

Integrated Inquiry Project

When seeking answers to our questions of shark abundance on the Mālama Manō expedition, we are seeking 'ike kapuna (ancestral knowledge). What knowledge of sharks has been passed on through time in mo 'olelo (storied history) or cultural practices? On your learning expedition, you will be invited to integrate 'ike kapuna into your research as well.

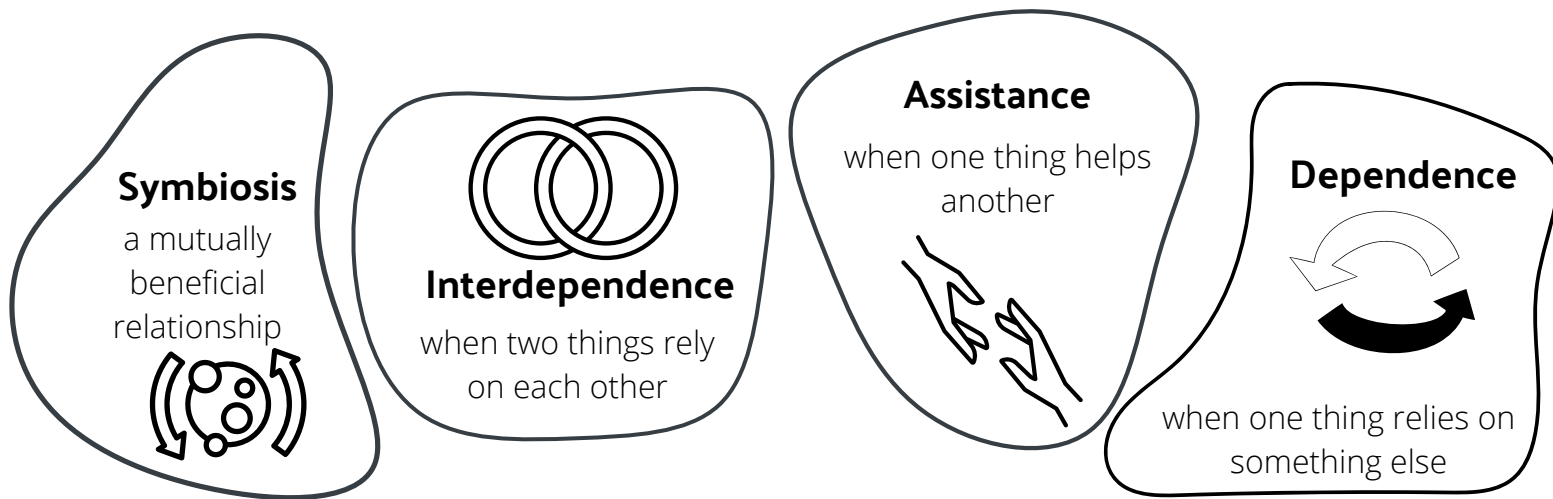
Abundance ka nui

Abundance is a very large quantity of something. Areas of Hawai'i and the rest of the United States were exploited in the past for their resources because colonists and settlers viewed the area as "unused". This view was incorrect, but a capitalist economy grew in the United States from that was dominated by private opportunity, ownership and unchecked exploitation of natural resources through the 1800s and most of the 1900s. Water, air and land resources began to crumble, as well as many species that call those areas home.

In the book, "Mapping Abundance for a Planetary Future," Dr. Candace Fujikane, a professor at the University of Hawai'i, shares how Indigenous scientists are looking at maps of mo 'olelo in a path forward that inspires us to do today what was neglected by colonists and capitalists in the past, and document the abundance, the existence and significance of the areas in which we live. ***In this inquiry project, we will explore an area by mapping relationships and abundance.***

Exploring Ecosystem Relationships

Ke 'imi nei Nā pilina kaiaola



What types of relationships do you want to research and map?

Stewardship a person or group of people assisting a resource or other species

example: how an area or species has been restored

Species to species symbiosis, interdependence, dependence, or assistance

example: interdependence of sharks and coral

Species to resource a species connection to water, soil, air or another resource

example: human dependence on water



Project Directions

Form your Inquiry Question

Get started by making observations, noticing...what is a relationship you are interested in, in your area?

Think about **WHERE** things are, **HOW** they are related, and **WHY** they are important--what significance do they have?

Example:
What is the significance of the relationship of Wood Turtles to rivers?

Research

- Identify and describe the type of relationship
- Seek out the locations--where are they found?
- What mo'olelo, storied histories, exist of the topic? What are the First Nations, or Indigenous cultures in your area? What information can you find on your topic from the perspective of Indigenous science, observations, histories or present cultural practices?
- What scientific information can you find about your topic?
- Are there current or future issues that challenge, threaten or affect your topic?
- What is the significance of the relationship?

Create

How can you create a visual or explanation of your findings?

- Artistically represent the significance of the relationship you found to your area (hand-created or digital)
- Use a resource like Google MyMaps or ArcGIS StoryMaps to explain the significance of the topic to your area

Share