Knowledge of Scedagi/Water Through Place-Based Experiences

Terrilyn Esplin

Indigenous Early Childhood Education Professional Development Fellowship

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Author Note:
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Scottsdale, Mesa, and Fountain Hills border the Salt River Pima Maricopa Indian Community. The Community measures 52,600 acres, with 19,000 acres being held as a natural preserve. The Community is the home to two Native American tribes: the Pima or the Akimel O'odham translation meaning the River People, and the Maricopa or Xalychidom Piipaash translation meaning People who live toward the Water. Although these two tribes inhabit this land, they both have unique cultures, backgrounds, and languages. There are approximately 11,000 enrolled members of the Salt River Pima Maricopa Indian Community.

Two miles east of the Scottsdale border, at the intersection of Chaparral Rd and Center Street, sits the Salt River Pima Maricopa Indian Community Early Childhood Education Center (ECEC). This center encompasses 53,424 square feet. The ECEC provides Head Start, Early Head Start, and CCDF services to the O'odham and Piipaash People of Salt River and other Native tribes in the neighboring cities. As of 2022, ECEC provides services to 246 children with the help of 100 staff members. It currently houses 10 Early Head Start classrooms and 6 Head Start classrooms. Our Head Start student-to-teacher ratio is 15 children to 2-3 teachers in each classroom. My classroom sits facing west toward Camelback Mountain on the Northwest side of the facility. It is the Tob classroom meaning Cottontail in O'odham. I serve 15 three to five-year-old children in this classroom, most of whom are from the Community.

As a district, Salt River Schools' mission statement is "to create a balance of exemplary education and the O'odham and Piipaash cultures to ensure a positive future for our children and our community." The Early Childhood Education Center recognizes the importance of quality early childhood education. As a center, we aim to prepare children for success when they leave our care and beyond. "Our long-term goals are to prepare enrolled children for success as lifelong learners and to strengthen our families." To best meet the needs of the Community, the school focuses much on Social and Emotional Development. To achieve growth in this area, ECEC uses Positive Behavior Intervention Supports, Conscious Discipline, and a research-based, comprehensive early childhood curriculum called Creative Curriculum. ECEC also incorporates Culture/language into each day. Our on-site cultural specialist visits the classrooms weekly to give students a glimpse into the language and stories and to support teachers. We incorporate vocabulary (numbers, feelings, colors, animals, and commands), songs, and prayers throughout the day. Most teachers at the school are not from the Community, so most are learning the language along with the students. The school hosts many cultural events during the year, such as the O'odham and Piipaash Family Gathering, Mini Pow Wow, skirt making, and language classes.

I have been working in this Community for 14 years and am still learning vocabulary and building my cultural knowledge. I have made it my goal to learn to build connections with my children and families to build trust among them. I am continuously working on learning strategies to help my children feel safe so that they can learn.
**Rationale**

Water is Life.

"Water sustains, flows between, within, and replenishes us. Water is the blood of Mother Earth and, as such, cleanses not only herself but all living things. Water comes in many forms and is needed for Mother Earth's and our health." Indigenous Nations believe that Water is sacred. Water is needed for life to thrive on our planet, but it is quickly being used, dried up, and polluted. Many Indigenous Nations are fighting to regain or continue to have rights to the Water running through their lands. For the Akimel O'odham, meaning "River People," and the Xalychidom Piipaash, or "People who live toward the water," this story is too familiar. The O'odham people were once a flourishing nation that had developed a complex irrigation system that sustained their livelihood in the desert. However, once the US acquired Arizona in 1853, the waterways that flowed freely through the state were dammed up and rerouted to more populated parts. Which left the O'odham and Piipash with their life source depleted. They were forced to give up their agricultural lifestyle and were given government food rations that included flour, sugar, salt, and lard. This piece of history is vital to remember for the O'odham people. Their ancestors were master engineers and built water systems that allowed them to survive in the deadly heat of the desert. These resilient people dared to live in one of the harshest environments and thrived. I want my children to know that this strength runs through their blood.

Water is life. In Navajo we say, “Tó éí iiná.” Running Water is still a concern for the Navajo Reservation and the Navajo People. Currently, 15% of the Navajo Nation does not have running water. Although I was fortunate to have running water throughout my youth, my family lived daily with the struggles of no running water. For them, however, it was a way of life. Water was acquired by filling barrels at the nearest well/water station. It was hauling the barrels miles back home to unload. Water would then have to be siphoned out of the barrels with hoses into a smaller bucket to be stored in the home for daily use. I remember having to ladle out the Water I was drinking and constantly being reminded not to waste the Water. If my grandmother needed hot Water, it would have to be placed in a pot and boiled on the wood stove so we could wash the dishes. Hands were washed in a basin on the counter and repeatedly rinsed out to keep them clean. Clothes must be taken to a "local" laundromat and washed. This laundromat was more than 20 miles from my grandparents' home and would require a lot of physical labor. Water is an essential part of our daily lives. Our people have adapted to its availability. I have seen both the struggles and the luxury of obtaining it.

I have my own connection to Water. Shi ei To'dik'ozhi nishli. I am of the Salty Water clan. My maternal grandfather's clan was Totsohnii meaning Big Water, which must be why my favorite place in the world is the beach. I can spend hours at the beach spoiling my inner child, playing in the waves, feeling the cold, salty sea water against my skin, and floating to the shore with the tide. Some of my favorite childhood memories have been around Water. I remember playing in the Water all day at Lake Powell and enjoying sandwiches on the sand, then running back in to enjoy the Water some more.
We would also enjoy playing in our yard with the neighborhood kids. Many hours were spent running through sprinklers, sliding on the slip-and-slide, and showering each other with the hose. We would be soaked, so we would lie our towels down on the driveway while we dried off like bacon frying in a pan. My fondest memory was simple. My siblings and I would come together in the living room and share stories during a thunderstorm. We were taught to sit quietly, meaning no electronics were to be used if there was thunder and lightning. We would listen to the thunder crashing in the background and the rain falling around us. We would all admire and appreciate the smell of the wet desert sand after. I love the connections I made with my siblings during these storms. It felt like a replenishment for my soul and the land.

I will be doing this study in October and November. The heat will have lessened, and we can explore more outdoors. We will introduce our outdoor classroom and be able to do more place-based learning. As stated above, Water is used in many aspects of our lives, and most times, we don't think much of it because it is readily available. I want to do this investigation on the Water to help my children become more aware of their water connection. In addition, why it is crucial to the Community

**Topic Summary**

History of Water and the Salt River Pima Maricopa Indian Community

Water is an essential part of life. To the Akimel O'odham and the Xalychidom Piipaash, Water was their key to survival in "the valley of the sun." However, the landscape has changed immensely. The stories and history are still waiting to be told from what it once was. In speaking to Kelly Washington, Cultural Resources Director of the SRPMIC, he spoke of stories from the elders and grandparents that detailed lush wetlands of thick grass, canopies of cottonwood trees providing shade from the hot summer sun, and bountiful food supply grown from the agricultural practices of the peoples but also many that grew wild in the desert. "Water from overflowed rivers brought silt that flooded and saturated the soil to provide a fertile ecosystem. The Xalychidom Piipaash participated in flood farming during these times and laid the seeds down in this fertile soil, giving way to an abundance of food" Esplin, T. (2022, June 29). The rich ecosystem also allowed wild-grown foods such as Mesquite Beans, Cholla Buds, Saguaro Fruit, and Prickly Pear, as well as a variety of wild seeds and greens to sustain their diets. The Akimel O'odham were skillful farmers who constructed complex irrigation techniques using tools such as long slender sticks to dig canals that stretched for miles. They would regulate the river flow to places that would allow them to grow an abundance of crops, such as corn, tepary beans, and squash. Spaniards, Mexicans, and Americans also introduced other food items. These included wheat, melons, sugar cane, figs, and pomegranate. Other non-food items, such as cotton, tobacco, devil claw, and gourds, were grown. Forty to fifty percent of their diet lies in their agriculturally grown and gathered foods. Huhugam Ki: Museum. (2022). This created an abundance of food that made them successful even before money became the form of payment. However, their abundance also made them targets for other local tribes that lacked food. This is one of the reasons behind the emergence of the two tribes- Akimel O'odham and Xalychidom Piipaash (Esplin, T., 2022, June 29).
Water from the River also provided plenty of fish and game. Traditional fishing methods included a technique as simple as jumping right into the river to catch the fish. Hunting, however, was taken more seriously. "There are traditional guidelines that one must adhere to so as not to offend certain animals and cause sickness" Huhugam Ki: Museum (2022). Most commonly hunted included cottontails, jackrabbits, ground squirrels, quail, dove, and turkeys. However, deer, mountain sheep, antelope, and javelina were hunted but not as often.

Water is used in the making of pottery. The pottery was used to hold Water and to cook. The Piipaash gathered White Clay near the river tributaries and worked the clay to make pottery such as vases, bowls, and other items that could be sold and traded. The Akimel O'odham used red and brown clay for their clay pots. They crafted pottery for daily use, such as water jugs, cookware, and storage pots and pottery for trade. Kelly stated that "Water was acquired by digging from holes near the river, and the sand acted as a natural filter from sediments from the river. His grandparents always told him that the Water from the clay pots was always colder than those kept in modern containers" Esplin, T. (2022, June 29).

The Water from the river created a diverse ecosystem that provided everything for the people of this land, from food, shelter, clothing, tools, and medicine. It was their Himdagi, their Way of Life, that was dependent on the river.

Today the ecosystem and landscape are a mere shadow of what the land once was. Due to colonization, the river systems began to be diverted and dammed up to provide Water to more populated areas in Arizona. The ancient river systems provided the framework for the Arizona Canal, Central Arizona Project, and others. Today the land is leased out to commercial farmers that use the canal systems and large machinery to grow produce for retail distribution. As the rivers began to be diverted and dammed up, the government subsidized the food rations with processed flour, and beef replaced fish and wild game. The Akimel O'odham and Xalychidom Piipaash women had to be resourceful with what they had. They used flour, salt, and lard to make tortillas/cemait and popovers/wuamajda/chshaylytap. These are now traditional staples among the tribes.

The tribe continues to place efforts in "resurrecting" those ideals the people once had. They have a community garden project that continues to help the Community grow their foods using new and old agricultural techniques. They also have a seed bank that houses traditionally grown foods native to the people. Today the Salt River Pima Maricopa Indian Community successfully runs several enterprises such as Casino Arizona, Talking Stick Resort, Salt River Materials Group, Saddleback Communications, and more.

By teaching about the importance of Water, the Community and the children will investigate their daily interactions with Water in their homes, school, and this curriculum. Children are natural explorers of Water and are curious about its various properties. They will investigate the physical properties of Water in and around the Community. They will learn how the Water and river helped their Community thrive. We will examine the Community’s cultural ties to Water and why the people are called the Akimel O'odham and the Xalychidom Piipaash. The children will explore how Water was used for farming, making pottery, making food, and even used to
The children will become explorers of their environment using place-based learning. It will rely "heavily on inquiry-based learning and hands-on approach. Students should conduct inquiries into their subject and be allowed to use various tools to explore their topic, including regular assessment and clear goals." (Loveless, B. (2022). I chose to focus this study on place-based learning because the children are a reflection of their environment, and we want them to connect with the land and their culture. "When young people know who they are, where they come from, and that family and Community fully support them, there is little they cannot do. These students are not only doing well in their Community but also succeeding in school." Romero-Little, M. E. (2010, p. 14). The Community will become the classroom, and the children will learn from local experts as we invite them into our spaces to share their wealth of knowledge. These local experts could be our community elders, family members, and workers. "Learning occurs through direct and indirect social interactions with more knowledgeable others. In this form of learning, children engage in a great deal of learning through observing others. They watch, listen and internalize the cultural and social events and interactions between adults and children" (Romero-Little, M. E. 2010, p. 24).

We will also build on the O'odham and Piipaash languages by incorporating Total Physical Response techniques to bridge the language's comprehension before speaking. I chose this method because "one of the greatest benefits of TPR is stress reduction… that's because the children are not expected to speak….The silent period is greatly encouraged because it is here that the learner is building their understanding of the language" (Johnson/Mills, 2021, p. #). It puts the focus on listening and enhances their listening skills. In using the TPR method, "the teacher states the word while showing a picture and a gesture, using exaggerated facial expressions and movement of the body. They ask the students to repeat the gesture or action." These gestures are done in a specific order and repeated to help with retention. Next, the children are asked to repeat the gestures when prompted with the picture. Finally, the images are shown out of order while the children act out the gestures. These gestures are repeated throughout daily interactions with the children as the words become embedded in their long-term memory. TPR is best used with new vocabulary terms, introducing verbs, and giving commands and instructions through storytelling and everyday classroom language. When using this technique intentionally, I hope to build not only my vocabulary but that of the children in the language of the O'odham and Piipaash.

**Alignment with Standards**

Social-Emotional Development

STRAND 1: SELF-AWARENESS AND EMOTIONAL SKILLS

Concept 1: Self-Awareness

The child demonstrates an awareness of self. Children develop a sense of personal identity as they begin to recognize the characteristics that make them unique as individuals and to build self-esteem.

- Demonstrates developmentally appropriate cultural curiosity and responsiveness.
STRAND 2: RELATIONSHIPS AND SOCIAL SKILLS

Concept 2: Social Interactions The child displays positive social behavior.
   a. Responds when adults or other children initiate interactions.
   b. Initiates and sustains positive interactions with adults and other children.

Concept 3: Respect
The child has an increased capacity to understand social boundaries about behavior and the environment
   c. Shows respect for learning materials in the learning environment.

Approaches to Learning Standard:

STRAND 1: INITIATIVE AND CURIOSITY

Concept 1: Initiative The child demonstrates motivation, independence, and responsibility while participating in a range of activities and routines.
   b. Demonstrates independence during activities, routines, and play
   c. Exhibits flexibility, imagination, and inventiveness when attempting tasks and activities.

STRAND 2: ATTENTIVENESS AND PERSISTENCE

Concept 1: Attentiveness
The child demonstrates the ability to focus on an activity.
   a. Displays the ability to pay attention when engaged in an activity.
   b. Sustains attention when engaged in an age-appropriate activity.

STRAND 4: CREATIVITY

Concept 1: Creativity, The child, demonstrates the ability to express their own unique way of seeing the world
   c. Engages in inventive social play

Standards:

Language and Literacy

STRAND 1: LANGUAGE

Concept 1: Receptive Language Understanding
The child demonstrates an understanding of directions, stories, conversations, and nonverbal cues.
   a. Demonstrates understanding of a variety of 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.

Concept 3: Vocabulary

The child understands and uses increasingly complex vocabulary. Figured out the meanings of unfamiliar words and concepts using the context of conversations, pictures that accompany the text, or concrete objects

STRAND 2: COMMUNITY

Concept 3: Environment

The child demonstrates awareness of locations within and around their Community and of the environment.
   a. Describes directionality and/or location within the Community.
   b. Describes some physical features of the environment in which she lives.

Science

STRAND 1: SCIENTIFIC INQUIRY AND APPLICATION

Concept 1: Exploration, Observations, and Hypotheses
The child observes, explores, and interacts with materials, others, and the environment.
   a. Exhibits curiosity about objects, living things, and other natural environmental events.
   b. Identifies attributes of objects, living things, and natural events in the environment.
   e. Asks and responds to questions about relationships of objects, living things, and events in the natural environment.

Social Studies

STRAND 2: COMMUNITY

Concept 1: Understands Community

The child recognizes that they are a part of a family and the larger Community with other people and that they can accept and appreciate diverse people and experiences.
c. Describes some characteristics (e.g., clothing, food, and jobs) of the people in their Community.

Concept 3: Environment

The child demonstrates awareness of locations within and around their Community and of the environment.
a. Describes directionality and/or location within the Community.
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Fine Arts

STRAND 2: MUSIC Concept 1: Creates and Connects with Musical Concepts and Expressions
   b. Sings to familiar rhymes, songs, and chants.

STRAND 3: CREATIVE MOVEMENT AND DANCE
Concept 1: Creates and Connects with Creative Movement and Dance
   b. Dances and moves to rhymes, songs, and chants

Core Principles of Culturally Responsive Schooling with/in Indigenous Communities
Relationality, relationships, and communities
1. Encourages students to understand themselves within broader communities
Indigenous knowledge systems and languages
5. Traditional and/or cultural knowledge is included
6. Norms, values, traditions, interests of local/regional Indigenous Community are leveraged for learning opportunities
7. Local/regional context is leveraged for learning opportunities
Representation of Indigenous peoples
15. Indigenous people are represented as contemporary (not only historical)
16. Indigenous people are represented as diverse (not a monolithic “they”)  
17. Local/regional Indigenous Community is reflected.

Student Learning Objectives

Students will learn the cultural significance of Water and their Community.
Students will learn what role water plays in their daily lives.
Students will learn O’odham words for Water and other natural elements.

Teaching Strategies

Place Base Learning
As we move into the Water Study, we will focus our explorations outside, and our focus will be Place Base Learning. The children will learn through their environment, and the unit will take place in our outdoor learning space, encouraging water exploration.

Modeling
As the children are introduced to the outdoor learning space, modeling will become essential for using the space effectively. When setting up explorations, my role as their teacher will be to MODEL how to use the area safely and complete the activity.

Sensory Play
Sensory Play will play an important role in the outdoor exploration area near an outdoor sand area with access to a water source. Sensory Play will allow my children to play, explore, and
investigate the properties of Water. This exploration will enable my children to use their senses (touch, taste, smell, see, and hear) to examine the importance of Water. While my children explore the different modalities, I will use open-ended questions to question their thought processes.

Food Experience

Another element that can add to a sensory experience is the food experience. With a food experience, the children learn what a recipe is and how to use it. The children learn what words are and that they have meaning.

Read-Aloud

We will be using read-aloud as well. The books bring information, stories, and ideas to the children regarding our topic and their Community. As the read-aloud is done, open-ended questions will be asked to gather understanding and build depth to the information.

Total Physical Response

We will use TPR, Total Physical Response, to bring more language vocabulary into the classroom. TPR is a method of teaching language/vocabulary by bridging movement with verbal language. The use of Visuals will also be necessary when incorporating new language concepts. Children will need to see a visual of the word and hear the word, followed by an action of the meaning of the word.

Reflection

Helping guide children through the Reflection process will be essential as we work through our investigations. We can discuss with the children what they did, what they learned, why things happened, and how it affects us.

Student Assessment Plan

We use Teaching Strategies Gold formative assessment at the Salt River Pima Maricopa Indian Community Early Childhood Education Center. It is an observation-based assessment designed to be used throughout the children's day. Observation notes are taken as part of intentional, everyday experiences in the classroom. It is inclusive of all children and meets the needs of every child in the classroom.

"Teaching Strategies GOLD™ measures the knowledge, skills, and behaviors that are predictive or most important for school success, focusing on 36 basic objectives and two additional objectives related to English language acquisition. Objectives are organized into nine areas of development and learning. The first four describe major areas of child growth and development (social-emotional, physical, oral language, and cognitive). The following five focus on content learning (literacy, mathematics, science and technology, social studies, and the arts). A tenth
area, English language acquisition, helps teachers follow a child's progress in acquiring receptive and expressive language in English" Teaching Strategies (2010, p. 4).

Working Portfolios: As teachers, we document experiences that our children engage in. For experiences the children engage in, such as the "Let's make a river," they are hands-on learning and telling us about their thinking while working through the activity. During this activity, the teachers will take pictures and write down what the children are saying as we ask guiding questions to further their understanding. We will then add a reflection piece so the children can draw what they made, and this will be added to their portfolios.

Classroom Activities

Rubric

<table>
<thead>
<tr>
<th>Activity name: Water Table with Indigenous Wildlife</th>
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<tbody>
<tr>
<td><strong>Objective:</strong> The children will:</td>
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<tr>
<td>● Investigate river wildlife with their senses.</td>
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<tr>
<td>● Listen/Use O'odham wildlife words</td>
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<td>● Talk about why the animals were selected to be on the table.</td>
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<table>
<thead>
<tr>
<th>Standards:</th>
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<tbody>
<tr>
<td>Social-Emotional Development</td>
</tr>
<tr>
<td>STRAND 2: RELATIONSHIPS AND SOCIAL SKILLS</td>
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<tr>
<td>Concept 2: Social Interactions The child displays positive social behavior.</td>
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<tr>
<td>a. Responds when adults or other children initiate interactions.</td>
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<td>b. Initiates and sustains positive interactions with adults and other children.</td>
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<tr>
<td>Approaches to Learning Standard:</td>
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<tr>
<td>STRAND 1: INITIATIVE AND CURIOSITY Concept 1: Initiative The child demonstrates motivation, independence, and responsibility while participating in a range of activities and routines.</td>
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<tr>
<td>c. Exhibits flexibility, imagination, and inventiveness when attempting tasks and activities.</td>
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<tr>
<td>STRAND 4: CREATIVITY Concept 1: Creativity The child demonstrates the ability to express their own unique way of seeing the world</td>
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<tr>
<td>c. Engages in inventive social play</td>
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<table>
<thead>
<tr>
<th>Materials:</th>
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</thead>
<tbody>
<tr>
<td>• Water table</td>
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<tr>
<td>• Sand</td>
</tr>
<tr>
<td>• Water</td>
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<tr>
<td>• Local wildlife toys</td>
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</tbody>
</table>
Procedure:
- Prepare the sensory bin by adding sand, water, and wildlife toys.
- Present the bin to the children in an appropriate area.
- Talk with the children as they are playing. Talk about the animals and river ecosystem. Have any of the children seen any of these by the river?
- Practice Animal names in O'odham.

Assessment: Working Portfolio
1. Observe and document the children's interaction with the sensory table.
2. Pictures/recordings will be documented in TSG.
3. Questions to check for understanding
   a. Why is Water important for animals?
   b. How do the animals (name animals) use the Water?
   c. What animals have you seen by the river?
   d. Have you been to the river? What have you done when you were there?

Activity name: Let's talk about WATER. (KWL Chart)

Objective: The children use the KWL chart to chart their learning about what they know, want to know, and what they learned about Water.

Standards:

Science
STRAND 1: SCIENTIFIC INQUIRY AND APPLICATION
Concept 1: Exploration, Observations, and Hypotheses
The child observes, explores, and interacts with materials, others, and the environment.
   a. Exhibits curiosity about objects, living things, and other natural events in the environment.
   b. Identifies attributes of objects, living things, and natural events in the environment.
   c. Asks and responds to questions about relationships of objects, living things, and events in the natural environment.

Social Studies
STRAND 2: COMMUNITY
Concept 3: Environment
The child demonstrates awareness of locations within and around their Community and of the environment.
   a. Describes directionality and/or location within the Community.
   b. Describes some physical features of the environment in which she lives.

Materials:
- Large Post it table with a KWL chart on it.
- Markers
Procedure:
1. The teacher will ask the children what they know about WATER.
2. As each child responds, their reply will be written on the chart.

Assessment: Working Portfolio
Each child will provide their understanding of Water and how it connects to them and their Community. The teacher will document this assessment and keep it in their working portfolios, and their progress will be documented in their working portfolio as we work through this unit.

Activity name: Let's make soup

Objective: The children will learn to follow a recipe using foods grown in the Community.

Standards:
Social Emotional Development Standard:
STRAND 2: RELATIONSHIPS AND SOCIAL SKILLS
Concept 3: Respect
The child has an increasing capacity to understand social boundaries about behavior and the environment
   c. Shows respect for learning materials in the learning environment.
Approaches to Learning Standard:
STRAND 1: INITIATIVE AND CURIOSITY
Concept 1: Initiative
The child demonstrates motivation, independence, and responsibility while participating in a range of activities and routines.
   b. Demonstrates independence during activities, routines, and play.
Social Studies
STRAND 2: COMMUNITY
Concept 1: Understands Community
The child recognizes that they are a part of a family and larger community with other people and that they can accept and appreciate diverse people and experiences.
c. Describes some characteristics (e.g. clothing, food and jobs) of the people in their Community.

Materials:
• Recipe for Veggie Soup  soup recipe
• Child-friendly cutting utensils for children to cut up vegetables.
• Crockpot, seasonings
• Vocabulary cards of foods in O'odham/Piipaash

Procedure:
1. The teacher will invite the children to the table to prepare Vegetable Soup.
2. First, the children must wash their hands because they will be the helpers today. We will engage in a conversation about why we need to wash.
3. The teacher will explain what a recipe is, and she will explain that we use a recipe to make something. Today we are making soup.
4. We will go over the vegetables and talk about where these and similar vegetables are grown—pointing out that the canals around us provide Water to the farms in the Community that grow such produce.
5. Next, we will name the vegetable using the English and O'odham names. We will also use O'odham handling verbs like cut, pour, and cook.
6. Next, each group of children will be given a vegetable for the soup to cut up and add to the soup. While cutting up the foods, we will model the use of O'odham vegetable words.

Assessment:

<table>
<thead>
<tr>
<th>Below:</th>
<th>Meets Widely Held Expectations:</th>
<th>Exceeds:</th>
</tr>
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<tbody>
<tr>
<td>The child showed little to no interest in the activity.</td>
<td>The child showed some interest by doing - most of the activity.</td>
<td>The child was able to go through the recipe and engaged in conversation about the words.</td>
</tr>
</tbody>
</table>

Activity name: Let's make a river!

Objective: The children will work together with their friends to use various hand tools to navigate the Water from a "lake" to a farm.

Standards:
Social Emotional Development Standard:
STRAND 1: SELF-AWARENESS AND EMOTIONAL SKILLS
Concept 1: Self-Awareness
The child demonstrates an awareness of self. Children develop a sense of personal identity as they begin to recognize the characteristics that make them unique as individuals and to build self-esteem.
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STRAND 4: CREATIVITY
Concept 1: Creativity
The child demonstrates the ability to express their own unique way of seeing the world
  c. Engages in inventive social play

Science
STRAND 1: SCIENTIFIC INQUIRY AND APPLICATION
Concept 1: Exploration, Observations, and Hypotheses
The child observes, explores, and interacts with materials, others, and the environment.
  a. Exhibits curiosity about objects, living things, and other natural events in the environment.
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</tr>
</thead>
<tbody>
<tr>
<td>• Shovels</td>
</tr>
<tr>
<td>• Water source, hose</td>
</tr>
<tr>
<td>• Tarp material, pipes, rocks, sticks</td>
</tr>
<tr>
<td>• Regional animals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teacher will present the items in the sand area. The teacher will make a &quot;lake&quot; and ask the children if this is a lake or river.</td>
</tr>
<tr>
<td>2. Give children tools to explore the Water.</td>
</tr>
<tr>
<td>3. As they start moving the Water by building a canal, give the children a task to move the Water to a selected location: A Farm.</td>
</tr>
<tr>
<td>4. As they work toward getting the Water to the farm, check for understanding.</td>
</tr>
<tr>
<td>a. What did we do to make this a river/canal?</td>
</tr>
<tr>
<td>b. Why do you think the farm needs this Water?</td>
</tr>
<tr>
<td>c. What can we do to stop the Water when we get what we need?</td>
</tr>
<tr>
<td>d. Do you see canals like this around the school?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Portfolio. We will record the children's progress on the river and document their engagement in the activity, from interactions to conversations to reflections. This assessment will include a journal entry of what they made.</td>
</tr>
</tbody>
</table>

**Activity name:** Read Aloud: We are Water Protectors.

**Objective:** The children will read the story and

**Standards:**
Language and Literacy
**STRAND 1: LANGUAGE**  
**Concept 1: Receptive Language Understanding**  
The child demonstrates an understanding of directions, stories, conversations, and nonverbal cues.
  a. Demonstrates understanding of a variety of 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.

**STRAND 2: COMMUNITY**  
**Concept 3: Environment**  
The child demonstrates awareness of locations within and around their Community and of the environment.
  c. Describes directionality and/or location within the Community.
  d. Describes some physical features of the environment in which she lives.

**Materials:**

- **Book- We are Water Protectors**
  - Props for the read
    a. Sensory water bottle with clean Water.
    b. Sensory water bottle with dirty black Water
    c. Picture of Brave Warrior from the book.
    d. SafeKeeper box with animals in it
    e. People holding hands.
    f. Picture of Mother Earth. (one side with the Earth and one side Sad.)

**Procedure:**

1. The teacher will introduce the book. (Front cover, spine, and back cover)
2. As the teacher reads, she will bring out the props to show the children.
3. The book will then be placed in a center for children to practice retelling independently.

**Assessment: Story questions**

- Why is Water so important to us?
- What does the black snake do to the Water in the story?
- What makes the warrior and people in the story so strong?
- What is our job with the Water?
- What are some ways that we can protect the Water?
<table>
<thead>
<tr>
<th>Below:</th>
<th>Meets Widely Held Expectations:</th>
<th>Exceeds:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The child is not able to answer any of the questions, and answers do not reflect the story</td>
<td>The child can answer 2-3 of the questions. Uses the props and attempts to retell the story</td>
<td>The child can answer 4-5 of the questions and retells the story using the props appropriately</td>
</tr>
</tbody>
</table>

**Activity name: TPR - River animals**

**Objective:** The children will become familiar with O'odham names for River Animals such as horses, fish, frogs, rabbits, turtles, and coyote.

**Standards:**

Language and Literacy
STRAND 1: Language Concept 3: Vocabulary
The child understands and uses increasingly complex vocabulary.

- Figured out the meanings of unfamiliar words and concepts using the context of conversations, pictures that accompany text, or concrete objects.

**Materials:**

- Visuals of river animals and names printed in O'odham
- Movements to go with the five selected animal words.

**Procedure:**

1. The teacher will show an image and mimic a gesture while saying the O'odham word.
2. Children will mimic the gesture for the image. (They do not have to say the word.)
3. We will continue this process for each of the five words.
4. We will cycle through the words 2-3 times as the children retain their learning.
5. Lastly, the words can be shuffled, and then we can check for retention.

**Assessment: Rubric for TPR Words retention**

<table>
<thead>
<tr>
<th>Below:</th>
<th>Meets Widely Held Expectations:</th>
<th>Exceeds:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The child shows no interest in the activity. 0 words are retained.</td>
<td>The child sustains interest in the activity. Can match 1-3 gestures to the pictures. Attempts to say some of the O'odham words.</td>
<td>The child sustains interest in the whole activity. Can match 4-5 gestures to the pictures and can say some of the O'odham words correctly.</td>
</tr>
</tbody>
</table>
### Activity name: TPR of the Water Cycle

**Objective:** The children will become familiar with words from the Water Cycle, such as River, Sun, Clouds, Rain, and ground/dirt.

<table>
<thead>
<tr>
<th>Standards:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Approaches to Learning</strong></td>
<td></td>
</tr>
<tr>
<td>STRAND 2: ATTENTIVENESS AND PERSISTENCE</td>
<td></td>
</tr>
<tr>
<td>Concept 1: Attentiveness</td>
<td></td>
</tr>
<tr>
<td>The child demonstrates the ability to focus on an activity.</td>
<td></td>
</tr>
<tr>
<td>a. Displays the ability to pay attention when engaged in an activity.</td>
<td></td>
</tr>
<tr>
<td>b. Sustains attention when engaged in an age-appropriate activity.</td>
<td></td>
</tr>
<tr>
<td><strong>Language and Literacy</strong></td>
<td></td>
</tr>
<tr>
<td>STRAND 1: Language</td>
<td></td>
</tr>
<tr>
<td>Concept 3: Vocabulary</td>
<td></td>
</tr>
<tr>
<td>The child understands and uses increasingly complex vocabulary.</td>
<td></td>
</tr>
<tr>
<td>f. Figured out the meanings of unfamiliar words and concepts using the context of conversations, pictures that accompany the text, or concrete objects.</td>
<td></td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td></td>
</tr>
<tr>
<td>STRAND 2: COMMUNITY</td>
<td></td>
</tr>
<tr>
<td>Concept 1: Understands Community</td>
<td></td>
</tr>
<tr>
<td>Recognizes that places where people live are made up of individuals who may be from different cultures, perspectives, and backgrounds and who speak different languages.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials:</th>
<th></th>
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<tbody>
<tr>
<td>• Visuals and matching movement for the five words.</td>
<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th>Procedure:</th>
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<tbody>
<tr>
<td>1. The teacher will show an image and mimic a gesture while saying the O'odham word.</td>
<td></td>
</tr>
<tr>
<td>2. Children will mimic the gesture for the image. (They do not have to say the word.)</td>
<td></td>
</tr>
<tr>
<td>3. We will continue this process for each of the five words.</td>
<td></td>
</tr>
<tr>
<td>4. We will cycle through the words 2-3 times as the children retain their learning.</td>
<td></td>
</tr>
<tr>
<td>5. Lastly, the words can be shuffled, and then we can check for retention.</td>
<td></td>
</tr>
</tbody>
</table>

| Assessment: Rubric for TPR Words retention |  |
|---|---|---|
| **Below:** | **Meets Widely Held Expectations:** | **Exceeds:** |
| The child shows no interest in the activity. 0 words are retained. | The child sustains interest in the activity. Can match 1-3 gestures to the pictures. Attempts to say some of the O'odham words. | The child sustains interest in the whole activity. Can match 4-5 gestures to the pictures and can say some of the O'odham words correctly. |

### Activity name: The Itsy Bitsy Tokdot (spider)
Objective: The children will sing the Itsy Bitsy Spider song using words O'odham words: tokdot (spider), Sudagi (Water), Tas (sun), Ju:ki (rain).

Standards:
Language and Literacy
STRAND 1: LANGUAGE
Concept 1: Receptive Language Understanding
The child demonstrates understanding of directions, stories, conversations and nonverbal cues.
   a. Demonstrates understanding of a variety of 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 that involve one step, two step or multiple steps.

Fine Arts
STRAND 2: MUSIC Concept 1: Creates and Connects with Musical Concepts and Expressions
   b. Sings to familiar rhymes, songs, and chants.

STRAND 3: CREATIVE MOVEMENT AND DANCE
Concept 1: Creates and Connects with Creative Movement and Dance
   b. Dances and moves to rhymes, songs, and chants

Social Studies
STRAND 2: COMMUNITY
Concept 1: Understands Community
Recognizes that places where people live are made up of individuals who may be from different cultures, perspectives, and backgrounds and who speak different languages.

Materials:
• Puppet spider
• Props for Water, sun, rain, and spout

Procedure:
1. The teacher will review the props and how to say each in O'odham.
2. The teacher will sing the Itsy Bitsy Tok dot song for the children using the props.
3. As the children get used to the song, the children will each take turns with the props.

Assessment: Rubric

<table>
<thead>
<tr>
<th>Below:</th>
<th>Meets Widely Held Expectations:</th>
<th>Exceeds:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The child shows little to no interest in the activity.</td>
<td>The child sustains interest in the activity. Mimics some of the movements of the activity. Attempts words to a song.</td>
<td>The child sustains interest in the activity. Mimics all the song's movements and sings the song with the teacher.</td>
</tr>
</tbody>
</table>
References:


Research foundation: Teaching strategies gold assessment system. Research Foundation: Teaching Strategies GOLD™ Assessment System. Retrieved August 18, 2022,


SRPMIC. (2020, April 28). History and culture. SRPMIC. Retrieved September 14, 2022, from https://www.srpmic-nsn.gov/history_culture/