learned from their Elders has stayed with them mentally and most of the storytellers practice spiritually. Many Diné would ask, how can you change a culture, especially when it has been respected and recognized for so many generations? Although the Diné storytellers have experienced oppression, they still try to add to the existing cultural heritage, they will always be inspired by the original creation stories.

The TribalCrit tenant used to analyze the storytellers stories for thinking is tribal philosophies, beliefs, customs, traditions, and visions for the future are central to understanding the lived realities of Indigenous peoples, but they also illustrate the differences and adaptability among individuals and groups is recognized as community and cooperation. Individuality is devalued, while contributing to the success of a community is valued (Brayboy, 2005). Being able to understand Diné ways of knowing, converse in Diné language, show respect for the Elders values, we then learn to understand the meanings behind the construction management practices that are being performed on the Diné Nation.

Diné “ways of life” define Diné. All of these storytellers are guided by the traditional language and stories from their childhood, but most importantly they were guided or influenced by their family experiences. The generation from 44 years and older experienced significant hardships, oppression, these were defined as the following: a) they attended boarding schools,

where they were forbidden to speak Diné language, b) they attended school out of the state during K-12 and any higher education, c) they experienced lack of transportation, food, or water as a child growing up, and d) they were raised by grandparents. Several of these hardships still exist today for our younger generation, but they are still able to thrive within their communities. Although times have changed, there is a gap between the older generation and younger generation.

In most cases, the younger generations were raised differently. Typically they had modern homes with utilities rather than timber Hogan's without utilities, they attended schools that encouraged Diné language and culture, they travelled by personal cars and truck vehicles rather than horse drawn wagons, and traditional teachings were optional rather than typical. The younger storytellers (younger than 40 years old) are beginning to understand how and what can be accomplished by adhering to Diné ways of life. Each has learned to review and reflect on their accomplishments to date. They are beginning to see how their Diné teachings as a child have guided them to where they are today. Their teachings have guided them to overcome oppression and empower themselves. Although the younger generations do not have as much experience as the other storytellers, they are starting to see signs of how the Elders Diné traditional values are influencing their lives now.

Each storyteller had a family influence or traditional upbringing that guided them to try harder, to change, to grow, and adapt as a Diné. Each has the respect for their Elders, who have guided their Diné thinking. Each of their families taught them how to relate and present themselves as a Diné. They each understand that it takes a community effort to show how Diné live. Each storyteller takes their thinking and learning process and each intend to give back their Diné community. The storytellers' hardships have become many blessings for how the next

generation Diné learn and think and lead into the four themes (language, culture, family, and community).

Language defines culture and provides clear communication for Diné through interpretation, presentation, clanship, ceremonies, culture, stories, and provides more opportunities. Diné language provides meaning and respect for any new practices introduced. TribalCrit informs the need to understanding the lived realities of Diné before examining the differences. In this study, the lived realities are founded by Diné language; the language interprets Diné history correctly, and illustrates how Diné communities have adapted over centuries by using Diné language within their communities. The older generation focuses on the interpretation of Diné language. They learned that Diné language is a powerful tool to possess. The storytellers each represent their Diné culture through the language. They recognize that to understand grandma traditional stories, Diné language should be used to provide more detailed meaning. This builds another level of respect for the language and culture itself.

Culture has unlimited meanings. The storytellers believe in taking culture, knowledge, and power (Brayboy et al, 2012) and making new meanings. They continue to respect and value their culture based on their upbringings. The storytellers see creativity in Diné culture; within the food, ceremonies, traditional proceedings, and livestock. They each respect who they are and who they represent, the Diné Nation. They all use culture to make them stronger as a Diné member. Any new practice on the Diné Nation encompasses the traditional Diné teachings. With their experiences, their hardships, and their challenges; they'd learn to move forward. They each believe in creating new cultural traditions.

Family is the center of promoting positive emotion and thinking. All storytellers shared their family influences based on what their mother, father, grandma, and grandpa taught them.

They use their family teachings to influence them to use their traditional Diné ways to help better themselves in their current positions and also with their family. They believe in listening and respecting their Elders. They want to continue teaching their own children and the younger generation their knowledge. This is a healing process that will help them overcome the years of oppression.

Community is family. The storytellers continue to be influenced by the community activities and how Diné present themselves. The community instills respect in each of the storytellers. The respect aspect includes recognizing the language and culture, teaching the language and culture, and preserving the language and culture for the future generations. Each of the storytellers had some community connection on how they learned the traditional Diné ways of life, whether it was through experience or observation. The storytellers' stories together show that by choosing to recognize and respect and 'being a Diné', they are contributing to their community success.

In comparison to the Eurocentric and Eurocentric derivative construction management practices and curriculum, there is one language, English, which is used to define construction management. This creates a barrier when Diné try to apply construction management practices on the Diné Nation. There is a disconnect between interpretation and application. Diné communities speak Diné language when presenting the local Chapter houses, out of respect for the Elders that attend the meetings. Diné construction management professionals (CMPs) use Diné language to interpret for the Elderlies that they provide services on the Diné Nation. The CMPs also use Diné language to manage and direct their employees, who in most cases, only understand Diné language. It is important that Diné language remains within a culturally

responsive construction management curriculum, so that construction management practices on the Diné Nation are carried out appropriately.

A current anomaly is that higher education means moving off the Diné reservation to learn Eurocentric and Eurocentric derivative principles to try and take back to the reservation. This process takes away from being Diné, in general, it causes oppression. There is always the possibility of losing a part of your Diné language and cultural understanding while away. Language and culture are the two features that define Diné. Each of the storytellers understands the importance of incorporating culture and knowledge, for our future. It would take a community effort to document their traditional stories, language, and cultural traditions.

Nahat'a (Planning)

Planning is defined as planning or action (Diné Community College, 1992). To plan or to take action could be translated as past, present, or for the future. To think about the future Diné communities refer to what has been done in the past. What did grandma do then? What can we do now, but with grandma's approval, of course? Lastly, what can we change in the future that still incorporates our Diné ways, that grandma would approve of? To plan in a Diné community, means to think of Diné traditional ways of life first, to see if they play a role in the outcome. This involves grandma- by describing the reason and then asking her in Diné language for possible approval.

By understanding traditional "grandma ways" and speaking fluent Diné, these individuals have learned how to plan with a variety of Diné communities. All the storytellers continuing or often referred to the grandma way. Grandma has a way of directing, speaking, and talking that is very Diné. Grandma has set of certain rules of respect that a lot of Diné follow. These rules are simply respecting the traditional Diné ways of life through 1) speaking the language, 2) asking

Elders for permission, 3) helping with homestead duties- land preservation and planting, and 4) caring for livestock. People near the reservation understand this term of how they carry it, act it, and speak it.

Each of the storytellers' stories related to their younger years when they were growing up, what they have done throughout in their academic and employment careers, and what they are trying to do now based on what they have learned. Through each of the storyteller's journey, they reflect on how their culture provides meaning of their existence. Each stepping stone relates back to Hózhó and remembering to keep all in balance throughout the process. The process of planning is a process itself for Diné, because to change a Diné community is a difficult task to attempt. I will honor and respect Diné teachings by presenting through the four themes, although not all may be used; they help to tell each storytellers story that emphasizes planning.

Language.

Hosteen Tso shared the following, "Elders have told the stories in Diné language. Through the stories I have learned why certain cultural traditions should be followed and why they have not changed over the years" (Hosteen Tso, personal correspondence, 10/26/2017). Hosteen Tso reflects on the stories multiple times throughout his interview. These stories are what influence change or deny change. The Elders have set guideposts for Diné to follow through the Diné language. Hosteen Tso believes in planning and presenting any new propositions in Diné language, as this is how it should be interpreted. Through this interpretation, he finds that the true meaning is clear and the people understand what they are planning for the community. In a similar way, the next storyteller also shared how clear communication and Diné language is important when presenting new projects, policies, or practices to Diné.

Adzaa' Dugi shared the following,

We have to provide clear communication to the person we are providing service to. I understand the importance of communication when planning for the Diné community. We have to educate customers. We have to talk Diné to explain our purpose. The Diné language is most important when communicating. I want to help my people (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi highly encourages the use of Diné language. She has to present project details in Diné language. By planning and speaking in Diné language to her community members, she becomes an empowered women in the construction field and within her Diné community, and is able to connect to her employees/employers. By interpreting clearly in Diné language, she makes interactions more meaningful and establishes trust. By using Diné language, she is respecting and upholding her cultural values. Similarly, the next storyteller shared a story of what he was told to think of before planning any projects Diné.

Culture.

Hosteen Tso shared the following,

As Diné, we can't break the earth. Something comes out and breeds. We change the earth. Examples are coal and uranium, they are the earth too. Once these come out, they go into certain areas and the people define the outcome as cancers. They thought this was bad then now it's the way of life (Hosteen Tso, personal correspondence, 10/26/2017).

With Hosteen Tso's cultural background and understanding the Elders needs, he has become very involved with community planning. His Elders have been a huge influence towards what he believes in culturally. He uses their stories to inform the community. By understanding the meanings behind the stories, he is able to control what is planned for the land. As a respected

Elder, he can prevent Diné from disrespecting their traditional values. By protecting the people and being able to share his experiences, he can build a relationship with Diné. Similarly, the next storyteller shared how he protects his fellow Diné employees.

Hosteen Shirley shared the following,

I provide a yearly protection prayer for my employees in order to address any health and safety concerns. We offer precious stones to the deities, because grading roads causes disruptions to snakes, ants, critters, herbal life and we should not destroy, but have to, to have access (Hosteen Shirley, personal correspondence, 10/27/2017).

Hosteen Shirley refers to many cultural traditions when planning for Diné. By understanding the traditional stories of taboos, he is able to plan ahead for the people he works with. He is able to share his traditional ceremonial expertise. Everything Hosteen Shirley believes in supports Diné philosophy and is informed by Diné philosophy. He ensures that with each project planned, he addresses his employees cultural needs through the ceremony performed at their annual office gathering. By conducting ceremonies and practicing cultural forgiveness, he is able to maintain Hózhó. By doing so, Diné trusts in his decisions and understand any reasoning for projects planned for the community members.

Community.

Hosteen Tso shared the following,

I have been an elected official at the Chinle Chapter for 36 years. I am appointed or elected for the Chinle area. I have been re-elected every four years. I do daily visits with people from the community. I work with land, livestock, remediation, conservation, and water practices. I understand the land. I talk to the people on opinions of where and what (Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso has become aware of the communities needs and interests and overall historical stories. He has become familiar with what the Diné Nation controls through local land, livestock, remediation, and conservation processes. Through his years in office, he has observed life changing events. He remembers when there use to be a lot of green, now there are erosion issues. By seeing the before and after effects, he is able to plan ahead, but at the same time adhere to the traditional ways of life. By understand the people needs; he has a better understanding of what should be planned for the future. Similarly, the storyteller below has been in office for years and understands the community resources and needs.

Hosteen Shirley shared the following,

I have been at the public office at Apache County for 23 years total. I believe strongly in communicating and listening to the community members to help carry out any activities. I am there on the Diné Nation and intermingling with community Elders. All community members help me to carry out the activities. I work with the community Chapter houses, attend major community ceremonies, sponsor community western dances, and attend school board meetings. I have to be aware of the community and surroundings in order to inform my employees. I attend Chapter meetings in order to get the community input on future construction projects. (Hosteen Shirley, personal correspondence, 10/27/2017).

Hosteen Shirley understands how to govern Diné and not having to ask for permission to be Diné. He has been in the public eye and representing Diné all throughout his life. He helped guide and govern policies and practices for Diné, both on a local and National level. Hosteen Shirley plans with the people in order to address roadwork, bridge construction, site work, water damaged areas and natural disaster clean up. For a rural community, these types of issues are addressed on a daily basis. Hosteen Shirley also stated that the local government is the way to get

things done, because the people have to vote and get grandmas approval. Resembling the need to plan for Diné, the storyteller below also works for the community.

Adzaa' Dugi shared the following,

I am proud to serve my Diné people. My goal is to serve the community. I need to be involved in order to establish a connection. I have community involvement with the Chapter house, police department, and local community. I am able to plan with the local community members and representatives to ensure that each project is carried out. We are here to serve our customers- the Elderlies'. (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi manages the tribal utilities for the Chinle community district, and in this role she manages and is a role model for her employees who serve the Diné Nation by providing electricity, water, natural gas, and solar power. She understands the Diné Nation policies and practices when it comes to providing utilities for Diné. She works with her office and her employees to plan multiple projects. She is committed to serving Diné Elders and ensuring that proper communication is conducted before any projects begin. Similarly, the storyteller below understands Diné policies for his department.

Hosteen T. Begay shared the following,

I understand the Diné Nation and the resources it possesses. My role is multi-faceted. I work as a technical advisor for the land use planning committee and economic development planning committee. I work with a variety of agencies and individuals to increase projects on the Diné Nations. Through the Chapter meetings and public work session, we plan collaborative joint meetings. This involves the Chinle Unified School District, Apache County, Bureau of Indian Affairs, and others in order to gain the

community advice on any future projects. There is tons knowledge available from the community, but at the same time, there are many barriers. There always has to be a process discussing what the project entails and everything has to be put in place with the community first before any approvals are made. I represent the local community, when planning future projects (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay is an Administrative Planner for the Chinle Chapter and understands the communities' needs for land use and economic development planning. He discusses the process of planning a construction project within the local community and the main importance is Diné language. The target audience is grandma and grandpa, who require Diné language and hands on learning. With local knowledge and cultural understanding, Hosteen T. Begay is able to support the growth of the local community on a planning level. He is aware of the communities needs and presents his findings at the local Chapter meetings.

Planning Summary

These four storytellers all work closely with their community members through years of service and strongly believe in working with the people and for the people. Working with the community members, they have learned to respect the Elders and the traditional Diné ways of life even more. Diné encouraged them to be in their management positions. The storytellers are empowered through the community, due to their years of service and reputation. Their ability to represent themselves as a Diné provides them the power to control and plan within their communities. The storytellers have been in their position representing Diné for many years. They also earned respect by planning with their departments and community members through Diné language. By understanding the language and working with the people through the language, they are able to get their community goals accomplished.

The TribalCrit tenant used to analyze the stories for planning is: Indigenous peoples have a desire to obtain and forge tribal sovereignty, tribal autonomy, self-determination, and self-identification. This tenant is based on tribal autonomy, which is the ability of communities and tribal Nations to have control over existing land bases, natural resources, and tribal National boundaries (Brayboy, 2005). Diné have been a sovereign Nation since the Treaty of 1868; they have developed their own tribal laws and practices based on their cultural beliefs and traditions. Diné have a process to obtaining and creating new construction management practices on the Diné Nation. Although, it is not perfect process for each Diné community, Diné use these efforts to provide an open door to act.

By the Diné Nation having the ability to control their own resources, land, and government, they have empowered Diné. Diné storytellers hold management positions within their own tribal government to review policies and practices for the Diné Nation communities. The storytellers are able to learn and adapt new policies based on their experiences, both academic and cultural. The Diné Nation controls the local community entities and regulates them in order to ensure that they follow the Diné Nation guidelines. In this study, Diné building codes and regulations have been documented based on Diné Elders' opinions, Diné Elders' approvals, and overall Diné history. Diné practice their own local building codes and regulations, which are developed and approved by the local Chapter community. Through these processes they are taking the next steps in overcoming the years of oppression.

Language is important when presenting any findings to Diné community. The Elders refer to traditional stories in Diné language, so each plan needs to follow the traditional beliefs. They have to first show respect before the planning process begins. They should then relate to

the people through Diné language, being that most of the community members that attend the planning meetings are Elders. Each storyteller shared a responsibility in planning for the future.

Culture has always been the number one priority. The storytellers believe in adhering to the culture when they are planning for future projects. They understand the respect aspect of not following through on certain projects. If there are certain projects that cannot be avoided, the leaders plan for cultural forgiveness through their ceremonies. Through this type of scenario, the Elders approve their plans, because the leaders acknowledge traditional values. As stated in the tenant above, tribal philosophies and traditions are influenced by Diné culture. Diné culture, according to the storytellers' stories is founded by Diné language. Diné culture provides the people a meaning of existence. Culture empowers Diné to highlight their Diné ways of knowing within their construction management practices. TribalCrit reminds the people of the power they have, the ability to control their lands and resources. According to Diné storytellers, they are able to control and govern their Chapter houses, county offices, school districts, and utility providers' decisions and outcomes based on their cultural traditions.

Community wants and needs require clear planning and communication to the Elders. Each storyteller understood their roles and who and what they needed to plan with before beginning their community plans. They each took into consideration the land, water, livestock, and finances before presenting their findings to the Elders at the local Chapter house. The storytellers learned the process through the years in service and years of living on the Diné reservation. They have to first relate to the people needs and also understand their responsibility as a community member.

In Eurocentric and Eurocentric derivative construction management practice, there is no emphasis on culture. Culture on the Diné Nation is recognized and heavily supported through

Diné communities. Diné culture is a sensitive subject and most Elders do not want to share with non-Diné members due to any misinterpretations of Diné meanings. Although, this creates a barrier for creating a new construction management curriculum, Diné trust that with the help of their Elders, they can help to transform the current construction management curriculum. If the new propositions are influenced by traditional Elders ways of being, Diné respect the traditional cultural beliefs, and establish trust, they can create new construction management practices. Diné have adapted over the years in developing new culturally responsive construction management codes and regulations for their communities, so the people have the confidence in integrating a new culturally responsive curriculum. The Diné Nation has been a strong entity that is powered by and for Diné. Diné know who they are, where they come from, how to define themselves, and how to plan for their future.

The anomaly that exists is that the Diné Nation may be behind in planning for future development, due to the Eurocentric oppression. There are still missing practices within the current system. Although the people are trying to work on fixing these missing pieces, it will take time to add to the current system. They have to take Diné culture, language, and tradition into consideration first, before trying to add any new concepts or ideas to the system. All the four storytellers above understand the need to honor Diné language and culture first, but understand the need for change. The planning process relies heavily on Diné families that have been a part of the community for years. Although, it is difficult to change and adapt, Diné at a local community level need to be able to relate to one another needs to plan for a greater future.

Iina (Life)

Life is defined as purpose, life, or existence (Diné Community College, 1992). Each Diné person is born with Hózhó- the good life path. As people of the Earth, we all start new. Some

people are born with a purpose, meaning they have a family influence, business, or trade. Others go through their younger years of life and find that their experiences have shaped who they have become. They each feel some type of commitment to their community. Additionally, the people are proud to be of a Diné existence and go about life following Diné principles. The overall translation is to plan and promote a positive foundation of life, whether it is for family, work, education, or any other goal for the future. This guides Diné throughout their journey. I will honor and respect Diné teachings by presenting through the four themes; they help to tell each storytellers story that emphasizes life.

Language.

Adzaa' Dugi shared the following,

The Diné language is what I find the most admirable within our culture. The language helped the Diné code talkers win a war. I see the native tongue as a strong representation of the Diné culture. I use the language at work and with my family. Communication is what I see as high importance when addressing my Diné people. I have to talk Diné to explain the purpose. I am proud to serve the Diné people (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi defines her purpose in life as teaching and guiding her children, and teaching them to continue to respect Diné language. She insists in respecting the language first as it was taught through the Elders teachings. She was raised to always respect your Elders. She understands that as a Diné, she has a responsibility to promote the Diné language. During her interview she talked about how two of her kids were fluent in the Diné language and her younger children were not exposed to the same opportunities. She is thankful that she has influenced her kids to learn Diné language and even though they are not all fluent, she encourages them to practice Diné language

as it has provided her many opportunities in her career. The language also helps Diné to provide meaning of the culture.

Culture.

Hosteen Tso shared the following,

Bikeh', constitution of life, we are a part of the earth. Everything must be in the positive and in balance. We have to be educated and have a good understanding of what we do.

We have to have a purpose for change and at the same time reflect on what we believe as Diné people (Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso defines his purpose or mission as passing on Diné language and culture to the youth as much as he can. As he states in his interview, we are all one people (as a Diné tribe) , so we need to work together as a family to preserve, promote, and guide one another on a positive path. Hosteen Tso works for Diné, to educate them and teach them his cultural knowledge that he has gained throughout his life. He wants to continue the natural balance and share his life influences of Diné language, culture, family, and community perspective, as they are all interconnected. Like every Elder in his generation, the preservation of culture is important. As stated by the storyteller below, balance is what Diné strive to keep within their lives.

Hosteen Shirley, shared the following,

I support my office in holding an annual ceremony to create Hózhó for myself and all employees that take part. This brings balance to all things that may be disturbed as they work on projects. The Hózhó ceremonies are used by the Diné people to provide balance for their lives: spiritually, mentally, and physically (Hosteen Shirley, personal correspondence, 10/27/2017).

Hosteen Shirley knew his purpose since he was young, and it was to serve Diné. He went through life doing community service as an elected official for different Diné Nation committees. With each opportunity, he continued to share his passion of Diné culture and language. Hosteen Shirley heavily supports traditional Diné ways of life to both his own family as well as his employees. His family consists of his immediate family as well as those within his community clanship. As a leader, Hosteen Shirley has a responsibility to empower Diné spiritually, mentally, and physically. By having natural balance, the Diné bear cultural power. Like many leaders, the storyteller below used her challenges as a positive impact to promote Diné culture.

Adzaa' Dugi shared the following,

I put my challenges to work, where I have learned respect for my culture and language.

The Diné ways of life was how I survived my time growing up. I was raised by my grandma and learned that no challenges that existed. I learned to work hard and never let anything overcome me. I was taught to respect Elders and listen to them while they spoke. (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi learned that her culture provides her strength, empowerment. She emphasized multiple times throughout her interview that her cultural upbringing from her grandma has made her strong. She learned to use these cultural strengths to guide her to become better and better. She hopes to influence the younger generation like the storytellers below.

Adzaa' Jumbo shared the following, "I implement culture and this helps me develop skills. I use culture to strengthen my mental thinking. I pray with white corn for Hózhó during my morning prayers in order to stay in balance. [Diné ways of life] are very important to me, it helps me progress in life faster than being without" (Adzaa' Jumbo, personal correspondence, 11/08/2017). As a Diné community mentor, she sees running as a path to keep herself in balance,

physically and mentally. She honors and respects Diné through running to the east and being thankful by praying to the east with white corn. She finds herself still learning about the traditional Diné ways and how they can be used to make her stronger. By using the Morning Prayer as her guide, she is able to stay in spiritually balance. She understands that as a role model she can influence others to believe and respect their cultural upbringing. Similarly, the storyteller below shared how he will never forget his cultural knowledge.

Hosteen Jumbo shared the following,

I decided to move off the Diné Nation to gain academic knowledge. I still remember what I was taught as a child. Cultural knowledge will never be forgotten. I think it will change as the next generation becomes the leaders. I want to teach my nieces and nephews what I know. I find culture important (Hosteen Jumbo, personal correspondence, 11/09/2017).

Hosteen Jumbo reflected on the importance of culture, but understands that it will change. He highlights oppression through the fact that he will never forget what Diné culture truly represents. He still finds the underlying reasons and causes very important. This is what he wants to share with his nephews and nieces, because that is what he finds to best describe being a Diné. Even though the times change, culture will always influence family in a positive way in order to provide them strength and power to survive.

Family.

Hosteen Tso shared the following,

K'é, encourages the way of life with positive emotion based on what we say and think. By acknowledging the clan system, this provides significant importance to the Diné people. It tells the story of who they are and where they come from. I was taught traditional stories from my grandma. K'é, is the constitution of life. It defines who and where the

people are from. It tells their family story in the Diné language. This is how the Diné communities developed their first system- the people use to know who lived where, their relationship, and their family duties for the community. The clanship brought about the respect aspect of the local communities (Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso talked about how K'é (families) are the ones who teach culture. Family created the clanship system that each Diné honor and respect. Through the clanship, Diné are able to understand their generations of stories provided by their Elders. They are responsible for passing down the knowledge to the next generation. As each family contributes, they tell their story of how their generation came to be who they are in the current community. Similarly, the next storyteller describes his family influences.

Hosteen Shirley shared the following,

I was educated and raised by my great grandmother. She taught me the traditional Diné ways of life. I attended ceremonies, herded the sheep, used the wagon to shop, hauled firewood, and water. When I attended the local boarding school, I didn't see fit to attend, so I ran away multiple times. At the local schools, I was discouraged to not speak the Diné language. Culture is found in the language (Hosteen Shirley, personal correspondence, 10/27/2017).

Throughout his interview, Hosteen Shirley proudly referred to his family and their influences of clanship and ceremonial practices. He introduces his four clans and his wife's first two clans as well as his children. He stated, long ago, this was how families introduced themselves. I respected how Hosteen Shirley shared his story of how they use to do things when he was a child. He is promoting the use of culture, providing valuable knowledge, and continuing to

empower Diné. As an Elder, he is willing to save and preserve as much Diné culture and language that he can for the younger generations, his family, so they have a chance to be exposed to their underlying Diné principles. Also, the storyteller below shared her cultural experiences that she conducted with her family.

Adzaa' Jumbo shared the following,

When I return home, I am proud to sit with my family to conduct traditional ways through ceremonies, grinding corn, chopping fire wood, and butchering sheep. I am proud that my family has taught me these traditional Diné ways. I understand that culture is shared with family and conducted with family (Adzaa' Jumbo, personal correspondence, 11/09/2017).

Adzaa' Jumbo still recognizes her culture as a learning point. As a young Diné woman she understands her traditional Diné roles when she returns home and the need to help her grandparents. These roles empower her as a Diné woman. She reflects on her family teachings to help guide her path. She is proud to be a part of her family traditions. With the smallest cultural practice, there can be multiple learning points. This is what makes family guidance and participation so important. Similarly, the next storyteller shared how he promotes the use of culture with his own children.

Hosteen D. Begay shared the following,

I watched grandma's ways of life. I am teaching this cultural knowledge to my boys. I find it important. Even though we have traveled extensively on and off the Diné reservation, I want my boys to continue to learn at grandma's house. I can influence others to still believe and respect the traditional Diné ways of life (Hosteen D. Begay, personal correspondence, 11/09/2017).

As an advocate for teaching Diné ways of life, Hosteen D. Begay discussed the importance of passing on his traditional Diné knowledge. By passing on traditional knowledge, Hosteen D. Begay provides a purpose in the process. Being exposed to traditional ceremonies and language, his family has provided him Hózhó and with that, he respects it enough to pass to his children. Also, the next storyteller shared how passing on knowledge creates more knowledge.

Hosteen T. Begay shared the following,

I learned the concept of livestock and planting from my grandparents. I am grateful that my grandparents raised me. I learned the traditional ways of life and the Diné language from them. The Diné culture is what makes the people more knowledgeable of their surroundings (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay learned a lot of cultural knowledge from his paternal grandparents. By them showing him cultural traditions, he uses his Diné teachings to share with others in his community. By sharing the cultural knowledge with others, he is promoting Diné. He is empowering his Diné community, and helping others to overcome oppression. He empowers those who were not able to have the same experiences. Similarly, the next storyteller was not able to gain cultural knowledge from family experiences, but is thankful to learn from his friends.

Hosteen Horton shared the following,

I watched my friends with their families. I recognize Diné traditional values and use them as an influence at work. I understand my role through different lens, being that I grew up with traditional Diné values, but never really applied them (Hosteen Horton, personal correspondence, 12/05/2017).

Hosteen Horton family orientation will always stay strong with him. Throughout his years, Hosteen Horton has learned that Diné know the origins of people way better due to their clanship. He has a great deal of respect for the culture and language. He believes like many of the other storytellers in the promotion of Diné culture and language and understands that it takes a community effort to share the different experiences and knowledges gained.

Community.

Hosteen Jumbo shared the following, “I understand the importance of conserving traditional Diné ways of life” (Hosteen Jumbo, personal correspondence, 11/09/2017). As a Diné community member, he understands that the traditional Diné ways need to be passed down. Although Hosteen Jumbo is not fully involved with his traditional Diné heritage, he understands the importance of language and community and the balance they provide him. Alike, the next storyteller shared the importance of passing on Diné cultural information to the community as well.

Hosteen T. Begay shared the following,

I define my purpose to help the Diné community grow in a positive direction. I assist in communicating the Diné land and building processes to the people of the community in the Diné language. The Chapter community is young, it is hard to identify yourself, we have to teach them (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay sees and understands the barriers, systems of oppression that exists on the Diné Nation, but is willing to overcome them to help his Diné community. He is committed to offer his teachings to any Diné member who asks. He wants to learn more on integrating Diné culture and tradition. Next, the storyteller shared how the community has continued to impact his cultural beliefs.

Hosteen Horton share the following,

I notice culture on and off the Diné reservation and by observing it, I have gained understanding and respect. I observed the Diné people working together as a community to help one another and I admire this process. I recognize that the Diné people work together to give back to their local community.

Hosteen Horton did not get a chance to have a full cultural experience with his family, but respects and acknowledges the traditional knowledge. He is overcoming oppression by acknowledging Diné ways of being and what it provides to all the people within the community. He notices how hard Diné people work to help each other.

Life Summary

Diné culture and language has greatly influenced each of these storytellers in a positive way. The questions that come to mind at this point are: What defines life? What is life as a Diné? What influences Diné lives? These questions help to define life as an ‘open door’. There are many possibilities when integrating cultural heritage and language. Both are used as guides. These guides help to create a sense of belonging. They help to overcome systematic oppression. After reviewing each storyteller’s interview, they all have a sense of commitment. By being committed to who they are- being Diné, they have balance. They have a clanship, they have a purpose to help their people, they understand the language, and overall they believe in preserving who they are.

The TribalCrit tenant used to analyze the stories for life is the concepts of culture, knowledge, and power take on a new meaning when examined through an Indigenous lens. Culture is simultaneously fluid or dynamic, and fixed or stable (Brayboy, 2005). Through the multiple Diné generations, culture has changed, but the underlying teachings remain the same.

Diné are shaped by their cultural inheritance, and they engage in cultural production (Brayboy, 2005). Diné learning process contains culture, survival, and academic knowledge. They intertwine the knowledges and provide meanings of culture. Diné have defined themselves in many ways, and this has provided them community-based power. Through TribalCrit, Diné are able to use their cultural history to adapt new construction management practices to help better solve problems. They are able to review their life experiences and take into account their academic knowledges (from the different generations) and apply it with their employment experiences to help develop new construction management practices for the future generations.

Throughout Diné history, each Diné member had a different life experience based on their family upbringing. Each of the storytellers reflected on how important it is to follow their grandparent's traditional ways of Diné life. According to the older generation storytellers, they were exposed to hardships, they were oppressed. These hardships are now seen as positive experiences, they are overcoming them, being that it made each of the storyteller's stronger individuals. It gave them the initiative to give back and help their Diné families. The younger generation storytellers interviewed notices their cultural power and the influences that it has had throughout their academic and employment experiences. They find power through culture. They have found their existence adds to their family legacy, working on and off the Diné reservation, they see differences in traditional Diné ways versus current construction principles. They reflect on life based on stereotypical ways and try to make it better for their children's generation. Each generation of storytellers also understood the importance of practicing and acknowledging clanship, being that family is who they work with on the Diné Nation. Diné have a goal to preserve and promote within their Diné families, whether they are on or off the Diné reservation.

Diné language is the most respectable to Diné families. Diné language is a key to their cultural stories and Diné words spoken have many powerful meanings when shared with other Diné. Diné also use their language to provide meaning of their cultural practices. Diné language is highly respected and recognized by the Elders. The Elders want to continue promoting the use of Diné language to each of the younger generations.

Culture provides each of the storytellers a cultural power. The younger generation is still learning how to use their culture, but they understand the strength it provides them. The older generation has seen culture change throughout their generation, but insists on the importance of core cultural values to guide the young. Most of the storytellers were raised through grandma ways of life, which included, herding sheep, reading the bible or a dictionary, speaking only Diné language, attending ceremonies, using a wagon for transportation, hauling firewood and water, and having no modern utilities. Their cultural knowledge, combined with their academic learning has provided these storytellers the strength and courage to thrive.

Family is used as a guide. Family encourages all the storytellers to recognize who they are, where they are from, and what they are doing to help Diné. Their family influences them to believe in cultural ceremonies, practices, and language. They learn to respect who they are as a Diné member by learning their role within the community. Through clanship, Diné provide a sense of belonging. On the Diné Nation, many people are related due to the clanship system. The creation stories emphasized the clanship system helped to provide each Diné member a duty within their lives. Their duties provided the people balance (mental, physical, and spiritual). As stated by one of the storytellers, they carry on their family legacy through each generation based on their strengths. The storyteller respects and finds responsibility in continuing his practices on

the Diné Nation. TribalCrit informs the need to add to these types of cultural teachings and upbringings as they are historically influenced and provide the people Hózhó.

Community teaching helps preserve and promote culture. The storytellers become responsible individuals within the community and learn the importance of teaching the younger generations. They each notice culture and language through their upbringing and want to share their experiences with their community, so they can learn and continue to respect their Diné ways of life. The storytellers each want to continue the natural balance of Hózhó, and each show that they can overcome oppression as a community.

In comparison to Eurocentric and Eurocentric derivative construction management practices, where there is no emphasis on family, family creates the community members on the Diné Nation. The community members provide approval for new construction management practices. Through project management, Diné can work with different levels of authority within their community. Diné each have a responsibility to work with their families, at the local Chapter house, schools, county, and utility committees. As project managers, they learn to understand their surroundings and provide the Diné community an assessment of their designs, schedules, estimates, soil classification, location, and renewable energy options. As a Diné, they understand their cultural traditions and provide the best assessment of their community's needs.

The paradox that exists is that “no one likes change, but it will change” (Hosteen Jumbo, personal correspondence, 11/09/2017). By change, it means if Diné don't practice the culture or language, it will be lost. Also, if the stories are not shared to younger generations, the culture will be lost. By Diné adapting and strategically accommodating for their communities, to survive and develop, the processes contributes to community growth (Brayboy, 2005). Each of the storytellers is seeking a way to continue tradition and share their stories with the next generation.

They find that by sharing, they will continue to empower Diné communities, and they are fulfilling their destinies. They understand that sharing how they were raised and what key points their Elders taught them will influence them to teach their families the traditional Diné language and culture.

Siihasin (Fulfillment)

Fulfillment is defined as stability, durability, or balance (Diné Community College, 1992). This is also defined as being a good person (keeping all in balance- spiritually, mentally, physically) to create a good path for the future. This is the goal that everyone strives to achieve. To fulfill your Diné purpose means to experience your traditional Diné upbringing; understand K'é (family); speak Diné language, and “integrating Diné culture and tradition” (Mr. T. Begay, personal correspondence, 11/14/2017). The goal is to support, preserve, and promote Diné ways of being. None of the storytellers have reached their full destiny, but have achieved a balance of understanding of what it means to be Diné. I will honor and respect Diné teachings by presenting through the four themes; they help to tell each storytellers story that emphasizes fulfillment.

Language.

Hosteen Tso shared the following, “there is a lot of misinterpretation in Diné language and stories. Diné language should only be written in Diné language” (personal correspondence, 10/26/2017). If people are not fluent in English, they have a hard time understanding the true meaning. Anytime time there is an attempt to dissect the language in English, it presents the wrong meaning. Therefore, this causes an untrue statement. The language should be presented with a clear purpose. As stated by the storyteller below, grandma needs to be able to understand the story.

Hosteen Shirley shared the following, “grandma needs to understand. Elders are the authorities of the Diné Nation. They decide what laws and practices we should adhere to” (personal correspondence, 10/27/2017). Hosteen Shirley shared that the Elders tell the younger generation what we should be learning. They guide the people to continue the traditional ways of life. We have not changed the process for generations, this is out of respect. As stated by the storyteller below, there cannot be any short cuts.

Hosteen T. Begay share the following,

The Diné Nation has no short hand jargon, so you have to explain through Diné stories. Grandma and grandpa don't understand much English, so you have to be able to tell a story in the Diné language and within a Diné context in order to relate to the Elders (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay understands that the Elders do not understand local building codes, they understand a story of why certain things are the way they are. The need to be taught first through Diné language, so they understand the new practices being proposed. The examples should include cultural ways of life in order to relate to the Elders. They have to understand that you are trying to promote and empower the Diné. Similarly, the storyteller below shared how she gains more respect by using Diné language.

Adzaa' Dugi shared the following,

I believe strongly in gaining absolute respect through the Diné language. My upbringing has made me who I am today. With my struggles, I became more knowledgeable for both my family and work. I am dedicated to my work. With dedication, I bring more meaning, which helps guide me through life (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi shared how her struggles and experiences provided her meaning to her life. She overpowered oppression with the use of the Diné language. She also shared a story of how she speaks Diné language at her work meetings and she gains respect from her workers for doing so. By delegating the others in Diné language, they are given more meaning to carry out a task. Rather than asking in English, with Diné language, they have more respect and drive to attempt. The language empowers these individuals to share and explain by using their culture.

Culture.

Hosteen Tso shared the following,

Keep all in harmony: emotional, physical, and spiritually. This represents balance within Diné culture. Emotional balance is described as mental thinking and how we think and use our traditional Diné culture. Physical balance is working towards good health. Spiritually the people pray to Diiyin Diné. These three factors are what control balance. Although not everyone may have perfect balance between the three factors, they have to at least acknowledge them in a positive way. We need to cherish the mother earth. I believe in praying directly for to the plants and address them as brother and sister
(Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso reflects most on having a positive outcome. He believes that with positive thinking, he can help people to stay in balance. By being in balance, the people are happy. Hosteen Tso also reflected on his farming and shepherding years. By focusing on nature, he has understood culture from this perspective as well. He shared stories of how it takes years to develop good soil. From this cultural aspect, he provides a better understanding of mother earth and what she provides Diné people. He is empowered as a Diné man through the cultural stories. Similarly, the storyteller below shared a story of maintaining balance.

Hosteen Shirley shared the following,

Know your surroundings: family tradition, community, and language. Family tradition guides me through the understanding of ceremonies. Each traditional ceremony conducted; there is a meaning of the outcome that dates back to the creation stories. Diné culture and the way of life are founded by the language. By understanding my surroundings, I promote being a Diné within the community (Hosteen Shirley, personal correspondence, 10/27/2017).

Hosteen Shirley promotes what it means to be a Diné member. They have to first understand who they are and where they are from. This provides the people balance. He finds that from the stories he has learned from and within traditional ceremonies, he has grasped a better understanding of Diné culture. Although, he is not a professional in the ceremonial aspect, he takes what he learns and applies it within his field in order to continue the traditional Diné teachings. Alike, the storyteller below shared her cultural experiences.

Adzaa' Dugi shared the following, "we lived off the land. We had no utilities and had to work daily at my grandmothers, in order to raise the livestock and feed the family" (personal correspondence, 11/11/2017). She knew that no matter what, through oppression, the work had to be done. She learned that with this upbringing, it was all a part of being a Diné and it empowered her. These types of duties were normal. She learned to appreciate her culture more and gain a better understanding of what Diné language entails. Below, the storyteller shared how she learned what keeps her in cultural balance.

Adzaa' Jumbo shared the following,

I understand that by implementing culture I develop skills and this provides me stability. I may not be fluent in traditional culture and language, but I understand the meanings.

With my past experiences at home, I move forward every day in a positive direction, because I know my Diné upbringing will continue to guide me (Adzaa' Jumbo, personal correspondence, 11/08/2017).

Adzaa' Jumbo uses her culture to help keep her stable. She understands that she is not in full balance- mental, spiritually, and physically, but knows that by using her cultural upbringings, she is at least trying. By trying, she is overcoming the years of oppression and empowering herself as a young woman. Similarly, the storyteller below shared his strengths.

Hosteen D. Begay shared the following,

We know how to survive. I understand that the Diné have a strong history and nothing can break it or divert it. I use these strengths to motivate me at home and work. By being a father and mentor to my kids, I believe that my traditional upbringing has made me stronger (Hosteen D. Begay, personal correspondence, 11/09/2017).

Hosteen D. Begay emphasizes how strong Diné teachings are and how they continue to influence him at work and with his family. Every day he learns more about what it means to be a Diné and what he should promote to his children. He is open to teaching his kids, so they are not oppressed of their Diné teachings. Similarly, the storyteller below shared how he learned about culture.

Hosteen T. Begay shared the following,

I learned culture through livestock and farming. I learned to respect cattle and horses, because I was taught of their significance at a young age. The traditional Diné culture used these animals for travel and food. Also, through planting I came to value the necessity of corn and squash and how they were used in traditional ceremonies as well as everyday eats (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay uses both cultural aspects to define a part of Diné culture. He understands the necessities these cultural traditions provide to the people. He can take his cultural teachings and pass them on to his family, to empower them. This adds onto the family trade practices. Each generation provides a new cultural influence, which continues to add to the balance.

Family.

Hosteen Shirley shared the following, “by learning the traditional ceremonial teachings from my father-in-law, I learn more about Diné cultural meanings, which are defined by the original creation stories” (personal correspondence, 10/27/2017). Hosteen Shirley proudly introduces his family and is known for talking about his family. He learns about his Diné heritage through his family stories. By doing so, his family has begun to overcome oppression. Alike, the storyteller below, he believes strongly in teaching his children.

Hosteen T. Begay shared the following,

I believe strongly in teaching my children about what it means to be Diné. I understand that without Diné culture and language, there is hardly any meaning when caring out certain tasks. There has to be an understanding of why we plant and why we care for livestock (personal correspondence, 11/14/2017).

Hosteen T. Begay inspires himself to learn more about his culture. He understands the importance of storytelling and the different meanings they provide. He wants to teach his cultural teachings to his own children, to provide them cultural knowledge that they can use and combine with their academic knowledge, in order to create new meanings. Similarly, the storyteller below shared his story about how he appreciates family influences.

Hosteen Horton shared the following,

The Diné have a cultural process to provide for their families. I respect the Diné process and see how the Diné work within the different trades in order to support their families. By observing the Diné people, I learn how dedicated they are to making ends meet on the Diné Nation. I notice the Diné people stay and work on the Diné reservation in order to support their people. It is a natural balance that the people keep (Hosteen Horton, personal correspondence, 12/05/2017).

Hosteen Horton admires Diné people and what they do to keep the balance within their communities. From observing the people, he notices each of their purpose and he sees that they know they have to work to serve one another needs. There is a community support base that empowers Diné and provides meanings of their existence.

Community.

Hosteen Tso shared the following,

At each Chapter meeting, I present my projects and recommendations to the community in the Diné language in order to provide the information to where the people understand the project details, location, costs, and any possible community impacts. I make sure I educate the people, so the Elders can decide (Hosteen Tso, personal correspondence, 10/26/2017).

Hosteen Tso goes to the Diné community to ask for approval. He believes in the traditional ways of asking and listening to the community Elders. This process of approval has worked for generations, and by stating facts in Diné language, he maintains the community balance. Similarly, the storyteller below shared his story on how he gains his community trust.

Hosteen Shirley shared the following,

I have to work with the Diné community in order to follow through with projects. The local community encourages me to carry out tasks. As a supervisor, I listen to the Diné community requests and delegate to my employees based on the situation. My employees are the experts in their fields (Hosteen Shirley, personal correspondence, 10/27/2017).

Hosteen Shirley helps the community by listening, evaluating, and reviewing project details. He successfully carries out projects by using this process. He also empowers his employees by delegating tasks to them. He understands that it takes a community effort to carry out tasks. Alike, the storyteller below, she strongly understands and believes in reciprocity.

Adzaa' Dugi shared the following,

We are here to serve our people. I understand what hardships most of the Diné people have as far as no utilities. I am dedicated to ensuring that the Diné people are provided these necessities. In order to carry out projects, I meet with the local community officials in order to present new utility data and locations to better serve the people (Adzaa' Dugi, personal correspondence, 11/11/2017).

Adzaa' Dugi is committed in providing utility resources for her Diné community. This has become her life goal, work. She understands that her people have had hardships for generations, and she wants to help the people overcome oppression. Similarly, the storyteller below, understands that it is hard to create change, but is grateful provide purpose for others in the community.

Hosteen Jumbo shared the following,

No one likes change within the Diné community, but it will happen to continue the natural balance. I am still trying to learn more about my culture. By living off the

reservation, and watching how other cultures interact, I see the Diné community as a good example (Hosteen Jumbo, personal correspondence, 11/09/2017).

Hosteen Jumbo sees the difference between the Diné reservation communities and others located off the reservation. He sees change happening off the reservation, but understands the power of Diné, and the years of oppression takes time to heal. He understands they might not accept change now, but may learn to adapt in the future. Similarly, the storyteller below discusses the barriers that exist on the Diné Nation.

Hosteen T. Begay shared the following,

We have too many barriers on the Diné Nation: vision, location, process, and financing. I see these types of situations are a norm for the Diné reservation. I learned to use these barriers in a positive direction. We don't know the jargon, so we have to talk through Diné stories. I present future project details in the Diné language at local Chapter meetings in order to inform the people of community development projects (Hosteen T. Begay, personal correspondence, 11/14/2017).

Hosteen T. Begay notices the barriers disturb the balance, but continues to inform the community that it is just a part of the process. He works to implement new practices to overcome oppression, but they are always community influence, in order to keep them in balance. All projects are Diné influenced in order to keep the community goals intact.

Fulfillment Summary

Diné continue to reciprocate through storytelling, clanship, and Diné history. The stories are carried throughout the generations and relate back to traditional grandma values. Diné highly recognize their four clans- maternal, paternal, maternal grandparents, and paternal grandparents. These clans are used to relate to and address one another in the Diné communities. Diné use their

stories to understand their community needs and interests. Each has learned that with their diverse knowledge and background, they can plan and improve their community history.

The TribalCrit tenant used to analyze the stories for fulfillment is; stories are not separate from theory; they make up theory and are, therefore, real and legitimate sources of data and ways of being. Many Indigenous people have strong oral traditions, which are used as vehicles for the transmission of culture and knowledge (Brayboy, 2005). Diné have documented their history based on traditional creation stories. These stories are what define Diné way of life and their thinking, planning, life, and fulfillment processes. Stories remind us of our origins and serve as lessons for younger members of our communities; they have a place in our communities and in our lives (Basso, 2000). The traditional Diné stories that have been passed down for generations through Diné Elders and have highly influenced how Diné carry out their construction management practices. The stories underscore the years of oppression and how the Diné, through the different generations, have continued to overcome them.

The storyteller's stories highlight the significance of Diné stories; culture, traditions, and sovereignty and how these elements promoted transformative change to Diné construction management practices. Each storyteller found their purpose in life and they each want to be able to preserve their life lessons and teach the younger generation, so they are able to carry on their knowledges, adapt, and empower. There are different responses from each storyteller that signifies what it means to be Diné; harmony, family, language, culture, barriers, and overall continuing the balance or circle of life. Through TribalCrit, the storytellers' stories can create a new construction management practice that improves the community.

Diné observe and complete hands-on-learning to provide new knowledge for their people. Through the stories, the storytellers provide insight on what it is to be a Diné and why it is

important to continue promoting Diné culture and language. Each of the storytellers' statements shares the different steps it takes for Diné to learn, respect, and acquire skills to benefit their community.

Diné language is what defines Diné. The language clearly identifies each story true meaning. There are many different contexts that Diné language is spoken in, but if you understand the context, you will understand the meaning. The language is highly respected when a Diné member presents to the local community. The language continues to empower Diné.

The culture provides Diné the meaning of their existence. It reminds Diné of who they are. Each Diné member can reflect back on their traditional creation stories and use certain cultural traditions guide them in life. Without their culture, they are not able to understand their culture, language, and overall traditions. Diné desire to understand where they sit within their own community. They need to cherish the skills they are given through their Diné culture.

Family teachings are the key of the culture and language. Each Diné family provides a purpose to help create a better life for the next generation. The families share their stories. With each generation, the family members gain more experience and knowledge to better the people. Each has been influenced by their grandparent's teachings, which they use as a guide in their current academic and employment careers. The family knowledge provides support and empowerment for each of their journeys.

Community Elders are decision-makers for the local community and decide to approve or not based on traditional culture and history. The Elders ensure that the community members are creating positive change for the people of the local community, but at the same time adhering to traditional beliefs and practices. The community as a whole may have barriers, but they use these barriers to educate their people. Every story told shared a tale of community effort. Diné learn

through hands-on learning through their traditional upbringing and by observing grandma's ways. As they get older, they learn to respect what they have experienced and feel obligated to give back their teachings to the community. They continue to cycle their knowledges within the Diné community, to help preserve and promote culture within their construction management practices.

In Eurocentric and derivative construction management practices, in general, there is little emphasis on community and rarely any cultural connection. There is little emphasis on practices relates to gaining community approval in relation to local city ordinances, building codes, and plan review. On Diné Nation, community needs, require the integration of culture and language within the same practices. TribalCrit supports the community's needs, as it benefits Diné in critically needed ways; to value and validate local knowledge bases and construction expertise that best serve their communities.

The anomaly that exists is the loss of Diné language as the process continues to move forward. Each storyteller believed in their stories and was proud of their accomplishments to date. The older generation believed in the continuance and integration of culture and language to empower Diné communities. The younger generation wants to work on repairing their culture and language, overcome oppression, but at the same time respect their academic knowledge and by doing so hope to revitalize Diné language and culture. With these stories, the knowledge gained from these storyteller's interviews, I hope will empower Diné to learn, respect, and acquire more cultural knowledge to benefit their communities.

Summary

In summary, Diné pedagogy philosophies, TribalCrit, and the four R's worked closely together and supported my underlying cause. By conducting the eight interviews, I have gained

information on how Diné ways of knowing and Eurocentric and Eurocentric derivative construction management practices align and conflict with each other. Based on the stories received, how we translate and communicate as Diné is not necessarily supported in a Eurocentric and derivative construct and vice versa. By comparing to a Eurocentric and Eurocentric derivative construction management practices, where the rules of practices are written and are documented based on city codes. There are many different variables between Diné and Eurocentric and Eurocentric derivative construction management practices.

The practices may align based on the overall cause- adapting and improving within the communities. Diné are open to change, but have parameters that need to incorporate Diné culture and language into any change. The tradition should be spoken and explained through Diné language. As opposed to Eurocentric and Eurocentric derivative practices, there is one language, English, and one explanation, growth. Each is community-based, in which the processes are approved for final practice.

With this information, I can use the following interwoven concepts: language, culture, family, and community, to further assist in incorporating into Diné focused construction management curriculum and practices. In Diné we show our children how to learn by having them do certain tasks for self-teaching. We teach our children to value and respect their land, livestock, Diné culture, and Diné language. We teach them to respect Diyin Diné, our creators.

As we continue to incorporate language, culture, family, and community into a construction management curriculum, we have to first think of what the Elders may approve of. The Elders have known construction management practices based on their traditional upbringing. We have to be able to use and accommodate their practices based on historical stories. The construction management curriculum could provide an opportunity for change, based on current

practices. Through the creation stories, Diné have developed a construction management process, but there is an opportunity for change.

CHAPTER FIVE: Implications and Recommendations

As I worked with each of the storytellers, I learned that it is true that Diné language and culture is being practiced to a small degree. It is heartbreaking to think that something so powerful can become of less interest to its own people. There needs to be more enlightenment and awareness to the reality that exist. One hundred and fifty years ago, Diné people gained sovereignty, and with each new generation the respect and reasoning behind our ancestor's purpose could be forever lost.

I found my purpose is to empower my Diné people and present this knowledge, so others can use it as a guide. As a child of one of the last generations that knows what it means to be Diné, I find that it is important to carry on one's legacy to ensure that my children understand their traditional Diné background and may be proud of it. I believe that Diné language and culture can be protected by implementing the historical stories and language by integrating both into our everyday lives and our education, specifically within our higher education institutions. Within the last year, I attended a teacher conference, and I learned that at a collegiate level, Diné culture is still much appreciated. Although, not all students attend a higher education setting after high school, it is still a way to preserve and promote Diné culture and language within certain fields of study.

My goal from the day I started this program was to serve as a voice for my people, culture and land. The minute I heard "critical theory" and its commitment to both justice for and by the people, I knew I could serve as a voice for my people. I am dedicated to the preservation of my Diné language and culture. Many people would ask, will this work? How can we save, continue to implement, and teach our young? This is a difficult process to attempt and accomplish as each story is translated and interpreted in many ways, as there are different

meanings based on the context. But with the storytellers' stories, they have agreed that preservation and the urgency of documenting their story is the ultimate key to survival. I have not found solutions or answers, but I have gained insights on new questions that could further preserve this sacred knowledge (Jumbo-Fitch, 2018).

The purpose of this study was to examine how and why Diné ways of knowing and Eurocentric construction management practices align and conflict with each other. This study was motivated by a perceived lack of commitment to enacting Diné culture and language in constructional management practices and an even greater lack of integration of this knowledge base in any higher education setting. There is a need for Construction Management Professionals (CMPs) who are simultaneously knowledgeable in the construction field and Diné traditions and beliefs within Diné communities.

The goal of this study is to underscore the importance of Diné culture and language and how Diné culture, language, family and community need to be included in planning higher education construction management programs. This chapter will describe implications and recommendations for research for Diné construction management curriculum and practices. First, I will provide a brief overview of my major findings from chapter four to assist in providing examples of Diné practices and curriculum. Further, I will use the findings to explain Culturally Responsive Diné Construction Management Curriculum and Practices (CRDCMCP). Lastly, I will discuss my study limitations to provide further recommendations for future research.

I found that Diné culture and language amongst CMPs can influence their construction management practices and the curriculum. I used Critical Oral History (COH) to gather data for my findings. The findings were analyzed through Tribal Critical Race Theory (TribalCrit), specifically four of TribalCrit's tenants: (a) Tribal beliefs, customs, traditions, and visions for the

future, (b) Indigenous peoples have the desire to obtain and forge tribal sovereignty, (c) The concepts of culture, knowledge, and power take on a new meaning, and (d) Stories are not separate from theory, they make up theory (Brayboy, 2005). The findings presented in chapter four have implications for professional practice and for curriculum in construction management education at the post-secondary level. My analysis of the interviews resulted in identifying four major elements, 1) Language, 2) Culture, 3) Family and 4) Community, and how they individually as well as collectively influence construction management practice and thus influence any post-secondary Diné-centric construction curriculum.

I began with questions that sought to explore how integrating Diné Language and Culture could further enhance a Culturally Responsive Diné Construction Management Curriculum and Practices (CRDCMCP). Through my interactions with the storytellers I confirmed the importance of language and culture as well as identified family and community as two additional themes important to achieving this goal. This study helped me to identify that Diné ways of knowing need to work in collaboration with Eurocentric construction management curriculum in order to create CRDCMCP (see Figure 4-1, chapter four). Engaging the third phase of the Critical Oral History (COH) frame (Lemley, 2018), transformative justice outcomes, I propose the following recommendations to prompt transformative justice change.

Major Findings

By understanding, respecting, practicing, and promoting Diné ways of life, the storytellers provided valuable information that influence the development of CRDCMCP. Each story shared encouraged the use of Diné language and culture based on what they have experienced throughout their lives. The younger generation had less experience in practicing Diné language and culture within their fields, but recognize and respect its underlying principles.

They also have not had time to fully understand and practice their parents' and grandparents' teachings. The majority of the younger generation had little or no input on how they are beginning to practice Diné ways of life within their fields, but shared how they are wanting to continue to preserve and promote Diné. The older generation has seen their Diné communities change, but have always maintained their culture, language, family, and community values throughout the changing generations. The older generation highly reflected on what they were told by their Elders and honor this respecting aspect at their current positions. The older generation also reflected on generations of stories told to them by their family and how the stories provided a rationale for their actions.

Throughout the years of oppression, the older generations were affected and unable to pass on knowledge to the younger generation Diné. The CRDCMCP empowers liberation through the continuous practice of Diné language, culture, with and within their families and communities. Overall, each generation believes in continuing the use and promotion of Diné construction management curriculum and practices, as it is highly respected trade and will continued to be implemented on Diné Nation.

Diné language is a critical element in developing CRDCMCP. Diné CMPs need to use culturally responsive culture and language through designing, building, and developing and implementing new policies for Diné communities. Diné families provide support and influence CRDCMCP. Diné use their community approval process, within the local Chapter houses to implement any new laws and practices located on Diné land (such as their livestock, grazing, branding, landscape remediation, site work projects, building, utility services to provide electric, water, natural gas, and solar power).

Diné language, culture, family, and community inform CRDCMCP through review of project details (schedule and estimates), design and location of new projects, requests and approval from community, and construction of new projects. Each listed aspect influences construction management practice based on the context (timing and location). Each aspect also varies based on a management role and an administrative role.

CRDCMCP are different from Eurocentric construction management curriculum and practices through a reliance on Diné language, culture, family and community. The project details, design and location of new projects, requests and approval of community, and construction of a new project may be similar to a certain extent for both Diné and Eurocentric, but the process for Diné Nations are defined based on Diné creation stories and Diné traditions that are passed down through the generations of Diné Elders.

For example, using CRDCMCP, project details must be first reviewed with the project team, made up of an architect, engineer, project manager, and owner. The project team should include qualified individuals that are selected based on project experience and cultural knowledge. The project team is able to develop an overall project goal, which consists of project cost, schedule, and location. Within the Diné communities, this process must be presented in Diné language and approved by the affected community members (Elders), Chapter house members, and Diné Nation. In most cases, this process may take additional time for the initial project approval, as there are many Diné members that may question the overall project goals. In Eurocentric practices, the review of project details, in most cases, requires the project team to be qualified members based on experience only. The project is guided by the project team and the owner approves the project goals. The processes vary differently according to respecting

traditional ways of being versus only project costs and schedule. Diné communities put respecting Diné culture and traditions first and foremost.

Culturally Responsive Diné Construction Management Curriculum and Practices

Although there is currently no construction management curriculum on the Diné Nation, Diné continue to be heavily influenced by the implementation of culture and language within their family and communities. Eurocentric construction management curriculum continues to dominate at post-secondary institutions on and off the Diné Nation, and much of the curriculum is related to work on Diné. However, engaging culturally responsive curriculum planning and development way may provide a way for Diné higher education institutions located on and off the Diné Nation to better prepare construction management faculty and students to serve Diné and beyond. All Diné construction management practices currently incorporate language, culture, family, and community, and I propose to incorporate these themes within a proposed culturally responsive Diné construction management curriculum overview. Specific student learning outcomes, lesson plans and techniques are the purview of institutions and instructors and are the purpose of my study (see Appendix C).

Elements important to engaging culturally responsive Diné construction management practices and implementing culturally responsive Diné construction management curriculum are listed and then contextualized below. I will be using the four major elements, 1) Language, 2) Culture, 3) Family and 4) Community, to analyze construction management practices and thus influence any post-secondary Diné-centric construction curriculum. The construction management practices are a part of the construction management curriculum, they inform each other and are intertwined.

Culturally Responsive Diné Construction Management Practices

From data provided by the storytellers, I described implications for both culturally responsive construction management practices and curriculum. The culturally responsive Diné construction management professional practices include the following:

1. Culturally responsive review of project details;
2. Culturally responsive design of a new project;
3. Culturally responsive request approval; and
4. Culturally responsive construction of the project.

Culturally responsive review of project details: During the review of project details, the construction manager needs to be able to work with the administrators in order to develop cause, schedule, location, and estimated costs. This process requires Diné CMPs to present their findings to their project team in Diné language. By using Diné language, CMPs gain respect and their team understands the practice reasoning and meanings clearly. Also, the use of Diné language provides multiple layers of meanings, which are presented to the project team in regards to the description of the project location, type of materials located in the geographical area, design and size of the project, and specifying what tools may be needed. Each decision made by Diné CMPs also should take into consideration culture. For example, Diné CMPs understand they would disturb the Earth and its living organisms; therefore, they would plan a ceremony to protect employees from any cultural taboos. Project details also include any residence that they may be working by, so the team became aware of how they would need to address the client through clanship relationships. Project details would then be reported to the local community for project review, comment and or approval.

Culturally responsive design of a new project: The design and location of a new project located on Diné requires construction administrators to coordinate the project details with

construction managers from different entities to ensure that proper guidelines and cultural morals are being adhered to. The entities include those from the county, utility provider, Chapter house, and school district. Any proposed project requires multiple meetings to be presented in Diné language, so Diné understand the underlying meaning of what is being proposed. Each new project design on Diné requires that culture be incorporated, so the people are respected and recognized throughout the project duration and beyond. The most common design principle for Diné is having the front entrance facing the East direction. This practice is common courtesy on Diné Nation and welcomes the early morning sun where Diné greet and pray to ancestors. Other practices include the use of materials located in the geographical area represent and respect Diné traditions and protocols. Family opinions are welcome, as the new project may affect their current properties. Overall, the community as a whole decides if the project promotes Diné culture, economy, land, and people.

Culturally responsive request approval: Approval of community requests on Diné is held at the local Chapter level and in a few cases requires Diné Nation approval. Construction management practices that require approval from the local Chapter house included the following but not limited to; project zoning, project design, project costs, and construction of the project. Construction managers and administrators become very involved with their communities. The majority of the CMPs are elected officials. They have to be able to speak and present themselves in Diné language in order to provide meaning, show respect to the people, and the land. Diné CMPs needs to understand their cultural surroundings (who and where they are going to be working by) and believe within their cultural traditions (presenting and providing examples in Diné language). Throughout this process, CMPs work with the Diné Elders, who are known as

K'é, family, and they acknowledge the community members through clanship. Through this practice, the CMPs respect the people with the Diné community and the land.

Culturally responsive construction of the project: During the construction phase, precautions are taken by construction managers to protect the workers. The administrators help to support the construction manager's practices by continuing to review the project details, schedule, and costs. Diné CMPs need to continue to inform their community members of project progress at the local Chapter house in Diné language. The CMPs continue to take precautions throughout the construction of the project, by reviewing the project location history with the Diné Elders at the local Chapter house meetings. The Elders assist in reviewing project location details, such as family connections and geological classification. The CMPs adhere to traditional values by informing the community, as well as listening to the community comments. During this practice, we give back to the community by constructing new, this is reciprocity.

Culturally Responsive Diné Construction Management Curriculum

Although the Eurocentric construction management curriculum will continue to dominate underlying principles of construction curriculum, there are opportunities to introduce culturally responsive Diné culture and language into the curriculum, especially on the Diné Nation, and at higher education institutions. Therefore, blending Eurocentric and Diné ways of life could be in collaboration with construction management professionals, to value and validate both knowledge bases. This process of Diné educating themselves, and can do so through both Indigenous wisdom and knowledges often found in dominant society (Brayboy, 2005). As a sovereign Nation, Diné have been able to develop their own higher education institutions that encourage the promotion and use of Diné heritage, potentially a natural place to pilot CRDCMCP.

Diné and non-Diné higher education institutions currently do not offer a culturally responsive Diné construction management curriculum. However, there is an opportunity for Diné culture and language and ways of knowing as practiced by CMPs to be introduced and taught in a formal education curriculum. This dissertation serves as a starting point to commit to this critical curriculum and practices. Using the four themes of Language, Culture, Family and Community, I developed implications for a Diné sensitive construction management curriculum. Again, referring to Figure 4-1, the CRDCMCP continue to inform each other.

The four proposed curriculum are also based on the storytellers' stories and relate the practices above in regards to project details and the ability to design and plan projects with an emphasis on Diné culture and language. The culturally responsive Diné construction management curriculum items include the following:

1. Culturally responsive evaluate project resources/Language;
2. Culturally responsive embed sustainability in culture/Culture;
3. Culturally responsive identify local economic needs/Family; and
4. Culturally responsive know local building codes and regulation/Community.

Culturally responsive evaluate project resources/Language: Teach Diné language to help Diné CMPs develop resources to complete needed projects. Some terms and words are difficult to translate and interpret and need to be developed to reflect cultural understandings. For example, a CMP may be working only with Diné Elders; the Elders only speak and recognize Diné language. This aids in translating the project details, such as geographical location, as projects located on Diné Nation are in most cases located in rural areas with no distinct markers. The CMP needs to be able to understand their cultural surroundings in order to obtain project resources from the local community. They have to be able to converse in Diné language to define

where they are, who they are located by (families), and what resources may be available at the project location.

Projects located on Diné Nation can be a challenge to design and construct. The terms used in obtaining resources as presented in a Eurocentric curriculum are very different than those used to obtaining resources in Diné language. Diné CMPs should first start with language to determine if the project is suitable for the community. By evaluating the use of Diné language, Diné CMPs should be able to present the possibility of a new project to the local community in Diné language. The curriculum therefore requires an introductory course in Diné language, history and geography as this will help to provide meaning and clear interpretation of the project itself.

Culturally responsive embed sustainability in culture/Culture: Diné ways of knowing include a significant element of the practice of sustainability embedded in their culture. CRDCMPC would be heavily influenced by use of local resources and materials, recycling methods, transportation, and culturally sustainable design. The curriculum would focus on long term building that is designed for Diné Nation. Modern, rural living would be highlighted in the curriculum, so that Diné CMPs are able to plan, schedule, obtain funding, and determine available resources.

Diné have been able to develop and create construction management practices of a traditional Diné Hogan, otherwise defined as “home” in English. The Hogan itself has many cultural teachings. In Diné culture, the Hogan materials, orientation, and overall design have many traditional meanings that were created by our ancestors. For example, the door faces east because it greets the morning sun and beginning of a new day, welcoming the creators to provide guidance. The eight and six sided Hogan represent male and female. The ceiling represents the

stars within the galaxy. The floor represents our mother earth. The dawn and dusk help with orientation. The four cardinal directions provide different meanings with the Hogan; there are male and female meanings for north and south directions that are used in traditional ceremonies; overall, ceremonies are conducted in certain ways based on the Hogan layout. The Hogan upholds cultural designs and traditions.

Culturally responsive identify local economic needs/Family: Diné family, clan, culture, and location are intertwined. Relationships of families through clans and within families' influences take into consideration and assessment of local economic needs. Economic need as defined by Diné will be different from those defined by Eurocentric entities. CMP curriculum will be influenced by a focus on the appropriateness of defining “needs” and the appropriateness of introducing new, and potentially advantageous or possibly intrusive technologies.

Diné is a vast region with a relatively small population. CMPs need to understand local geography driven by generational uses of the land for basic sustenance. The use of available resources needs to be studied in order to determine the appropriateness of any new project or practice. For instance, using modern GIS (Geographic Information Systems) on a landscape level would have a significant influence in assessing the local long term economic needs. Using intrusive types of remote sensing technologies could likely be seen as insensitive to traditional ways of dealing with neighbors.

Diné families provide the best assessment of the local economic needs. They understand what survives and thrives on Diné Nation and understand what is required to better their economic needs. For instance, Diné Nation has different soil classifications and many microclimates, which discourage the construction of buildings and structures that will not withstand severe elements (desertification, dust, and flooding). Local economic needs may entail

new planning and zoning ordinances, so CMPs are able to determine based on Diné ways of knowing, what is best in the long term for any new construction.

Culturally responsive know local building codes and regulation/Community: Community plays a major role in construction. The curriculum will provide a way for CMPs to learn how the Diné Nation gains consensus and is subsequently influenced by the community approvals. The curriculum will provide a basis for understanding how written law, practice, and clan relationships work in construction practice. CMPs have to be able to abide by the building codes, and regulations developed by the Diné community.

Clanships and community are important when hiring qualified employees for projects. For example, hiring Diné workers is a priority for projects on the Diné Nation. Scarce resources of money and skilled labor can then be reserved for use in the community. Since local Diné are aware of their language and their surroundings they are important additional assets for local construction. The curriculum would emphasize local Diné Chapter practices, clan relationships as well as building codes and regulations. The building codes and local practice will guide the designers and builders when assessing new or existing projects.

There are many scarce resources on Diné Nation. For example, for approval to plan utility connections for a new home on the Diné Nation requires multiple documentations. The approval process based on existing utility regulations requires a home site lease, which in most cases, none of the younger generation have. This document should be obtained from family members of the local community. If the document is unobtainable, the community needs to be able to grant approval of the utility connection, which can take months to years depending on the CMP in charge. In most cases, the project comes to a complete halt and the homeowner lives without utilities. Building projects on Diné Nation are complex when integrating language,

culture, family, and community as it is not a set code or regulation; it is working through the four themes to complete a step in the projects.

CRDCMCP is very different as we begin comparing to Eurocentric curriculum and practices. CRDCMCP inform each other based on the examples provided. The examples provided above for both practices and curriculum emphasizes the need to speak, understand, and respect Diné language. All formal communication on the Diné Nation is required to be in the Diné language in order to ensure understanding. Diné culture is exercised in every instance, whether it is to evaluate the surroundings, conduct cultural ceremonies, or review project details. On Diné Nation, familial clanship is very important when addressing the community, reviewing project location, and overall use to gain support from the community. The CRDCMCP should highlight Diné language, culture, family, and community through each step of the construction processes in order to respect and honor Diné ways of being. Both, Diné and non- Diné CMP's have to learn to listen, respect, and strengthen their Diné traditions and beliefs.

Limitations

The limitations from this study included storytellers and the following: 1) data collection occurred during one semester of fall 2017, 2) access to research site was limited based on distance, 3) selection of storytellers reflected a small subset of the community, 4) received limited data about a construction management curriculum, 5) Diné language had to be translated per the storytellers interview to prevent any misinterpretations, and 6) there was little female representation.

Data collection

My data was intentionally collected during the fall. During the fall to winter months, CMPs are not as occupied as compared to other seasons. The fall to winter seasons availabilities

caused an urgency to gather the storytellers' stories quickly, so I contacted each storyteller and scheduled interviews within the limited timeframe. Each of the storytellers was available. During this time, I was also able to return their transcripts for member check and those that responded had ample time to return them to me. This process caused me to plan ahead to obtain approvals from both Diné Nation as well as Northern Arizona University during the summer of 2017, for me to receive approval to conduct my research during the fall semester of 2017. This process limited my timeframe to gather all required documentation before the fall semester.

Access to Research Site

During my interviews, I had to travel to Chinle, Arizona, which is located two and half hours northeast of Flagstaff, AZ, to meet with the majority of the storytellers. I have not fully resided on Diné Nation since I began my higher education career in the fall of 2004, so access to the research site was limited in that I only visited Chinle, Arizona in order to complete the interviews. I had to plan interviews based on the storytellers schedule and meet the storytellers at their requested meeting location. The interviews had to be verified multiple times beforehand in order to ensure that each interview took place.

Selection of Storytellers

The storytellers selected for my study were diverse in gender, age, employment, and academia, but there were other options that I could have expanded on. The storyteller availability limited my ability to invite more of a diverse group. Other storytellers that I would have liked to interview had they been available include a laborer position, construction management instructor, more varied age, or additional female storytellers. These added perspectives could have provided additional insights with their varied lived experiences.

Construction Management Curriculum

Through my storytellers' stories, there was a lot of input on Diné language, culture, family, and community in relation to construction management practices, but very little information on construction management curriculum. I used the construction management practices to influence how I can integrate Diné culture and language into an existing construction management curriculum. I was unable to locate a storyteller who teaches Diné construction management related curriculum, limiting data from this viewpoint. Information in regards to specific construction management or engineering curriculum could have added data in the creation of a culturally responsive Diné construction management curriculum.

Diné Language

The highlight of my study was how Diné language was used in describing crucial parts of Diné history to contextualize rewards and challenges faced today. Diné language provided more significance to each of the storytellers' stories. Diné words and translations provided by the storytellers were documented in order to state the true meanings that were taught by Diné Elders through the different generations. Diné language has many different meanings based on context, so for each of the storytellers, Diné translations were documented per the actual interviews in order to convey the messages correctly.

Female Representation

I attempted to have equal Diné female and male representation, but I was unable to contact the female storytellers. There was a total of four female contacted, but two did not respond, therefore I pursued interviewing storytellers that were available at the time of the data collection process. Although, there was not equal male and female representation, the female storytellers that provided their stories, provided significant words of empowerment.

Summary

Diné have the power to build with a cultural influence. Although many of the buildings and houses constructed are circular in shape, front door facing the east, natural materials, and have earth tone colors, all of these elements have cultural meanings. This empowers Diné community members to show their Diné ways of life through their structures' vernacular characteristics. Diné are entitled to build and construct with a cultural influence as others do.

Diné build with meaning, purpose and intention. They have to think of their purpose, plan the materials to be used based on the location and setting, ask family and community of their thoughts and approval, and overall fulfill their goal of constructing. There is a meaning to each of the four Diné philosophies. The cultural stories provide Diné CMPs guidance to construct.

A Diné construction management curriculum has an underlying reasoning of respect. Diné communities may have many obstacles, but who does not have these obstacles? Diné have struggled to implement policies that would overcome these obstacles, but have not been fully successful, due to the extent of Diné communities. There is a need to teach Diné CMPs, so they can help to improve or create new construction management practices to better Diné communities.

Diné construction management practices have been used for generations by Diné Elders, but with the younger generations, the underlying reasons for the practices are being forgotten. Although we cannot replace the lost generation of language and cultural knowledge, we can begin to heal with culturally responsive practices and curriculum. Diné need to bring back the emphasis on Diné language and culture within a Diné culturally responsive construction management curriculum that is driven by Diné family and community. The people need to understand the CMP qualifications needed on Diné Nation. Before closing, I provide these practices for CMPs to consider and strongly encourage other professionals to consider them to. I

believe these practices are interdisciplinary and could transcend disciplines and inform professionals like educators to reconsider curriculum, both content (what to teach) and pedagogy (how and why to teach).

As stated by Hosteen Shirley,

Hire people that have experience. They need to know what they are doing. They have to understand Diné. They have to know how to manage people. Hire based on location as well. Make sure they are reliable. They have to know culture and understand their surroundings. Know grandmas language (Hosteen Shirley, personal correspondence, 10/27/2017).

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APPENDICES

Appendix A

Navajo Nation Human Research Review Board Approval



THE NAVAJO NATION

RUSSELL BEGAYE PRESIDENT
JONATHAN NEZ VICE PRESIDENT

April 20, 2017

Rosanna Jumbo-Fitch, MA, BS
Northern Arizona University
6520 Silver Saddle Rd.
Flagstaff, Arizona 86004

Dear Ms. Jumbo-Fitch,

This is to advise you that the **Study #NNR-17.274T: "Integrating Diné Culture and Language to Transform Construction Management Curriculum"** has been presented to the Navajo Nation Human Research Review Board (NNHRRB) on **April 18, 2017**, and the following action taken subject to the conditions and explanation provided below.

Reasons:	New Application
Description:	Request Review and Acceptance of New Protocol
NNHRRB Action:	Accepted and Approved – April 18, 2017 – April 18, 2018 period
Conditions:	With All Standard Conditions

The Navajo Nation Human Research Review Board has added a very important additional contingency regarding failure to comply with NNHRRB rules, regulations, and submittal of reports which could result in sanctions being placed against your project. This could also affect your funding source and the principal investigator. Under Part Five: Certification, please note paragraph five wherein it states: *"I agree not to proceed in the research until the problems have been resolved or the Navajo Nation Human Research Review Board has reviewed and approved the changes."* Therefore, it is very important to submit quarterly and annual reports on time and if continuation is warranted submit a letter of request sixty (60) days prior to the expiration date.

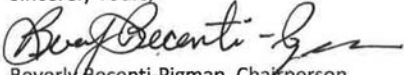
The following are requirements that apply to all research studies:

1. The Navajo Nation retains ownership of all data obtained within its territorial boundaries. The Principal Investigator shall submit to the NNHRRB a plan and timeline on how and when the data/statistics will be turned over to the Navajo Nation;
2. Only the approved informed consent document(s) will be used in the study;
3. Any proposed future changes to the protocol or the consent form(s) must again be submitted to the Board for review and approval prior to implementation of the proposed change;
4. If the results of the study will be published or used for oral presentations at professional conferences, the proposed publication, abstract and/or presentation materials must be submitted to the Navajo Research Program for Board review and prior approval;
5. Upon Board approval, three (3) copies of the final publication must be submitted to the Navajo Research Program;
6. All manuscripts must be submitted to the Navajo Research Program for Board Review and prior approval;
7. The Principal Investigator must submit a dissemination plan on how the results of the study and how these results will be reported back to the Navajo Nation;

8. The Principal Investigator must share specifically how these results will generally benefit or improve the health of the Navajo people. This can be completed by:
 - a. Conducting an educational in-service for the community people and health care providers on the Navajo Nation and present the findings. Provide documentation of these in-services presented.
 - b. Developing educational materials for use by the health care providers and the community people and providing the training on how to use the materials; and
 - c. Presenting and sharing the results of the study at a research conference sponsored by the Navajo Nation for its health care providers and the Navajo people.
9. The Principal Investigator is expected to submit documentation on 8a, b, & c;
10. The Principal Investigator must submit quarterly and annual reports as scheduled.

Please begin using your approved Study Protocol Number **NNR-17.274** on all correspondences and Report documents. If you have any questions on this subject, please call the Navajo Research Program at (928) 871-6929.

Sincerely Yours,



Beverly Becenti-Pigman, Chairperson
Navajo Nation Human Research Review Board

cc: #NNR-17.274 file



Project Number: 871565-2
Approval Date: May 23, 2017
This stamp must be on all
consenting documents



Human Subject Informed Consent

Title of Study: Integrating Diné Culture and Language to Transform Construction Management Curriculum

Principal Investigator: Rosanna Jumbo-Fitch

Dear Project Participant:

You are being asked to participate in a project conducted through the Department of Education at Northern Arizona University by Rosanna Jumbo-Fitch that involves research. The researcher is required to receive your consent before you participate in this project.

This document will explain to you in detail: (1) the purpose of the project; (2) how long participation will last; (3) how personal information collected will be used; (4) the possible benefits; (5) and how personal information will be kept confidential.

Your participation in research is voluntary, and shall not interfere with services available to the rest of the population. There may be potential discomforts, as it relates to individual's spiritual beliefs that may result from participation in this project. If you choose not to give consent to participate, there are no penalties or loss of benefits or services that you are otherwise entitled. If you decide to give consent and then change your mind or withdraw prior to completion of the research, there are no penalties or loss of benefits or services. If participant withdraws after interview, data will not be published. Regardless of whether you give consent or if you agree or disagree to take part in this research, there will be no effect on your relationship with Northern Arizona University now or in the future.

A basic explanation of the project is written below. Please read this explanation and review it thoroughly. If you need more information or have any questions about the research before consenting to participate, you may contact **Rosanna Jumbo-Fitch** at the phone number and email address below.

If you decide to participate in the research, please sign on the last page of this form and return the entire signed form to the researcher conducting the data collection session. A copy of the form will be provided for your records.

1. PROJECT PURPOSE:

The purpose of this project is to examine how and why Diné ways of knowing and western construction management practices align and conflict with each other. The goal of this project is to underscore the importance of Diné culture and language and how they need to be implemented in higher education construction management programs.

2. DURATION OF THE SUBJECT PARTICIPATION:



Your interview will last approximately 1 hour, on a one on one basis. After the session, the data will be coded and information will be shared with participants via mail. The participant at this time will be invited to co-present the results to the Chapter houses, but it is not required to co-present findings.

3. DATA COLLECTION PROCEDURES:

Each participant will participate in a storytelling session lasting approximately 1 hour. The participants will be invited to a luncheon at Junction Restaurant for interview. Each session will be audiorecorded and written notes will be taken for later analysis. After the session, the data will be coded and information will be shared with participants via mail.

If you choose to bring an artifact to the interview, the researcher may ask you to share a story about it. The participants will introduce themselves and will be asked about their residency, gender, age, ethnicity, education, employment, preferred language, traditional upbringings, and community involvement. I will also ask the participants to define construction management based on their experiences. The stories and artifacts will be analyzed to determine where Diné and western construction management practices conflict and align.

No specimen will be collected from the participants.

4. COMPENSATION AND BENEFITS:

Participants will receive \$30.00 gift card upon completion of the interview. Participants will also receive information about how they contributed to their local community. Benefits to society in general may include informing the younger generation of how valuable Diné culture and language is to construction management practices and the higher education curriculum.

5. COSTS

You will be responsible for the cost of your transportation to and from the interview site.

6. CONFIDENTIALITY:

The research findings will be shared with study participants, the local chapter houses and higher education institutions in order to promote the use of Diné culture and language within their existing construction or engineering programs.

All identifiable information will be kept securely in a locked cabinet at the researcher's personal office. Only individuals who are directly involved with the research project will have access to the office. You will be assigned a participant number and that number will be used to label all information that is associated with your data sessions. After data analysis is completed, all direct identifiers (name, age, contact information) will be destroyed and only your participant number will be used to identify data that is kept. Other information received, such as ethnicity, job description, location residing on Navajo Nation, education level, and cultural language and beliefs will be disclosed, and there is a slight chance that this information could allow your information to be linked to you. The audio recordings and written notes will be kept for 1 year after completion of



the study and will then be destroyed. In publications and during presentations, data will be presented only in a de-identified format.

There may be circumstances where your information must be released. For example, personal information regarding your participation in this study may be disclosed if required by state law.

Also, your records may be reviewed by the following groups:

- Office for Human Research Protections or other federal, state, or international regulatory agencies
- Navajo Nation and Northern Arizona University Institutional Review Boards

7. CONTACT INFORMATION

If you have any questions about (1) the conduct of the project, or (2) your rights as a research participant, or (3) a research-related injury taking part in this research project, you should first direct them to the Navajo Nation IRB Contact:

Navajo Nation IRB, contact Beverly Becenti-Pigman, Board Chair at Navajo Department of Health, P.O. Box 1390, Window Rock, AZ 86515. Telephone number 928-871-6929. Fax Number 928-871-6255.

If you have any questions about taking part in this research project, you should direct them to the Principal Investigator:

Rosanna Jumbo-Fitch, Ed.D. Candidate
6520 Silver Saddle Rd.
Flagstaff, AZ 86004
(928)225-1658
Rj97@nau.edu

An Institutional Review Board responsible for human subjects research at Northern Arizona University reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.



AGREEMENT TO PARTICIPATE

I have read (or someone has read to me) this form, and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I am at least 18 years of age and voluntarily agree to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Subject Name: _____

Subject Signature: _____ Date: _____

AGREEMENT TO BE AUDIORECORDED

Subject Signature: _____ Date: _____

Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed the full contents of the study including all of the information contained in this consent form. All questions of the research subject and those of his/her parent or legal guardian have been accurately answered.

Investigator/Person Obtaining Consent: _____

Signature: _____ Date: _____



Office of Regulatory
Compliance

Institutional Review Board
Human Research Subjects Protection Program

805 S Beaver St
Building 22, Room 215
PO Box: 4062
Flagstaff AZ 86011
928-523-9551
[http://nau.edu/Research/Compliance/Human-Subjects/
Welcome](http://nau.edu/Research/Compliance/Human-Subjects/Welcome)

To: Rosanna Jumbo-Fitch, EdD
From: NAU IRB Office
Approval Date: May 23, 2017

Project: INTEGRATING DINÉ CULTURE AND LANGUAGE TO TRANSFORM
CONSTRUCTION MANAGEMENT CURRICULUM

Project Number: 871565-2

Submission: Amendment/Modification

Review Level: Exempt Review

Action: EXEMPT

Project Status: Exempt

Review Category/ies: **Exempt Approval 45 CFR 46.101(b)(2):** Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior.

This submission meets the criteria for exemption under 45 CFR 46.101(b). This project has been reviewed and approved by an IRB Chair or designee.

- Northern Arizona University maintains a Federalwide Assurance with the Office for Human Research Protections (FWA #00000357).
- All research procedures should be conducted in full accordance with all applicable sections of the guidance.
- Exempt projects do not have a continuing review requirement.
- This project should be conducted in full accordance with all applicable sections of the guidance and you should notify the IRB immediately of any proposed changes that affect the protocol.
- Amendments to exempt projects that change the nature of the project should be submitted to the Human Research Subjects Protection Program (HRSP) office for a new determination. See the guidance Exempt Research for more information on changes that affect the determination of exemption. Please contact the HRSP to consult on whether the proposed changes need further review.
- You should report any unanticipated problems involving risks to the participants or others to the IRB.
- All documents referenced in this submission have been reviewed and approved. Documents are filed with the HRSP Office. If subjects will be consented, the approved consent(s) are attached to the approval notification from the HRSP Office.
- Exempt projects are maintained in HRSP for five (5) years from approval. An updated application is required every five (5) years.

Rosanna Jumbo-Fitch

SC100 – Syllabus Assignment

Northern Native American Community College

Mission Statement

Our mission is to educate students to become knowledgeable construction management professionals within their fields of study, provide an affirmative impact within their Diné communities, and boost their pupils overall competencies in order to make a positive difference in society.

Syllabus- Department of Diné Construction Management

SC 100- Lecture

Sustainable Diné Culture and Construction

Spring Semester 2019 (15-Week Format) - January 14 to May 10, 2019

General Information:

Credit Hours: 3

Instructor: Rosanna Jumbo-Fitch

Office Phone: (928) 644-4000 **and Fax:** (800) 444-4444

Office address: 5400 E. College Dr., Diné Reservation, Arizona 86500

Office hours: M, W, and F (10:00AM to 1:00PM)

Email: rosanna.jumbofitch@nacc.edu

Class Meeting (Days and Time): Tuesday's and Thursday's (11:10AM to 12:20PM)

Class Meeting Location: Native Engineering Building, RM 200

Course Description:

The course will introduce students to the foundations and techniques about sustainable Diné construction and concurrently incorporating methods from a Diné standpoint. The priority will be to have students develop a strong knowledge about Diné culture and awareness of construction in the local economy. The course will include two lectures per week and online class discussions. Lecture will be held by a Diné LEED accredited faculty person.

Principles encouraging sustainability in Diné construction techniques: green building, Diné culture, building techniques, conservation, and management.

Prerequisite and/or Co-Requisites:

None.

Instructional Method:

This course will interact twice a week for 50 minutes each session. Sessions will include a review of class readings, quizzes, online discussions, research, and two exams. Online resources will be used to view class content. Students will be required to prepare and present a group research project at the end of the semester.

Basis/Rationale for this Course:

The course will incorporate construction management techniques, sustainable methods, and Diné culture. Sustainable construction should not be viewed from one cultural standpoint; it should incorporate different multi-cultural communities. The sustainable construction techniques should be viewed as a method for all cultures to use, based on the culture location, local economy, transportation, resource availability, and funding possibilities. The course provides students the opportunity to view Diné communities and review their current living conditions and provide sustainable recommendations based on their current living status and resources.

Course Objectives:

At the completion of the course, students will be able to:

- formulate and plan ways to simulate “sustainable green” buildings or structures
- select and integrate information from sustainability guidelines and Diné culture and use them to create future solutions
- communicate sustainable techniques for various construction projects
- create and manage a sustainable energy program for a building
- describe and evaluate sustainable methods that can be used within their local economy
- obtain a LEED credentials- LEED Green Associate or LEED Accredited Professional

Course Overview & Schedule:

The course content for SC 100 is divided into fourteen (14) modules covering sustainable construction methods and Diné construction techniques and viewpoints. Modules cover the following topics:

Module 1

1. Course introduction and overview of sustainability
2. Review syllabus and research project requirements (30pts)
3. Reading #1- What is sustainability? What is sustainability to Diné Culture?

Module 2

1. Reading #2- CH 1-2.
 - o Sustainable Development and Construction
 - o Ethics and Sustainability
2. Review sustainability guidelines and techniques

Module 3

1. Reading #3- Harris, S.G. A Native American Perspective on Sustainable Infrastructure
2. Quiz 1 due online (10pts)
3. Review and reflect on Native American culture and sustainable techniques

Module 4

1. Reading #4- CH 3-4.
 - Ecological Design
 - Green Building Assessment
2. Benefits of sustainability in a Native American community

Module 5

1. Reading #5- Grimley, B. Activist: Old Native Ways Can Be Used in New Sustainability Efforts
2. What can we incorporate from both Native American culture and Eurocentric and Eurocentric derivative culture?
3. Research Project Draft Due

Module 6

1. Reading #6- CH 5-6.
 - Sustainability Process and Credentials
 - Sustainability Verification and Certification
2. Observe and learn about sustainable techniques for residential and commercial construction based on Eurocentric and Eurocentric derivative culture versus Native American culture

Midterm Exam (in class) - Modules 1-6 (20pts)

Module 7

1. Reading #7- Benfield, K. Can Native American be Sustainable and Culturally Appropriate?
2. Learn about the steps in transforming to green methods to the Navajo reservation

Module 8

1. Reading #8- CH 7-8.
 - Green Building Documentation Requirements

- Sustainable Sites
2. Create an in-class assignment on how we create a process to help rural communities go green

Module 9

1. Reading #9- HUD. Sustainable Construction in Indian Country
2. Quiz #2 due online (10pts)

Module 10

1. Reading #10- CH 9-10.
 - Energy and Carbon Footprint Reduction
 - Water Reduction and Efficiency
2. Review HUD guidelines that are being introduced to the local Native American communities

Module 11

1. Reading #11- Singh, A. Greenroads: A Portrait of Sustainable Design and Construction for Indian Roads
2. How can reservation transportation impede on going green?

Module 12

1. Reading #12- CH 11-14
 - Materials Selection and Usage
 - Air Quality
 - Economics and Sustainability
2. A Sustainability presentation will be held by local Diné Construction Management Professionals

Module 13

1. Research Presentations (in class) (10pts)

Module 14

1. Review and reflect sustainability and Diné techniques.

Final Exam (in class) - Modules 7-14 (20pts)

Course Structure/Approach:

This course is based on the philosophy that student learning is based on research and making meaning of the knowledge gained. The course goals may be accomplished through:

- Reading assigned course textbook
- Reading and researching additional online web sources, and other outside reading, as assigned or needed
- Completing research assignment and activities relating to sustainable construction and Diné culture and techniques
- Submitting and responding to all discussion posts, exams, and on line quizzes
- Working collaboratively with other students in class

Readings and Materials

Required Text:

Kibert, C.J. (2012). *Sustainable Construction: Green Building Design and Delivery*. 3rd Ed. John Wiley & Sons, Inc: Hoboken, NJ. ISBN-10: 0470904453.

Optional Resources: Students will be required to obtain additional readings for current information regarding their research project.

Attendance/Class Participation Requirements:

Students will be required to attend in-class lectures and participate in any class assignments. The student will be excused based on medical leave, family emergency, or any other urgent situation. The students will be required to notify instructor (recommended 24 hours) before any absent in order to coordinate any assignments or class material that will be missed during the absence. The student will be required to submit any missed assignments after any excused absent within

24 hours, unless otherwise noted by instructor. Attendance will be required for on-line weekly discussion and will be monitored by instructor online.

Course Management and Classroom Behavior

All students are expected to participate in class assignments, discussions, and provide a positive learning environment for all. Students are to maintain a positive behavior and not disturb or interrupt any classroom sessions. Students will be encouraged to be respectful during any class lecture and not provide any negative or present any offensive comments toward any member of the class. The use of cell phones and other electronics (not involving classroom assignments) are not allowed during class hours. Students will be allowed to eat during class, based on the class hours (lunch time), but if it becomes disruptive, the student will be asked to wait until after class hours. Any students that provide any disruptions during the class time will be first warned; second asked to leave; and third be withdrawn from the class.

Evaluation Methods

There is a total of one research assignment, two quizzes, two exams, one research presentation, and weekly online discussions. Each assignment will have detailed instructions included online under the “Assignments” tab. Students are responsible in submitting assignments online by due date. Late assignments will not be accepted. Students are to plan ahead of time for assignments. Students are to use APA style formatting for all assignments. Course requirements are as follows:

1. **Course Research Project:** Students will conduct research on a sustainable project located on the Diné reservation and compare it to a sustainable project located in an urban community. The research project will be worth 30 points, based on the instructions, which is located in the assignment description.
2. **Course Quizzes:** Students will be required to take a quiz based on information learned in the class. There are a total of two quizzes and each will be worth 10 points each.
3. **Midterm Exam:** Students will be required to take a midterm exam based on the first seven weeks of class. The exam will be worth 20 points.

4. **Course Presentation:** Students are required to present their course project based on the research study they have conducted. Each student will have 15 minutes to present their findings to the class. The presentation will be worth 10 points.
5. **Final Exam:** Students will be required to take a final comprehensive exam based on the second seven weeks of class. The exam will be worth 20 points.

Students are allowed extra credit based on the online discussion posts. Students are able to gain ten (10) extra points, based on participation in weekly discussions. Students are required to participate in all weekly discussions and provide at least two responses to another student post.

Grading System:

Student's final grade will be based on a total of 100 points. The student will be responsible in submitting all assignments according to instructions and by due date. The grading scale is as follows:

90- 100 points	A
80- 90	B
70- 80	C
60- 70	D
Below 60 points	F

Students will be responsible by checking online announcements from instructor on a daily basis. Student research projects will have an online grading rubric located under "Assignments" tab, which will provide details of grading. If students have any questions on assignments or grading, they are to email instructor concerns and response time will be within 24 hours. The student is encouraged to review grading with instructor if there are any concerns. When a student is appealing a grade, the instructor is to be contacted within the 24 hour after the grade is posted. The formal appeal will include reasons for the request and the instructor will respond with final decision.

What to Expect From Your Instructor:

Students are to abide by the syllabus guidelines. Instructor requires that all students have access to the internet and submit assignments with Microsoft office software. The instructor will log on daily to respond to any questions and provide announcements as needed. The instructor will participate in online discussions to clarify any student concerns about course content. The instructor will provide feedback for assignments, quizzes, and exams within 72 hours of due date. If there are any delays, the instructor will post on course announcements.

Policy Statements of Northern Native American Community College

All student policies are located on the college website: www.nnacc.edu/policies

Student Code of Conduct. Students are to be respectful and courteous to others in class. Students are to present themselves as professionals and interact in a positive manner around the instructor and other students. The instructor will provide warnings if there are any violations made to the student code of conduct and final warning will require removal of student from class.

Students with Disabilities. Students with disabilities are allowed by the ADA to be given assistance as needed. The college will provide the student with visual, access, and other means as necessary in order to provide the student a comfortable learning environment.

Plagiarism. Plagiarism and cheating will not be acceptable. All student work will be reviewed through a global referencing source. Students are highly encouraged to ask for assistance if there are any questions in regards to resource citations. If committed, students will be charged with academic dishonesty and will be punished according to the College Board. Students are required to follow the APA guidelines when submitting assignments. Students are not allowed to expose any course exams to other students.

Internet Policy. Students are to abide by student policies and not download material onto college computers. Students are not allowed to use college computers for any other use besides academia. Any student caught using college computers and internet for illegal use may be punished according to college policy and withdrawn.

Weather Related Class Cancellation. There will be no exceptions to late work- all assignments will be submitted online. If any weather delays impede on student attendance, the instructor is to be notified ahead of time or within 24 hours afterwards.

Construction Management: “Management of the development, conservation and improvement of the built environment; exercise a variety of levels from the site and project, through the corporate organizations of the industry and its clients, to society as a whole; embracing the entire construction value stream, from inception to recycling, and focusing upon a commitment to sustainable construction; incorporating a wide range of specialist services; guided by a system of values demonstrating responsibility to humanity and to the future of our planet; and informed, supported and challenged by an independent academic discipline” (CIOB, 2016).

Critical Indigenous Research Methodologies: “CIRM begins as an emancipatory project that forefronts the self-determination and inherent sovereignty of Indigenous peoples is rooted in relationships and is driven explicitly by community interests” (Brayboy, Gough, Leonard, Rohel III, & Solyom, 2012).

Critical Oral History: “COH guides research to (a) identify a critical topic focused on underrepresented populations through critical inquiry, (b) engage critical processes through community-based accountability and (c) honor critical outcomes through transformative justice.” (Lemley, 2018).

Culture: “Culture is learned standards for perceiving, believing, acting, and evaluating the actions of others” (Goodenough, 1949).

Indigenous Knowledge Systems: “Indigenous knowledge may be embodied in songs, ceremonies, symbols, and artworks that have commercial value in their own right, separate from the empirical models of the world they represent. Values are so deeply embedded within

Indigenous knowledges that it is difficult to distinguish the empirical content from the moral message” (Battise, 2002).

Tribal Critical Race Theory: ““The primary tenet of TribalCrit is the notion that colonization is endemic to society. By colonization, I mean that European American thought, knowledge, and power structures dominate present-day society in the United States.” (Brayboy, 2005).