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# Protecting Our Future: Environmental Health and Indigenous Child Well-Being

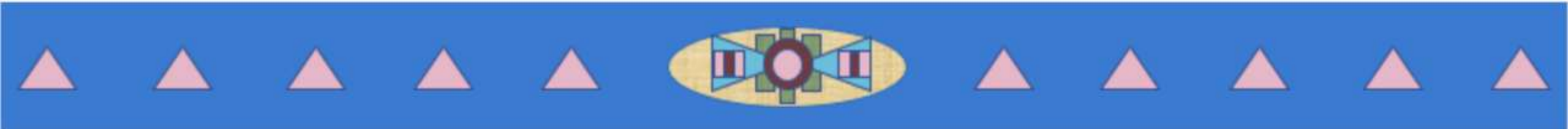
Dr. Vanessa Simonds  
Montana State University





# Disclosure

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- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.





*Óhkapisee—Big Basin*

*Baáchuuaashe-Berry River*

*“Valley of the Flowers”*

*”Valley of the Chokecherries”*

*”The Good Camp”*

*“Full of Berries”*

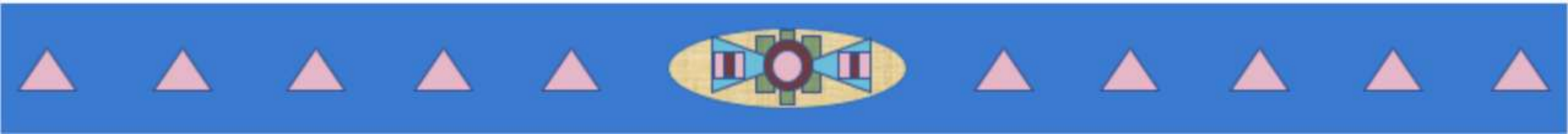
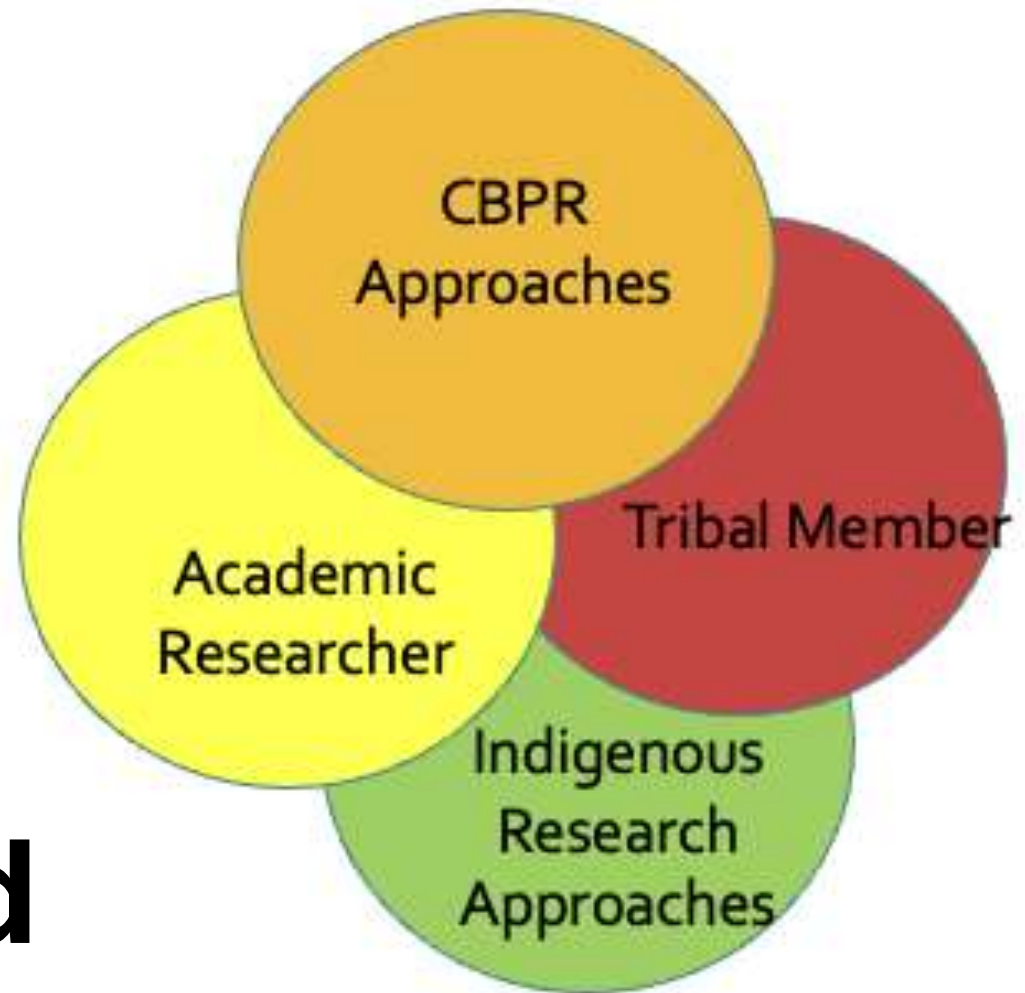
*“The Big Valley with the Mountains”*







# My Background

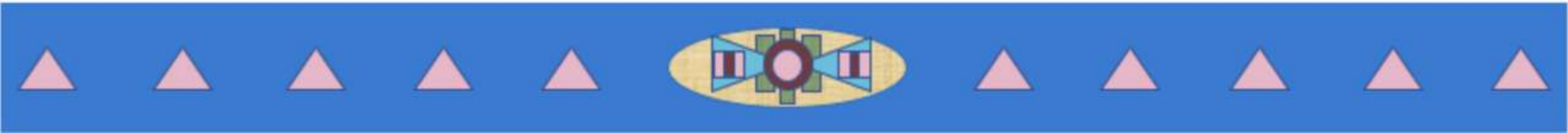




# Community-Based Participatory Research

“A collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action and achieving social change . . .”

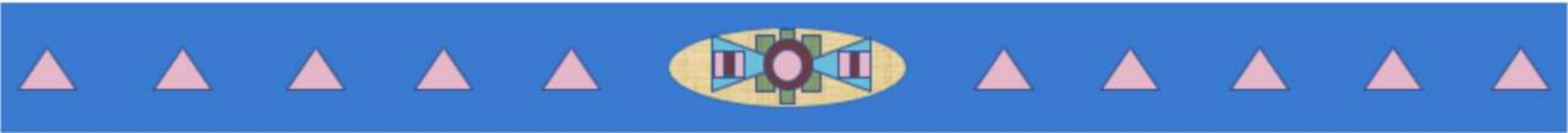
W.K. Kellogg Community Health Scholars Program



# Indigenous Approaches to Research

Methods for acquiring knowledge are as important as actual knowledge

Principles of Indigenous methodology are incorporated throughout the research process





The background image shows a natural landscape. In the foreground, there is a grassy slope leading down to a small, dark, possibly man-made water feature or a natural spring. To the right, a large, leafy green tree stands prominently. The middle ground is filled with dense green vegetation. In the background, a rolling hillside with sparse, dry-looking grass stretches towards the horizon under a clear sky.

## **Protecting Our Water Sources**

**“We take care of the water, and the water takes care of us.” This concept illustrates the values of reciprocity, respect, relationality, and responsibility shared by many Indigenous cultures.**

# Water Security

Jurisdiction  
Enforcement

Resources

Risk of  
Exposure

Environmental  
Connectedness





Crow Agency  
Public School



# Relationships





# Advisory Boards/ Steering Committees

Partner

- Partner with key community leaders

Provide

- Provide direction and advice for all areas of program

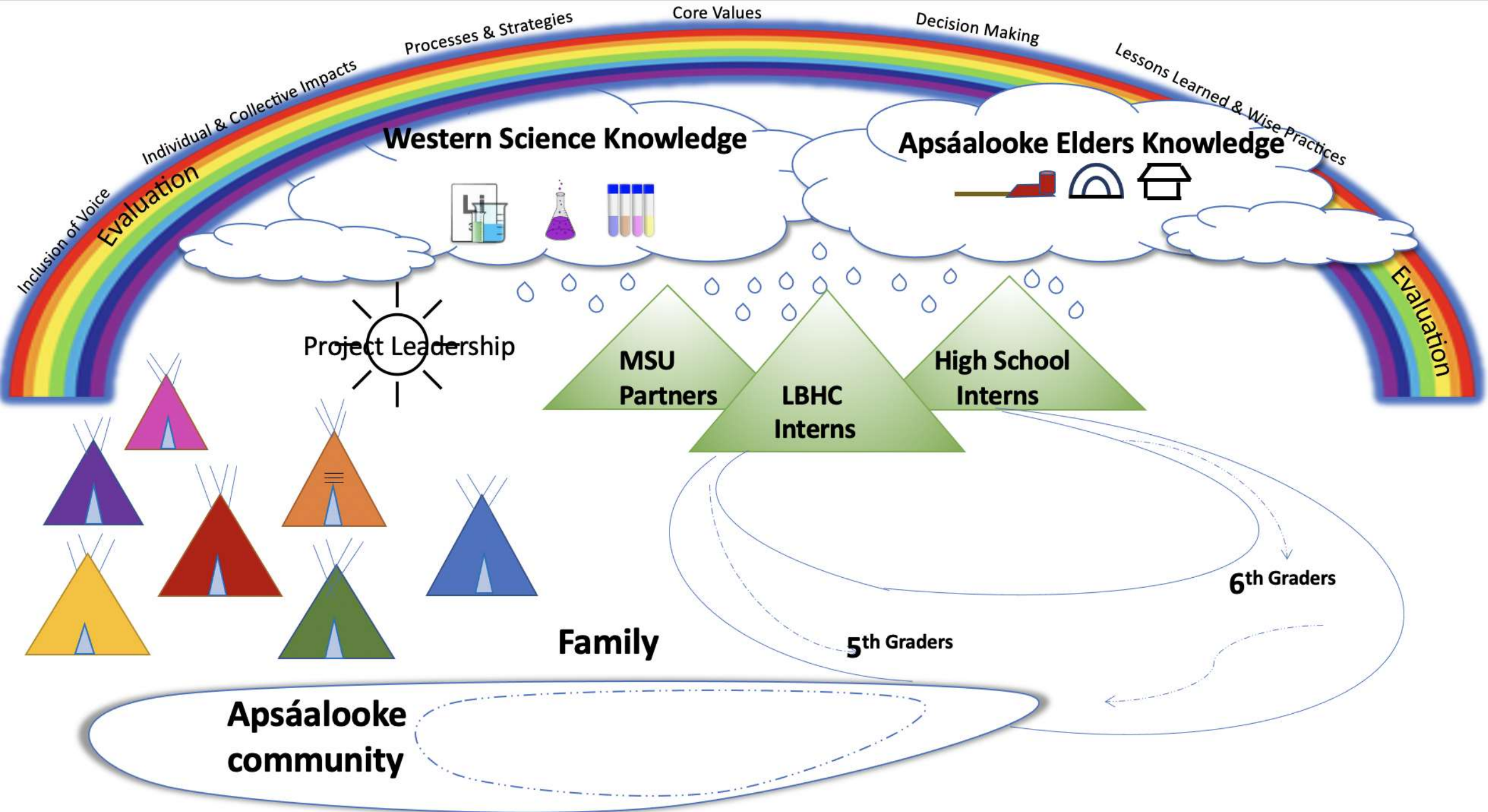
Include

- Include a variety of experiences

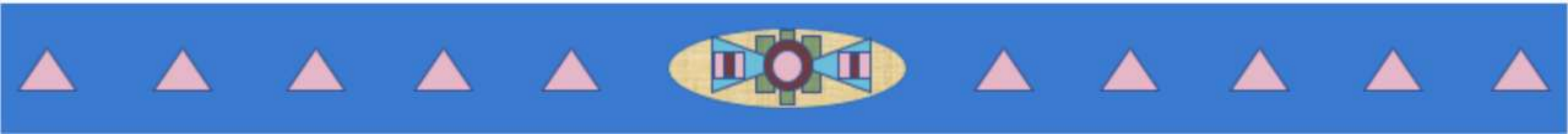
Benefit

- Benefit from shared Expertise





# Centering Apsáalooke Ways of Knowing



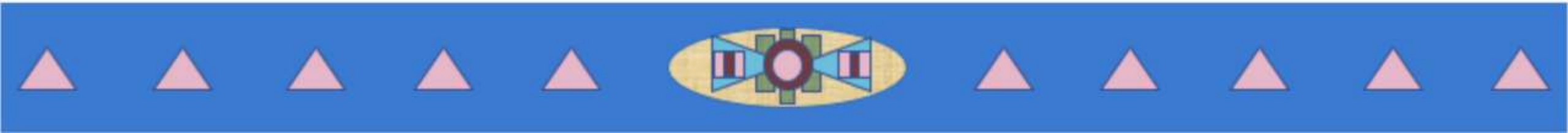




# Values

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- Gratitude
- Only take what you need
- Environmental Connectedness:
  - “Crow country is the most beautiful place on earth”
- Reciprocity: “Take care of the land and the land takes care of us” & “Giving back to community”
- Generational Learning & Clan System





# Crow Knowledge

- Water is sacred element of creation story.
- Water is powerful and takes care of us.
- Observation and Knowledge.

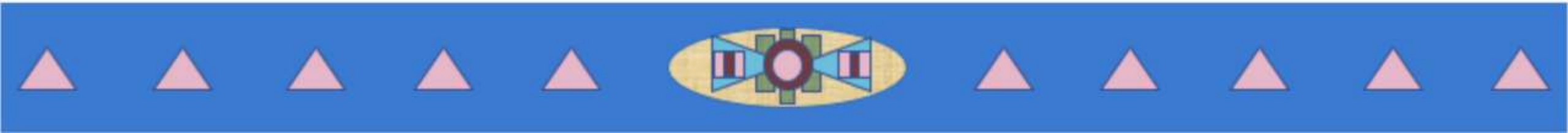






# Practices

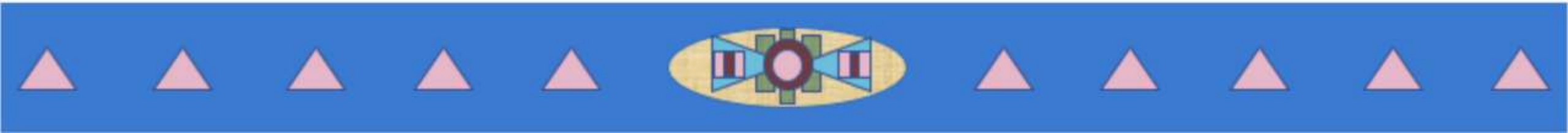
- Feeding the River
- Prayer
- Sun Dance
- Sweat Lodge





# Balance

- “Every story has an Indigenous perspective, an Apsáalooke side of story that is equally important.”
- Mentors bring who they are into their research.

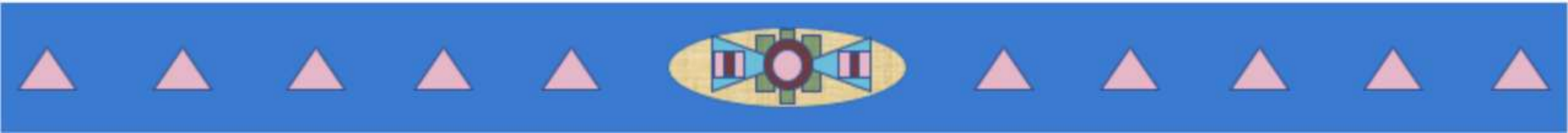


# Shússhua (Mint) Activity



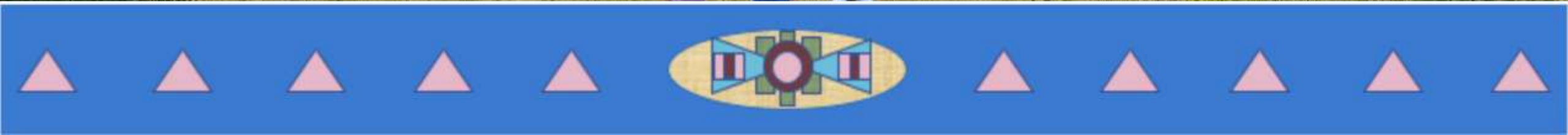


# Chihpachíiskisshe (Yarrow) Walk





# Environmental Connectedness











# Intergenerational Connectedness



# Two Leggings Fishing Access Site

Coliscan Petri Dish Coliform results

Name	Status	Number of Red, Pink and purple colonies	Total number of colonies 10 x number of red, pink and purple colonies
Amerah	✓1	0	10 x 0 = 0
Lahna	✓10	9	10 x 9 = 90
Xada	✓100	30	10 x 30 = 300

Coliscan Petri Dish E.coli results

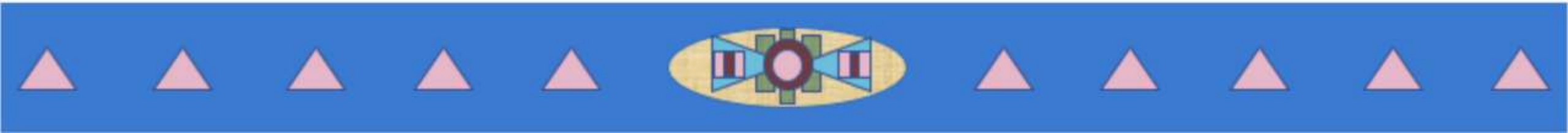
Name	Status	Number of purple colonies counted	Total number of colonies 10 x number of colonies
Amerah	✓1	2	10 x 2 = 20
Lahna	✓10	1	10 x 1 = 10
Xada	✓10	5	10 x 5 = 50

Total Count Petri Dish results

Name	Status	Total numbers of colonies counted	Total number of colonies 10 x number of colonies
Amerah	✓1	0	10 x 0 = 0
Lahna	✓1	0	10 x 0 = 0
Xada	✓1	0	10 x 0 = 0

Stream Assessment

Stream Habitat	Status	Notes
Stream Bed	✓10	Stones, Gravel
Algae	Excellent	Little to none
Pool/Riffle/run	Excellent	Present
Stream Shading	✓10	Some shade
Bank Stability	✓10	Some Erosion
Human Impacts	None	
Water Temperature	Excellent	11.4
Water clarity	NA	
Invertebrates	NA	Ph-7.42



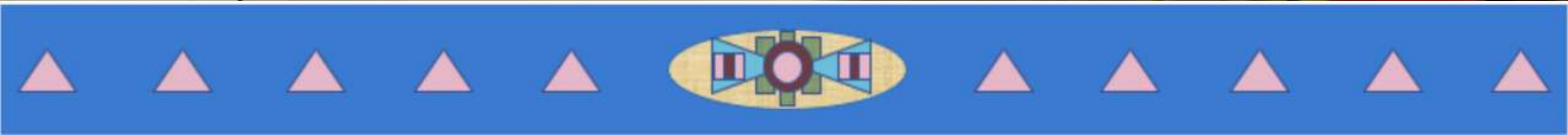
# Family Connectedness



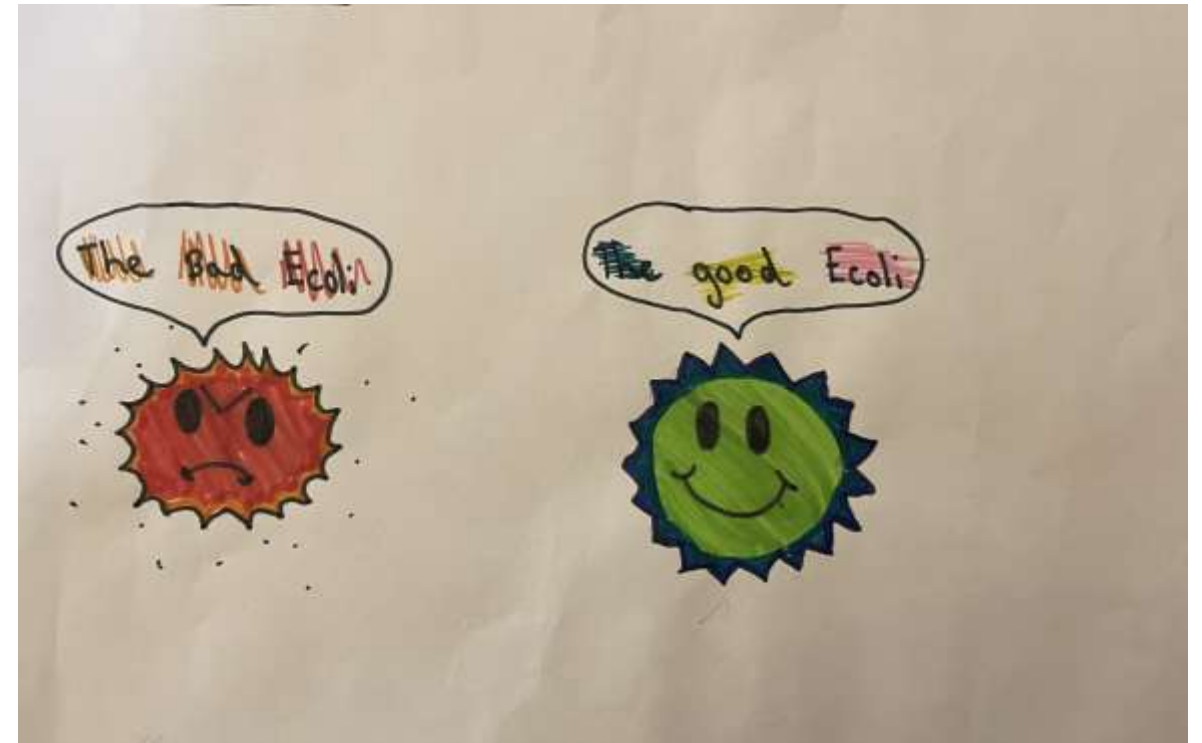
## Parent Perspective:

“If the children can convince their families and their friends, and then they’ll convince the community and you know we all need to take initiative to help clean our water.

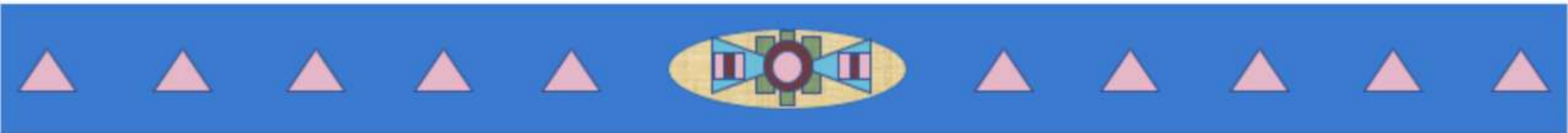
# Community Connectedness







# Impact of Programs



# Responsibility

## Valuable

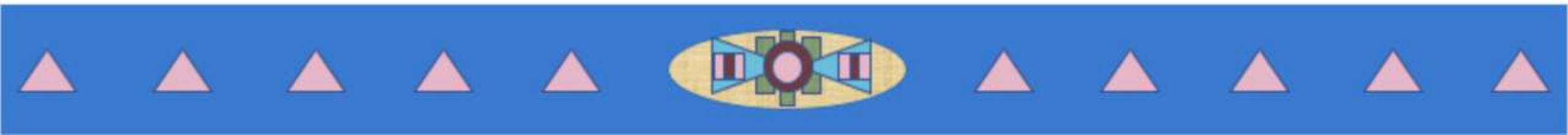
- Make sure program is valuable to the community.

## Culture-Centered

- Make sure that program is conducted in culturally centered manner.

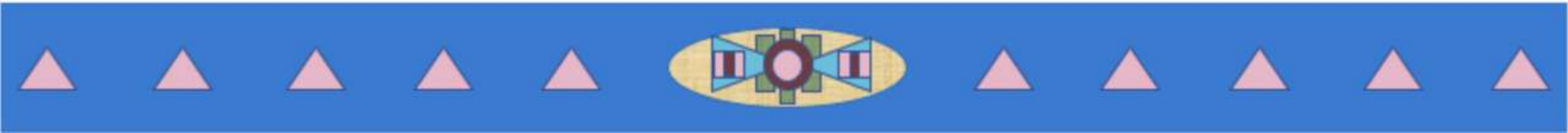
## Sustainable

- Make sure program is sustainable.





- “You have the strength of the clan system of the Crows’ powerful culture that’s here, very powerful. You know it’s the love of our people as Apsáalooke, of Crow people....It’s so strong there are no words to describe how strong it is,”





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- **Montana State University:** Cierra Tredway, Marilla Harris-Vincent, Deborah LaVeaux, Mikaela Miller, Emma Stihler, Yuhuan Xie, Lexie Kyro, Catalina Rosales, Jack Cambria, Cedar O'Donnell, and many others
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- **Consultants and Advisors:** Suzanne Held, Rima Rudd, Shelly Valdez & Jill Stein



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