Traditional Knowledge, Traditional Ecological Knowledge, &Western Science

Karen Jarratt-Snider, Ph.D. Assistant Professor and Octaviana Trujillo, Ph.D. Department of Applied Indigenous Studies





What is Traditional Knowledge, or Traditional Ecological Knowledge (TEK)?

The indigenous people of the world possess an immense knowledge of their environments, based on centuries of living close to nature. Living in and from the richness and variety of complex ecosystems, they have an understanding of the properties of plants and animals, the functioning of ecosystems and the techniques for using and managing them that is particular and often detailed. In rural communities in developing countries, locally occurring species are relied on for many - sometimes all - foods, medicines, fuel, building materials and other products. Equally, peopleís knowledge and perceptions of the environment, and their relationships with it, are often important elements of cultural identity.

United Nations Educational, Scienitific, and Cultural Organization (UNESCO) 1994





TK, TEK

Develops out of Indigenous peoples' connections to land—homelands. Lifeways and practices. Decades, centuries of observation, understanding, and relationships between Indigenous peoples and the natural world—air, earth, fire, water, plants, animals.





Traditional Knowledge	Western Science	What do they share in common?
Based on observation(s) over time	?	
Specialized (certain keepers of particular knowledge)	?	
Generalized (things known throughout the community)	?	
Some things not intended to be shared with everyone	?	
Method of tranmitting/passing on knowledge is personal, experiential, verbal (Oral tradition)	?	
Connected to sprirituality		
?	Understanding of climate variability over time globally	

Traditional Knowledge, Traditional Ecological Knowledge, & Western Science





Deloria on Traditional vs. Western Science

The main difference between Indigenous knowledge and Western science is that for Indians, the knowledge is personal, and with it comes a responsibility. *Red Earth, White Lies (1995)*





Many examples of indigenous knowledge---

- •Indigenous burning practices
- •Dry farming and other native-based irrigation/agricultural systems that demonstrate deep knowledge of natural systems.
- •2004 Tsunami—The Onge and other Indigenous peoples escape the <u>tsunami</u> near Indonesia.





What do applications of TK, TEK tell us?

That traditional knowledge is and has been used by native peoples throughout the world to deliberately manage their natural environments, based on





Importance of Combining the Best of TEK & Western Science to Address Impacts of Climate Change on Native Peoples

Better, more complete data (information), including important context for that information Ψ

More complete understanding of climate change impacts ↓↓ Identifying, crafting better solutions





How do we do it?

Difficulties –

Who maintains/keeps the knowledge?

What knowledge can be shared how do we manage this?

What is the outcome of sharing knowledge?





The Anchorage Declaration 2009

•Represents promise

•Indicates a willingness of Indigenous peoples to share traditional knowledge in pursuit of finding solutions for climate change impacts

Also reflects the concerns of Indigenous peoples and suggests ways they can be addressed.





Respect Protection Continuity Acknowledgement **Equal Partnership**



