Cultivating Outdoor Play Ecosystems in Early Childhood Education

Curriculum Unit Overview

Indigenous Early Childhood Education Professional Development Fellowship

Catrina Herbert

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Author Note:
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The school district I instruct at is located in Tuba City, Arizona. Tuba City is located on the Navajo reservation among the painted desert. The land bears wind, sand, natural desert plants, and a community of Diné people. Although you can pass through the town in less than five minutes, the town has been growing over time with small businesses and a growing number of residents. According to DATA USA, in 2017, Tuba City, AZ, had a population of 9.02k people with Diné age of 29.6 and a median household income of $48,293. Between 2016 and 2017, the population of Tuba City, AZ, declined from 9,221 to 9,022, a -2.16% decrease. And its median household income grew from $45,613 to $48,293, a 5.88% increase. The five largest ethnic groups in Tuba City, AZ are American Indian & Alaska Native (Non-Hispanic) (91.6%), White (Non-Hispanic) (3.57%), Two or More Races (Non-Hispanic) (1.72%), Asian (Non-Hispanic) (1.46%), and American Indian & Alaska Native (Hispanic) (0.776%). N/A% of the people in Tuba City, AZ, speak a non-English language, and 99.5% are U.S. citizens.

Tuba City Unified School District is located in Tuba City. The district services Tuba City, Cameron, Gap, Red lake, and Rocky Ridge. According to the Tuba City Unified School District demographics, for the 2020 school year, there are six public schools in Tuba City Unified School District #15 School District, serving 1,694 students. Minority enrollment is 99% of the student body (majority Native American), which is more than the Arizona public school average of 62% (majority Hispanic). The Early Childhood Education Program is situated at Tuba City High School. Our program is a part of the Career Technical Education program at Tuba City High School. The preschool program is a lab-based environment for practicum and internship for high school students.

The Early Childhood Education Program is a preschool program that has been with High School for 24 years. The program has partnered with First Things First and Quality First for the last six years. First Things First created Quality First to work with child care and preschool providers across Arizona to improve the quality of their early learning settings. Currently, more than 1,000 early learning programs in communities across Arizona participate in Quality First. These programs are licensed and regulated, but participating in Quality First is voluntary. These programs are committed to quality improvement, going beyond regulatory requirements to help the infants, toddlers, and preschoolers in their care are ready for success in school and beyond (qualityfirstaz.com).

Our program started with a two-star rating and has worked its way up to a four-star rating. The program prides itself on providing a quality program to the Tuba City community. The program is evaluated by an Early Childhood Environment Rating Scale (ECERS). The ECERS is a classroom assessment tool designed to measure the program's quality, and the result determines the star rating.

The age level for this intended curriculum is pre-kindergarten/preschool children. The ages will range from three to four years old. The pre-k class is a mixture of children from the community from different economic backgrounds. The children I service in the classroom are usually 75%
Diné children. The classroom is generally heterogeneous. The developmental milestones in the children range in all learning domains, from emerging to meeting standards. Our ratio is one teacher to fifteen students. Our program typically services about two students with special needs; our PEEP program referees these students. PEEP (Preschool Early Education Program) program is an in-house program in our school district that screens and services students under the age of five years. The children I service are typically on a Monday through Friday and in a traditional classroom environment. Our day starts at 7:30 a.m. with breakfast together. It ends at 2:00 p.m. with a goodbye chant and summary of the day.

Our preschool curriculum is a quality-first program, and our curriculum is Beyond Textbook. Beyond Textbook (BT) is an online curriculum that allows teachers to collaborate on lessons and resources. The BT curriculum follows a calendar and requires teachers to unpack learning standards weekly. The Beyond Textbook is a very open-ended curriculum, and I am fortunate to incorporate my Diné curriculum effortlessly.

Tuba City is my community. I was born and raised in Tuba City and am an alumnus of Tuba City High School. My family resides in Tuba City, and I also raise my children in the community. My educational role is deeply rooted in my heart because I was an ECE (Early Childhood Education) prodigy and presently oversee the ECE program and student teachers. I am a lead teacher in this Career Technical Education preschool lab.

Rationale

Implementing the Diné curriculum in my ECE curriculum fosters teaching that major publishing companies do not offer. While our program includes exposure to other global cultures, there needs to be a strong focus on Indigenous cultures, specifically Diné culture. Education in schools has shifted in the past years to include a multicultural curriculum in the classrooms, but educators lack the resources to cultivate an authentic Indigenous curriculum. The focus on Indigenous culture is not a new concept in culturally responsive teaching, and it is a concept that needs to be accentuated more. Although culturally responsive schooling for Indigenous youth has been advocated for over the past 40 years, schools and classrooms fail to meet Indigenous students' needs (Castagno, A., & Brayboy, B., 2008).

This Diné curriculum will be handcrafted and constructed in creation by my hands and my resources. The instruction and teaching will be grounded and scaffolded by Diné learning standards and other resources. I want to provide a research-based Diné Early Childhood Curriculum that is in line with current studies and is content-rich, and focuses on Diné-specific content and culture. I want to acknowledge my student's differences, especially their culture. I want my students to be proud of their self-identity and cultural identity. As a young child, outdoor play was a favorite activity for me. My parents were very young and financially starting their lives. Items like toys were luxury items because toys were sold within the city limits. I resided on the Diné reservation, and in the early 1900s, the housing and town expansion was growing in Tuba City.
My fondest memory is making outdoor toys from empty milk jugs, old coffee tins, and other recyclable items. Water play during the summer months was the highlight for me! Water play allowed me to make mud pies, create small rivers to sail make-shift boats or plant seeds with my mother. Outdoor play created this world away from the indoor environment of the home. I became a farmer, baker, zookeeper, circus worker, and the list went on. My imagination generated the most extended list of play goals; through this play, I measured, counted, constructed, analyzed, and more. When I played with others, I learned to converse, collaborate, cooperate, and compromise in our play. As I grew older, playing with shináli (paternal grandmother) changed shape, and she managed to make a game with chores. My cousins and I raced to collect the most wool, created straw houses to feed the sheep, and made Hogan homes with rocks, sticks, and mud. Our play began to reflect the life we observed on a day-to-day basis. We watched sheep being sheered, we watched Water being collected to cook food, and we collected herbs and tea to make our medication and drinks. This life away from the city limits has given me a deeper appreciation of my childhood and has shaped a character in my personality that projects this "aspiring" background play. Outdoor play can nurture children in learning and their health. Time spent outside can lead to better physical and mental health, improved sleep, and cognitive, social, and emotional gains for young children. Ensuring that outdoor play is an integral part of your child care and education setting's daily schedule supports early learning across all domains and unleashes a whole lot of joy (Kinser, 2019).

I plan to start my curriculum in October. The month allows flexibility for the change of curriculum schedule. The school district usually had a Native American week in previous years, and I would like to embed this week into the three-week curriculum. The curriculum developed will build outdoor learning in Diné culture through an Early Childhood Scope.

The introduction week will emphasize the clanship and kinship of my students and their family. Clanship and Kindship are important to Diné culture because it establishes identity with others and relationships. Our clans and the relationship we establish through clanship (referred to as Navajo clanship called Ke') with other members of our tribe are symbolic markers that form our identity as Navajo people (Haskie, M. 2013).

Using Dinés learning standards, the curriculum will cultivate an outdoor environment that supports students' learning through authentic and meaningful lessons and activities. I plan to incorporate Diné literary resources and Literature to support and supplement early learning standards in the classroom. Diné children's Literature, among other Indigenous Literature, will support the curriculum and activities. The Literature will help children see themselves in books/curriculum and empower their self-development. Preschool learning is exploration and self-discovery, and children can make the connection between home and school by witnessing how Diné culture transpires in both environments. As an educator providing quality education, it is important to focus on culture because culture is a part of every human being. Each of us is born into a culture, and we grow up in that culture. Even though our culture may be invisible to us, it shapes how we view the world, process information, learn, communicate, and interact with others (York, S., & New, E.2016).

**Topic Summary**
Incorporating an outdoor play ecosystem environment is not entirely new for Early Childhood Education. There have been so many programs grasping the idea of an outdoor learning environment. The unique aspect of this curriculum is the approach in play for Indigenous learners to cultivate ecosystem learning in retrospect to cultural identity. Outdoor learning can inspire learning in many ways and incorporate many values for Indigenous learners. According to research conducted by Dr. Angela James (Alden, 2020), an approach to integrating Indigenous education values, beliefs, and ways could be fostered through the engagement of outdoor ecosystem play by acknowledging and incorporating fundamental Indigenous values, which include the following:

- The respectful attitude toward the child in Indigenous families
- Parents as first teachers
- Grandparents' (Elders') love for children, which is the most profound love that the Creator has for humankind
- Importance of identity and self
- Holistic developmental understandings (mind, heart, body, spirit)
- Relationships with people, place, and time
- Spiral guides and spiral learning
- Spirituality as an extension of culture
- Experiential learning and storytelling as fundamental modes of learning

The scope of outdoor ecosystem play is not simply a shovel, pail, and sand. The foundation of this play is to take an ecosystem approach to learning geared toward the climate of learners and their communities. The Diné reservation school communities have a different land topography compared to inner cities, and most of these schools serve indigenous learners and their families. The outdoor resources in these schools are limited, but the resources are indeed there for effective and beneficial ecosystem learning. An outdoor learning climate can engage developmental learning in every aspect of an indoor classroom environment.

According to Alden (2020), Applying an ecosystem lens to children’s outdoor play would have the following added benefits:

- It would inform and aid the development of holistic political, economic, educational, legal, and social policies that support children’s need for access and outdoor play opportunities.
- It would foster a change in societal attitudes at all levels toward outdoor play and greater recognition of its importance for children.

Engaging Diné learners to discover a deeper understanding of their community environments will promote belonging, correspond opportunities, and create a connection to mother earth, father sky, and all living beings. The focus of this curriculum will take a paradigm in Diné language
exposure in an outdoor ecosystem play environment. Diné language exposure for young learners can nurture educational play and foster cultural relationships. Language is essential in culture because language shapes, forms, and scaffolds identity and culture. Joshua Fishman states: The most important connection between language and culture that gets to the heart of what is lost when you lose a language is that most of the culture is in the language and is expressed in the language. Take it away from the culture, and you take away its greetings, curses, praises, laws, Literature, songs, riddles, proverbs, cures, wisdom, wisdom, and prayers. The culture could not be expressed and handed on in any other way. What would be left? When you are talking about language, most of what you are talking about is culture. That is, you are losing all those things that essentially are the way of life, the way of thought, the way of valuing, and the human reality you are talking about (1996, p. 81).

As a Diné woman and educator who shares the same values as my students, I wanted to craft a curriculum that promoted the Diné bizaad in an effective outdoor learning climate. Children who learn their Indigenous language can maintain critical ties to their culture, affirm their identity, and preserve important connections with older generations. There is also an additional benefit for students who learn their Indigenous language from a teacher who shares the same background, history, and culture (Zingg, 2019). I must state that I am not a fluent speaker of Diné, but that will not hinder me from learning the language with my students. From my past observations of my own students, my little ones pick up learning skills faster than me and are constantly reminding me and correcting me, and we co-teach a concept with each other. The concept in this curriculum is embracing Diné bizaad. Once an embrace is harnessed, I can honestly wholeheartedly declare as a class will grow a love for our natural born tongue/language.

The fear of language learning seems to diminish when you are allowed to make mistakes with words with others. The goal is to continue language growth in learning skills in a habitual approach and, most importantly, learning the language in a non-judgmental environment.

The focus is to educate young learners in building a relationship with Diné language, outdoor play, and a deeper understanding of our ecosystems and resources. There have been numerous research on language development for Early Childhood, but focusing on this curriculum will narrow the importance of incorporating Diné bizaad. One research I would like to mention in particular was conducted in Rural Northern Canada. The research examined teachers, and students use of Indigenous language through play and the importance of exploration and space for talk. Eisazadeh and colleagues (2017) state, "Our research contributes to conversations about classroom practices that provide spaces for children's talk as well as ways to support Indigenous children's construction of meanings that draw from Indigenous Knowledge and cultural practices" (p. 294). Providing students with support and the opportunity to play with language will help them construct their cultural knowledge and practices. This concept is the goal of creating this outdoor play ecosystem for language play. Diné bizaad can be incorporated in all areas of an indoor classroom environment, but incorporating the language in an outdoor environment will change the power of language acquisition. Miller and colleagues (2009) emphasize that when children engage in authentic play in outdoor environments, they develop skills in a variety of domains at the same time. The natural learning environment offers children something that completely contrasts to many of today's learning environments that value and employ 'skill and drill' and testing to validate learning." The ecosystem of an outdoor
environment can provide tools for a language-play learning environment. The depth of language play outdoors has changed to dirt, sand, mud, sky, weather observation, plant life, trees, light, dark, etc. A natural learning environment can enhance Diné language in so many ways through opportunities in an outdoor curriculum. According to Szczepanski (2007), children's motivation and understanding increase when the learning environment is moved outdoors. Outdoor activities and events provide opportunities to explore, investigate and reflect, which is crucial for children's acquiring a rich and varied language.

Learning Diné bizaad at a young age in preschool will build the child's language development, but the language has to be exposed in a daily habitual form. Language acquisition is a process for all, but the learned language must constantly be heard, spoken, and practiced by the learner. According to Francis (2005), "the human capacity for acquiring languages will decline if not exercised early in life; if exercised, this capacity will remain intact throughout a lifetime. Hence, it is conceivable that if the language learning mechanism is triggered without delay and thus kept intact, it is still hypothetically possible for the new language to arise." (Francis, 2005). When I was younger, my mother would model movements or point directly at items in Diné bizaad. I have not forgotten a few simple statements, but my conversational language was not built. Both my parents spoke English and Diné bizaad, but my schooling was mainly in English, and the focus of my learning was English. If the consistency and priority of cultural language were heavily focused, I would honestly say that I would have been a fluent Diné bizaad speaker. The focus of my curriculum is to change that aspect, to change that foundation I didn't have. Diné bizaad in our preschool learning is that change! As a Diné educator, I want to provide that opportunity for my students to experience, grow, and acquire Diné bizaad in outdoor play.

Our research contributes to conversations about classroom practices that provide space for children's talk and ways to support Indigenous children's construction of meanings that draw from Indigenous knowledge and cultural practice.

Alignment of Standards

Diné Character Building Standard: K’éhwiinidzin dóó ádáhozdílzin bee hadínísht’ée dooleeligíí bóhwiideesh’áál – I will develop and apply critical thinking to establish relationships with the environment.

Concept 4-T’áá altsoní baa ahééwiindzin- I will understand and appreciate all things.
PO 3. Shighan haz’úqdoó iiná bee nashidi’ nitinígíi yišínists’úq dooleel- I will identify and appreciate the teachings of life surrounding the home.

Arizona State Learning Standards- Language and Literacy

Strand 1: Language Concept 1: Receptive Language Understanding
   a. Demonstrate understanding of various finger plays, rhymes, chants and songs, poems, conversations, and stories.
   b. Engages actively in finger plays, rhymes, chants and songs, poems, conversations, and stories.
   c. Demonstrates understanding and follows directions involving one, two, or multiple steps.
Student Learning Objectives:

Students will construct an animal/insect ecosystem with outdoor materials with Diné bizaad descriptions.
Students will investigate sand/water/mud play using Diné bizaad labels.
Students will follow three-step directions on outdoor health and safety using Diné bizaad directions.
Students will name four outdoor colored items in Diné bizaad.
Students will show body movement for four different outdoor activities in Diné bizaad.

Teaching Strategies

K-W-L Chart

The strategy helps the teacher understand what their students already know about Navajo culture and what they would like to learn. The K-W-L chart allows the teacher to return and fill out the portion of what the students learned at the end of the unit.

Peanut butter & Jelly (Think Pair share)

This strategy is shared between two students. One student is assigned to peanut butter and the other to jelly. When shown a visual picture of the items, the peanut butter or jelly will share their ideas and answers with their partner.

Find Someone Who

This strategy will allow the teacher to incorporate visuals of Navajo items (i.e., cradleboard, Hogan, jewelry). Students will have to mingle and search for someone with the items. This activity is a quick way for students to connect to Navajo-inspired cultural items visually.

Puppet Play

This strategy will allow character building and help preschool learn about new topics. Diné puppets are an excellent way to deliver information to students and help them retain it. Diné puppets can also assist with developing language skills, including Diné language.

Pieces of Me

This activity is to help children identify different cultural items at home, such as Cradleboard, Hogan, weaving loom, traditional hairbrush, traditional jewelry, etc. Finding items at home that transpire the essence of who you are.

Field Trip
Field trips can provide preschool students with new opportunities for learning through experience. The Interactive Navajo Museum in Tuba City, Arizona, allows students to learn to do instead of passively listening to information.

Numbered Heads Together

This strategy will allow teachers to use cards to display learning information such as colors, weather, family, and animals for team teaching. The teacher asks the question, and students answer it solo, then put their heads together to share the team's answer.

Technology

The teacher can use this assisting tool in the format of virtual field trip videos and IPad learning of Diné Bizaad. Technology can aid in PowerPoint presentation lessons and Smartboard demonstrations of Diné lessons, and technology can make lessons more interactive and hands-on for student learners.

IPAD learning

This strategy will allow students to access the Navajo language on YouTube videos and apps with Diné Bizaad language on animals, objects, and food. IPad learning for technology is limited to seven minutes of screen time each day for each student.

YouTube videos

The teacher will use a collection of videos of traditional teachings and the language of Diné. Videos show numbers, colors, animals, the alphabet, moral stories, etc.

Clan shirt day

All educational stakeholders, families, and children are welcome to wear their clan colors to school and participate in clan walks. The clan walk shows the relations in school and inspires health and community by walking together in a united manner.

STEM Outdoor Mud play with Water

This strategy will give students loose parts to strategize and create/construct Navajo Hogan and planting for vegetables and flowers. The instruction strongly assimilates STEM (Science, Technology, Engineering, and Mathematics).

Focus Activity

This teaching activity/strategy is a key piece in the instruction. Students will work one-on-one with the teacher on a drama project. The project is set up as an "I do, we do, you do" approach. The activity is embedded with essential language to strengthen Diné learning concept. The focus
activity is set up as a hands-on play area. This area can be set up outside or inside the classroom.

Library Discovery

This strategy allows book exploration of Diné authors and illustrators. The library is set up with book bags with props to enlighten reading and discovery. Families may check out the Diné-inspired book bags to explore and engage with their children at home.

Family Nights

This strategy allows families to visit our center and engage in storytelling about stories they learned about social justice in their homes.

Classroom Activities

The curriculum developed is to provide preschool students with many opportunities for children to learn Diné teaching through hearing stories, songs, games, and manipulating concrete objects. The children will use their five senses to explore the Diné curriculum lessons.

My plan for the curriculum length is two weeks. The curriculum will focus on Diné culture in social justice through storytelling and modeling. The second week will align the curriculum with the district's original Native American week and festivities. The third week is a trip to the Navajo Museum in Tuba City, Arizona. At the museum, students will experience and explore Navajo teaching and storytelling.

Connections to Literature:

Literature can inspire all learners to understand and comprehend the stories of different people in our world. Children are exposed to all types of Literature from various authors and concepts. Native American or Social justice authors inspire the Literature selected for this curriculum. Native American authors help promote a more authentic storytelling scenario for young indigenous learners. Social Justice seen in literature text is essential because of the connection made with real-life scenarios to the child.

How do I plan to use the Literature? I will share some stories and unpack a literature lesson in the classroom. Some literature will be shared in book bags to enhance the story with families to encourage; language, social skills, family bonding, and cultural appreciation/relations. The book bags will go home with the child and return the next day. The book bags have the story and a synopsis page along with how to use the Literature with open/ended questions. In addition, I will include artifacts to enhance the story. For example, in Rose Tahe's book "First Laugh Welcome," the bag consists of salt rock, a small cradleboard, and small puppets of family members. These items will help enhance learning in a child by promoting; literacy, language, Diné teachings, and family bonding.

Children's Literature used:
Bilingual Kiddos Press. *Diné Bizzaad, A Navajo Alphabet Books for Kids* is a book that introduces Navajo language of animals, weather, and objects to preschool students.

Wildsmith, Brian. *Binaaldlooshii Da’o’ita’ Animals to Count* is a book introducing Navajo language of animals and counting to preschool students.

Blood, Charles, Link, Martin. *The Goat in the Rug* is a book that illustrates the process of Navajo rug weaving to preschool students.

Healthy books. *Naadáá’ Dóó Naadáá’Ch’yáán* is a book that can illustrate types of corn used for different Navajo food preparations for preschool students. The book also incorporates Navajo language.

Oughton, Jerrie. *How the Stars Fell into the Sky, A Navajo Legend* is a book that showcases Navajo Storytelling and poetry to preschool students.

Penfold, A., & Kaufman, S. (2020). *All are welcome*. Scholastic Inc. This storybook is about how a classroom can cultivate a place where young children have a place, have a space, and are loved and appreciated.

Tahe, Rose, Bo Flood, Nancy. *First Laugh Welcome, Baby!* The book shows the baby laugh ceremony and how a Navajo family celebrates a baby's first laugh.

Maillard, Kevin. *FryBread, a Native American Family Story*, is a book that shows how FryBread is a process of making with the five senses, and it is food that is commonly seen in Navajo culture.

Tapahonso, Luci. *Navajo ABC The Diné Alphabet book* is a book that shows children different people, objects, food, and animals in the Navajo language.

Slier, Debbie. *Cradle Me* is a book demonstrating the creation and purpose of Navajo Cradleboard.

<table>
<thead>
<tr>
<th>Book: <em>Diné Bizzaad, A Navajo Alphabet Books for Kids</em></th>
<th>Book Bag items: Small mini plush animals, Weather Cards, Color cards</th>
<th>Lesson Activity: Encourage stories of opposites and discuss the balance of weather.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Binaaldlooshii Da’o’ita’ Animals to Count</em></td>
<td>Small mini plush animals for naming and counting</td>
<td>The lesson's goal is to name and count animals.</td>
</tr>
<tr>
<td><em>The Goat in the Rug</em></td>
<td>Small mini weaving loom, Yam, small goat plush, mini rug</td>
<td>The lesson's goal is to discuss the sequence of events to make a rug.</td>
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<tr>
<td>Lesson Title</td>
<td>Activity</td>
<td>Lesson's Goal</td>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>Naadáá’ Dóó Naadáá’ Ch’yáán</td>
<td>Different dried corn based on appearance but discuss how all corn is grown the same, but the color is different.</td>
<td></td>
</tr>
<tr>
<td>How the Stars Fell into the Sky</td>
<td>Night and Day activity shows what can be seen during the day and at night.</td>
<td>Day and night are the counterbalances of the opposites in nature. Discuss the importance of both.</td>
</tr>
<tr>
<td>All are welcome</td>
<td>Showcase of all our friends in the classroom. Discuss our likes and hobbies.</td>
<td>The lesson's goal is to create a community in the classroom by celebrating everyone's differences.</td>
</tr>
<tr>
<td>First Laugh Welcome, Baby!</td>
<td>Family puppets, a small play cradleboard</td>
<td>The lesson's goal is to express different family members and traditions.</td>
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<tr>
<td>FryBread a Native American Family Story</td>
<td>Include a recipe on how to make frybread at home. The bag will contain ingredients.</td>
<td>The lesson's goal is to create a family activity in a cooking lesson.</td>
</tr>
<tr>
<td>Navajo ABC The Diné Alphabet book is</td>
<td>A mixed bag is full of objects from the book.</td>
<td>The lesson's goal is to scavenger hunt the items and sees if the family can find those same items at home.</td>
</tr>
<tr>
<td>Cradle Me</td>
<td>Cradleboard and template for Cradleboard's purpose</td>
<td>Have family share their stories of cradleboards.</td>
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</tbody>
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**Student Assessment Plan**

In creating a student assessment plan, I would like to gather student growth in several ways:

- Working Portfolio
- Developmental surveys
- Anecdotal notes
- Project completions
- Student Achievement Data form with lessons

Gathering a combination of student assessments can help build the authentic progress of students during and after the lessons taught.

Working Portfolio is a collection of students' work collected over some time. The result is then showcased to parents or students to show achievements and progress.
Working portfolios are a great tool to exemplify individual progress in each student. The content in the portfolio will include student work, pictures of student activities, self-portraits, writing samples, and art samples. Since most of the lessons will be taught outdoors, an extensive collection will be pictures documented with an attached anecdotal note.

Developmental Surveys: the developmental survey I would like to use with my students will have two categories. The first category is Expressive Diné Language skills (talking), and the second is Receptive Diné language skills (understanding). The survey gives the educator three choices in the concept area of question. The selections are: approaching goal (student is not fully meeting the goal, but progress is possible with continued support), meets goal (student is meeting the selected concept), exceeding goal (student is advancing in the selected concept).

<table>
<thead>
<tr>
<th>Expressive Diné Language skills (Talking)</th>
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<tbody>
<tr>
<td><strong>Answer Fact-based yes/no questions</strong></td>
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<tr>
<td>Approaching goal</td>
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<tr>
<td>Meets Goal</td>
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<tr>
<td>Exceeds Goal</td>
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<tr>
<td><strong>Answer Social Questions</strong></td>
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<tr>
<td>Approaching goal</td>
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<tr>
<td>Meets Goal</td>
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<tr>
<td>Exceeds Goal</td>
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<tr>
<td><strong>Ask questions to learn.</strong></td>
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<tr>
<td>Approaching goal</td>
</tr>
<tr>
<td>Meets Goal</td>
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<tr>
<td>Exceeds Goal</td>
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<tr>
<td><strong>Retell movies or stories read to them</strong></td>
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<tr>
<td>Approaching goal</td>
</tr>
<tr>
<td>Meets Goal</td>
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<tr>
<td>Exceeds Goal</td>
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<tr>
<td><strong>Retell personal stories</strong></td>
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<tr>
<td>Approaching goal</td>
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<tr>
<td>Meets Goal</td>
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<tr>
<td>Exceeds Goal</td>
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<table>
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<tr>
<th>Receptive Diné language skills (Understanding)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Follow 1-step directions</strong></td>
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<tr>
<td>Approaching goal</td>
</tr>
<tr>
<td>Meets Goal</td>
</tr>
<tr>
<td>Exceeds Goal</td>
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<tr>
<td><strong>Follow 2-step directions.</strong></td>
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<tr>
<td>Approaching goal</td>
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<tr>
<td>Meets Goal</td>
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<tr>
<td>Exceeds Goal</td>
</tr>
<tr>
<td><strong>Understand position words</strong></td>
</tr>
<tr>
<td>Approaching goal</td>
</tr>
<tr>
<td>Meets Goal</td>
</tr>
<tr>
<td>Exceeds Goal</td>
</tr>
<tr>
<td><strong>Can categorize items by color/shape/size</strong></td>
</tr>
<tr>
<td>Approaching goal</td>
</tr>
<tr>
<td>Meets Goal</td>
</tr>
<tr>
<td>Exceeds Goal</td>
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</table>

Anecdotal notes: This method of student assessment is a collection of observations, drawings, paintings, and conversations. The documents collected can create a picture of the student's reflected learning of the lessons taught. This tool will provide insight to educators about developmental progress in a play-based setting. The anecdotal notations will also be incorporated into the student's working portfolio.

Student Achievement Data Form with an Outdoor Color Identification Lesson:

Identifying colors Lesson:

Lesson Description: In this lesson, the students will be taught the eight primary colors in Diné Bizaad through visuals, technology, puppet play, and games. The color lesson will be incorporated into our circle times, group times, and teachable moments in discovery areas. The
teacher will focus on the following colors: Black (Łizhin), Brown (Dibélchi’), Blue (Yágo Dootl’izh), Green (Ch’ilgo Dootlizh), Orange (Yéego Łitso), Purple ( Tsédídéé), Red (Łichíí) and Yellow (Łitso).

**Classroom Activities**

Outdoor discovery areas include the science area, dramatic play area, library area, music area, art area, sand table, and water table. These areas can incorporate the lesson in many ways by showcasing the activity in hands-on play and language activities. Teachers can encourage Diné bizaad of the concept in many teachable moments in the discovery areas. Small group activities can focus on the goal and desired outcome of the lesson. Teachers need to scaffold the lesson based on students' learning needs.

**Lesson Rationale:** Learning colors is an essential skill in academics, but learning colors in Diné culture is a foundation of Diné way of life. According to Farina King (2018), Diné teaching strongly emphasizes color. Color has many symbolic meanings in Diné’ culture. The four colors, black, white, blue, and yellow, connect significantly to Diné’s culture and spiritual beliefs. In Navajo creation stories, these colors represent the four cardinal directions, and the first man took four stones and placed them in each direction (King, 2018). The stone colors were:

- jet, which represents black;
- white shell, which symbolizes white
- turquoise, which represents blue
- abalone, which represents yellow

These simple colors establish a philosophy in Diné’ culture and teach identity and striving for hozho. Color representations can be seen in other Diné’ teachings and items, such as weaving, jewelry making, clothing, and songs. Color identification is a crucial foundation to build in young learners to foster Diné teaching.

**Alignment with Standards**

The lesson for color identification will have the following standards:

*Arizona State Early Learning Standard:*

Social Studies Standard, STRAND 1: Family

Concept 1: Understand Family

The child demonstrates an understanding of families and the roles and responsibilities of being a family member.
c. Describes/discusses own family's cultural or family traditions

Diné Learning Standard: Concept 1-Nitsáhákees Shintsáhákees shił niigo bee ákonisdzin dooleel. I will acknowledge and value my thoughts and personality.
PO 3: Nitl’ iz altaas’ėi baa ákonisin dooleel. I will recognize cultural items and jewelry.

Diné Learning Standard: Concept 2-Ádáhozdílzin dooleel. I will practice and maintain the sacredness of self-identity. PO 1: İinísts’ąą’ go na’nitin baa ákonisin dooleel. I will listen to and observe cultural teachings.

<table>
<thead>
<tr>
<th>Student Achievement Data Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria are based on identifying eight basic colors.</td>
</tr>
<tr>
<td>Black: Łizhin</td>
</tr>
<tr>
<td>Brown: Dibéłchí’</td>
</tr>
<tr>
<td>Blue: Yágo Dootł’izh</td>
</tr>
<tr>
<td>Green: Ch’ilgo Dootlízh</td>
</tr>
<tr>
<td>Orange: Yéego Litso</td>
</tr>
<tr>
<td>Purple: Tsédidéé</td>
</tr>
<tr>
<td>Red: Łichíí</td>
</tr>
<tr>
<td>Yellow: Łitso</td>
</tr>
</tbody>
</table>

Classroom Activities

Diné language outdoor playbook bags:

**Student Learning Objective**
Students will engage in Diné language learning prompts with parents using book bags with props.

**Teaching Strategy**

In this lesson, the students will work with literature books with their families. The families use a book bag to explore the book bag with Diné inspired stories with theme-related real-life props. The book bags are curriculum tools that will be incorporated into our outdoor classroom. The book bags will be led to different families throughout the week.

Connections to Diné language:

To cultivate a safe environment, educators can achieve a harmonious climate when all children are accepted for their differences. In an environment where safe modeling is occurring and encouraged, children feel safe to keep practicing safety with the guidance and encouragement of their educators. This same way of thinking is valued and encouraged in Diné teachings. Diné language play is encouraged in all play and modeled by the teacher, peers, and picture codes.

Dual Language Play:
Language play for this lesson will incorporate students hearing either person, place, or thing or activity in English, picture cue, and Diné language. The purpose of incorporating these skills is to scaffold learning and build sound, sight, and language together. Diné learners have learned cultural teachings/language through seeing, hearing, doing, and repetition. This process was established before any commercialized learning of language.

Lesson Rationale:
The book bags will incorporate real-life props to encourage discussion and support the lesson and literature exploration. Some book bags will contain discussion prompts to help promote Diné language discussion. The book bags will contain props that relate to the storybooks and provide a real tactile experience for the students and families.

**Alignment with Standards**

Lesson for language books.

*Arizona State Early Learning Standard*

Language and Literacy
Strand 1: Language
Concept 3: Vocabulary
b. Figures out the meanings of unfamiliar words and concepts using the context of conversations, pictures that accompany the text or concrete objects.

Diné Learning Standard:
Standard: K’é hwiinidzin dóó ádáhozdilzin beehadinisht’ée dooleeligii bóhwiiđessh’áál
I will develop and apply critical thinking to establish relationships with the environment.

Concept 1- K’ézhnídzin dooleél
I will express critical thinking to establish relationships with the environment.

PO 1 K’é shintsékees át’ée dooleel
I will recognize ways to express relationships.

<table>
<thead>
<tr>
<th>Student Achievement Data Form</th>
<th>Based on the effort given by the child and family.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria are based on the student's hand mural.</td>
<td></td>
</tr>
<tr>
<td>No Evidence Yet</td>
<td>Emerging</td>
</tr>
<tr>
<td>Completed 0/4 prompt discussion questions from the book bag</td>
<td>Completed 1-2 prompt discussion questions from the book bag</td>
</tr>
<tr>
<td>Meets standard</td>
<td></td>
</tr>
<tr>
<td>Completed 3-4 prompt discussion questions from the book bag</td>
<td></td>
</tr>
</tbody>
</table>

Outdoor Diné language using picture cues:

**Student Learning Objective**

Students will engage with Diné language picture cards with response in body movements/

Lesson Description

In this lesson, the students will mimic body movements to Diné language word plays. Word plays include weather, animals, food, and emotions. Teachers will use four-word cards from different topics, and each word will have a body movement to connect to the word. Ex: Rain-niltsá body movement response: Fingers wiggling in a downward motion from head to tummy.

Connections to Diné language

To cultivate a safe environment, educators can achieve a harmonious climate when all children are accepted for their differences. In an environment where safe modeling is occurring and encouraged, children feel safe to keep practicing safety with the guidance and encouragement of their educators. This same way of thinking is valued and encouraged in Diné teachings. Diné language play is encouraged in all play and modeled by the teacher, peers, and picture codes.

Dual Language Play

Language play for this lesson will incorporate students hearing either
person, place, or thing or activity in English, picture cues, and Diné language. Incorporating these skills will scaffold learning and build sound, sight, and language together. Diné learners have learned cultural teachings/language through seeing, hearing, doing, and repetition. This process was established before any commercialized learning of language. Teaching Strategies: The picture cards are sorted through different topics of animals, weather, food, and emotions. Each topic will contain four cards with Diné word descriptor and also a body movement response. The teacher will call out the words with students and visually observe the taught body response. The lesson will be taught in an "I do, We do, and You do" approach, and the goal is to have students play the games independently with others.

Alignment with Standards

Lesson for Outdoor Diné Language Cards with Body Response Movements
Arizona State Early Learning Standard: Language and Literacy
Strand 1: Language
Concept 3: Vocabulary
b. Figures out the meanings of unfamiliar words and concepts using the context of conversations, pictures that accompany text or concrete objects.

Diné Learning Standard:
Standard: K’é hwiinidzin dóó ádáhoozdílzin beehadinísht’ée dooleeligíí bóhwiidessh’áál
I will develop and apply critical thinking to establish relationships with the environment.
Concept 1- K’ézhnídzin dooleel
I will express critical thinking to establish relationships with the environment.
PO 1 K’é shintsékees át’ée dooleel
I will recognize ways to express relationships.

<table>
<thead>
<tr>
<th>Receptive Diné language skills (Understanding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow 1st card language/body response movement.</td>
</tr>
<tr>
<td>Follow 2nd card language/body response movement.</td>
</tr>
<tr>
<td>Follow 3rd card language/body response movement.</td>
</tr>
<tr>
<td>Follow 4th card language/body response movement.</td>
</tr>
</tbody>
</table>

WEATHER: Receptive Diné language skills (Understanding)

| 1st Card Rain: niltsą | Approaching goal | Meets Goal | Exceeds Goal |
| Body response: Fingers wiggling in a | | | |
downward motion from head to tummy.

<table>
<thead>
<tr>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Card</th>
<th>Sunny: Adinídín</th>
<th>Approaching goal</th>
<th>Meets Goal</th>
<th>Exceeds Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body response: Circular motion above the head.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3&lt;sup&gt;rd&lt;/sup&gt; Card</th>
<th>Windy: Niyol</th>
<th>Approaching goal</th>
<th>Meets Goal</th>
<th>Exceeds Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body response: Wave motions with fingers from left to right and back</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4&lt;sup&gt;th&lt;/sup&gt; Card</th>
<th>Cloudy: K´os hóló</th>
<th>Approaching goal</th>
<th>Meets Goal</th>
<th>Exceeds Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body response: Using both hands to make puffy clouds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student Achievement Data Form with an Outdoor Shape activity:

Identifying Shape Lesson:

**Student Learning Objective**

Students will match four shapes using cards in the English language and Diné bizaad.

Lesson Description:

In this lesson, the students will be taught the four shapes in Diné Bizaad through visuals, technology, puppet play, and games. The shape lesson will be incorporated into our circle times, group times, and teachable moments in discovery areas. The teacher will focus on the following shapes: Circle-Nainties, Square-Dik’á Rectangle-Nineezgo Dik’á Triangle-táá’go deez’á. Our environment and world have so many shapes. Shapes can be seen in places, things, and Diné ceremonial teachings or home environment. Engaging in shape play can encourage children to build pattern-making, count angles, and manipulate shape builds. These skills can help a child in construction building, weaving, jewelry making, and other life skills.

**Classroom Activities**

Outdoor discovery areas include the science area, dramatic play area, library area, music area, art area, sand table, and water table. These areas incorporate the lesson in many ways. They are showcasing the activity in hands-on play and language activities. Teachers can encourage Diné bizaad of the concept in many teachable moments in the discovery areas. Small group activities
can focus on the goal and desired outcome of the lesson. Teachers need to scaffold the lesson based on students' learning needs.

**Teaching Strategies**

The teachers will use shape-matching cards to incorporate in outdoor play activities using shapes. Students will play with shape activities in weaving, stick games, artifact collections, scavenger hunts, etc. The teacher will use Diné language of shapes to describe different forms observed in our outdoor environment. The focus will start with four shapes and increase once students can successfully identify the shapes.

**Dual Language Play**

Language play for this lesson will incorporate students hearing either person, place, or thing or activity in English, picture cues, and Diné language. Incorporating these skills will scaffold learning and build sound, sight, and language together. Diné learners have learned cultural teachings/language through seeing, hearing, doing, and repetition and this process have been established before any commercialized language learning.

**Alignment with Standards**

The lesson for shape identification will have the following standards:

**Arizona State Early Learning Standard**

Mathematics
Strand 4: Geometry
Concept 1: Shapes
b. Uses the names of geometric shapes when describing objects found in the environment

**Diné Learning Standard:** Concept 2-Ádáhozdílzin dooleél. I will practice and maintain the sacredness of self-identity. PO 1: İinists’ąą’ go na’nitin baa ákonisin dooleél. I will listen to and observe cultural teachings.

---

**Student Achievement Data Form**

<table>
<thead>
<tr>
<th>Criteria are based on identifying four shapes.</th>
<th>The teacher will need to indicate the number of students in each domain. Identify the percentage &amp; mean of student data. The teacher may need to reteach or enrich the standard taught based on the data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle-Nązbaąs</td>
<td></td>
</tr>
<tr>
<td>Square-Dik’ą</td>
<td></td>
</tr>
<tr>
<td>Rectangle-Nineezgo Dik’ą</td>
<td></td>
</tr>
<tr>
<td>Triangle-táá’go deez’á</td>
<td></td>
</tr>
</tbody>
</table>

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The teacher will need to indicate the number of students in each domain. Identify the percentage & mean of student data. The teacher may need to reteach or enrich the standard taught based on the data.
| Exceeds   | Students can identify and match 4/4 shapes. | The number of students who: Exceed: 
Percent of total class: 
Number of Students: |
|-----------|---------------------------------------------|-----------------------------------------------------------------|
| Meets     | Students can identify and match 2 out of 4 shapes | The number of students who: Meets: 
Percent of total class: 
Number of Students: |
| Approaches| Students can identify and match 1-2 out of 4 shapes. | The number of students who: Approaches: 
Percent of total class: 
Number of Students: |
| Falls Far Below | Students can identify and match 0-4 shapes | The number of students who: FFB: 
Percent of total class: 
Number of Students: |
Resources


