

The Environment & the Five Senses: Engaging Young Minds with a Holistic
Approach to Learning

Learning from Nature for Diné Head Start

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Author Note:

Edison Gonnie, Diné Institute Fellowship: Diné Head Start teacher at Window Rock 2 Center in Window Rock, Arizona. To all Diné Educators that inspire students to learn their Diné Language across all of Diné reservation. Correspondence about this curriculum unit can be addressed to Edison Gonnie P.O. Box 1114 Many Farms, Arizona 86538. Email contact:

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Introduction

My name is Edison Gonnig my Diné Clans are I'm "T[2sh ch7 77]" (the Red Bottom People) Born for "Ta'B2h11" (Near the Water People) Maternal Clan "A'sh77" (Salt Clan) and Paternal Clan "N2' t00 d7n4 T1' ch66 n44" (Tobacco Red Streak People). I work for Diné Head Start in Window Rock, Arizona, with the community of Fort Defiance. Annually- I have 20 students with all-day learning for 3-, 4-, and 5-year-old. The Curriculum Unit Topic on Diné Indigenous teaching, language, and culture is for young learners to learn and have the confidence to express their identity. My topic will help students identify trees in Diné Head Start learners' local surrounding environment. Diné people teach the uses and purpose of different types of trees and plants for various purposes in Diné culture. This topic interests me because Diné children need to explore their local Botanical environments where they live. The Diné teachings remain "A Way of Life" in everyday routines for parents to be role models for their young children. Using the Navajo Language to make connections to express holistically with belief and traditions of ancient generations of stories and people that have brought it down from hundreds of generations is told by my adopted family in Steamboat, Arizona (H. Begay). Young children need their elders to connect and maintain the ancient ways of life.

As a Diné teacher and many other teachers, we must create new innovative curriculums to teach our young Diné. This Unit plan will have a pre-Unit to align this Unit plan. A beginning of the year Study for Diné Head Start children will help students understand the foundation for going into Kindergarten and recognize the Diné language and their identity as holistically being Diné and where they live.

Context

The Students that our Diné Head Start service are children that live in the community of Fort Defiance, Arizona, on the Diné reservation. The population of Fort Defiance, which is a city located in Apache County, Arizona. Fort Defiance has a 2020 population of 4,590. Fort Defiance is currently declining at a rate of 0.00% annually, and its population has increased by 26.66% since the most recent census, which recorded a population of 3,624 in 2010. Fort Defiance reached its highest population of 4,590 in 2019. (Wikipedia,7/26/21)\

The average household income in Fort Defiance is \$47,898, with a poverty rate of 41.28%. In recent years, the median rental costs have come to \$504 per month, and the median house value is \$34,800. The median age in Fort Defiance is 34.4 years, 34.5 years for males, and 34.3 years for females; 9.3% are children under 18 years of age. (<https://worldpopulationreview.com/us-cities/fort-defiance-az-population>) Dinés language spoken in the home is 5.4%, and the English spoken is 45% (Wikipedia,7/26/21).

The geographical location on the Diné reservation territory covers about 17,544,500 acres (71,000 km²; 27,413 sq mi), occupying portions of northeastern Arizona, southeastern Utah, and northwestern New Mexico, in the United States. [Navajo Nation. (n.a) Wikipedia]. Students living on the Diné reservation have to travel on dirt roads to go to school more than an hour away from home. L have to travel two miles to get to a paved highway and still have to drive an hour and a half to get to work. Many students and their families have lived where their great grandparents have lived, But some children have moved to housing complexes where they are limited to people, cultures, and traditions. And are adapted to their environment. For instance, families cannot have sheep, cattle, horses or maintain a cornfield while living in these Housing operated by Navajo Housing Authority (NHA).

Teaching young Diné children about their grandparents and great-grandparents' teaching about their local environment and its land uses will help learners reconnect and maintain the values and cultures of the Diné people. They will learn through play, animals such as sheep, lambs, goats, natural plants, rocks, sticks, branches, mud clay, trees, and items in their environment. Diné children learned responsibilities while playing, acting out their parents' roles and immediate family members. "Foundation for Adeehoniszin Dooleel Curriculum is based on both the Diné philosophy of learning and the western theories" (Shirley, A pg. 4).

Rational

Teaching young Diné children in school is understanding the many different ethnicities, cultures, and beliefs worldwide. Helping students identify their core values, beliefs, and traditional practices to help the community maintain their cultures. Teaching the Diné language in the classroom as a second language for the Diné children to maintain who we are as Diné people to keep our traditions alive and support the Diné Tribal Sovereignty. "The federal government has special trust obligations cited in treaties: to protect tribal lands and resources, protect tribal rights to self-government, and provide services necessary for tribal survival and advancement. Tribal sovereignty refers to tribal rights to govern themselves, define their membership, manage tribal property, and regulate tribal business and domestic relations. Sovereignty is a non-Navajo word, but in Diné it has a related concept called Onni' Inteeego, Self-Responsibility" (<https://www.etd-inc.com/recent-news/navajo-tribal-sovereignty>). The Military of the United States also recognizes the Diné language as a Code used during World War II to help win the war against Germany and its Allies. (www.history.navy)

The rewards of teaching young Diné learners using their language and culture as a tool in completing their education values of each child's identity. Studying trees for Diné Head Start children will help students learn more about where they live in remote areas of the Diné homeland. Having students learn different customs and languages will enhance cognitive/linguistic and social-emotional development. (Bialystok 2008; Kuhl 2009)

Implementing the Diné curriculum is to help our young Diné learners in schools is to use the fundamental early childhood education to rebirth the language, belief, behavior of the Diné people. The schools in the Diné homeland have not had a strong focus on Indigenous culture. There has been a shift toward a multicultural curriculum in Diné Head Start. Still, as a Head Start teacher, there is no strong support or better innovation in Dinés curriculum and needs to be updated to current educational standards. The older teacher of Diné Head Start has a better understanding of the Diné language and cultures. Yet, they have been called inefficient or obsolete to the Performance Standards of Diné Education. Diné Tribe Sovereignty needs more justification on what it means for us Diné people. We are not fully sovereign if we still access our federal funding from the United States Government. The education of Native or Indigenous people has been underline as underperforming since the early 20th Century. (Castagno. A., & Brayboy. B., 2008).

I am using articles, books, videos, Navajo people stories, and their local trees and plants to align instruction for young learners on home and school virtual learning. The teaching will include using the Diné language to describe and illustrate tree and plant types and their uses for many different things in our homes or ceremonial purposes. I will also use the knowledge that I have learned from my family and community traditions.

Content Objectives

The history of Indian Education has been a traumatic and horrible experience that the Diné people and all Indigenous people experienced. Those who were killed, abused, molested, and taken away from their homelands. The Indigenous Holocaust in the history of “The United States” on Native people of this country has had a profound effect on the lives of all Indigenous people. [R.Thornton & D. Stannard, 1998]

The topic of trees is to teach young learners to understand the cultural understanding of how trees and other plants are essential. The Unit plan will be for age-appropriate learning for 3–5-year-olds In Diné Head Start. Our Diné people and children learn differently from western colonial teaching. Native children learn with all the five senses smell, touch, hearing, seeing, and taste. The Native people and other cultures learn differently; for example, “different environments affect the development of essential perceptual phenotype as sizes contrast effect. Crucially, they show how developmental data can help differentiate between alternative accounts of the functional mechanism whereby the cultural environment influences perceptual development” {Child Development}.

As far as I remember as a young person, there was respect in the communities and within the family as Diné people. The Diné people honor their kinships through clans called (K’). The culture and values of the people were that young people were not supposed to speak back, ask questions, and could not express themselves. When I was in Leupp Boarding School, I could not, raise my hands or ask questions because of how I was raised at home. The cultural behaviors have impacted how I learn in school, which lacked building confidence and self-esteem. Today there has been a shift in the way children learn in schools. More children are coming into my classroom with more English speaking and fewer Diné speaking students. On average, each school year, I might have only one student that might understand fewer than 5 Diné word but not speak it to have a conversation. The more Diné language students hear and associate with the print concepts; the more Diné students will build their confidence to learn and speak more of their language and cultures. There are multiple ways to encourage families to help their child/children become bilingual.

- Use two languages from the start. Many children grow up learning two languages at the same time
- Use only one language at home. Your child can learn the second language when he starts school.
- Give your child many chances to hear and practice both languages during the day.

{ASHS} paragraph 2

Diné Students will identify trees and plants with the Diné names and parts of the tree. They will sort and compare the different tree things from the nature walk. Some things that the students collect around where they live will help students identify the importance of specific items of their uses. Some of the ordered items will help in activities in the classroom. Using Science and Math will add more Diné words like numbers, colors, shapes, textures.

The Virtual Lesson for students that are not in-person will be collecting those items for their home learning. Homework packets are picked up by parents and returned each Friday with completed homework. Pictures of the student projects are texted to the teacher for evidence of

assignments. Large group meetings are held for students that have access to the internet and a device to participate virtually with all the other students in the classroom.

Using creative cultural ideas to connect with parents to help their children to identify core values, beliefs, and practices that the Diné people believe. “What should Diné children learn to do to be Diné.” Independence practice: letting children role play things that children know from home. Dancing, singing, show and tell help children build confidence toward their identity as Diné. (E. Romero-Little, Speaker, NAU 2021)

Implementing the curriculum will align with early childhood standards. Head Start early learning frameworks, Creative Curriculum, Navajo Standards, Arizona Early Learning Standards. Students will demonstrate achieving student success at the end of the unit and how much they have retained or scaffolded what they learned.

Alignment with Standards

The Standard for this Tree Unit Plan will contain the Head Start early learning frameworks, Creative Curriculum, Navajo Standards, Arizona Early Learning standards. Mainly, I will focus on the Head Start early learning frameworks and the Diné Standards. For the Tree Unit, there will be dual language learners for Diné language and English. Parents of Head Start children want their children to learn the Diné language. The language assessment that the program assesses asks parents if they want their children to learn to speak in the Diné language. I will implement the Prek-3rd Diné Culture Standards, Prek-3rd Diné character-building standard, Pre K-3rd Oral Diné language Standard, which will be implemented with Concepts 1,2,3,4 in each of the standards. Head Start early learning frameworks, Creative Curriculum, Navajo Standards, Arizona Early Learning standards.

Pre K-3rd Diné Character Building Standards:

Concept 1- K’4 shints4kees 1t’4e doolee[: I will express critical thinking to establish a relationship with the environment.

- PO 1. K’4 shints4kees 1t’4e doolee[: I will recognize ways to express relationship.
- PO 2. Sh8zh4’4 d00 shim1 d00 b7[h17j44 b22 ahx44h n7sh7n d00lee[: I will respect my immediate family
- PO 3. Sh1’1h’w77nit’99go baa1kod7n4s77[: I will recognize self-respect

Concept 4- T’ 11 altson7 baa ah44hwiindzin: I will understand and appreciate all things around me

- PO 1. sh7gh3n d00 b7[h17j44 n7sin d00lee[: I will demonstrate ways to be thankful for my home and immediate family.
- PO 2. Sh7zh4’4 d00 Sh7m3 b7n2hat’1 y77s7n7sts’33’g0 baa 1h44h n7s7n doolee[: I will express and value my parent’s Diné way of life teaching.
- PO 3. Sh7ghan haz’33d00 77n1 b55 nashidi’Y7s7n7sts’ 12 d00lee[: I will identify and appreciate the teachings of life surrounding the home.

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- PO 4. Sh7m1s1n7 d00 sh7che77 baa han4' b7ts'33d00 7hw77deesh' 11[: I will express and value my grandparent's Diné way of life teachings.

Head Start Early Learning Outcomes Framework: Birth to Five-year-old

Approaches to learning

Goal IT-AT 6. Child demonstrates emerging initiative in interactions, experiences, and exploration.

Teaching Strategies

The teaching strategies for young learning achieve the objective.

K-W-L Chart

Using a whiteboard to brainstorm with the students on what they know, what they want to, and what they will learn. The chart will help the teacher understand where the student made progress.

Flash-cards with Diné language representation

This strategy will help the teacher connect with Diné language activities. Showing the parts of the plant in Diné and English language

S.T.E.M Outdoor collection of plants.

Introducing the plants by doing a nature walk around the school building collecting plants. Identifying which plants to look for, plants that have all the parts that can be identified visually.

Venn Diagram

This strategy compares and contrasts the collecting plant again at a later date when the plants have dried.

Unit plan Learning from Nature using the five senses.

The Five senses that children use for their learning sight, sound, smell, taste, and touch, will help young learners learn by applying Diné teaching. There are many different plants on the Diné land. The plants are essential to the Diné people as a way of life through the generations. The plants are used for food, medicine, and other household uses.

Objective: Visual sense

Teachers will introduce to students what local plants grow in their area and what they are used for. Students will do a nature walk collecting local plants that grow around or near where they live. The teacher will also do a nurture walk with the students around the school building, adding Diné names to the plant. Look at the surrounding landscape, asking students what they see, rocks, sand, animals, and insects. Students observe each other on what they collect. They compare with the instruction of staff. Identify the stem, roots, leaves, colors, and flowers of the plant. In addition, identify what elements of the environment help the plant grow in nature. Diné language is added to the lesson plan to help Diné children appreciate their language and

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have the self-confidence to speak in their language.

Diné Language Goal: Children will learn to say and identify the plant or tree parts.

Vocabulary for Practice

- Ke tloli -roots
- Bi'tsaa- leaves
- Bi tsen-stem
- T'oo- Water
- Ch'il-Plants

Objective	Activities	Material	Standard/Domain
1. Answer questions 2. Ask questions 3. Actively participates in conversations	Discussion about plants and trees, what are plants? What are trees? -provide some examples of plant or tree parts. encourage conversations	Plants and Tree parts	Language

Enjoying and value reading. Demonstrate understanding of print concepts	Show pictures of plants and trees -Vocabulary words in Diné and English	Picture of plants and trees	literacy
Classifies Objects, Compares/ measurement	Sample of tree rings- Children count rings of the tree for tree age. -Tree size: tall and short. -Have children bring collected items to school. -Pictures of changing colors during fall.	A cut tree to show tree rings. -Pictures of Plants and trees -Markes, Papers	Mathematics
Demonstrates self-direction and independence	Guessing Game: Put leaves in box Children put their hands in the box to	Box with opening for hand to fit in. Five different leaves.	Social and Emotional

	determine which leaf it is.		
Cutting and pasting: Making a tree, using parts of a tree	Using the collected tree parts or plants, make a plant or tree. Gluing it on paper and identifying each piece.	Paper, Glue the collected parts of plants and trees.	Creative Arts
Show Balance	Walk on wood beam	Balance Beam	Physical Movement.

Classroom Activities

Assessment for the Visual Senses

Students will say the part of the tree in English and identify the part of the tree in the Diné language.

- 3-4 year old will identify 30 % as approaching, 4-5-year-old 60 % for an approach to learning.

Objective: Sounds, Smells, Taste, and Touch

What do we hear when we are outside, the wind, animals, cars, and airplanes? Sound is all around us. How do children determine what types of sound they hear? Ask children to close their eyes and listen, and they can explain the sounds they hear? What do they smell in the air and on plants? Taste of harvest corn, pumpkin from garden or pinion nuts off trees or Diné Spinach (W'22). Also, touch the plants for texture to feel the smooth, rough, soft, and hardest of different plants or trees. The young Diné learners will distinguish the sounds spoken from the parents and connect through sounds associated with objects and hand gestures.

Vocabulary Practice for Diné Language

- H2l ch77n -Smell
- Ch' 7l -Plants
- Ch'0---Pine
- G2d --Juniper
- Ts7n --Wood
- B7' k5 t[00[---Roots
- B7' t'11 ---Leaves
- B7' ts77n --Branch
- Y11g00 d00't[izh ---Blue
- T1't[7d g0 d00t[izh---Green
- D7b6[ch77 ---Brown
- {azh' ----Ground or Dirt

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Objective	Activities	Material	Standard/Domain
1. Ask and Answer Questions 2. Participate in conversations	Discussion about trees. What are trees used for? Provide tree branches and have children select a branch, discuss the tree branch, and ask what it feels like? Colors? Smells?	Tree Branches	Language
1. Understand print concepts 2. Site Words	Show Pictures of Trees Introduce Diné/English Vocabulary words Branch, Leaves, Roots, Dirt, Colors,	Picture Of Trees and Plants	Literacy
Demonstrates self-direction, work or play independently	What is in the box? Have the student put a hand in a box and identify what it is.	(Paper bag). Five tree branches Picture of trees to identify.	Social and Emotional
Classification Compares/Measures	Show cut tree for growth ring have students count the rings to determine the age of the tree. Compare which is big and small of trees.	Example of growth rings for a tree. Picture of Trees Paper for graphing.	Mathematics.

Student Assessment Plan

3year old	4year old	5year old	
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<ol style="list-style-type: none"> 1. Responding to adults and engaging in the activities in the classroom or virtually 2. Can negotiate to engage in activities make few scribbles in the paper for their drawing in the classroom or virtual. 3. Can use two-to-three-word sentences 4. Answerer with one or two. 	<ol style="list-style-type: none"> 1. Interact with adults and their peers in activities in class or virtually. 2. Start using fingers to hold the writing tools and name writing few letters are legible. 3. Drawing is visible and can identify some parts of the plant or tree. 	<ol style="list-style-type: none"> 1. Identify the words to the parts of the plants or trees in the classroom or virtually. The Diné language words are recognized and can be pronounced. Use Diné language to identify. 2. Can draw out the plant and can identify the parts of the plant or tree with colors. 3. Recognize the size or sorting of the plants and trees.
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