

Conservation Pen Pals

Name of instrument	Conservation Pen Pals
Use Case and Target Audience	Suggest for use with school programs or summer camps: Ages 2 nd grade and up
Theme	Activity to imagine what it's like to be an animal and to recognize that aquarium/zoo animals have wild counterparts with similar needs.
Scheduled implementation	One time activity administered towards the end of the program. Could be done as a pre post activity to determine if their zoo/aquarium experience shifts their ability to understand animals' perspectives.
Evaluation questions addressed with assessment	Does program participation increase the child's understanding of what animals need to survive and what contributes to their well-being? Does program participation increase children's ability to consider the perspectives & experiences of animals?
Outcomes being measured	<ol style="list-style-type: none"> 1. Child can take the perspective of other animals <ol style="list-style-type: none"> a. Child [shares] the perceived emotional state of an animal b. Is able to predict the needs or emotional state of an animal and identify what informed this prediction. c. Is able to imagine the worldview of another animal 2. Child demonstrates cognitive understanding of animal needs <ol style="list-style-type: none"> a. Understands the full spectrum of animal needs, including biological, activity, social, psychological & ecological. 3. Child shows compassionate concern for other animals <ol style="list-style-type: none"> a. Demonstrates concern for the well-being of another animal.
Materials needed	<ul style="list-style-type: none"> • Paper • Pencils • Scenarios
Data analysis plan	<ul style="list-style-type: none"> • Code student responses for empathy indicators including demonstration of understanding and concern for animals. (see section below)
Staffing requirements	<ul style="list-style-type: none"> • 1 staff member required to distribute the scenarios and facilitate activity and discussion
Time needed for activity	<ul style="list-style-type: none"> • Flexible; 1 hour recommended

Protocol of Assessment Implementation:

First, have the student pick an animal at the zoo/aquarium. Some examples of animals with mini biographies are listed below; feel free to generate biographies based on your own zoo/aquarium's animals.

Once the animal has been chosen, direct the student to write a letter from the perspective of the animal, addressed to a pen pal or friend in the wild. They will write a letter telling their pen pal all about their life, so they understand how it feels to be that animal in the zoo/aquarium, and then imagine what their wild counterpart's life is like in the wild.

The following are examples of prompts you might use for animals at the zoo, along with the outcomes they address:

Prompt	Associated Outcome
What do you do every day at the zoo?	Child demonstrates cognitive understanding of animal needs, including biological, activity, social, psychological & ecological.
What do you eat at the zoo?	Child demonstrates cognitive understanding of animal needs, including biological, activity, social, psychological & ecological.
Who do you live with at the zoo?	Child demonstrates cognitive understanding of animal needs, including biological, activity, social, psychological & ecological.
How does s/he feel about different situations s/he might face? Why? (e.g. interacting with other animals, interacting with people)	Child is able to predict the needs or state of an animal and identify what informed this prediction.
What makes him/her happy? What makes him/her sad?	Child is able to predict the needs or state of an animal and identify what informed this prediction.

The following are examples of prompts you might use for animals in the wild, along with the outcomes they address:

Prompt	Associated Outcome
Where does s/he live?	Child demonstrates cognitive understanding of animal needs, including biological, activity, social, psychological & ecological.
What does s/he need to survive?	Child demonstrates cognitive understanding of animal needs, including biological, activity, social, psychological & ecological.
What challenges does s/he face? (e.g. finding shelter in a storm, trying to find food)	Child demonstrates concern for the well-being of another animal.

How does s/he feel about different situations s/he might face? Why? (e.g. interacting with other animals, interacting with people)	Child is able to predict the needs or state of an animal and identify what informed this prediction.
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Scenarios:

Hogan is a harbor seal at the Seattle Aquarium. Hogan was born in Tacoma at the Point Defiance Zoo and Aquarium; Hogan’s mom still lives there but his dad lives here at the Aquarium. Hogan’s favorite food is fish.

Mishka is a young otter at the Seattle Aquarium. When she was very young, she was caught in a fishing net. People in Alaska helped her get better, then sent her to live in Seattle with a new family of sea otters. Mishka has asthma, and takes an inhaler sometimes to help her breathe. Mishka loves clams and playing in piles of ice.

Kimmy is an opossum at the Woodland Park Zoo. She is very friendly and curious and loves to meet children. Kimmy loves fruit, but she’ll eat a lot of other things too.

Analysis

Analysis should be done via coding of student responses. Coding is a process in which tags or labels are assigned to words, phrases, sentences, or larger chunks of text. Once all text has been coded, then different meanings of the response can be identified in order to determine themes or patterns. These themes or patterns help show what ideas are most prevalent throughout the data.

Using the empathy indicators, coding of student responses should fall into five categories:

Code	Example
Demonstrates understanding of needs (food, water, habitat)	“There’s no more food and nowhere to hide.”
Demonstrates understanding of needs (social, emotional)	“I am angry - someone is touching me and it is not gentle, it doesn’t feel good.”
Demonstrates concern for animal (generally life and death)	“I would be scared of being killed.”
Predicts the needs or state of an animal and identify what informed this prediction.	“I feel happy because I have a lot of good food.”
Unrelated responses	“Sea otters can fly.”

As you read through your participant responses, mark if the responses fall into any of these categories. Comments by participants can be coded in more than one category, if applicable.

Once you have completed your coding, look for evidence that these indicators are present in your participants' responses. Indicators that are not present can be specifically prompted for in future activities, if relevant to your program.

Evaluation Rubric

An additional layer of analysis can be done by applying this evaluation rubric.

	Weak	Moderate	Strong	N/A
Child demonstrates cognitive understanding of animal needs, including biological, activity, social, psychological & ecological.	Needs described are incorrect or inappropriate for the chosen animal.	Needs described are appropriate for the animal, but vague (e.g. otters eat seafood).	Needs described are appropriate and specific (e.g. otters eat mussels and clams).	
Child is able to predict the needs or state of an animal and identify what informed this prediction.	Descriptions of perspective are notably incorrect and/or learner cannot explain perspective.	Descriptions of perspective are founded on understanding of animal, but may be weak or partially incorrect.	Descriptions of perspective are founded on clear understanding of animal; learner can offer evidence for actions.	
Demonstrates concern for the well-being of another animal.	Does not express concern or expresses a lack of concern for animal.	Expresses some concern for animal but concern is either unfounded or founded on incorrect information.	Expresses concern for animal that is based on correct information about the animal's circumstances.	