Traditional Navajo Storytelling as an Educational Strategy: Student Voices

by

Tammy Yonnie

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Kathleen Puckett, Chair Robert Kleinsasser Harold Begay

ARIZONA STATE UNIVERSITY

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ABSTRACT

This mixed methods action research study explores the phenomenon of Navajo storytelling from the student perspective, exploring views of their experiences, and how those experiences and perceptions impact their learning. Navajo storytelling reflects the traditional teachings of the Dine, and serves as the foundation to character building promoting the concepts and processes of *T'aa Sha Bik'ehgo Na'nitin* ("sense of direction"). The design of the study supports the students' achievement by utilizing a storytelling approach to teaching that organizes learning around the principles of critical thinking *(nitshakees)*, planning *(nahata)*, reasoning *(iina)*, and creativity *(sihasiin)* found in the Dine educational philosophy model, *Sa'ah Naaghai Bik'eh Hozhoon*. Goals of this study focus on the subject of traditional storytelling, Navajo folktales, to determine how the teaching and learning influences the processes by which a student makes decisions. Through oral storytelling the teachings place priority on creating a nurturing, respectful, and culturally inclusive environment based on Diné knowledge and language.

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CHAPTER 1: INTRODUCTION

Stories deepen the understanding of how people view themselves as human beings. Stories affirm their beliefs and values, influencing how they see the world and how it shapes their lives. Inevitably, stories define their identity connecting them to their culture and their families. It manifests itself in the way they lead their lives, influencing how they think and how they act. The decisions, in turn, influence the direction they take in life. For some, these experiences and knowledge result in choices leading to a good, full life. The Navajo people (Diné) who now live in the tri-state area of Arizona, Utah, and New Mexico recognize this journey as a way of maintaining life that is balanced and harmonious. In this quest for understanding truth, the Diné use the foundations of storytelling to describe the path to a good life, *iina*. Diné philosopher Wilson Aronilth (1991), believes that "*iina* is that journey that each of us make. It is the true value of education and survival" (p. 48).

This study focuses on the subject of storytelling with the understanding that the socio-cultural context in which the teaching and learning that takes place influences the processes by which an individual makes decisions regarding all things in life. The socio-cultural context of learning and development shapes people in distinctly unique ways influencing their thoughts, feelings, and behavior. Neuliep (2015), in his extensive study, summarizes that people "learn to organize their thoughts, emotions, and behaviors in relation to their environment" (p. 48). The socio-cultural context in which we live, learn, and develop where teachings are different is therefore quite diverse and unique. The Diné are not any different.

For the most part, human growth and development is represented as stages occurring throughout one's lifespan. The traditional knowledge and skills acquired throughout this lifespan are significant to understanding self-identity within the Navajo culture. An awareness of these stages of life is essential to understanding one's place in life. In *Navajo Philosophy of Learning and Pedagogy*, Herbert Benally (1994) describes how "life becomes the knowledge itself because everything in life is part of the four branches of knowledge, the four stages of maturation, and the four cardinal directions" (p. 24). Benally (1994) further explains the framework of Navajo philosophy "as a process guided by the four principles of knowledge [and the philosophical foundations of Navajo culture are holistic in process with a perspective on] life as a whole" (p. 2).

Overview

Traditional education, then, typically involved listening, observing, and being actively engaged in lessons meant for survival. Children acquired the knowledge and skills specifically to care for the family. Life lessons integrated oral teachings and through these stories, young Navajo children were instructed the essential principles of the Diné philosophy on how to live a balanced and harmonious life. The teachings encouraged and reinforced respectable behavior and values within the home. Children internalized common values by learning to prepare and plan around the basic necessities of Navajo life. Naturally, the child was taught to be respectful and to be responsible to the family. As a result, their duties also included the care of livestock and the care of crops that brought food to the table.

Traditional stories contained life lessons that provided the essential foundations to discipline and engagement which were later applied to other events in life. Spoken words

nurtured the physical, social, emotional, and intellectual growth of life. These experiences emanated feelings of belonging and relatedness. To that effect, children grew to understand and respect their culture and their community.

Historical Background

The beginning of Indian education originates back to the United States (U.S.) government's role of acculturation and assimilation. Policies enacted in the early 1800s were the earliest attempts by the dominant Eurocentric education to strip the identity of Native American Indians (Szasz, 1999). At first, Christian values and beliefs were used to replace the traditional system the American Indians utilized for many centuries. Later, the Bureau of Indian Affairs became the system that controlled the educational process that forced students to become immersed in values and beliefs that contradicted their own. Gradually, the customs of American Indian cultures were ignored and regarded as inferior to the westernized educational system. Those who accepted the attitudes and values of the dominant society experienced loss of ethnic identification.

Long-time advocate and ally to the Navajo people, Charles Roessel (2002) described Navajo education before the 1930s as "primarily a deliberate and intentional means to erase Navajo language and culture" (p. 36). Originating back to the *Treaty of 1868, Article VI*, the federal government pledged the "Navajos to compel their children, male and female, between the ages of six and sixteen to attend school." Taken far from their homes, the "early formal education programs . . . was aimed at civilizing and Christianizing" Indians (Thompson, 1975, p. 25). Known as the boarding school experience, the program was a significant factor in destroying families and life. The boarding school era was a time of suffering, an ordeal experienced through forced assimilation as Navajo children were captured and removed from their homes. Children attended off-reservation schools run by the federal government. "Government teachers sought to erase the cultural backgrounds of Indian children with the naive belief that once a vacuum was created, western social mores and beliefs would naturally rush in to replace long-standing tribal practices and customs" (Deloria, 1991, p. 34). Hundreds of miles away from their homes, the schools were set up with the understanding that Navajo children would soon adopt the values and way of thinking of the dominant society. Alienated and discouraged from learning their traditions, the children experienced loss of language, customs, and traditions. These experiences left many Navajo children disconnected from their family members.

Challenges of the Navajo Education System

In 1966, the Rough Rock Demonstration School opened its doors offering the following programs: culture, language, adult education, improved dormitory living, along with guidance and counseling (McCarty, 2002). Areas meaningful to the students were used to connect important values and customs of both the Navajo culture and the dominant society. McCarty, Lynch, Wallace, and Benally (1991) reported that Rough Rock Navajo children brought to the classroom certain preferences that led to the kind of performances referred to as a "style." Price, Kallam, and Love (2009) define these learning styles as the method by which one comes to know or understand the world. They are characteristics or usual strategies by which a student learns (More, 1989). The outcome of this first tribally controlled school on the Navajo Nation supported the claim that "any school to be maximally successful must have its roots in the community" (Roessel, 1968, p. 1).

Today, there are over 34 grant schools in operation on the Navajo Nation. Despite the efforts to operate the school at the local level, very few schools have fully integrated Navajo language and culture into their curriculum. In its place are "schools . . . set up to accommodate styles of . . . learning which are incongruent with the traditional values and styles of learning that characterize many [Native] American Indian students" (Swisher, 1990, p. 1).

Studies suggest "there may be perceived conflicts between formal schools and group identity" (St. Charles & Costantino, 2000; Fischer & Stoddard, 2013, p. 148). The cultures and languages of the American Indian students' homes and communities conflict with the language and culture of the mainstream classrooms (St. Charles & Costantino, 2000). The linear, sequential, and repetitive tasks do not match the holistic approach the Native American students are taught in their homes. Literature further explains the established relationships between student learning and culture (McCarty, 2002; Rhodes, 1994) suggesting that learning supports that are culturally appropriate provide physical, social, emotional, and intellectual understandings to address learning barriers (Nieto, 1999; McCarty, 2002).

Next to the learning styles, the Diné have strong cultural ties to matrilineal clanship and respect for elders. These cultural values are rooted in the teachings of the elders which have been a dominant role in the teaching and learning process of American Indian students for many generations (Pewewardy, 2002). Nichols and Berliner (2007) propose "a well-internalized value system . . . [resulting] in higher quality of learning, a persistence in the face of difficulty in learning, and a greater enjoyment of the learning process" (p. 149). Bridging the gap begins with an understanding of the cultural context

from which the students come. With the increasing demand for changes in the educational attainment of American Indian students, familiar and practical solutions must be developed. Demmert (2011) proposes a culture-based education as part of a school improvement strategy addressing "issues of culture, language, cognition, community and socialization are central to learning" (p. 1). By maintaining a better understanding of culture . . . educators can begin to take important steps to ameliorating persistent gaps in educational outcomes" (Howard, 2010, p. 111).

One solution is the integration of oral storytelling in the classroom. Storytelling has the potential to help Navajo students develop the knowledge and skills needed to be successful in life.

Context

The setting of this action research study is Mountain View School (a pseudonym), a tribally-controlled school located on the Navajo Nation. Formerly a Bureau of Indian Affairs school, Mountain View is monitored by the Navajo Nation Board of Education while activities and regulations are set by the Office of Indian Education Program–Bureau of Indian Education. However, because of the minimal technical assistance by the Office of Indian Education Program, the local school board, the administration, the faculty and staff, the parents and community members, and the students determine the context and culture of the school. The organizational context and culture are in part defined by the grant school mission and vision. The unique structure of the school enables the community to decide on the educational needs appropriate to students of Mountain View.

Mountain View is a Title I school where the goal is to "provide a positive,

healthy, social and education environment based on Diné knowledge and language." The administrative team suggested that teachers think about intervention services to address learning and behaviors in the classrooms. This recommendation required teachers to examine the current school curriculum and develop a framework to support student learning at the earliest grade possible. Initially, the team agreed the change needed to occur with the implementation of the school-wide Navajo Language and Culture (NLC) Program. Increased student interest in the NLC program led to this study in an attempt to learn about students' experiences with storytelling and the perceived influence storytelling has on student learning and behavior.

Purpose of Study

The purpose of this study is to explore the phenomenon of Navajo storytelling from the student perspective. Specifically, the study explores middle school students' views of their experiences of storytelling and how those experiences and perceptions impact their learning.

The design of the study supports the middle school students' achievement by integrating the Diné educational philosophy (DPL) model with storytelling through the process of planning, preparation, critical thinking, implementation, and reflection. The Diné stories will be used as a link to connect students to their traditional teachings brought down from local ancestors. The stories are an accumulation of cultural beliefs, values, and traditions.

CHAPTER 2: BACKGROUND LITERATURE

Introduction

This chapter includes a review of literature that explains the existing scholarship on storytelling. First, a definition of the term *culture* in the context of this study is explained. The definition will show how the context in which a child grows is shown to have a significant impact on learning. Following this section, an explanation of Navajo stories will be provided. The conclusion of this chapter will present the theoretical framework that explains and guides my action research study.

Culture Shapes Mind

Boas (1938) defines culture as a system of shared beliefs, values, customs, behaviors, and artifacts that the members of a society use to cope with their world and with one another and are transmitted from generation to generation through learning. According to Little Soldier (1992), the ways in which children's needs are met are determined in large measure by cultural patterns. Learning in traditional Indian cultures can often be described as watch-then-do (e.g., learning to make a fishnet) or listen-thendo (e.g., learning values through legends taught by an elder) or think-then-do (e.g., thinking through a response carefully and thoroughly before speaking (More, 1989, p. 18). The "we-do, I-do" approach describes the learning styles of most American Indian tribes. Different from the trial and error learning, the learning environment found in traditional indigenous settings are naturally experiential and place-based (Cajete, 1993; More, 1989; Rhodes, 1994; Swisher, 1990).

Mental activity cannot be understood without taking "into account the cultural settings and its resources, the very things that give mind its shape and scope"

(Bruner, 1996, p. x-xi). This involves the "connection with elders . . . inclusion of students' culture and experiences and actively teaching social responsibility" (p. 242). McIntosh, Moniz, Craft, Golby, and Steinwand-Deschambeault (2014) find that "actively teaching the cultural values of the community and viewing social development as a goal for schooling are just as important as academic achievement" (p. 240).

Storytelling

Gregory Cajete (1993), a distinguished scholar in Indian Education, affirms the value of storytelling in the education of American Indian children. Storytelling holds "the power to reach within each of us, to command emotion, to compel involvement . . . [showing] us the truth about ourselves – who and why we are" (Livo & Rietz, 1986, p. 4). It captivates the heart internalizing one's feelings and thoughts and stimulates the mind through development of emotions promoting self-awareness, self-esteem, and confidence.

Storytelling has long been known to be successful in transmitting knowledge and cultural values from one generation to the next. The Diné elders use storytelling as a way to educate and teach the process of life. The stories contain teachings that express ideas through characters; their voices speak of the origin stories and with it are the morals used to teach the child to think and to plan for the future. Through storytelling, the Navajo language is communicated and considered to be an "essential element of the life, culture, and identity of the Navajo people" (Navajo Tribe, 1984, p. 9).

Navajo Stories

Traditionally, winter stories such as the creation stories are shared when the first frost begins in the winter to the very first thunders in spring. It is the clear winter sky that provides an exceptional time and place to view the constellations and tell stories. The two brightest stars in the constellation system represent the Navajo Hero Twins. This legendary story (see Appendix D) demonstrates the determination and perseverance of two Navajo adolescent boys who overcome obstacles while on their journey to see their father. Each encounter gave them more courage, strength, and determination to complete their task. In the story, the twins avoid failure and are portrayed as heroes for slaying various enemies. In the end, they accomplish their goal in meeting their father for the first time. The Navajo Hero Twins are known as *Naayee Neizghani* [Monster Slayers].

The *Hooghan Nimazi* [Navajo hogan] is also depicted in the constellation as well as other characters referenced in many of the traditional Navajo stories. In general, the stories generate feelings of belonging and relatedness.

Hooghan Nimazi [Navajo Hogan]

The Navajo hogan is translated as *Hooghan Nimazi* which means a round dwelling. The Hogan is often represented as an eight-sided dwelling, constructed of wood and mud. The structure of the hogan is described to be held tightly at each corner with alternating layers of logs grasping at each corner like the mother's grasp around her unborn child. Inside, the materials and belongings are appropriately placed around the perimeter of the Hogan. The inside of the hogan is symbolic of the mother's womb, a place of protection and purity. Children are taught the appropriate way to enter the hogan and how to behave. There is no shouting, yelling, or running in the hogan. The hogan is therefore a sacred site for the Diné.

The structure of the hogan brings families closer together as they gather around an open fire situated in the center. The learning environment is "designed to educate the child informally through observation and interaction with parents, relatives, elders, and...

social groups" (Pewewardy, 2002, p. 6). Children are taught the social behaviors associated with the *Hooghan Nimazi* [Navajo hogan].

Entering a home and greeting a person through clanship establishes kinship Ke' [respect for one another], and respect for order by addressing each person seated in a clockwise cyclical (*T'aa Sha Bik'ehgo*) manner. The concept of ke' provides solidarity, a sense of camaraderie, and harmony between the individuals. Addressing one's clan is an important custom. The practice teaches the younger generation to care and respect one another.

The Navajo way of life includes the home and community in the educational process. Learning one's role and responsibilities are the first teachings used to understand the concepts of beauty and harmony. Children are taught the proper behavior through daily activities within the home and the oral teachings provide the essential foundations to discipline and engagement. By tradition, storytelling in a *Hooghan Nimazi* [hogan] has been the most appropriate for character building among the children. The teachings in a *Hooghan Nimazi* [hogan] promote the concepts and processes of *T'aa Sha Bik'ehgo Na'nitin* [sense of direction].

Theoretical Framework

The Diné educational philosophy model (DPL) was developed by the Navajo cultural specialists of Diné College. Clark (2009) describes "the philosophy of Diné College [emanating] primarily from the Diné creation stories, identifying the Four Worlds and their representations, elements, applications, and attributes" (p. 243). A method of philosophical teachings, the Diné philosophy of learning is a model that represents the Navajo point of view on life explaining the significance of nurturing the physical, social, emotional, and intellectual growth of life. Figure 1 illustrates the framework of this study.

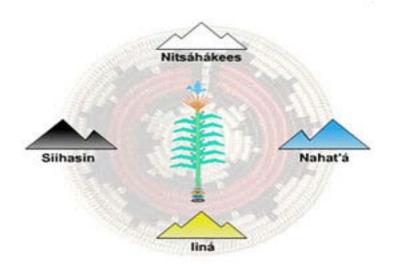


Figure 1. Representation of the Diné philosophy model (Sa'ah Naaghai Bik'eh Hozhoo). Used with permission (see Appendix O). Retrieved from http://www.Dinécollege.edu/images/mountains-subpage.jpg

Sa'ah Naaghai Bik'eh Hozhoon is literally translated to describe one's journey through life moving through stages to maturity. The philosophy of the Diné, *Sa'ah Naaghai Bik'eh Hozhoon*, is founded on the principles of "the Diné traditional living system that places Diné life in harmony with the natural world and the universe" (Diné Educational Philosophy). It describes how "humans, animals, plants, and mountains are harmonic components of the whole . . . [indicating] it is the responsibility of the humans to honor and maintain this balance" (Griffin-Pierce, 1992, p. 29).

Represented as a cyclical process of life, the DPL model (see Appendix C) is divided in four domains used to understand and learn the principles appropriate to the Diné ways of thinking. The four domains of the DPL model are described to exist in four cardinal directions. The four cardinal directions are associated with the "four-part planning process . . . central to traditional Navajo way of knowing" (Lee, 2016). It is a process that provides a cyclical way of teaching and learning. Clark (2009) uses this idea to describe the cyclical manner by which a child develops to the growth of corn. Like the corn, students require attention and care until they reach maturity.

Each direction is grounded in the traditional teachings of the four sacred directions: Ha' a'aah [east], Shadi'aah [south], E'e'aah'[west], Nahookos [north]. The teachings associated with the clockwise movement around the four sacred directions promote the concept of *T'aa Sha Bik'ehgo Na'nitin* [sense of direction]. *Ha' a'aah* [east] is associated with the concept of critical thinking, *Shadi'aah* [south] is associated with the concepts of planning and preparation, E'e'aah' [west] is associated with the concept of reasoning, and Nahookos [north] is associated with the concept of creativity. A complete cycle, T'aa Sha Bik'ehgo Na'nitin [sense of direction], of these teachings establishes an organized holistic approach to learning. It is a "process of growth ... adopted as the orderly cycle that embodies the sequence of *Nitsahakees*, *Nahata, Iina*, and Siih Hasin" (Clark, 2009, p. 244). T'aa Sha Bik'ehgo Na'nitin is used as a "traditional teaching encompassing valued moral principle[s] and empowerment of the minds . . . [that] encourage individuals to be self-determined through growth and development" (Begay, 2007, p. 6). Described as the basic Diné principles, the elders use the philosophy model as a way to educate the children.

T'aa Sha Bik'ehgo [moving clockwise] from the eastern direction, it is "believed that all blessings of learning and understanding come from that direction" (Aronilth,

1991, p. 13). The first principle is associated with the eastern cardinal direction, Nitsa'hakees, that symbolizes conception and birth. The stages of child development begin with this cardinal direction. At this stage, children make observations about what is generally going on around them. They learn from concrete materials so that concepts are life-like and are internalized much more easily. Storytelling contains the words used to stimulate the minds, generating emotions and connections which the child embraces and internalizes. For this reason, the storytelling sessions make abstract concepts more clear. In the process, the students develop a behavior by imitating what they hear and begin to express their ideas, feelings, and knowledge with words. It is through these processes that initiate mental images initiating the first stages of cognitive thinking. Begay and Maryboy (1998) describe *Nitsa'hakees* to include the "mental image [that] provides an awareness of need and the cognitive process and thinking begins" (p. 338). Developmentally, the baby moves out of the toddler phase and into a child. Between the ages of six and nine, "one begins to think and do things on one's own" known as *Nitsidzikees Dzizlii*, (Kenneth Begishie, personal communication, October 2014).

The second principle is associated with the southern cardinal direction, *Nahata*. that symbolizes stages of planning and preparation. At this time, a child continues to develop the physical, social, emotional, and intellectual growth of life. The middle grades (ages 10 to 15) are times of tremendous change . . . children begin to move toward adulthood and shift their focus from within to what is happening around them" (Myers & Hilliard, 2001, p. 10). Around the ages of 10 to 15, preparation and planning is necessary to complete a puberty ceremony leading them into adulthood. At this stage, the demands for learning increase. Ages 10 to 15 is described as "one's thought begins existing"

known as *Hanitsekees Niliinii Hazlii* (Kenneth Begishie, personal communication, October 2014). New skills and experiences are acquired with proper support and guidance. Proper planning prepares and ensures the accomplishment of tasks. *Nahata* is also recognized as a stage of development known as *Ada Nitsidzikees Dzizlii* translated as "one begins to think for oneself," (Kenneth Begishie, personal communication, October 2014). At this stage, the child is expected to take on the roles and responsibilities of an adult. This concept applies to the next two stages of living: *Iina* and *Sihasiin*.

T'aa Sha Bik'ehgo [moving clockwise] from the south, the west represents the stages of living, *lina*. This stage is a process of "application to life and implementation...a simplistic translation would be living or acting" (Begay & Maryboy, 1998, p. 339). The western cardinal principle is associated with the western cardinal direction representing the stages of living. *Jina* represents readiness in applying the skills. Moving clockwise (t'aa sha bik'ehgo) the focus moves from planning and preparation to implementation. At this point in life, there is a transition from childhood to adolescence. Adolescents are learning to understand the relationship between behavior and consequences. At this stage of the innovation, the students are encouraged to interact with their peers to establish positive relationships and responsible decision making while participating in activities. Social skills provide students the opportunities to meet challenges constructively and ethically. At this stage, adolescents require more processing time, paying attention to memorization and development of reasoning skills. Critical thinking goes beyond recalling information by having students gather prior knowledge and use it to solve a problem.

T'aa Sha Bik'ehgo [moving clockwise] from the west, the fourth cardinal direction is located in the north and represents *Sihasiin* [the stages of assurances]. The focus moves from implementation to assurance. This stage marks the development of the child's self-confidence indicating a "strong internalization of the teachings" (Begay & Maryboy, 1998, p. 339). At this stage of life, individuals demonstrate knowledge of the Navajo principles and values of *nitshakees, nahata, iina,* and *sihasiin*. This stage is correlated to having a "transformational process of developing a strong sense of confidence and assurance, derived from having firmly established proper thinking" (Begay & Maryboy, 1998, p. 339). An individual who achieves a level of strong confidence, *Sihasiin,* are said to display the following characteristics for *Ya'at' eehgo Iina*, living a good life: "Ha' jolni [being patient], ake'hojili [being obedient], hashte'ezhdite [being stable] and taa altsonihol nili [having value and caring for everything]" (Kenneth Begishie, personal communication, October 2014).

Diné Character Building Standards

The Navajo Nation Council enacted the Navajo Sovereignty in Education Act in 2005. This act helped to establish the Department of Diné Education. Under this department, the Diné Culture, Language, and Community Services set out to establish a unified Navajo language and culture curriculum for all Navajo-operated schools. Standards were created to maintain the Navajo language and culture. In 2012, the Diné Character Building Standards were officially approved specifically designed in strengthening and promoting positive social skills and behavior. The Diné Character Building Standards were designed for students by grade level spans. For the middle school, the standards were designed to include four concepts (See Appendix E):

- Concept 1: I will apply critical thinking to establish relationships with environment.
- Concept 2: I will maintain the sacredness of self-identity.
- Concept 3: I will have self-respect.
- Concept 4: I will express gratitude in everything.

Summary

Historically, storytelling has been used with Navajo children who grow to understand and respect their culture and their surroundings. Aronilth (1991) describes the stories as lessons to help define the role in one's life while preparing to take control of "feelings, thoughts, thinking, ideas, understanding, planning, preparing and implementing" (Aronilth 1991, p. 62). These cultural values are rooted in the teachings of the elders which have been a dominant role in the teaching and learning process of American Indian students for many generations (Pewewardy, 2002).

Both the Diné Character Building Standards and the basic principles found in the Diné philosophy model incorporate traditional teachings to describe the process of life. In each stage of the Diné philosophy model, children learn the principles appropriate to the Navajo way of thinking. The relationship between the cardinal directions is a source of knowledge that one acquires throughout their lifetime, even then all knowledge may never be fully understood. The power that comes from using the Diné philosophy model serves its purpose in providing children the opportunities to develop their skills for competence, autonomy, and relatedness.

Within the self-determination theory, Ryan, and Deci (2000) maintain that there are three basic needs and when they are all satisfied, people experience more vitality,

self-motivation, and well-being. Simply stated, people engage in activities to satisfy their needs. Through the DPL model, learning is acquired through the teachings and the support of the elders. Autonomy is taught through the stories, a teaching method or activity that creates independence by choice. The model also provides a sense of ownership in how they understand their world around them. Being autonomous leads to self-confidence in learning that establishes a love for learning, a desire to build knowledge for the sake of enjoyment.

CHAPTER 3: METHODOLOGY

This chapter presents the research methodology used for this action research study. The purpose of this study was to explore the middle school students' views of their experiences of storytelling and how those experiences and perceptions impact their learning. This phenomenological-oriented approach is an in-depth study used to understand the target audience perceptions. This section describes the methods used to answer the following research questions:

- How do students describe, apply, and feel about the four phase DPL model (teachings and values of the four sacred directions: *Ha' a'aah*, [east], *Shadi'aah* [south], *E'e'aah'* [west], *Nahookos*, [north] that promote *T'aa Sha Bik'ehgo Na'nitin* [sense of direction] among students?
- 2. To what extent does the Navajo Storytelling Project affect students' engagement in the academic process?

Research Design

This action research study used a mixed method design to understand the phenomenon of storytelling. In this study, the mixed method design included a procedure for collecting, analyzing, and mixing both quantitative and qualitative data . . . in a single study to understand the research problem (Creswell, 2012). Collected qualitative data consisted of journals, artifacts, and interviews using text (words) used to explain the experiences of the participants. Quantitative data consisted of a rubric and a pre- and post-survey. The instrument used for the survey contained preset questions, while the rubric included a Likert scale to collect quantifiable (numeric) data. The qualitative and quantitative datasets were analyzed separately and the results were "mixed" to provide a

better understanding of the problem than using one dataset alone (Creswell & Plano Clark, 2007; Creswell, 2008, 2009). Merged datasets were used to make meaning in describing the intrinsic nature of the experience.

Setting

This action research study was conducted at Mountain View School (pseudonym). Mountain View is a small, rural school situated in the Little Colorado Valley in the southwestern corner of the Navajo Nation. About 50 miles away, the San Francisco Peaks can be seen and during the winter the snow caps the peak of the mountains. Mountain View is a K-12 grant school with an enrollment of 145 to 150 students. Currently, there are 147 students enrolled. Of those students, 100% are Native American students, 79% are Limited English Proficient (LEP) students, and 13% of the student population have an Individualized Education Plan (IEP) and receive services from the Special Education Program (SPED). One hundred percent of the student body qualify for the Free/Reduced Lunch Program.

Participants

The target participants (n = 26) in this study consisted of middle school (seventh and eighth grade) students enrolled at Mountain View School (pseudonym). Given that this study was mixed methods action research aimed to inform local practice of a small school, the non-probabilistic and convenience sampling was considered the most appropriate strategy. Convenience sampling allowed the researcher to select the participants "based on their convenience and availability" (Creswell, 2014, p. 158). Demographics for the 26 targeted participants are listed in Table 1.

Table 1

Demographics

Category	Туре	n	%
Grade-Level	7th grade	14	54
	8th grade	12	46
Gender	Female	13	50
	Male	13	50
Ethnicity	Navajo	26	100
Age	13	4	15
C .	14	14	54
	15	8	31
English Language Learner (ELL)	Fluent	4	15
8	Proficient	12	46
	Novice	10	39
Navajo Language Learner (NLL)	Fluent	0	0
	Proficient	4	15
	Novice	22	85

Students

Middle school is a stage of transition for many students. Their experiences provide a unique insight to this study making them the ideal participants in this study. The student participants ranged in age from 13 to 15 with a mean age of 14. The female to male ratio in this study was 50:50. The school classification of student participants for the seventh grade was 54% and 46% for the eighth grade. All (100%) of the student participants were American Indians (Navajo), however very few of the students in the middle school were identified as being proficient in the Navajo language. According to the Navajo Oral Language Assessment, four (15%) students were proficient, and 22 students (85%) were identified as "novice" in the Navajo language. Within this population only 15% are identified as "fluent" in the English language, 12 students (46%) are proficient and 10 students (39%) are novice. The relatively high number of students identified as "novice" in the English language, along with students who are "fluent" in the Navajo language indicates an unsuccessful transition between the two languages. The population is neither fluent in Navajo nor English; instead the Navajo Language and Culture (NLC) teacher reported the students to "switch between the languages."

Storyteller

The low percentage of Navajo-proficient students warranted the selection of a bilingual elder to communicate effectively with the students. Bilingual and employed by the school, the storyteller was selected based on availability and convenience. As a respected community member, he attributes his wisdom and strengths to the teachings he acquired from his elders. He continues the traditions of storytelling through cultural activities such as the Navajo "shoe-game." The cultural events such as the Navajo shoe-game are intertwined with myths and legends told only in the winter time. His background in storytelling is a unique resource to the school.

Navajo Language and Culture Teacher

The middle school Navajo Language and Culture (NLC) teacher is a fluent Navajo speaker. Unlike many teachers on the Navajo Nation today, her instructional practices are designed to promote daily literacy skills in reading and writing using the Navajo language. She attributes her knowledge of the Navajo language and culture to the elders in her home. A passionate and positive role model, she believes the Navajo "language and culture is sacred . . . [it] is what our students lack . . . knowledge [that is] essential to the Navajo way of life."

Core Teachers

Participants included three middle school core teachers of the students in the study at Mountain View School. The core teachers included the following: science/mathematics, English, and social studies. While English and social studies are taught by different teachers, science and math are taught by one teacher. Together, the three teachers have over 70 years of teaching experience primarily using the English language while following standard instructional practices developed by Madeline Hunter's (1982) "I do," "We do," "You do," approach.

Role of Researcher

During this study, I served as a researcher and as a facilitator. As a researcher, I drafted and created lessons and activities aligned to the Diné philosophy of learning model. As a facilitator, I assisted and supported the NLC teacher in the implementation of the lessons and activities. Throughout the study, I monitored daily activities and verified completion of student journal entries, graphic organizers, thinking maps, and story wheels.

Innovation

The innovation is designed to support the middle school students' acquisition of traditional concepts, skills, and information through a four-week storytelling activity. Each story was presented orally using both the Navajo and English language while addressing the four domains of the DPL model.

Storytelling

In this study, storytelling was used as a teaching and learning tool to bridge students' understanding of their roles and responsibilities in a traditional setting found in a *Hooghan Nimazi* [home], with the roles and responsibilities found in a regular class setting. The aim was to help students identify with traditional teachings in the Hogan and apply them to the classroom. It is important to note here that the information used in this innovation is a fraction of the knowledge and understanding learned in one's lifetime. Nevertheless, the information represents a segment of what may one day significantly contribute to the whole in the process of understanding and learning the Diné way of life. The students were introduced to the main categories of Navajo folklores: myths/legends and folktales. Knowledge acquired from the stories was used to determine the message, lesson, or moral. The innovation includes the telling and listening of traditional stories used for life teachings and to establish a connection to the students' way of life. Several coyote tales and one legendary tale (the "Navajo Twin Hero Story") was used to discuss how the characters contribute to the students' understanding of personal development. The videos included "Coyote and the Lizards," "Coyote and the Rabbit," "Coyote and the Skunk," and "The Navajo Twin Hero Story."

Navajo Curriculum Specialist Don Mose (2004) describes the coyote stories to teach responsibility and respect for one another. No matter how many times the animals plead with him, Coyote never learns his lesson. He is described as deceitful and often plays tricks on other animals to get what he wants. Each coyote story is presented with a moral or message at the end of the story. The stories focus on the Coyote to help children and young adolescents develop skills in relation to the four sacred principles: thinking, planning, implementation, and assurances. Each of the stories provide direction and guidance to the children (See Appendix D).

Diné Philosophy of Learning (DPL) Model

Embedded with messages and morals, the selected stories weave the processes of the DPL model to promote critical thinking, planning, reasoning, and creativity. Essential to the Navajo way of life, the stories integrate the values of the four principles to the four sacred directions: *Ha' a'aah* [east], *Shadi'aah* [south], *E'e'aah'* [west], and *Nahookos* [north] promoting the concept of *T'aa Sha Bik'ehgo Na'nitin* [sense of direction]. The four sacred directions align to each of the principles described in Chapter 2. The traditional teachings add a solid foundation in bridging the values of the Diné philosophy as taught in the Hogan to the values taught in the classrooms.

Procedures

Navajo Language and Culture Curriculum

Appendix F is a matrix of the storytelling unit indicating the lessons and the principles tied to the DPL model. The first day of each week, the lessons commenced in the school's modern Hogan where the students entered the *Hooghan Nimazi* [hogan] in a clockwise *T'aa Sha Bik'ehgo* [sense of direction] direction by gender, establishing respect for the structure and the adults (C2. I will maintain the sacredness of self-identity). The female students entered first and moved towards the northern half of the *Hooghan Nimazi* [hogan]. The male students followed and remained in the southern half of the Hogan. Each visit, the elder storyteller was seated in the western part of the *Hooghan Nimazi* [hogan], dividing the females from the males. The division between the genders symbolized respect. Participants were reminded of the traditions and were

instructed to greet the storyteller by handshake. T'aa Sha Bik'ehgo [moving clockwise], the students were seated on the floor around the perimeter of the Hooghan Nimazi [hogan]. Each student greeted the storyteller through clanship, starting with the student seated at the right entrance of the hogan and T'aa Sha Bik'ehgo (moving clockwise; C2. I will maintain the sacredness of self-identity). In translation, the elder described the traditional greeting as a "symbolic connection between the people orienting their values that promote a healthy and positive relationship and experience" (personal communication, October 12, 2014). At this point, the elder greeted the students with a formal introduction. The traditional greeting established the initial stages of thinking. The connection made between clanship and kinship required the students to think about the clan chart system. According to this system, the first two clans represent the matrilineal and patrilineal lineages. The system provides information on kinship between the Navajo people. A brief moment of silence implies to the students to pay careful attention to the story. The introductions and routine provided organization and structure to the setting as well as recognition and development of manners. Near the end of the session, the students were given time to ask questions related to the story. At the conclusion of the session, the students exited the Hogan in a *T'aa Sha Bik'ehgo* [clockwise] direction. The male students exited the *Hooghan Nimazi* [hogan] first with the female students following behind. To show appreciation, the students shook the storyteller's hand as they exited the hogan. The students used the remainder of class time to write a reflection of the storytelling experience using the following prompt: Describe an example of how you applied the teachings of the *Hooghan Nimazi* [hogan] experience to your classes (C2. I will maintain the sacredness of self-identity). The activity and the writing process

provided the initial stages of thinking but as the "content of thinking is being organized, the process proceeds to *Nahata*, but *Nitsa'hakees* remains part of the process" (Begay & Maryboy, 1998, p. 338). The focus of the activity was to transition from *Nitsa'hakees* [the stages of thinking] to *Nahata* [the stages of planning and preparation].

Each Tuesday, the entire middle school Navajo Language and Culture class focused on the second cardinal principle, *Nahata* [planning and preparation]. During these sessions, the students were assigned to small cooperative groups to establish role interdependence. The students were assigned a partner to discuss the meaning of the story and how the events in the story influenced their way of thinking. Like a compass, *Nahata* acted as a guide navigating and orienting students to identify their goals toward completion of their assignments. During this stage, learning tools were used to help the students accomplish daily lessons. Learning tools included graphic organizers and thinking maps used to help students construct meaning. One type of thinking map used in this activity was the spider map. The students were paired up to generate ideas and list their them on a sheet of paper. Using the information, the two were responsible for organizing and arranging a completed "spider map." While the graphic organizers used pictures to arrange things into categories, the thinking maps showed the important ideas from the story expressed by their thoughts and ideas in a non-graphical representation. At the center of the spider maps, the main ideas were presented. Supporting details were added to the main idea. Each supporting detail radiated out from the center of the map. Each group selected a student who displayed the completed thinking maps on a document camera and explained the group's thinking. The students used the remainder of class time to write a reflection on how the lesson was linked to the concept of *Nahata* [stage of

planning] responding to the question, "How has the concept of *Nahata* [stage of planning] helped you to accomplish a problem in one of your classes"? (C3. I will have self-respect).

Each Wednesday, the Navajo Language and Culture class focused on the third cardinal principle, *Iina*, located in the west. At this stage, the students were encouraged to establish positive relationships through cooperative learning activities. The students were specifically assigned to small groups to promote their own learning as well as others within their group. The lessons required the students to work together to translate and identify the message or moral for each video. Translations were necessary since the videos were shown using only the Navajo Language. For the first three weeks, a series of coyote stories were shown beginning with the Coyote and Lizards, Coyote and Rabbit, and finally Coyote and the Skunk. The final week ended with the Navajo Twin Hero Story.

To increase understanding of the content, the students worked in pairs to answer questions and complete their character maps. Character maps are graphic organizers used to help students learn about the character by identifying and organizing details about the character. Character maps included an illustration of the main character; the character was placed in the middle with a description of the traits labeled around the picture. The thinking maps and graphic organizers were used to help students transition from concrete to abstract thinking. The students shared information, paying particular attention to the words they used to describe the traits of the main character. The students then used the completed "spider map" graphic organizer and the character map to solve the moral of the story. The concrete representations were used to create abstract pieces of writing. The

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students wrote statements of the lessons learned. The students also wrote reflections interpreting the author's message using the following prompt: "*lina (assurances)* is a stage of establishing positive relationships with peers and responsible decision making while participating in activities. Describe a positive experience you had with your peers today. If you did not have a positive experience, explain why you think so" (C1. I will apply critical thinking to establish relationships with environment; C2. I will maintain the sacredness of self-identity).

Each Thursday, the Navajo Language and Culture class focused on the fourth principle, *Sihasiin* [implementation]. To determine whether the students have internalized the teachings, the students worked in groups of three to complete a double bubble map. This thinking map was used to guide students through *Nitsahakees* [the stages of thinking process]. Using only their journal entries as a reference, the students compared and contrasted the story as told by the elder and the story as seen from the video. The students planned and decided their roles for their group: a materials person, a recorder, and a speaker. The materials person prepared the materials by gathering chart paper and markers for their group. The group then constructed a double bubble map. The students drew each character and placed a bubble around them. Next, the students brainstormed a list of words and phrases that described how the two stories were told. At the end of class, the students wrote a reflection using the following prompts: "Sihasiin means confidence. This stage of the DPL model marks one's ability to complete a task independently. The completion of your assignment is an example of *Sihasiin*. Explain how the teachings from the DPL might help you to complete other tasks in your core classes"? (C1. I will apply critical thinking to establish relationships with environment,

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C2. I will maintain the sacredness of self-identity, C3. I will have self-respect., C4. I will express gratitude in everything).

Each Friday, the students were required to create a story wheel. The story wheels were one-dimensional and two-layered. The story wheels included a brief summary of the story and a message or moral around the perimeter of the wheel. The first wheel had an 8inch diameter using a plain sheet of white paper. This story wheel was divided in four sections with the title of the story written in the middle. The first section began with a picture of the setting and the main character with a list of adjectives describing the main character. In the second section, a picture of the antagonist was provided with six vivid adjectives that described the character. In the third section, a picture of the main problem in the story was provided with a brief description. The fourth section included a picture and a short description of the solution to the problem with a brief paragraph explaining why the story was told. At the bottom of each section, the students cited the source of information. There were a total of four citations referencing the source of information. Each wheel had a second wheel glued to it. The second wheel was constructed using a 10-inch diameter from the following colored sheets of paper in the following order: white, blue, yellow, and black. The smaller wheel (eight-inch diameter) was glued on top of the larger wheel. The moral for each of the stories were written around the perimeter of the story wheel. The students informally retold the story using their story wheel. With the remaining class period, the students addressed the following prompt: "The stories have provided you with knowledge in traditional Navajo teachings that may have transferred to your regular classroom teachings. Describe how the teachings of T'aa Sha *Bik'ehgo Na'nitin* [sense of direction] can be or has been applied to your core classes?"

(C1. I will apply critical thinking to establish relationships with environment, C2. I will maintain the sacredness of self-identity, C3. I will have self-respect., C4. I will express gratitude in everything). By the end of week four, the four story wheels were glued back to back in the following order: white, blue, yellow, and black. By gluing the four story wheels back to back, the students constructed a three-dimensional story wheel with a string attached to the middle. The model was then suspended from the ceiling for the students to view. The final week of the study, the students were asked to construct a story wheel using a story of their choice by repeating the steps mentioned in the procedure above.

Instruments

To determine the value of the storytelling activities, student behavior and learning were monitored through various qualitative and quantitative instruments. The instruments used to collect data during this study included reflective journals, student based artifacts, teacher interviews, student interviews, student surveys, and a rubric. Table 2 lists the instrument and type of data collected with each. The section that follows the inventory explains each instrument in detail.

Table 2

Data Collection Inventory

Type of Data	Instrument	Data Source
Qualitative	Journal	Students
Qualitative	Artifact	Students
Qualitative	Interview	Students/Teachers
Quantitative	Survey	Students/Teachers
Quantitative	Rubric	Students/Teachers

Qualitative Data Sources

Journals. The student participants submitted daily reflections in the form of worksheets. Each worksheet was photocopied. The reflections provided a better understanding of how the students responded to storytelling. Using a standard three-hole binder, the students organized their reflections in chronological order. Each reflection described their learning experiences. Table 3 outlines the prompts and sentence frames used during this study.

Table 3

Day	Prompt	Sentence Frame
Monday	Describe an example of how you applied the teachings of the Hogan experience to your classes.	The traditional teachings I learned in the Hogan that were most valuable to me were I applied these teachings in my class today by
Tuesday	Explain how the concept of <i>Nahata</i> [stage of planning] helped you to accomplish a problem in your class?	Today I applied the concept of <i>Nahata</i> during my class when I
Wednesday	<i>Lina</i> is a stage when you begin to establish positive relationships with your peers and begin responsible decision making while participating in activities. Describe a positive experience you had with your peers today. If you did not have a positive experience, explain why you think so.	I learned in my Navajo Language and Culture class about Iina. I experienced this when
Thursday	<i>Sihasiin</i> means confidence. This stage of the DPL model marks your ability to complete task independently. The completion of your assignment is an example of <i>Sihasiin</i> . Explain how the teachings from the DPL might help you to complete other tasks in your core classes?	I used the DPL model when
Friday	The stories have provided you with knowledge in traditional Navajo teachings that may have transferred to your regular classroom teachings. Describe how the teachings of T'aa Sha Bik'ehgo Na'nitin [sense of direction] can be or has been applied to your core classes?	The lesson I learned from this story is This message will be used in my classes when

Daily Journal Prompts and Sentence Starters

In addition to the reflections, the students were encouraged to add a comment, ask a question, or state any concerns.

Artifacts. The first four weeks, the student participants constructed four, onedimensional, two-layered story wheels. By the end of week four, the four story wheels were glued back to back with a string attached in the middle creating a three-dimensional mobile. This mobile was the first artifact collected.

The second artifact was completed during the fifth week of the study. The students used what they learned about the four cardinal directions and principles to create their final artifact. The students began the week thinking about the characters of the story using a character map. A spider thinking map was used to plan and prepare a story by sequencing the events from beginning to end. The information was used to create a three-dimensional story wheel infusing the Diné philosophy model. The students shared their story using the completed three-dimensional story wheel.

Interviews. At the conclusion of this study, several participants agreed to participate in the interview process. The participants were free to respond to each question in detail and in their own words. The interviews each lasted between 30 and 40 minutes. With the permission of the participants, I taped each session using an audio recorder.

Teacher interviews. Each of the three core teachers and the Navajo Language and Culture teacher were interviewed at the conclusion of this study. These interviews (n = 4) followed a semi-structured protocol using seven questions. The interviews provided information on how teachers felt the storytelling project may have influenced the middle school students' attitude and behavior. The questions are located in Appendix J.

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Student interviews. A probabilistic sampling method, systematic sampling, was used to select students for the interviews. A list was created by placing all prospective student participants in alphabetical order using their last name. Every 5th student on the list was selected as a respondent. Consequently, students were selected at the following intervals: the 5th, 10th, 15th, 20th and so on. The students in this sample (n = 5) participated in an open-ended interview. The questionnaire consisted of 14 questions regarding the students' experiences and how the stories influenced their way of thinking. The questions are located in Appendix K.

Quantitative Data Sources

Surveys. The Activity Perception Survey© was given to each student participant before and after the study (Deci, Eghrari, Patrick, & Leone, 1994). The 25-item survey consisted of three constructs used to assess student perceptions of the storytelling activities. The constructs include interest and enjoyment (enj), value and usefulness (val), and perceived choice (cho). The survey items were randomly arranged. A seven-point Likert scale was used to rate the student participants' perception of the storytelling activity from "not at all," "somewhat true," to "true." The survey is located in Appendix L.

Rubric. Each artifact was rated using a 4-point rubric scale using "excellent," "good," "satisfactory," and "needs improvement" (See Appendix H). The rubric consisted of the following categories: *display, character, label, knowledge gained, creativity,* and *cooperative group learning.*

Table 4

	Data Collection Tools					
Research Questions	Journal	Artifact	Interview	Survey	Rubric	
	QUAL	QUAL	QUAL	QUAN	QUAN	
How do students describe, apply, and feel about the 4 phase DPL model (teachings and values of the four sacred directions): <i>Ha' a'aah</i> [east], <i>Shadi'aah</i> [south], <i>E'e'aah'</i> [west], <i>Nahookos</i> [north], promote <i>T'aa Sha</i> <i>Bik'ehgo Na'nitin</i> [sense of direction] among students?	X	X	X			
To what extent does the Navajo Storytelling Project affect students' engagement in the academic process?				X	Х	

Data Collection Tools Used to Inform Research Questions

Data Analysis

Qualitative Data Analysis

Raw data from journal reflections, artifacts, and interviews were gathered. The photocopied journals (described as a worksheet in sections above) and the threedimensional story wheels were organized and prepared for reading. After reading the data, the entries were coded by hand. Using open coding, the journal entries were chunked and coded into groups by highlighting and bracketing sections. Key words and short phrases emerged from the open coding process. The results were categorized and sorted into order using axial coding. From this process emerged themes and descriptions used to make meaning of the qualitative dataset. Included in the qualitative dataset were the student and teacher interviews. Each interview was transcribed and prepared for manual coding. Using an open and axial coding system, key words and short phrases were categorized and chunked together. The themes and descriptions that emerged from the coding process were clustered and compared to data for confirming and disconfirming evidence.

Quantitative Data Analysis

Surveys. A pilot survey was conducted prior to the study. Results of the preliminary survey were entered into Statistical Package for the Social Science (SPSS) to confirm the reliability of the survey instrument and constructs. Cronbach's alpha (α) was used to test the reliability (Cronbach 1951; Nunnally 1978). Table 5 displays the alpha of internal consistency for the Activity Perception Survey© (Deci et al., 1994).

Table 5

Al	pha	Estimates	of	`Internal	Con	sistenc	v	Activity	Perce	ption .	Survey	(n =	26)	

Construct	Cronbach's Alpha (α)
Perceived Choice	0.760
Value & Usefulness	0.820
Interest & Enjoyment	0.856
Overall	0.898

The overall alpha coefficient for the items is 0.898, and suggests that the items on the survey have relatively high internal consistency and indicates that the items are closely related as a group. The construct for perceived choice had a reliability coefficient of 0.760 which is considered to be "acceptable." The construct for interest and enjoyment had the highest reliability coefficient of 0.856 which Nunnally (1978) considers "good."

The students completed the Activity Perception Survey© (1994) before the study and a second survey at the end of the five-week study (Deci et al.). The Activity Perception Survey© (1994) provided data regarding the participants' experiences with the storytelling activities. Each survey required parental consent. Using a seven-point Likert scale, the students rated their level of agreement to 25 statements. A rating of a 1 indicating "not at all," a rating of a 4 indicating "somewhat true," to a rating of a 7 indicating "true." The survey assessed three constructs that included interest and enjoyment (enj), value and usefulness (val), and perceived choice (cho) while performing the activities.

In scoring the instrument, several statements required a reverse score before calculations were determined. The reversal was completed for items 8, 12, 14, 18, 20, and 24. Each of the responses was subtracted by 8 and the result was entered as the score for each item. These results were entered into the *Statistical Package for the Social Science* (SPSS) and analyzed using descriptive statistics (mean and difference). The items on the survey were categorized by construct. The information in Table 6 presents the survey statements by constructs.

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Table 6

Subset of	^c Statements l	by Constructs
-----------	---------------------------	---------------

Construct(s)	Item(s)				
	1. While I was doing this activity, I was thinking about how much I enjoyed it.				
Interest and	 This activity was fun to do. Loniouzd doing this activity yory much 				
Interest and	 I enjoyed doing this activity very much. I folt like I was anioving the activity while I was doing it. 				
Enjoyment	4. I felt like I was enjoying the activity while I was doing it.				
(enj)	5. I thought this was a very boring activity. (R)				
	6. I thought this was a very interesting activity.				
	7. I would describe this activity as very enjoyable.				
	8. I would describe this activity as very fun.				
	1. I believe that doing this activity could be of some value for me.				
Value and Usefulness (val)	2. I believe that doing this activity is useful for improved concentration.				
	3. I think this activity is important for my improvement.				
	4. I think this is an important activity.				
	5. It is possible that this activity could improve my studying habits.				
	6. I am willing to do this activity again because I think it is somewhat useful.				
	 I believe doing this activity could be somewhat beneficial for me. 				
	8. I believe doing this activity could help me do better in school.				
	9. I would be willing to do this activity again because it has some value for me.				
	1. I believe I had some choice about doing this activity.				
D · · ·	2. I really did not have a choice about doing this activity. (R)				
Perceived	3. I did this activity because I wanted to.				
Choice	4. I felt like I had no choice but to do this activity. (R)				
(cho)	5. I felt like I had to do this activity. (R)				
	6. I did this activity because I had to. (R)				
	7. While doing this activity I felt like I had a choice.				
	8. I felt like it was not my own choice to do this activity. (R)				

Rubric. The artifacts created in NLC class were also used to assess how students applied skills in critical thinking, planning, reasoning, and creativity from the Navajo storytelling project. Points were awarded for each story wheel with a maximum number of 24 points. A rubric was used to evaluate each of the completed story wheels. The rubric comprised of six categories: display, characters, labels, knowledge gained, creativity, and cooperative group learning. Each category was rated using a 4-point scale from "excellent = 4", "good = 3", "satisfactory = 2", and "needs improvement = 1." All story wheels were combined as percentages and compiled by category and rating. Calculations were derived by adding the overall scores for each rating and dividing by the total number of points by category for all completed story wheels. The results were entered into SPSS and analyzed using descriptive statistics to summarize the level at which students articulated what they have learned from the stories (Table 10). Display and cooperative group learning demonstrated value of planning and preparation. The description of characters and labels demonstrated understanding of the Navajo language requiring critical thinking skills. Knowledge gained demonstrated student understanding of the lesson by merely stating the facts and moral of the stories. Creativity shows evidence of student expression through greater preparation time to the artifact and greater thought to the stories and its meanings. Finally, cooperative group learning demonstrated whether the students internalized the messages from each lesson by paraphrasing, sharing ideas, and working together.

Data Triangulation

This study utilized a concurrent triangulation design to collect the qualitative and quantitative data "during the same timeframe but independently" (Creswell & Plano

Clark, 2007, p. 125). This traditional approach results "in well validated and substantiated findings" (Adamson, 2004, p. 768). In a concurrent triangulation approach, the researcher collects both quantitative and qualitative data to better understand a research problem by comparing the results from both sets of data. The qualitative data was analyzed first, the quantitative data analysis followed later. The integration occurred at the data interpretation stage. Figure 2 provides an illustrated view of how the datasets were analyzed.

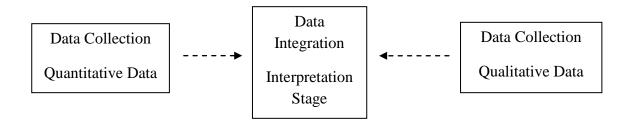


Figure 2. Concurrent triangulation mixed methods design.

Table 7 illustrates a timeline of how the collected data sets were analyzed and prepared for interpretation.

Table 7

Data Analysis Plan

Timeline	Instrument	Source	Analysis	Interpretation
Before the Study	Survey	Numeric	Descriptive	Descriptions
During the Study	Journal Artifact	Text from reflections Text from story wheel Numeric	Coding Coding Descriptive	Themes Themes Descriptions
After the Study	Survey Artifact Interview	Numeric Numeric from Rubric Text from Transcriptions	Descriptive Descriptive Coding	Descriptions Descriptions Themes

The analysis for the qualitative dataset used a "linear, hierarchical approach building from the bottom to the top" to explain the results. (Creswell, 2014, p. 196). During this phase, the collected quantitative and qualitative data sets were compared, connected, and integrated.

Each text from the journals, artifacts, and interviews were highlighted. The words and phrases were sorted, arranged, and organized by what the student participants were feeling and hearing. Chunking was used by looking for the most descriptive wording. At first, the qualitative data set revealed several themes. This included teachings, language, storytelling as an important activity, value, accomplishments, choice, and aspirations. The existing themes were coded another time which resulted in the following: language, teachings, and aspirations. The surveys and rubric produced numeric data using descriptive statistics. The surveys were collected and organized by category, and later percentages were determined. The survey results showed value and usefulness as the highest rating. The results of the rubric for the story wheels were also collected and organized by category. Percentages were calculated for all story wheels. The quantitative data set revealed labeling with the highest rating of the six categories. The categories included *display, character, label, knowledge gained, creativity,* and *cooperative group.*

Interrelated themes and descriptions were merged together; disconfirming evidence between and among the data sets were noted. This analysis became the basis for interpretation in order to describe: (a) how the students described, applied, and felt about the four phase DPL model; and (b) how the Navajo storytelling project affected student engagement in the academic process. Figure 3 provides an outline of how the data were analyzed.

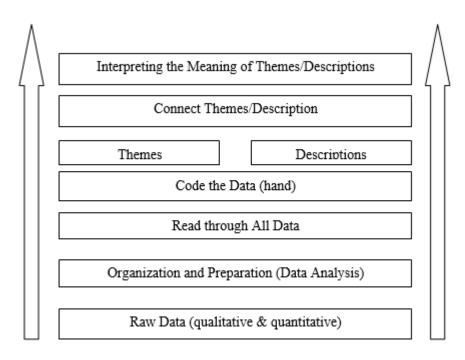


Figure 3. Hierarchical data analysis.

The data analysis interpretations are used to explain and describe student perceptions of the Navajo Storytelling Project are discussed in Chapter 4.

Summary

The intention of using the four phase DPL model with the stories is to promote T a Sha Bik'ehgo Na'nitin [sense of direction] to establish a sense of belonging and to build a stronger identity. The teachings and values of the four sacred directions– Ha' a'aah, [east], Shadi'aah, [south], E'e'aah' [west], Nahookos [north] – initiates this cyclical process of planning and preparation, critical thinking, reasoning, and creativity. The concepts and processes associated with the DPL model have shown to provide guidance and continued support in achieving balance and harmony. Storytelling is also shown to say something about what life means. Embracing the values of the four phase DPL model with the stories is one way to promote T'aa Sha Bik'ehgo Na'nitin [sense of direction] to establish a positive direction in life toward Hozho [beauty way].

Overall, the aim of the procedures outlined in this chapter was to capture the Navajo students' voices as they applied traditional stories, teachings, and models to the concepts they experienced in school and in daily life.

CHAPTER 4: DATA ANALYSIS AND RESULTS

This chapter provides results of the storytelling activity. Table 8 represents the data collected from each of the instruments used throughout the study. The results of the qualitative and quantitative datasets are explained in the first two sections.

Table 8

Data Collection

Type of Data	Instrument	Data Collected
Qualitative	Journal	Student text from 498 reflections
	Artifact	Student text from 36 story wheels
	Interview	Student text from five transcriptions
	Interview	Teacher text from four transcriptions
Quantitative	Survey	Numeric – 52 surveys
	Artifact	Numeric - Rubric

Qualitative Results

Students participated in an approach to teaching structured around storytelling that organized learning around the principles found in the Diné philosophy of learning model. Student reactions from journals, artifacts, and interviews were collected and their teachers were interviewed. Participant responses from each instrument yielded text (word) data that was analyzed using an open coding process. Text data were arranged by key words and short phrases, which were later categorized by themes and descriptions. Initially, I anticipated capturing experiences related to changes in academic and behavioral expectations of core content classes where the storytelling activity was not used. Instead, student responses varied from basic replies to a mixture of feedback expressing views and thoughts related to the storytelling activities. They wrote and talked about their childhood experiences, their perceptions of the storytelling activity, and of the principles found in the Diné philosophy of learning (DPL) model. The majority of responses revealed a subjective and holistic comfort as students recalled personal experiences. In general, the perceptions, experiences, and understandings of the storytelling activity and of the Diné philosophy learning model were "important in identifying who they are" and essentially acted as a guide and "support system for learning." Their shared experience offers an understanding of middle school student perspectives within the context of "traditional" teaching and learning.

Three themes emerged and were identified: language, teachings, and aspirations. The concept of aspiration emerged as the most often revealed theme across the data sets.

Language

Language is more than words; it carries heritage, traditions, and culture. The Navajo language is based on the oral traditions, a heritage passed down from the elders as a way of thinking thus influencing the way of life. For generations, spoken words encouraged children to learn new things, connecting ideas to the context of their environment. In the same manner, the oral teachings in this study inspired student participants both emotionally and spiritually.

The expectations in class were straightforward: to speak, read, and write the Navajo language. The NLC teacher reminded students and advised them that "speaking and understanding your language helps to appreciate the traditional stories." In the Hogan, the reasons were clear. Vivid descriptions and expressions were used primarily by the storyteller to describe the actions and events in the stories. In the tale "Coyote and the Lizards," the concepts of language and identity were the moral values instilled. To the students, the message was basically to "never try to be someone you are not . . . Stay true to who you are." From this lesson, collected data revealed a discourse filled with emotions as students shared their views on language and identity.

From the boarding school experience to the role of the Navajo Code Talkers, the students listened to the stories learning about the uniqueness of their heritage. One young man spoke of the events and shared "about language, about life when people were not allowed to use the Navajo language . . . or wear traditional clothing and got into trouble for speaking Navajo." Another student added,

A long time ago the bilagaana [white people] took the native children to school. The children were not allowed to speak our language. And they could not wear the native clothing; they had to wear bilagaana clothes. I thought about my own life at school . . . it's different . . . they could not speak Navajo, instead put soap in children's mouths . . . people were taken away from their homes and they were forced to learn in English.

The discussions encouraged students to jot down their thoughts on graphic organizers. Finalizing their thoughts on paper, they immediately shifted back to their groups and began talking about the events of World War II. Looking around, the students were engaged and captivated in the discussions. Addressed by the students as "Diné Warriors," the Navajo Code Talkers' role in World War II drew greater interest in revitalizing the language in class. "We need to speak our language and not lose our language because in WWII that is what saved our language from others." Other students chimed in expressing their thoughts on speaking the Navajo language.

- "I speak Navajo when I see my grandparents or when I am around my parents, because it will help me understand what they are saying or what they are trying to teach me."
- "Nitsahakees is about thinking the language we speak, we need to speak our language and not lose our language."
- "Language is Life."

While the role of the Diné warriors during World War II inspired students to learn the language, the boarding school experience established a sense of urgency in revitalizing the Navajo language. The stories revealed some of the greatest challenges the Diné faced, and the students learned how the Navajo Code Talkers demonstrated perseverance and ultimately triumphed. The storyteller openly declared "it was the songs and prayers that helped them get through the war." It was clear to everyone sitting in the Hogan; language was the key to survival. He encouraged students to learn the Navajo language and said... "the gods will bless you and you are heard when you run and pray in the morning." While gesturing to the East with his hands in the air, the storyteller shared the following translation:

From the east, the sun rises giving us warmth and light. Like the birth of a child, the newborn experiences the first light. East is the direction you take in the early morning hours, run toward the light, run to the east. As the sun is about to rise make an offering and with it a prayer. First words are spoken with the Holy people. East is linked to your thoughts where you begin thinking about your day. *Nitsahakees* which means thinking represents the Eastern direction.

The stories resonated with many students. The moral provided the link between the tale of "Coyote and the Lizards" to the Navajo Code Talkers and the survivors of the boarding school experience. Realizing these adversities, the students associated these events to the hardships in their life. The discussions became pivotal in helping students understand the significance of the DPL model. For the most part, the DPL model was understood by the students to carry the songs and prayers representative of each cardinal direction. Like a shield, the Diné people are protected by the songs and prayers allowing the survivors to share the stories.

Teachings

At the core of the traditional Navajo teachings is the concept of life. The Navajo people or the Diné believed this way of knowing placed human life in harmony with the rest of the world. For generations, the stories, songs, and prayers carried the teachings regarding life. Most elders embed songs and prayers into the traditional stories used to teach and educate the children.

Much of what is taught from birth to childhood begins with social behaviors. Children are taught to work together in a cooperative and respectful manner. Cooperative group activities were established to help students work together, merging their ideas by working as a team and maintaining the harmony between the team members.

Positive relationships are built when you can talk to your peers. I talked to my peers in all my four classes. We laughed, talked, had fun but leaving NLC class we don't talk to each other because we have to pay attention.

In the Tale of the Coyote and the Skunk, the children are taught to get along with others and most importantly to never be deceitful. The message in this story is to never cheat others out of their share. To the students, the message was to "get along with others" and to be "As the child matures, lessons are role model." As the child matures, lessons are geared specifically to include the roles and responsibilities of the male and female. Specific roles are taught to establish structure in the *hooghan* [home]. The females are taught the social and family responsibilities, while the males are taught to protect and provide for his family. By creating roles for each team member, there is less discord among the team. Each student is given a role during discussions, cooperative group activities, and storytelling sessions in the Hogan. The storyteller believes this teaching is essential in establishing respect and responsibility for one another. One teacher participant reported his observations.

Student respect for one another has changed . . . for example, the girls . . . after their teachings . . . knew a little bit more about how to behave, how to respect yourself, how to engage with others, umm... especially in a way where they had to keep their distance from the boys. The boys also have more respect for the girls, they would umm...I would see them sometimes opening the doors for the girls saying: "girls first, boys last": so yes there uhh their respect for one another has changed, I saw that there was a change in that.

With the aid of storytelling, such as the coyote tales, expressions such as Doo *nibi'didzilii* were used by the Navajo elders to lecture children not to be stubborn or lazy. *Doo nibi'didzilii* means too stubborn to be moved. The message is implied but never made directly to the children. Many of the students interpreted the moral of the story as a choice agreeing the traditional teachings carry the thought processes, the language, and the culture. The following examples express the students understanding of these teachings:

• "I learned that you can learn from your past and always keep your head held high. Never give up on your dreams and something you never would hope for And don't be a statistic. Always do your best. Education is always your main priority so always strive to do your best for a good life."

- "I learned that you can never be lazy or sleep all the time and you cannot think negative about yourself. Plan to go to college, get a job, and finish high school."
- "I learned that many people do their best and never give up. They have problems and those people try hard. They have important things to do in life. Never quit when bad things come your way."
- "Growing up can be hard but it all depends on you to make it happen."
- "You never give up just when you are really sad. You run east and pray you be whatever you want to. You never drink because you might make bad choices. You have to make good choices and you will not have to go through terrible things."

Like Coyote, in Coyote and the Skunk, the students learned that there is no easy way out of doing things. In this story, the students recall the misfortune the Coyote experiences repeatedly. "Coyote never has a plan and counts on the other animals to get things done. He deceives them just because he did not want to cook." The students shared how Coyote is not only "deceiving but never wins in the end by being lazy." In addition to the lesson, the students were asked to pair up and discuss how the coyote stories would be used to align to the teachings of the DPL model (teachings and values of the four sacred directions: *Ha' a'aah, Shadi'aah, E'e'aah', Nahookos*) that promote *T'aa Sha Bik'ehgo Na'nitin* [sense of direction]. Several students commented.

- "Mistakes [are made] but we learn from them."
- "We used the DPL model to follow the planning and teaching. When you get to *siihaasin*, you teach your children what you were taught when you were little that includes stories. Stories are good for people or children it is like a cycle and *siihaasin* is the process of making critical affirmative actions of thinking, planning, learning, becoming experienced, confident to adapt. Follow the cycle, it helps to understand and how to teach others."
- "I learned many things about [being] Navajo and learned that it is important to run before the sun comes up. Learning in school is to become experienced, an expert and something you are confident into an adult."
- "Keep moving forward. It is our culture and our Navajo teachings that we have to learn and about the lessons and our traditions. The gods will bless you and you are heard when you run in the morning, do your best at work and at sports."

The coyote tales are often told to children teaching them about morals, helping them confront and deal with such challenges. The teachings emphasize the concept of *Taa hwo aji teego* [it's up to me] implying that choices are a result of who you are, who you represent, and to avoid "the mistakes by never looking back." Looking back on these mistakes is revisiting the past, moving counterclockwise like the tornado that sweeps things in its path and destroying it. So rather than look back (counterclockwise), children are taught to look ahead and to think positive thoughts (clockwise). This belief is central to the DPL framework where actions and behavior are holistically represented in a clockwise direction, *T'aa Sha Bik'ehgo Na'nitin* [sense of direction] maintaining the path of *Hozho* [beauty way]. The students interpret the teachings as a choice and several of them describe their experiences:

- "We have choices and we do mistakes but we learn from them. It is up to me means I do my and go by my choices. I am really in control of my own life. I learned that completing your dreams is done by listening and doing the right things and doing what your grandparents ask you. It's our choice. Taa hwo aji teego."
- "I learned that it was up to me of how I am gonna [sic] live my life and plan ahead of what I'm gonna [sic] be or do. I should be responsible and make sure you are happy with yourself... You learn to clear your mind so you can move on with your life."
- "We are born into the spirit world until you had your first laugh then you are released and now your parents have to take care of you. From there you have your own spirit of mind and strength. When we talk about clans, it is your family and ke'... then that will reflect the teachings: about the Hooghan [Hogan] and about life."

The discussions proved the following phrases; *T'aa Sha Bik'ehgo Na'nitin* [sense of direction], Doo *nibi'didzilii* [too stubborn to be moved], and *Taa hwo aji teego* [it's up to me] to have a great influence on the students' way of thinking. Responsibility, pride, and respect were evidenced in the journal entries and discussions. The students discussed matters that are important to them and most often reflect the values of home life.

Aspirations

An eighth grader points out, "remember, education is always your main priority

so always strive to do your best for a good life." This statement sums up how a majority of the students in this study felt about their future. Despite the less advantaged backgrounds of these students, there exists a strong desire to achieve success. Participants expressed their hopes and wishes to attend college, to obtain a career, and in some cases to have a family of their own. Some students articulated thoughts on "goals that are financially driven to balance the life between family and work." Planning and preparation is one method of setting and reaching those goals.

From the tale of "Coyote and the Rabbit," (see Appendix D), I observed the discourse between the students and examined each response from the journals. Interactions between the characters in the story were discussed in the classroom using the Navajo language. The main character, Coyote, was described as a "simple" person who did everything he could "to avoid the work." When it came to capturing and preparing a meal, "Coyote avoided using all his energy to capture his prey." Coyote did very little to help himself and never planned for the day. "Coyote never was prepared for anything." In the end, Coyote did not capture the rabbit. The story brought many discussions to life and the students were asked to pair up and report their answers. One group responded "that you can never be lazy or sleep all the time and you cannot think negative about yourself." Another pair scrutinized the message from a different angle, looking for connections. The conversation resulted in the following, "you take responsibility in life ... you need to succeed in order to feed and have a place for your family." As students probed the significance of the story, the session ended with writing prompts about what they planned to do with their future.

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A majority of the students shared their plans of attending college. Some students shared what profession they would like to enter. Most of the responses reflected an occupation in which they were motivated to helping others. Their responses show they want to maintain a standard of living by offering the assistance and support to others. The students who picked their occupations have taken the opportunity to begin thinking about their future.

Professional studies.

- "I want to be a doctor when I grow up and help patients. And I want to open up my own cupcake store."
- "When I get older I want to go to college to go to school for a doctor."
- "I want to be a doctor or maybe travel around the world."
- "I want to be a nurse when I grow up."
- "I want to be a lawyer when I grow up. I want to help people with their cases."
- "When I grow up I want to be a lawyer, to be self-sufficient and married."
- "When I grow up I want to be an engineer."
- "When I am done being a vet I will move back to rez. I will live in a Hogan and have my own livestock."
- "When I am done with high school I am going to college. When I go to college I am going to be a vet."
- "When I am done with collage [sic] I am going to get place where I can work at. When I am working I will help lots of animals in need of help."

- "I want to be a medicine man to be able to help people and hold sweat lodges for wisdom."
- "I will be able to help people with ceremonies."

There were also students who started thinking about college, but had not made any plans on what they would like to do in the future. Most of the responses include goals of completing high school first.

College with no profession.

- "Plan to go to college get a job, and finish high school."
- "I would like to get a diploma and graduate high school."
- "Going to plan for collage, going to U of A."
- "Planning my future, going to NAU."
- "I want to go to college when I grow up. I want to get a house and car when I grow up."
- "I want to go to college and I want to get a certificate.
- "I am going to finish until I go to college."

Very few students shared interest in the skilled and technical labor workforce.

Skilled and technical labor.

- "I want to be a mechanic."
- "I wanted to be underwater welder."

A number of students shared their dreams of becoming a National Basketball Association (NBA) player to becoming an actor. However, it is important to note that some of these students did not specify obtaining a degree but they did mention academic factors that may one day lead them to obtain a degree.

Hopes and dreams.

- "I wanna[sic] get drafted to the NBA and play for Los Angeles Lakers."
- "I wanna[sic] play basketball for U of A college."
- "I really want to be an actor."
- "I want to be a dancer. I would like to go to college and get a certificate so I can get a job."
- "When I grow up I want to be a football player, or I want to become an engineer."

Travel.

• "I would like to go to travel to Canada and back even when I'm finishing college."

In many ways, the DPL model acts as a guide to help map balanced pursuits for the family, education, and work. Embedded in this model are the sacred elements of life, linked to the four cardinal directions. One eighth-grade student described these elements "to provide aim and purpose [to] making critical affirmative actions." Taped to the classroom wall is a poster of the Diné philosophy of learning model. The Navajo Language and Culture teacher shared with the students how "the illustrated colors of the mountains and cardinal directions are a simple yet useful model [for] setting goals." The students routinely referenced the poster during classroom discussions and assignments to identify the four cardinal directions and colors, as well as the principles associated with each direction. For example, the following journal entry integrates principles aligned to the four cardinal directions: Haa'a'ah is another meaning as when you grow up it flows with you until you get to shadi'aah that's when you are an adult. Ee'aah is when you are in the middle of life as applying to get food and work for your kids. As you get older Na'hookos you start to teach your grandchildren the same thing that you been taught. The message I learn becomes handy you will start to need it in the future.

Each cardinal direction acted as a compass where students were guided to begin thinking about a problem, then plan and prepare a solution and finally implement the plan. Application of those concepts were evident in the cooperative group activities; students worked together translating messages in the stories. Some examples of how the participants acknowledged the importance of utilizing the four cardinal directions include:

- "to be mindful in what we are doing when planning so setting goals is what's important be responsible for your actions."
- "It is used when you plan for the future."
- "It's when you prepare for your future like staying in school."

Next to the cooperative group activities, the students reflected and commented in their journals of the Navajo Hero Twin Story. This story helped students understand the symbolic meaning of the four elements in the DPL model and how those elements applied to their lives.

- "the four sacred directions are the mountains that . . . lead your path . . . towards the direction of good life."
- "Learning about me . . . it is up to me because [I] have a choice."
- "It's really up to me to make the choices."
- "I am really [in] control of my own life."

Quantitative Results

The quantitative data in this study included the *Activity Perception Survey* (1994) and artifacts for targeted participants, n = 26 (Deci et al.). Each instrument yielded quantifiable (numeric) data.

Survey Results

Participants were asked to assess three constructs that included interest and enjoyment, value and usefulness, and perceived choice. The results, mean (M) and difference, are displayed in Table 9.

Table 9

Mean and Difference for Pre- and Post-Survey Results (n = 26)

Construct	Pre Survey M	Post Survey M	Difference
Value & Usefulness	5.85	5.40	- 0.45
Interest & Enjoyment	5.24	5.30	+ 0.06
Perceived Choice	4.25	4.35	+0.10

The mean results of the pre surveys provided numerical data ranking the three constructs in order from highest to lowest. The mean average ratings for the three constructs showed very little difference before and after the study. However, the highest mean score occurred for Value and Usefulness construct. This construct reflects respondent's perceptions of the value and usefulness of the storytelling activities. While the change showed very little variation between the surveys, the construct for Interest and Enjoyment and Perceived Choice showed a slight positive trend. These results suggest the storytelling activity to show a slight change in interest and enjoyment of the storytelling activity. The students also believed they had some choice about doing this activity. The construct Value and Usefulness showed a slight decline in rating by 0.45. In general, a comparison of the ratings showed very little change; however, the results of the survey provided a distinct numerical rank of each construct.

Value and usefulness. Participants responded to and rated the construct Value and Usefulness of the activity before and after the study. In Appendix M, the mean ratings for this construct are presented. The results ranged from 4.88 to 6.35. While the majority of the items found in this construct showed a slight decline, there was one statement with a rating of a 0.00. This indicated "no change" for students believing that "doing this activity is useful for improved concentration."

Interest and enjoyment. Appendix M provides the overall results of the pre- and post-surveys for constructs Interest and Enjoyment. The results provide an overall perception of student interest and enjoyment of the storytelling activity before and after the study. On a scale of 1 to 7, the overall ratings for this construct ranged from 4.35 to 6.35. The post survey results indicated several items to increase but the highest rating was 0.80 indicating that students "would describe this activity as very fun." One statement had a rating of a 4.35 but at the end of the study rated a 5.08 indicating that students were "somewhat true" or neutral to the following statement: "I felt like I was enjoying the activity while I was doing it."

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Perceived choice. Appendix M presents an overall perception of how students perceived choice for the storytelling activity before and after the study. The overall ratings for this construct ranged from 3.11 to 5.54. The item showing the greatest positive trend of +1.16 indicated students believed they had some choice about doing this activity. In all, they had "greater choice in participating in this activity."

Artifact Results

Scores from the story wheels are displayed in Table 10. The table presents the combined categorical results by rating for all completed story wheels.

Table 10

Category	Excellent	Good	Satisfactory	Needs Improvement
Display	3%	5%	68%	24%
Characters	0%	12%	76%	12%
Label	12%	74%	8%	6%
Knowledge Gained	6%	26%	59%	9%
Creativity	6%	24%	68%	2%
Cooperative Group	0%	29%	71%	0%

Combined Categorical Results of Story Wheels by Rating

Student participants constructed story wheels according to the rubric found in Appendix H. Each story wheel was rated according to the six categories using a 4-point scale. Constructed story wheels were rated from excellent, good, satisfactory, to needs improvement. **Display.** Sixty-eight percent of the story wheels were somewhat organized and attractive. The displays lacked attention to neatness and were quickly put together. Twenty-four percent of the story wheels were not organized and the displays were somewhat attractive. Only three percent of the story wheels displayed attractiveness and organization that exceeded beyond expectations. This category showed that very little attention went into the detail of the model which indicates little planning and prep time devoted to the model.

Characters. Seventy-six percent of the story wheels used descriptions to visualize what the characters looked like from the story. Very few of the story wheels were described using at least three descriptive Navajo or English words.

Label. Seventy-four percent of the story wheels had cardinal directions written in English or in Navajo on all four sides. The students spent more time in translating the cardinal directions from English to Navajo. A majority of the story wheels were labeled with cardinal directions.

Knowledge gained. More than half, 59% of the story wheels, revealed the moral of the story. Tools, such as the graphic organizers and the DPL model were used to interpret the meaning of the story. Students were paired up and asked to utilize the DPL model in determining the message behind the story. Discussions were used to think (*Nitsahakees*) about the story and each team shared their translations. The students contributed their thoughts on the meaning of the story and as a class they came to a general consensus of the knowledge they acquired from the story.

Creativity. Sixty-eight percent of the story wheels displayed some thought. Student attention to originality was limited.

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Cooperative group. Seventy-one percent of the students worked well with all members contributing some work. The students worked cooperatively in a group and used the information to complete their assignments.

Table 11 presents a combined result of all the completed story wheels by category and domain. Each story wheel was rated on a 4-point scale using the six categories. For each category, the total points for all completed story wheels were compiled and added. The subtotal was divided by the total number of points. The results showed the category "label" and the Diné learning domain "critical thinking" having the highest rating 73%. The category "display" had the lowest rating, 47%, for the combined results.

Table 11

Diné Learning Domain	Category	%
Planning	Display	47
Critical Thinking	Characters	50
Critical Thinking	Label	73
Reasoning	Knowledge Gained	57
Preparation	Creativity	58
Planning	Cooperative Group	57

Combined Results of Story Wheels by Category and Domain

The six categories were used to determine whether the students were utilizing the areas aligned to the four Diné learning domains: critical thinking, planning, preparation, and reasoning.

Critical thinking. Seventy-three percent of the story wheels displayed the translations between the English and Navajo language. The characters were described for some story wheels, but as a combined rating the learning domain for critical thinking revealed that more time was spent on labeling the story wheels. Time was essential to the process of translations. Translating each phrase required greater critical thinking; the students actively analyzed the information from the storytelling experience and used the information to translate the meanings.

Planning. Display and cooperative group activities were used to determine the time spent on planning and preparing the models. Forty-seven percent of the story wheels displayed attractiveness and organization that exceeded expectations. This category showed that very little attention went into the detail of the model which indicates little planning and prep time devoted to the model. However, 57% indicated the class worked cooperatively to complete their models.

Preparation. Fifty-eight percent of the models showed some originality indicating that more than half of the preparation time went into the model.

Reasoning. The combined results indicated 57% of the story wheels displayed the knowledge acquired from the stories. Illustrations showed attention to personal experiences.

Triangulation of Datasets

Interrelated themes and descriptions among the data sets were merged together. The results indicated two overall themes: balance and wholeness of storytelling and storytelling as a merger of knowledge.

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Balance and Wholeness of Storytelling

The four cardinal directions and its principles encompass what the Diné call the Beauty Way Path. The concept of *Hozho* [beauty way] emerged as students demonstrated a supportive and nurturing behavior. In this study, *Hozho* is best explained by the positive relationships the students displayed over the course of the study. Through *Hozho*, there is harmony, a state of balance where student participants exhibited kindness and patience with one another. The process of group decision making empowered the participants to do better in class and to work towards a common goal. Through the cooperative group activities, the participants learned to respect and to support the opinion of others as well as share in the discussions. The participants acted more responsibly in the Hogan and in their NLC class.

In this study, the storytelling experiences provided students the basic knowledge of the holistic teachings of the Diné. Storytelling helped students to reflect on the uses of the information and how those elements were aligned with the DPL model. A complete cycle of this model helps one to practice and move ahead in life toward a state of wholeness. Student participants noted in the journal entries to understand the principles that contribute to what they need to know before they achieved the stage of *Siihaasin* [competency].

Beginning with *Nitshakees* [positive thinking], the students took part in cooperative group learning sessions and saw how the social behaviors were necessary in learning about the standards of living. For the most part, the students indicated an understanding of why it was important to listen to the stories because the messages or morals were contained within the coyote stories. As a child matures, they enter the stage

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of Nahata [planning] and here the students accepted roles and responsibilities within their groups. These ideas helped the students understand the roles and responsibilities of the males and females. Moving around clockwise, the stage of *lina* [implementation] is addressed by the students as being "the adult." At this stage, the students focused on the skills necessary to adapt and live in the western world while retaining the traditional teachings. The students found this stage to be empowering in all that they aspire to do. Most students realized their heritage has its roots in language. From this standard, the students acknowledge that speaking Navajo is a part of being whole. This balance is mentioned by the students as a "need to have respect and respect yourself, to have good manners. The lessons teach us not to misbehave." At the end of the cycle, there is shift from helping self to helping others. The stage of *Siihaasin* means competency. The students understand that this stage is synonymous to reaching and completing a goal. For example, one student shared how he was the first to complete an assignment and another student shared how he received an "A" on a quiz. Accomplishment of these goals is understood by the students to help them reach their long term goal. These examples reflect the concept of *Taa hwo aji teego* meaning "it's up to me" to make that change. This concept has empowered students "to do better in school" influencing their overall self-esteem. In general, the stage of *Siihaasin* means you have acquired all the skills to do what you need to independently. It also means that when an adult reaches this stage, you use the acquired skills to support each other and help others realize their potential.

Overall, the students indicated an understanding of how the concepts of the DPL model were used to establish and accomplish goals. The completed artifacts showed direction in planning and preparation as taught from the DPL model. Next to the artifacts were the journal entries where the responses reflected a positive outlook on life. In general, the DPL model provided a sense of hope and strength to the students. Most students indicated interest in attending college and the components found in the DPL model helped to map out goals toward success. Overall, the students communicated through their journal entries a renewed interest to learning their language, culture and traditions.

Storytelling as a Merger of Knowledge

Knowledge is power. Consequently, the holistic teachings the Diné live by are understood on a need to know basis. Rather than provide the answers to all the questions an individual may have, the elders believe these explanations come with readiness. Things are explained when a person is ready and by no means are these explanations to be understood immediately. Life is experienced in bits and pieces, helping one to understand and reflect on the uses of the information. Oral storytelling is described by the student participants to carry these valuable lessons. The knowledge contained in these stories is meant to help individuals internalize and practice these values through experience.

According to the *Activity Perception Survey*© (1994), the students believed that storytelling was an important activity and beneficial to them as a student (Deci et al.). They described the importance of language and the traditional teachings in shaping their identity and preparing them for the future. As a result, gratitude was expressed by the students for the stories shared in the Hogan. Participants noted through journals and interviews of the Hogan as being the first place to understand the Diné worldview. For example,

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- "the Hogan is like the earth and how the top is the sky and that your surroundings in the Hogan you should have respect for."
- "The Hogan is sacred and when you enter a Hogan you go clockwise because it tells you that it is your life and the ground is Mother Earth and the top is Father Sky."

The students learned quickly to respect the stories shared in the Hogan. The setting provided the strong foundation to teach the basic yet essential components of Navajo philosophy. The students used the information from these stories to distinguish between right and wrong. They listened, acknowledged, and contributed their ideas. Whether the stories were funny or sad, good or bad, the students understood what the lessons had to offer. The participants communicated with their peers, discussing the stories and the messages contained in them. Some discussions included events and people significant to them. The lessons made the participants think not only about the main character, Coyote, in the stories, but how those events related to their lives. Some student participants wrote about family members having a positive impact on their learning. Their participation in the discussions showed their willingness to be a part of something with which they identified and relate to through contributing to the socialization process.

Participants engaged in various oral storytelling activities that included opportunities to listen and speak the Navajo language. To better understand the concepts and meaning of these stories, students participated in a student-centered discourse. The exchange of ideas required the students to engage in daily cooperative group learning activities resulting in meaningful discussions with peers, family members, and elders within the community. Language proved to be the most important factor in achieving success and harmony. The oral teachings were commented to be of value and useful to the students' lives. In general, the results of the merged datasets verified how valuable the oral teachings are to student identity.

Interpretation of Results

Research Question 1: How do students describe, apply, and feel about the 4 phase DPL model (teachings and values of the four sacred directions): *Ha' a'aah, [east], Shadi'aah,* [south], *E'e'aah'* [west], *Nahookos* [north] that promote *T'aa Sha Bik'ehgo Na'nitin* [sense of direction] among students?

Language

Throughout this study the students at Mountain View remained connected to the stories by engaging in various discussions and assignments both in Navajo and in English. The first lesson included teachings of proper greetings, clanship, and mannerisms in the Hogan. The session ended with an emphasis on the Navajo language. This study demonstrated the Navajo language to be described by the students as a source of hope and strength as a result of learning about the experiences of the Navajo Code Talkers and the survivors of the boarding school era.

Most students stated their appreciation for being taught the traditional oral stories in the Hogan. During the study, the students displayed a greater degree of comfort and security in using their language. Speaking the language required support from peers. As a result, the cooperative groups were essential in translating the messages from Navajo to English. In Figure 4, completed artifacts show how students carefully completed the translations. Completed surveys and artifacts proved language to be important to the students. The analysis of the teacher interviews proved the storytelling experience to help the students learn more about a culture that fosters collaboration and trust.

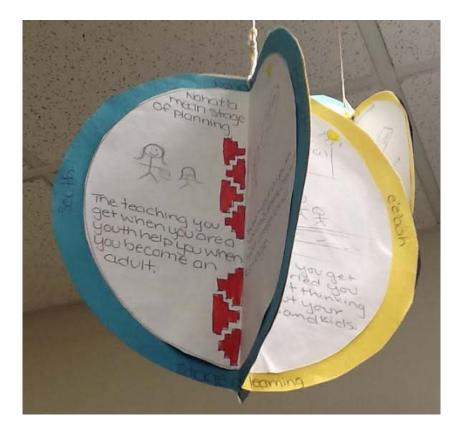


Figure 4. Completed story wheel.

Traditional Teachings

Hooghan Nimazi Bahane [Teachings of the Hogan] were used to introduce social behaviors with lessons focusing on mannerisms in the Hogan. From the beginning, the students commented on hearing these stories for the very first time. Over the course of the study, social behaviors associated with the *Hooghan Nimazi* [Hogan] were emphasized and taught intentionally using structured lessons to promote a positive and healthy environment. The mood and feelings were expressed by the students to be

comforting and nurturing. Learning in the Hogan impelled students to inquire about the symbolic meaning of the structure. As pointed out by the storyteller, the teachings that begin in the *hooghan* [home or hogan] are merely a sign of respect for all life.

The students listened both in Navajo and in English, "Entering the Hogan, the ground is mother earth and the ceiling is father sky. The Hogan is where all life originated from and you are basically entering a womb. The structure is holy and you are not to misbehave. Avoid running and yelling in the Hogan." Traditionally, the entrance of a Hogan faces the east. It is believed this cardinal direction is associated with the emergence of all holy deities. This explains its place for protection and purity. The message was heard by the students and was communicated in the journal entry with sincerity of the Hogan.

The Hogan is mother earth as in the ground and on top of the ceiling of the Hogan is father sky. On the sides is the wall of the Hogan representing nature as in Mother Nature. You enter a Hogan and the walls represent everything on earth. Everything has a purpose and in life you never look back. The top of the Hogan has logs stacked in swirls like the swirls on your body, it is a symbol for life like the swirls on the top of a newborn baby's head.

The majority of the students were content, thinking critically about the message or moral of the stories. Interpreting the underlying meaning or message required students to work cooperatively.

Several students relayed stories from home indicating that the beams of the Hogan are like the students standing side-by-side in "support of one another." The joints of each corner brace each log in a tight-interlocking manner resembling "the strong grip between the hands of people." The construction of the Hogan symbolizes the strength of the family. The students interpreted the message to symbolize the "strength of the class" and "learned that the Hogan is like the earth and that you should have respect for it." In the example of the *Hooghan Nimazi*, student comments were aligned with the teachings of social behaviors indicating that "entering a Hogan is a way of life, the way we learn to behave is taught through the Hogan."

The coyote stories also served its purpose by helping the students acknowledge the choices being made by the main character. For example, following a storytelling session, a journal extract shows how reasoning is used to make choices supporting the philosophy of Iina:

We have choices and we do make mistakes but we learn from them it is up to me means I do my best and go by my choice. I am really in control of my own life. I learned that completing your dreams is done by listening and doing the right things and doing what your grandparents and parents taught you.

The students voiced their opinions and thoughts of these stories as a lesson to "keep moving forward."

Journal entries indicate an understanding of the concepts found in the DPL framework, consistent with the teachings of *T'aa Sha Bik'ehgo Na'nitin* [sense of direction]. The descriptions used to explain the DPL model is represented in a cyclical manner (Figure C). Beginning with *Nitsa'hakees* [thinking], then *Nahat'a* [planning and preparation], then *Iina* [implementation], and *Sihasiin* [assurances]. A complete cycle, *T'aa Sha Bik'ehgo Na'nitin* [sense of direction], of these teachings establishes an organized holistic approach to learning. To the students, moving counterclockwise means stepping back into the past; it is a sign of hardship in life. This discussion led to personal experiences reflecting on what students viewed as hardships; others commented on how the teachings would help them overcome what they also viewed as obstacles. A student

wrote "I can always tell my uncle about these stories because he is never with his family." Another student wrote "the stories make you encouraged to move on or get up and that everyone struggles ….. but you don't want to look to the past." The traditional teachings of the four sacred directions–*Ha*' *a*'*aah* [east], *Shadi*'*aah* [south], *E*'*e*'*aah*' [west], and *Nahookos* [north] –are mostly described by the students to provide clarity.

When you enter the Hogan clockwise your mind and thoughts are clear but when you enter the Hogan counterclockwise you are revisiting your mistakes and your mind and thoughts are not clear. I also learned that you can be whatever you want to be when you grow up but [moving clockwise] can keep you from planning or changes your mind of what you want to be. Nahata is always a part of my life . . . I use Nahata to plan.

Overall, the DPL model was mostly described by the students as a useful tool.

Their responses indicated how the cyclical process was easy to follow: "we use the DPL model to following the planning and teaching . . . that includes stories." The teachings associated with the clockwise movement around the four sacred directions demonstrate the importance of following logic and order. For example, various tasks in this study required students to pair up and work together in solving and summarizing the message contained in the story. Each group followed the process of thinking, planning and preparation, learning, and the implementation of the task. In the following journal entry excerpts, the students talk about the "clockwise" practice and the implications it held (Figure 5):

- *Ha' a'aah* [east] associated with the concept of *Nitsahakees* [critical thinking], teaches to value culture and language.
- *Shadi'aah* [south], associated with the concepts of *Nahata* [planning and preparation], teaches to set goals in life.

E'e'aah' [west], associated with the concepts of *Iina* [reasoning], teaches the

process of making critical affirmative actions.

Nahookos [north], associated with the concepts of *Siihasin* [creativity], teaches strength and hope through inspiring stories.

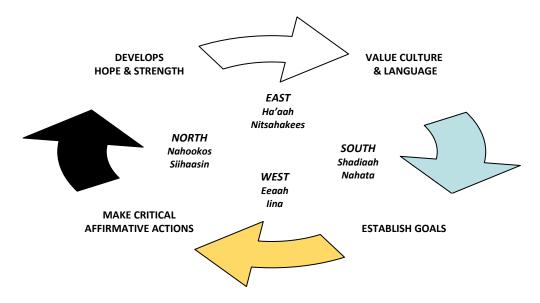


Figure 5. Students' interpretation of T'aa Sha Bik'ehgo Na'nitin [sense of direction].

Research Question 2: To what extent does the Navajo Storytelling Project affect students' engagement in the academic process?

The Diné find strength in following *Saah Naghai Bikeh Hozho* [the cyclical path] living a balanced life to old age. With a strong faith and belief system, the Diné believe that by demonstrating the traditional values, there is a balance between success and harmony. Students learned that achieving success and harmony is acquired by utilizing the principles found in the DPL model.

The story of the "Navajo Twin Heroes" was selected to help students make meaning of the principles in the DPL model. The results of this study indicate the story influences the students' choices in setting and attaining goals. The Navajo twins make plans and prepare to meet their father yet they are confronted with many obstacles along the way. Along the way, the twins are offered support and guidance through ceremonies and teachings. Like the twins, the students describe in their journals of individuals who inspired them to make good choices and move on while encouraging them to confront and overcome obstacles. At some point in time in the story, the Navajo twins acquired skills and traits that defined their identity. Following Saah Naghai Bikeh Hozho [the cyclical path] the students also experience success and harmony by learning to address others using appropriate kinship terms, showing compassion, and practicing courtesy with others. Most of all, the students demonstrated sincerity by "expressing gratitude in everything" they accomplished (Diné Character Building Standard, Concept 4). As a result, student participants acquired skills and traits used to shape their identity. Early in the study, students were taught to greet one another and over time they were observed to use a firm handshake and address one another by kinship. Students also showed appreciation for the storyteller after each session. As students worked together to discuss each story, they developed positive working relationships and frequently relied on one another to translate the messages. Overall, the student engagement showed an increase in respect, responsibility, and relationships in the classrooms.

Aspirations

The theme aspirations frequently appeared across all datasets. The results of the merged datasets showed greater interest towards planning and preparation for college life. To the students, achieving success meant more than attaining a job. Their journal entries

reflected an understanding of experiencing and overcoming life's challenges through the teachings of the DPL model. At the heart of this model is the teaching of *Saah Naghai Bikeh Hozho*, where students identified the principles used to maintain the balance of school and home. Their explanations of success included home life and helping others. Their compassion for helping others showed that they internalized the values of the Diné. In the end, the work of the students was gratifying partly because they achieved greater knowledge of their culture and traditions.

CHAPTER 5: DISCUSSION AND IMPLICATIONS

This chapter presents the limitations, lessons learned, implications, and the conclusion of this study. This action research study explored the middle school students' views of their experiences with storytelling and how those experiences and perceptions impacted their behavior and learning.

Limitations

Generalizability is one noteworthy limitation of this study that needs to be acknowledged. The limitation to this study is the extent to which the study can be generalized due to sample size and time. Sample size was limited due to the school enrollment. For the purposes of this study, selection of participants was limited to a small number of student participants. Time spent on this study also limited the amount of data that might have been obtained.

Lessons Learned

The results of this study suggest storytelling to be an important part of curriculum for Navajo students. The storytelling approach integrated a unique educational philosophy grounded in Navajo cultural traditions. The students used the Diné philosophy of learning model to learn about the traditional teachings which the Navajo elders still promote today.

The theme of life as a journey is reinforced through the DPL model as well as the stories. The storytelling activities stimulated and engaged students to think critically. Each story contained messages forcing the students to think about the meaning. The more they analyzed and questioned the key points of the story, the more they relied on their peers for the answers. As a result, the students gained a deeper understanding of the

stories they were learning as they critically interacted with the content of each story. A sense of camaraderie developed as students worked together to understand the meaning of each story. In the core classes, the students were observed by the teachers to gradually change their behavior. Teachers shared that the activities aligned with storytelling sessions navigated students in a "direction needed to keep the students on task and in completing their assignments each day." Each classroom teacher made additional comments on how the study influenced the students to "do better in school," "to show compassion to others," and "to be thankful." These statements indicated a change in their overall demeanor in their classes.

The students experienced first-hand a desire to do better in and out of class. At first, the students displayed restlessness as they listened to and observed the storyteller. After the first storytelling session, the group displayed control of their behavior as they sat calmly and peacefully around the perimeter of the Hogan. Sitting through an entire session demonstrated a great deal of willpower from the students. These examples have helped the students to realize their growth and determination. The participants willingly contributed their ideas, shared their experiences, and expressed how the traditional teachings have had a significant impact on them. In some cases, the participants spoke about how they relate to the characters in these stories.

The students learned to reference the DPL model, retelling the stories and discussing them at great lengths. The stories helped the students in "understanding the concepts of interrelated wholeness, or interrelationships of all things" (Begay & Maryboy, 1998, p. 7). This was demonstrated by the students who used the DPL model to "map out" their plans as they described their goals. Some shared through discussions a

greater appreciation for life and the people that surround them. The students' understanding of the values and principles associated with each cardinal direction conveyed feelings of purpose and determination.

In retelling their stories, the students in this project showed to be at varying levels of sophistication. Some found difficulty in speaking the language, while the few who spoke fluent Navajo felt it was even more important to learn and retain the Navajo language. Those who could retell the story exhibited an understanding between the English and Navajo language and most of all showed a level of ingenuity in how they thought. Their translations showed creativity in how they talked about the Hogan as "our culture, home, land, [and] clans." Those who had trouble speaking the Navajo language were still able to relate to the stories as it reflected their lives at home. With the help of their parent or guardians, the students found themselves speaking some Navajo by the end of the study. Whether the students spoke the Navajo language fluently or not, their place in the NLC class was described as positive and fun. These experiences revealed what Robert Rhodes (1988) described as a

Gestalt idea . . . the relationships are important in an idea, as in a family. The family and clan relationships are as important as are relationships of ideas. The parts can be studied, but only in relation to the whole. (p. 2)

This literature speaks to the importance of holistic teaching rather than a linear approach for American Indian students, such as the students in this study.

I learned the oral storytelling experiences to promote positive thinking and provide opportunities for students to learn their native language and culture. The stories incorporated values and principles of the DPL model which showed to be a significant part of the process for goal setting. The students were very clear about the ways in which language was used to protect the Diné. These stories helped the students to feel empowered making them more confident in speaking. The students have grown to love their language. Most students commented the storytelling sessions helped them realize the rich heritage and culture from which they come from. The participants' experiences suggest a need for connecting students to their culture through storytelling, bridging the learning gap by providing a curriculum responding to the culture from which the student comes.

Overall, the principles of *T'aa Sha Bik'ehgo Na'nitin, T'aa Hwo Aji'teego, and Saah Naghai Bikeh Hozho* have helped students to understand the components necessary to live independently and happily. These concepts are understood by the students as vital components to maintaining balance and harmony. The "glue" that bonded these pieces together were the oral storytelling activities. As each story was told, the students gradually immersed themselves in the discussions. The students learned extremely important lessons that may one day contribute to their understanding of the holistic Navajo worldview and the social structure.

Implications

Storytelling has helped me to understand the gaps presently observed in many of the school's curriculum on the Navajo Nation. The project was considered useful and valuable as the students spoke of these teachings in this study as a source of strength and hope. The results confirmed that students respond to instruction that matches their learning styles. Students were at their best as they listened to the storytelling and later used the information to collaborate with their peers. The activities helped students to process information needed to complete their graphic organizers. Throughout the study, the students referenced the storyteller focusing their attention on how these events related to them personally. This included a "roadmap" of their goals and aspirations stating what they would like to do after high school. Students organized their thoughts and ideas while referencing the DPL model. The cyclical process provided students with structure and organization of their thoughts. Each time, the students were inclined to complete their tasks using the following process: thinking, planning and preparing, using reasoning skills, and acquiring competency in completing tasks.

Cooperative group activities were found to promote a nurturing and supportive classroom environment. The interactions between the students suggest group activities to place greater accountability and responsibility of tasks. Student relations were positive which showed to benefit student learning. The teachings indicate students respond to teachings to which they are already accustomed. However, the project still motivated students to learn more about kinship, family values, choice, identity, and most importantly their language. The classroom climate in this study suggests to teachers the importance of understanding and valuing the students' way of learning. The results showed to promote academic achievement and build student character among the students suggesting the potential of integrating student culture and traditions.

The study showed the cultural experiences to contribute to the balance and wholeness of a child. Beginning with the *Hooghan Nimazi* [the Hogan]. The Hogan was described by the students to hold the traditional teachings. Students embraced these teachings that embed the principles they believed placed them in harmony with their self and the classroom environment.

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The holistic manner in which the information was introduced encouraged students to think about and understand the interrelationships of the subject matter. The morals or messages from the stories established a sense of direction helping the students to be positive in and out of class. The lessons taught students to be respectful and responsible about learning the Navajo language. These results suggest to parents a commitment to reinforcing the traditional practices at home. The students report a great desire to learn their language and traditions.

The results of this study suggest further areas of research for educators of American Indian students. When American Indian students are taught their language and culture with the existing curriculum, their understanding of the "whole" influences how they perform overall. Implying that cultural competence extends to honoring the language, cultures, and traditions of the indigenous tribes. Specifically, storytelling has shown to enhance the learning of students in this study. It is a traditional teaching strategy that continues to remain absent and ignored in school curriculums across the Navajo Nation. These areas include an awareness of how American Indian students learn as well as an understanding of their challenges. Some may describe the burden of these students as hopelessness, but the findings suggest otherwise. This journey helped students to recognize elements needed to do well in school, and language was the guiding principle. The students were inclined to learn more about their language and their traditions. This was made apparent each time they shared their appreciation by shaking the elder's hand and stating in Navajo how much they appreciated him for sharing the stories. There is much to learn from these students and their voices suggest teachings based on traditional values and beliefs.

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Conclusions

Learning continues to be described as confusing for many American Indian students today. Most students feel unheard and invisible to others. Their voices are missing in this endeavor to understand the learning problems visible in many schools on the Navajo Nation. This study has shown storytelling to have potential to be a catalyst to student learning among the Navajo students. Oral storytelling is one practice that simply needs "dusting" as it has been used extensively in the past and remains to be in direct alignment with the student's culture. While "many people think that traditional knowledge is obsolete and outdated, something ancient that is of little or no use today ... [is described] as transmutable, going through [stages of] constant renewal" (Begay & Maryboy, 1998, p. 67). Traditional teachings are continuously changing and the teaching "adapts through changing demands and changing times" (Begay & Maryboy, 1998, p. 67). In response to these changing times, educators of American Indian students should examine in detail the cultural context by which these students live and learn. American Indian students require an education that is set up exclusively for them. In the revitalization and relearning of Navajo culture and language, the traditional teachings will only help to define, protect, and maintain Navajo identity.

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APPENDIX A

ASU IRB APPROVAL



APPROVAL: MODIFICATION

Kathleen Puckett Division of Teacher Preparation - West 480/727-5206 Kathleen.Puckett@asu.edu

Dear Kathleen Puckett:

On 8/28/2015 the ASU IRB reviewed the following protocol:

Type of Review:	Modification	
Title:	Traditional Navajo Storytelling as an Educational	
	Strategy: Student Voices	
Investigator:	Kathleen Puckett	
IRB ID:	STUDY00002713	
Funding:	Name: Navajo Nation Scholarship Financial	
	Assistance, Office of	
Grant Title:	None	
Grant ID:		
Documents Reviewed:	Dine Philosophy Learning (DPL) Model, Category:	
	Technical materials/diagrams;	
	 Storytelling curriculum, Category: Participant 	
	materials (specific directions for them);	
	Parental Consent to Participate in Study, Category:	
	Consent Form;	
	 Daily Journal Entry, Category: Technical 	
	materials/diagrams;	
	 Teacher Consent, Category: Consent Form; 	
	 Student Agreement, Category: Consent Form; 	
	End of Project Student Interview Questionnaire and	
	Protocol, Category: Measures (Survey	
	questions/Interview questions /interview guides/focus	
	group questions);	
	 RUBRIC for student based artifacts, Category: 	
	Technical materials/diagrams;	
	 Teacher Interview Questionnaire and Protocol, 	
	Category: Measures (Survey questions/Interview	

questions /interview guides/focus group questions);
 Navajo Scholarhsip Cost Verification Form,
Category: Sponsor Attachment;
 Student Perception Survey, Category: Measures
(Survey questions/Interview questions /interview
guides/focus group questions);
 School Board Resolution, Category: IRB Protocol;
 Stamped NNHRB Approval Letter and Consent
Forms, Category: IRB Protocol;
 Social and Behavioral PROTOCOL June 9, 2015,
Category: IRB Protocol;
Sample Lesson Plan, Category: Participant materials
(specific directions for them);
• Dissertation Budget, Category: Sponsor Attachment;
 cultural review approval, Category: Off-site
authorizations (school permission, other IRB
approvals, Tribal permission etc);
Recruitment Script, Category: Recruitment
Materials;
Parental Consent for Minor to Participate in
Interview, Category: Consent Form;
 Leupp, Az.pdf, Category: IRB Protocol;
Navajo Historical Preservation PERMIT, Category:
IRB Protocol:
Letter of Explanation for Grant Funding , Category:
Sponsor Attachment;
Letter of Explanation for Consent Forms, Category:
IRB Protocol:
• Teacher Directions student based artifacts, Category:
Participant materials (specific directions for them);
Navajo Scholarship Application, Category: Sponsor
Attachment;

The IRB approved the modification.

When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

APPENDIX B

NNHRRB APPROVAL: INFORMED CONSENT DOCUMENTS

Dear Parent and/or Guardian:

I am a graduate student under the direction of Dr. Kathleen Puckett in the Division of Educational Leadership and Innovation at Arizona State University's Teacher College. I am conducting a five-week action research study in our school. The purpose of this study is to acquire student views of Navajo Oral Storytelling in the Navajo Language and Culture class and the effect storytelling has on the overall student attitude and behavior in the classrooms. I am inviting your child to participate in this study because they are currently enrolled in the Navajo Language and Culture class.

Description of Procedures

If you agree to let your child participate in this study, their participation will last for 5-weeks consisting of a pre and post survey, daily journal reflections, student based artifacts, and an interview. The 25-question surveys will be given to your child before and after the study. Your child will also be asked to write daily reflections in their journals describing their day and how the stories influence their decisions in each of their core classes. In addition to the daily journal reflections, the students will construct story wheels each week for five weeks (student based artifacts). Selected students will participate in an interview regarding the storytelling activities. The interviews will last at least 30 minutes to an hour. Each interview will be audio recorded but all responses will be disposed of after the study. If you do not agree to let your child participate in this study, there is no penalty for not being a part of this study.

Risks and Confidentiality

There are no known risks to your child's participation in the sessions. Throughout the study your child will continue with their normal classroom routines. The results of this study may be used in reports, presentations, or publications but your child's name will not be used.

Confidentiality will be maintained to protect your child during the study. Care will be taken to maintain subjects; anonymity (unknown); their names will be replaced by codes and the tapes will be erased once the study is completed and the dissertation is submitted. Individuals and organizations will never be identified by name. Pseudonyms ("fake names") will be created and agreed upon by individual research subjects and used to protect individual and group identity. Subjects may withdraw from the study at any time and data obtained from them will be deleted.

Benefits

A benefit is defined as a "desired outcome or advantage." Although there may be no direct benefit to your child, the possible benefit of your child's participation will help to determine the most appropriate teaching methods by which our students learn in the language and culture programs.

Participation Rights

Your child's participation in this study is completely voluntary. Since the study is conducted during normal class activities, the students that do not have parental consent will still be a part of the study. Whether you decide not to have your child participate in the study or leave the study

Parent/Guardian Consent to Participate in a Research Study

early, your child will still be required to complete assignments for the class. However, their artifacts, journaling and interviews will not be used as part of the data collection.

Questions

You may choose to withdraw at any time by contacting Ms. Beverly Becenti-Pigman at the Navajo Nation Research Review Board Office at (928) 697 – 2525. Mailing address: Navajo Division of Health, P. O. Box 1390, Window Rock, AZ 86515. Fax number is (928) 729-4488. If you would like to speak with someone other than the research team, you may call Ms. Becenti-Pigman at the Navajo Nation Human Research Review Board office. A member of the research staff will contact you for a signature confirming your withdrawal and no future contact will be made. Information collected at that point will be used confidential in the overall analysis of the study data.

You are encouraged to ask me any questions about the study. Contact Tammy Yonnie at 928-551-3562 or 480-521-8311; <u>yonnietw@gmail.com</u> or Dr. Kathleen Puckett at <u>Kathleen.puckett@asu.edu</u>.

Participant Signature

Your signature indicates that you voluntarily agree to let your child participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered.

Parent/Guardian's name (printed)

Parent/Guardian's Signature

Date

Investigator's Statement

I certify that the participant's parent/guardian has been given adequate time to read and learn about the study and all of their questions have been studied. It is my opinion that the participant understands the purpose, risks, benefits, and the procedures that will be followed in this study and has voluntarily agreed to participate.

Name of Investigator Obtaining Informed Consent

Date

Date

Signature of Investigator Obtaining Informed Consent Expires: August 18, 2016 Bevely Becenti - Pignon, Chauperson Approved: August 18, 2015 Navajo Nation Human Research Review Board Navajo Nation Human Research Review Board

ASSENT OF MINOR TO PARTICIPATE IN EDUCATION RESEARCH

I was informed by my parent(s) and/or guardian(s) that I have permission to take part in a research study to get my opinion on storytelling in the Navajo Language and Culture class.

I will take part in completing a 25-question survey before and after the project. I will take part in writing daily reflections in my journal of how the stories influence my decisions throughout the day. I will participate in classroom activities where I will construct story wheels each week for five weeks. If selected, I will also be interviewed about how I felt about the storytelling activities.

I am taking part in a 5 week study on storytelling because I want to be a part of this study. I know that I can stop participating at any time if I want to and it will be okay to stop if I want to. If I decide to stop participating, I will be given different assignments in my Navajo Language and Culture class.

Student Name (printed)

Student Signature

Date

Expires : August 18,2016 Blue Becenti - Rigman, Champerson Navajo Nation Human Research Review Board Approved August 18,2015

Parent/Guardian Consent for Minor to Participate in a Student Interview

Dear Parent and/or Guardian:

Your child has participated in a study using Navajo Oral Storytelling in the Navajo Language and Culture class. Prior to this study, I mentioned the possibility of your child participating in an end of project interview to get student views and opinions of their involvement with the project. Your child was selected to participate in the interview and I am writing to ask your permission for him/her to take part in this interview. Your child is one of nine students randomly selected from a list generated by placing all student participants in alphabetical order using their last name. Every 5th student on the list was selected as a respondent. With this method, at least 9 students will participate in an open-ended interview consisting of 10 questions regarding the student's experiences with the stories and how these stories influenced their way of thinking. The interviews will last at least 30 minutes to an hour. Each interview will be audio recorded and transcribed and protected but all responses will be disposed of after the study.

Risks and Confidentiality

There are no known risks to your child's participation in the sessions. During the interviews, participants may skip any question that makes them feel uncomfortable. The results of this study may be used in reports, presentations, or publications but your child's name will not be used.

Confidentiality will be maintained to protect your child during the study. Care will be taken to maintain subjects; anonymity (unknown); their names will be replaced by codes and the tapes will be erased once the study is completed and the dissertation is submitted. Individuals and organizations will never be identified by name. Pseudonyms ("fake names") will be created and agreed upon by individual research subjects and used to protect individual and group identity. Subjects may withdraw from the study at any time and data obtained from them will be deleted.

Benefits

A benefit is defined as a "desired outcome or advantage." Although there may be no direct benefit to your child, the possible benefit of your child's participation will help to determine the most appropriate teaching methods by which our students learn in the language and culture programs.

Participation Rights

Your child's participation in this study is completely voluntary. Since the study is conducted during normal class activities, the students that do not have parental consent will still be a part of the study. Whether you decide not to have your child participate in the study or leave the study early, your child will still be required to complete assignments for the class. However, their artifacts, journaling and interviews will not be used as part of the data collection.

Questions

You may choose to withdraw at any time by contacting Ms. Beverly Becenti-Pigman at the Navajo Nation Research Review Board Office at (928) 697 – 2525. Mailing address: Navajo Division of Health, P. O. Box 1390, Window Rock, AZ 86515. Fax number is (928) 729-4488. If you would like to speak with someone other than the research team, you may call Ms. Becenti-Pigman at the Navajo Nation Human Research Review Board office. A member of the

Parent/Guardian Consent for Minor to Participate in a Student Interview

research staff will contact you for a signature confirming your withdrawal and no future contact will be made. Information collected at that point will be used confidential in the overall analysis of the study data.

You are encouraged to ask me any questions about the study. Contact Tammy Yonnie at 928-551-3562 or 480-521-8311; <u>yonnietw@gmail.com</u> or Dr. Kathleen Puckett at Kathleen.puckett@asu.edu.

Participant Signature

Your signature indicates that you voluntarily agree to let your child participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered.

Parent/Guardian's name (printed)

Parent/Guardian's Signature

Date

Investigator's Statement

I certify that the participant's parent/guardian has been given adequate time to read and learn about the study and all of their questions have been studied. It is my opinion that the participant understands the purpose, risks, benefits, and the procedures that will be followed in this study and has voluntarily agreed to participate.

Name of Investigator Obtaining Informed Consent

Date

Signature of Investigator Obtaining Informed Consent

Date

Expires: August 18, 2016

Beverly Becenti-Figmen, Chairp erson Navajo Nation Human Research Review Board Approved: August 18, 2015

Informed Consent to Participate in Research

Dear Participant:

I am a graduate student under the direction of Dr. Kathleen Puckett in the Division of Educational Leadership and Innovation at Arizona State University's Teacher College. I am conducting an action research study in our school. I am requesting your participation to participate in the research project described below. You were selected as a participant in this study because you are listed as one of the following: storyteller, teacher, Navajo Language & Culture teacher.

The purpose of this study is to acquire student perceptions of Navajo Oral Storytelling in the Navajo Language and Culture class. This study, titled: **"Traditional Navajo Storytelling as an Educational Strategy: Student Voices,"** is anticipated to last approximately 5 weeks. The data used in this study will be collected daily. Over the course of the study, the Navajo Language and Culture teacher will follow a four-week lesson plan. The curriculum includes the use of the four sacred cardinal directions, the four Dine' philosophy principles and the Dine character building standards. For each lesson, an elder will share stories related to each cardinal principle. The storyteller will share stories once a week for four weeks. In addition to the lessons, the students will complete daily reflections and construct story wheels each week. Story wheels will be constructed by each student and submitted to me as the researcher. Teacher participants will provide input that will include an interview and daily observations of student achievement and student behavior from their class.

Risks and Confidentiality

There are no known risks to your participation in the sessions. Throughout the study, the students will continue with their normal classroom routines. The results of this study may be used in reports, presentations, or publications but your name will not be used.

Confidentiality will be maintained to protect you during the study. Care will be taken to maintain subjects; anonymity (unknown); names will be replaced by codes and erased once the study is completed. However; the taped stories will be saved once the study is completed and the dissertation is submitted. Individuals and organizations will never be identified by name. Pseudonyms ("fake names") will be created and agreed upon by individual research subjects and used to protect individual and group identity. Subjects may withdraw from the study at any time and data obtained from them will be deleted.

Benefits

A benefit is defined as a "desired outcome or advantage." Although there may be no direct benefit to you as an adult participant, the possible benefit of student participation will help to determine the most appropriate teaching methods by which our students learn in the language and culture programs.

Participation Rights

Your participation in this study is completely voluntary. Whether you decide not to participate in the study or leave the study early your data will not be used as part of the data collection.

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Informed Consent to Participate in Research

You may choose to withdraw at any time by contacting Ms. Beverly Becenti-Pigman at the Navajo Nation Research Review Board Office at (928) 697 – 2525. Mailing address: Navajo Division of Health, P. O. Box 1390, Window Rock, AZ 86515. Fax number is (928) 729-**4488.** If you would like to speak with someone other than the research team, you may call Ms. Becenti-Pigman at the Navajo Nation Human Research Review Board office. A member of the research staff will contact you for a signature confirming your withdrawal and no future contact will be made. Information collected at that point will be used confidential in the overall analysis of the study data.

You are encouraged to ask me any questions about the study. Your responses will remain anonymous and will only be used by the researcher. All information collected will be kept confidential. Contact Tammy Yonnie at 928-551-3562 or 480-521-8311; yonnietw@gmail.com or Dr. Kathleen Puckett at Kathleen.puckett@asu.edu.

Respectfully,

Tammy Yonnie

Participant Signature

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered.

Name of Participant and Title

Signature of Participant and Title

Name of Investigator Obtaining Informed Consent

Investigator's Statement

I certify that the participant's has been given adequate time to read and learn about the study and all of their questions have been studied. It is my opinion that the participant understands the purpose, risks, benefits, and the procedures that will be followed in this study and has voluntarily agreed to participate.

Signature of Investigator Obtaining Informed Consent Date Expires : August 18, 2016 Bluedy Becenti - Pigman, Chauperson Navajo Nation Human Research Review Board Approved : August 18, 2015

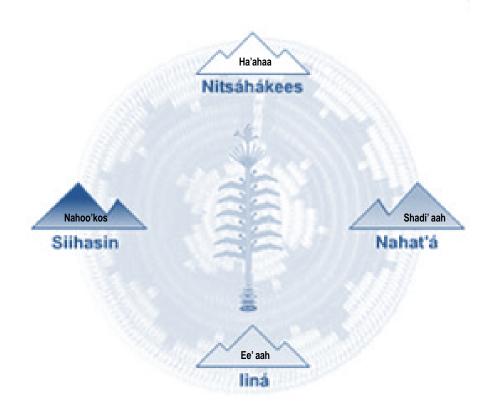
Date

Date

Date

APPENDIX C

DINÉ PHILOSOPHY MODEL



Diné College. (n.d.). Representation of the Diné philosophy model. (*Sa'ah Naaghai Bik'eh Hozhoo* (Image). Retrieved from <u>http://www.Dinecollege.edu/images/mountains-</u> <u>subpage.jpg</u> Permission granted to use.

APPENDIX D

NAVAJO STORIES

This study includes several traditional Navajo stories told only in the winter. These stories vary in each region of the Navajo Nation. The stories I share are based on the teachings of my elders. Out of respect to these elders, the stories are protected and are told in the winter. This practice is a teaching that extends from our late ancestors. Additionally, I briefly mention the phrase *creation stories*, but at any time I do not provide specific details.

Coyote and the Lizards:

One day, Coyote is walking along and is interrupted by the laughter and excitement coming from the lizards. He finds that the lizards are sliding off the hillside using slabs of rock. Coyote observes for a moment, and decides he wants to join the group of lizards. Quickly, Coyote interrupts one of the lizards at the top of the hill. He finds the activity very interesting and decides that he wants to give it a try. Almost immediately, Coyote picks up the largest rock and the lizards try to persuade him not to get on. He does not listen and becomes very stubborn. Near the end of the story, Coyote is crushed by the rock, peeling away his fur and nearly dies. The lizards try to "piece" him back together but do so with whatever was available. To this day, his eyes are yellow because the lizards could not find his eyes and replaced it with tree gum. His fur is the color of the badger because they were the only animals willing to offer their extra fur to him. The moral of this story is listen the first time and never be stubborn when people try to help you. To begin with, Coyote never thought about the consequence of this dangerous activity. Without much planning, Coyote chose a large rock and he faced an unexpected catastrophe. Using the four principles and the Coyote story, children learn about being more responsible for their actions.

Coyote and the Rabbit:

One fine day, Coyote is walking alone in the forest. Looking around Coyote quickly notices a rabbit running past him. Coyote decides to chase after the rabbit and plans on having rabbit for dinner. Chasing after the rabbit, Coyote starts to huff and puff losing all his energy to running. Moments later, the rabbit jumps into a hole for safety. Coyote tries to follow but notices that he will not be able to squeeze through the entrance. Coyote grabs several plants nearby to try and light the rabbit's den on fire. Coyote stuffs milkweed into the hole and the rabbit says "I love milkweed, give me more." Coyote runs around and decides to use a different type of plant and uses foxtail. The rabbit laughs and shouts to Coyote that foxtail was also his favorite. Making Coyote angrier, he decides to use rabbit brush and once again the rabbit is filled with laughter and shares that it is his favorite food. By the time he tried the third plant, Coyote decides on using pinyon pitch. The rabbit cries, "Oh no! You will kill me... I don't eat pinyon pitch?" Alas, Coyote is happy and throws more pinyon pitch over the entrance and puts it on fire. The more he blew on the fire, the Coyote was sure he would capture his meal for the day. The rabbit,

however, outwits Coyote and reverses the process. Coyote is on fire and runs away from the den. Coyote is once again without food. The moral of this story: things never come easy. You have to work hard for things you want in life.

Coyote and the Skunk:

One hot day, Coyote was out looking for food. As he wandered around, he mustered the idea of relieving himself from the heat. He walked and noticed the sun beating down on him more and more. Yet, his hunger was all he could think of. As he walked along he noticed the prairie dogs peeping in and out of their holes to avoid the heat and the predators. Coyote, decides the "fat" prairie dogs would make for a good meal because they moved so slowly. Repeatedly, he tries to grab them out of their holes but is not successful. He walks to the nearest shade and under the tree, he pulls out his "magic stone." He prays to the stone and asks for food and for the rains to come in. In no time, his request is acknowledged and the rain falls until the water takes him off his feet. As he floats down past the prairie dog holes, the water gets angrier and angrier. The water forces him to ask for help from a skunk standing nearby. The skunk decides to help him as Coyote promises him a good meal if he helps him out of the raging waters. Coyote's plan involves deceit and tells the skunk to share that he has died from the storm. He tells skunk to gather all the animals and have them "dance" around him in celebration of his death. The skunk does as he is told and finds that Coyote is right. Together they capture as many animals as they can. They walk away planning to cook their food. Once again, Coyote tries to deceive the skunk but skunk is aware of his conniving acts. Coyote asks the skunk to compete against him as the food cooked. They do so but the skunk outwits Coyote and hides from him. Coyote then runs past the skunk, as skunk hides in a neighboring hole. Coyote returns from the race only to find that the skunk has taken all the food. Coyote never considers that his wishes were granted and had the food in sight. This was not enough for Coyote. The moral of this story is to never ask for more than you can bargain for. Otherwise you will be left with nothing in the end.

Navajo Twin Story:

The Navajo Hero Twin story is a legendary tale of two brothers who travel a great distance to meet their father, the Sun. Along the journey, they come across treacherous tasks that might have prevented them from seeing their father. Through prayers, songs and ceremonies the young men persevered. They encountered people that attacked them but the deities protected them along the way. The twins were given special "tools" to survive their journey and instructed in Navajo the purpose of each tool. Their quest to see their father never changed; they never looked back and thought twice about their plans. The Navajo people learned from this story that with determination and perseverance, they also hold the power to do what they set their minds to. From this story, the Navajo twins are given "guidance and protection of the Holy People" by holding onto the most sacred element in life, speaking the Navajo language. The Navajo language is descriptive in so many ways that if one word were not understood by the twin brothers, their lack of knowledge might have prevented them from surviving. Throughout the story, the two young boys experience a connection with their relatives, the land, the animals and the monsters they slayed. The twins embark on a journey toward adulthood and are strengthened by the people they meet.

APPENDIX E

DINÉ CHARACTER BUILDING STANDARDS

7th-8th Diné Character Building Standards

STANDARD: K'é hwiinidzin dóó ádáhozdílzin bee hadínísht'ée dooleelígíí bóhwiideesh'ááł. I will develop and apply critical thinking to establish relationships with the environment.

	Concept 1 -K'édinisdzin dooleel. I will apply critical thinking to establish relationships with environment.
	PO 1. Shintsáhákees bee she'iina' bidziilgo íínísin dooleeł.
	I will apply my thinking to build strong life skills.
	PO 2. Shik'éí shił nilíjgo baa ahééh nisin dooleeł.
	I will respect my extended relatives.
0	PO 3. Shá' áhwiinít'íí dóó k'édinisdzingo bee ánísht'ée dooleeł.
grade,	I will model kindness and patience.
th-8 th	PO 4. Bił kééhashť inii bił dlohodishchii dooleeł.
Hantsékees Hazíj' – One's thoughts begin to exist. (7 th -8 th grade)	I will display appropriate teasing with my community members.
egin to	Concept 2 –Ádá hozdílzin. I will maintain the sacredness of self-identity
thts be	PO 1. Na'nitin be'esh'íi dooleeł.
thoug	I will practice cultural teachings.
One's	PO 2. Yishááłgóó shíni' dóó shits'íís dínísingo bee ádaahááh nisdzin dooleeł.
ız(j, -	I will show and respect my mind and body.
es Ha	PO 3. Iiná Siléii choosh'íí dóó bee hinishnáa dooleeł.
ntséke	I will practice Diné Way of Life.
На	PO 4. Shooh hodindzinígíí binahjį' ádaa ákonisin dooleeł.
	I will comply with the Diné moral practices.

7th-8th Diné Character Building Standards

STANDARD: K'é hwiinidzin dóó ádáhozdílzin bee hadínísht'ée dooleelígíí bóhwiideesh'ááł.

I will develop and apply critical thinking to establish relationships with the environment.

Conce	pt 3 - Ádił nishdlíį dooleeł. I will have self-respect.
PO 1 .	K'é saad choosh'jj dooleeł.
	I will address others using appropriate kinship terms.
PO 2.	Jiinishba' dooleeł.
	I will show compassion.
PO 3.	T'áá ałtsojį shá áhwiińt'įį dooleeł.
	I will practice courtesy to others.
PO 4.	Doo shízhá'ílíj da dooleeł.
	I will demonstrate ways not be tempermental.
Conce	pt 4 - T'áá altsoní baa ahééh nisin dooleeł. I will express gratitude in everything.
PO 1.	Shikéyah biyi' dóó bikáá'góó dahólóonii baa ahééh nisin dooleeł.
	I will explain ways to be thankful for land and its resources.
PO 2.	Shikéyah bits'ą́ą́dóó dahólóonii baa hą́ą́h nisin dóó baa áháshyą́ą dooleeł.
	I will show respect and take care of the natural resources.
PO 3.	Nahasdzáán dóó Yádiłhił bits'ą́ą́dóó iiná hólónígíí baa ahééh nisin dooleeł
	I will describe ways to appreciate the natural elements of earth and sky.
PO 4.	Nahasdzáán dóó yádiłhił binahjį' na'nitinígíí baa ahééh nisin dooleeł.
	I will present the teachings that I have learned to appreciate from earth and sky

Copyright.7 – 8th Diné Character Building Standards. Retrieved October 01, 2016, http://navajonationdode.org/uploads/FileLinks/0af6457a581b4ac6a25fd65b2c014e7b/7_8 DinéCharacter.expert.8.19.12_2.pdf)

APPENDIX F

STORYTELLING CURRICULUM

		Days of the Wee	ek	
Monday	Tuesday	Wednesday	Thursday	Friday
		Cardinal Direction		
East	South	West	No	rth
		Dine Philosophy Pri	nciple	
Nitsa'hakees [Stage of Thinking]	Nahata [Stage of Planning]	<i>lina</i> [Stage of Implementation]	Siha [Stage of A	
		Dine Character Building	standards	
C2. I will maintain the sacredness of self- identity.	C3. I will have self-respect.	C1. I will apply critical thinking to establish relationships with environment. C2. I will maintain the sacredness of self- identity.	 C1. I will apply critical establish relationships C2. I will maintain the identity. C3. I will have self-res C4. I will express grad 	s with environment. e sacredness of self- spect.
		Lesson		
Oral Storytelling	Cooperative Group Learning: Group will plan on how to complete a "Spider Map" Strategize: Discuss the main idea Organize, agree and arrange the main idea and supporting detail.	Cooperative Group Learning: Video: Coyote Tales (Don Mose, 2004) Use collected information to identify character and traits Apply skills from previous lesson to create a Character Map Use the character map and spider map to solve moral of the story.	Cooperative Group Learning: Compare and Contrast how the stories told (elder and video). Create a Double Bubble Map List words or phrases describing similarities and differences.	Independent: Recall the lesson learned. Create a Story Wheel Cite source at the bottom of each section. Retell story Explain the moral of the story.
	Identify the Main Ideas	Interpret the author's message.		

	Journal Reflection								
Prompt:	Prompt:	Prompt:	Prompt:	Prompt:					
Describe an	Explain how	<i>lina</i> is a stage	Sihasiin means	The stories have					
example of	the concept of	when you begin to	confidence. This	provided you with					
how you	Nahata	establish positive	stage of the DPL	knowledge in					
applied the	[Stage of	relationships with	model marks your	traditional Navajo					
teachings of	Planning]	your peers and	ability to	teachings that may					
the Hogan	helped you to	begin responsible	complete task	have transferred to					
experience to	accomplish	decision making	independently.	your regular					
your classes.	a problem in	while participating	The completion of	classroom teachings.					
	one of your	in activities.	your assignment	Describe how the					
	classes?	Describe a positive	is an example of	teachings of T'aa Sha					
		experience you had	Sihasiin. Explain	Bik'ehgo Na'nitin					
		with your peers	how the teachings	[sense of direction]					
		today. If you did	from the DPL	can be or has been					
Sentence		not have a positive	might help you to complete other	applied to your core classes?					
Frame:		experience, explain why you think so.	tasks in your core	classes?					
The traditional		wity you tillik so.	classes?						
teachings I			classes?						
learned in the									
Hogan that									
were most									
valuable to me	Sentence	Sentence Frame:							
were	Frame:	I learned in my		Sentence Frame:					
I	Today I applied	Navajo Language		The lesson I learned					
applied these	the concept of	& Culture class		from this story					
teachings in	Nahata during	about Iina. I	Sentence Frame:	isThis message					
my class today	my	experienced this	I used the DPL	will be used in my					
by	class when I	when	model when	classes when					

APPENDIX G

SAMPLE LESSON PLAN

Dine Literacy Lesson Plan	on Plan Week of:		September 8 – 11, 2015	Grade:	Seventh & Eighth
Week 1:		Navajo Language and Culture Lesson Plan	u		
Learning	L	tse critical thinking skills	to organize and utilize it	The students will use critical thinking skills to organize and utilize information, communicate in written and oral	in written and oral
Target/Objective:		1 solving and decision ma	aking skills, work in coop	forms, use problem solving and decision making skills, work in cooperative groups, synthesize information, develop	e information, develop
		an artifact, and explain the main idea.			
Diné Character Building		C2. I will maintain the sacredness of self-identity.	entity.		
Standard(s):		f respect.			
	C1. I will apply cri C4 I will everess	C1. I will apply critical thinking to establish relationships with environment.	I relationships with envir	onment.	
Essential Question: Hor	w does the 4phase DPL 1	model (teachings and value	tes of the four sacred dir	Essential Question: How does the 4phase DPL model (teachings and values of the four sacred directions): Ha' a'aah, east; Shadi'aah, south;	Shadi'aah, south;
E'e'aah', west; Nahooko	s, north) promote T'aa S	E'e'aah', west; Nahookos, north) promote $T'aa Sha Bik'ehgo Na'nitin (or "sense of direction")?$	"sense of direction")?		
Materials/Resources: D	PL Model, journal, const	Materials/Resources: DPL Model, journal, construction paper, guest speaker.	ker.		
Focus: Storytelling: Hooghan Nimazi	ghan Nimazi Binahji Hane'	ne'			
Vocabulary:			List Types of S	List Types of Strategies/Models/Graphic Organizers that will be used:	ganizers that will be used:
Doone' Iina	Hane	E'e'aah' Nahookos	•	Character Maps	
Nitsa'hakees Sihasiin		Ha' a'aah	Doub	Double Bubble Maps	
Nahata' Hoogh:	Hooghan Nimazi T'aa Sha Bik'ehgo	Bik'ehgo <i>Shadi'aah</i>	Video		
Monday	Tuesday	Wednesday	Tuesday	Friday	
	Nitsa' hakees	Nahata'	Iina	Sihasiin	Dine Philosophy
	"Stage of Thin Eina"	"Stage of Dlanning"	"Stage of Turnlamentation"	"Stage of Assurances"	Principle(s)
	Summer	Summer			
FAKIS OF LESSON			Strategies include: Stude	1 Y Pr ent Engagement/ ELL/ IEP/Nav	ITTES OF SIRAIEGES USED Strategies include: Student Engagement/ELL/IEP/Navajo Language Accommodation
PART 1:					
Beginning (Introduction/Knowledge Building)	/Knowledge Building)				Inking to
Monday	Tuesday	Wednesday	Thursday	Friday	background
	Nitsa' hakees	Nahata'	Iina	Sihasiin	learning to past
Labor Day	Enter Hogan	Discussion of Story	Video: Types of Hogan	Create a Story Wheel	 guided practice
Нондау	Clansmp: muouucuons	Video: Coyote and the	and their purpose T ist the fasts from each		 modeling
	(27.0)	(Don Mose, 2004).	narrator (storvteller.		
			video)		

PART 2: Middle (Investigating/Exploring)	g(Exploring)				 independent
Monday	Tuesday Nitsa' hakees	Wednesday Nahata'	Thursday Iina	Friday Sihasiin	 practice w/scaffolding hands-on
	Oral Storytelling: Hooghan Nimazi Binahji Hane' Proper Behavior and conduct in the Hogan	Cooperative Group Learning: Complete a Spider map – discuss the main idea of story Create character maps – identify and list features	Cooperative Group Learning: Create a Double Bubble Map – compare and contrast the stories.	Cooperative Group Learning: Using the organizers, students will create a story wheel.	 rigor and relevance individual group oral
PART 3: Conclusion					 reading
Monday	Tuesday Nitsa' hakees	Wednesday Nahata'	Thursday Iina	Friday Sihasiin	 writing speaking listening
	Students will properly exit the room - demonstrate appreciation by handshake	Students will share how they planned and agreed to create a spider map with a main idea.	Students will pair up and discuss what they believe is the moral of the stories.	Students will retell the story and explain the moral.	 unstanug choraling revoicing partner talking product
PART 4: Reflection - Key Que	PART 4: Reflection - Key Questions for Students to answer (Journal Entries)	wer (Journal Entries)	•		exit ticket
Monday	Tuesday Nitsa' hakees	Wednesday Nahata'	Thursday Iina	Friday Sihasiin	 product writing
	The stories have provided you with knowledge in traditional Navajo teachings that may have transferred to your regular classroom teachings. Describe how the teachings of T'aa Sha Bik'ehgo Na'nitin ("sense of direction") can be or has been applied to your core classes?	Explain how the concept of Nahata "stage of Planning" helped you to accomplish a problem in your class?	<i>lina</i> is a stage when you begin to establish positive relationships with your peers and begin responsible decision making while participating in activities. Describe a positive experience you had with your peers today. If you did not have a positive experience, explain why you think so.	Sihastim means confidence. This stage of the DPL model marks your ablity to complete task independently. The completion of your complete is an example of Sihastim. Explain how the teachings from the DPL might help you to complete other tasks in your core classes? <u>English</u> : <u>Describe an example of</u> how you applied the teachings of the Hogan experience to your classes.	

APPENDIX H

STORY WHEEL RUBRIC

Category	Excellent	Good	Satisfactory	Needs Improvement	SCORE
	(4)	(3)	(2)	(1)	SCON
Display (Planning)	The story wheel attractive and well- organized. The display exceeds beyond expectations.	The story wheel is attractive and organized.	The display is somewhat organized. The display is somewhat attractive.	The display is not organized. The display lacks attention to neatness and is quickly put together.	
Characters	All main characters are	All main characters	Characters are named	Characters have only	
(Critical Thinking)	named and described using at least 5 or more descriptive Navajo AND English words. The audience can use the description to visualize what the characters look like and behave.	are named and described using at least 4 descriptive Navajo OR English words. The audience can use the description to visualize what the characters look like and behave.	and described using at least 3 descriptive Navajo OR English words. The audience can somewhat use descriptions to visualize what the characters look like.	two descriptive words using Navajo OR English words. The audience can somewhat use descriptions to visualize what the characters look like.	
Label	The story wheel has	The story wheel has	The story wheel has at	Each story wheel is	
(Critical Thinking)	cardinal directions written in Navajo and English on all sides.	cardinal directions written in English OR Navajo on all four sides.	least one missing cardinal directions.	missing two or more cardinal directions.	
Knowledge Gained (Reasoning)	The students could easily state facts about the story and reveal the moral of the story without looking at learning tools/story wheel.	The students could state facts about the story and reveal the moral of the story while looking at learning tools/story wheel.	The students had trouble understanding what the facts were about OR had trouble revealing the moral of the story while looking at the learning tools/story wheel.	The students had trouble understanding what the facts were about AND had trouble revealing the moral of the story while looking at the learning tools/story wheel.	
Creativity	The group put tremendous amount of thought into the story wheel.	The group put some thought into the story wheel.	The group tried to put some thought into the story wheel.	The group did not put any thought into the story wheel.	
Cooperative Group (Planning)	The group worked well together. Each member contributed equally to the assignment(s).	The group worked well with one member contributing some work.	The group worked fairly well with all members contributing some work.	The group did not cooperate with each other and the members did not agree nor share ideas to complete their assignment.	
(g)				Total	/24

APPENDIX I

SAMPLE WORKSHEET

"Lesson Reflection"				
		Date: Friday, /		
Name:			Week 1, Reflection 5	
		/2015		
Class:		1	+	
C1. I will apply critical thin	iking to estal	blish relationships with environme	ent.	
C2. I will maintain the sacr	edness of sel	f-identity.		
C3. I will have self-respect.		-		
C4. I will express gratitude	in everything	g.		
Sihasiin "Stage of Assurat	nces"	-		
Direction: Use the sentence	frame to be	gin writing about how today's less	son affected your	
thoughts, actions and behav	ior in this cl	ass.		
Prompt		have provided you with knowled	lge in traditional	
_	Navajo tea	chings that may have transferred	to your regular	
	classroom	teachings. Describe how the teach	nings of T'aa Sha	
	Bik'ehgo I	Na'nitin ("sense of direction") can	be or has been applied	
	to your con			
Sentence Frame	The lesson	I learned from this story isThi	is message will be used	
	in my class	ses when		
The lesson I learned from the	his story is	.This message will be used in my	classes when	

APPENDIX J

TEACHER INTERVIEW QUESTIONS AND PROTOCOL

A semi-structured interview will be used to gather information using the following interview questions.

Introduction and Consent

Interviewer: I would like to thank you for participating in this interview. I'm interested in learning about your perceptions of student attitudes and behaviors. I'd like to know what has changed in your classroom in regards to student attitude and behavior.

With your permission I would like to record our conversation so that I may transcribe it later for further analysis of the text. The information I gather will be kept confidential at all times and names will not be applied to the comments. The data (transcribed interview) will be kept on the investigator's USB drive which will be kept safe. The interview will not be recorded without your permission.

The data will be released to the Navajo Nation Institutional Review Board and will be destroyed.

If you have any questions to ask at this time, please do so. We will begin at this time.

- 1. Briefly explain changes of students in your class engaged in a caring and respectful manner.
- 2. Based on your classroom observations, describe the attention and detail the students had with their daily assignments.
- 3. Explain the types of learning tools (graphic organizers, thinking maps, etc.) the students in your class used to help them plan and prepare for an assignment in your class.
- 4. During the five week study, describe the classroom climate each time you provided cooperative group learning opportunities for the class.
- 5. During the five-week study, describe what was observed to be a common or reoccurring problem in class.

- 6. Based on your observations of the five week study, describe the most noticeable changes in attitude and behavior of students in your class.
- 7. Describe any discussions or references the students made to the study.

APPENDIX K

STUDENT INTERVIEW QUESTIONS AND PROTOCOL

A semi-structured interview will be used to gather information using the following interview questions.

Introduction and Consent

Interviewer: I would like to thank you for participating in this interview. I am here to learn about your experiences with storytelling.

With your permission I would like for you to complete the student questionnaire. The information I gather will be kept confidential at all times and names will not be applied to the comments. You will have a choice to complete the questionnaire and it will not affect your grade. If you have any questions to ask at this time, please do so. We will begin at this time.

Student Interview Questions

- 1. Provide a formal introduction of yourself.
- 2. Explain what you know about the teachings and values of the four sacred directions.
- 3. Explain why you think Navajo storytelling is important.
- 4. Explain as best as you can the meaning of T'aa Sha Bik'ehgo Na'nitin (or "sense of direction").
- 5. Describe the difference between the traditional ways of teaching from the teachings found in a classroom
- 6. Explain how being a part of the Navajo Language and Culture class makes you feel.
- 7. In your household, who would you describe as being a teacher to you? Explain why you think this person is a teacher to you.
- 8. Describe how the stories have helped you become aware of your actions in class.
- 9. Describe the advantages and disadvantages of the cooperative group learning activities.

10. You completed story wheels each week; explain how the model is a representation of a Hooghan Nimazi.

APPENDIX L

SURVEY AND PERMISSION TO USE

The following items concern your experience with the task. Please answer all items. For each item, please indicate how true the statement is for you, using the following scale as a guide:

1	2	3	4	5	6	7	
not at a	ıll	som	ewhat	very	true	true	

- 1. I believe that doing this activity could be of some value for me.
- 2. I believe I had some choice about doing this activity.
- ______ 3. While I was doing this activity, I was thinking about how much I enjoyed it.
- _____4. I believe that doing this activity is useful for improved concentration.
- _____ 5. This activity was fun to do.
- _____6. I think this activity is important for my improvement.
- _____7. I enjoyed doing this activity very much.
- 8. I really did not have a choice about doing this activity.
- _____ 9. I did this activity because I wanted to.
- _____ 10. I think this is an important activity.
- _____ 11. I felt like I was enjoying the activity while I was doing it.
- _____12. I thought this was a very boring activity.
- 13. It is possible that this activity could improve my studying habits.
- _____ 14. I felt like I had no choice but to do this activity.
- _____ 15. I thought this was a very interesting activity.
- 16. I am willing to do this activity again because I think it is somewhat useful.
- _____ 17. I would describe this activity as very enjoyable.
- _____ 18. I felt like I had to do this activity.
- _____ 19. I believe doing this activity could be somewhat beneficial for me.
- _____ 20. I did this activity because I had to.
- _____ 21. I believe doing this activity could help me do better in school.
- _____ 22. While doing this activity I felt like I had a choice.
- _____ 23. I would describe this activity as very fun.
- _____ 24. I felt like it was not my own choice to do this activity.
- _____25. I would be willing to do this activity again because it has some value for me.

Permission to Use Instrument

10/21/15

SDT <info@selfdeterminationtheory.org>

Hi Tammy,

Thanks for your interest in the Self-Determination Theory and using our scales. While we make our questionnaires available free of charge for purely academic uses only (i.e. not directly or indirectly related to any commercial application or for-profit use), the information you have requested is proprietary and individuals have taken a lot of time and resources to develop these scales.

Thus, we ask that you use the scales ONLY for academic purposes and we also ask that you please inform us at <u>info@selfdeterminationtheory.org</u> should your work be published using our measures.

If you are wishing to use the scales for commercial purposes, please reply to this email so we can assist you further.

To access the SDT scales, please follow the steps below...

• Go to the SDT homepage at: <u>http://selfdeterminationtheory.org/</u>

• Login first on the left-hand side of the window. If this is your first time trying to login, you will need to REGISTER first.

• You can go directly to our registration page at:

http://www.selfdeterminationtheory.org/registration/

• Then go to the questionnaires page (link is located in left navigation bar or at the top of the page)

• Select the scale you want to use, and then you should see at the top of the page "Get Scale." This "Get Scale" option will NOT appear if you are NOT logged into the site.

• Click "Get Scale" and then you'll be prompted for a signature validation and asked for your intended use of the scale.

Best wishes with your work. Steph Green on behalf of The Center for Self-Determination Theory <u>www.selfdeterminationtheory.org</u> JOIN US AT THE **2016 SELF-DETERMINATION THEORY CONFERENCE** Scott Rigby, Richard Ryan and Edward Deci will be leading a 1-Day Business Workshop **"Putting Intrinsic and Extrinsic Motivation to Work"** JUNE 1, 2016 web.uvic.ca/sdt2016/

On Oct 21, 2015, at 2:26 PM, SDT info <<u>systems@immersyve.com</u>> wrote:

From: Tammy Yonnie <u>yonnietw@gmail.com</u> Subject: Permission to Use the Activity Perception Survey Message Body:

Greetings. I am writing to request permission to use your 25 item survey titled: Activity Perception Survey)for my dissertation with Arizona State University's Leadership & Innovation doctoral Program. Any related information on reliability and validity of the of the instrument would be greatly appreciated. Thank You.

Respectfully, Tammy Yonnie APPENDIX M

DATA

Survey Result: Value and Usefulness Construct

	Item	Pre-	Post	Difference
1.	I believe that doing this activity could be of some value for me.	5.88	5.31	-0.57
2.	I believe that doing this activity is useful for improved concentration.	5.77	5.77	0.00
3.	I think this activity is important for my improvement.	5.85	5.81	-0.04
4.	I think this is an important activity.	6.35	5.88	-0.47
5.	It is possible that this activity could improve my studying habits.	5.88	5.23	-0.65
6.	I am willing to do this activity again because I think it is somewhat useful.	5.77	4.88	-0.89
7.	I believe doing this activity could be somewhat beneficial for me.	5.58	4.92	-0.66
8.	I believe doing this activity could help me do better in school.	5.58	5.65	-0.07
9.	I would be willing to do this activity again because it has some value for me.	6.00	5.15	-0.85

Item	Pre-	Post	Difference
1. While I was doing this activity, I w thinking about how much I enjoyed		5.77	+0.35
2. This activity was fun to do.	5.15	5.23	+0.08
3. I enjoyed doing this activity very much.	5.12	4.96	-0.16
4. I felt like I was enjoying the activit while I was doing it.	y 4.35	5.08	+0.73
5. I thought this was a very boring activity.	5.27	4.85	-0.42
6. I thought this was a very interesting activity.	g 6.35	5.42	-0.93
 I would describe this activity as ve enjoyable. 	ry 5.15	5.23	+0.08
8. I would describe this activity as ve fun.	ry 5.08	5.88	+0.80

Survey Result: Interest and Enjoyment Construct

Survey Result: Perceived Choice Construct

	Item	Pre-	Post	Difference
1.	I believe I had some choice about doing this activity.	4.38	5.54	+1.16
2.	I really did not have a choice about doing this activity.	3.54	4.42	+0.88
3.	I did this activity because I wanted to.	5.31	4.50	-0.81
4.	I felt like I had no choice but to do this activity.	3.96	3.88	-0.08
5.	I felt like I had to do this activity.	3.19	3.46	+0.27
6.	I did this activity because I had to.	4.81	4.38	-0.43
7.	While doing this activity I felt like I had a choice.	4.77	5.42	+0.65
8.	I felt like it was not my own choice to do this activity.	4.00	3.11	-0.89

APPENDIX N

CONFIDENTIALITY STATEMENT

As a researcher working on the above research study at Arizona State University, I understand that I must maintain the confidentiality of all information covering research participants. This information includes, but is not limited to, all identifying information and research data of participants and all information accruing from any direct or indirect contact I may have with said participants. In order to maintain confidentiality, I hereby agree to refrain from discussing or disclosing any information regarding research participants, including information described without identifying information, to any individual who is not part of the above research study or in need of the information for the expressed purposes on the research program.

Signature of Researcher

Print Name

Date

Signature of Witness

Printed name

Date

APPENDIX O

PERMISSION TO USE ARTWORK

Request to use artwork for Dissertation

Sep 29 (8 days ago)

Tammy Yonnie <yonnietw@gmail.com>

Greetings. My name is Tammy Yonnie and currently completing the last part of my dissertation with ASU. Throughout my research I have referenced the Diné Philosphy Learning Model and used the picture that is displayed on the Diné College with the four cardinal directions, Navajo basket as the background, and the cornstalk that is placed in the middle (it also has the following phrases around the picture, Nitsahakees, nahata, iin,a and siihasiin). I am not sure who has the copyright to this picture but need your assistance so that I may publish my dissertation.

You may reply or reach me at (480) 521-8311.

Thank You.

Respectfully,

Tammy Yonnie, ABD

Valarie S. Tom

Sep 29 (8 days ago)

Hi Tammy,

Thank you for contacting Diné College.

You may use the image as long as you attribute where you got the source. It would depend on APA or MLA style of sourcing, but just as long as you cite where you got the source. In this case, it would be Diné College and that will be fine.

Thank you for asking. We wish you all the best in your research and educational endeavors.

Kind regards, Val Tom

Public Relations ~ Diné College valtom@Dinécollege.edu (928) 724-6696: Office (602) 716-1149: Cell From: Tammy Yonnie [<u>yonnietw@gmail.com</u>] Sent: Thursday, September 29, 2016 4:01 PM To: Valarie S. Tom Subject: Request to use artwork for Dissertation