



ROADMAP to Empathy

Como Park Zoo & Conservatory and Denver Zoo

What is ROADMAP?

ROADMAP is a mission-aligned, capacity-building initiative that:

- provides a **program development and facilitation process** to:
 - identify priority learning content and experiences
 - target outcomes using backwards design principles
- identifies priority **visitor engagement strategies**

ROADMAP supports staff and volunteers through **training and resources** rooted in research-based best practices.

ROADMAP Past to Present

2011: Denver's education team developed ROADMAP

2016: Denver began training AZA orgs on ROADMAP

2018: Como began initiative inspired by Denver's ROADMAP

2021: Como and Denver launched ROADMAP to Empathy

Why ROADMAP to Empathy?

We realized that ROADMAP has the potential to **effectively embed empathy best practices and outcomes** into programming and experiences.

ROADMAP to Empathy Project Goal

This project will enhance the ROADMAP to:

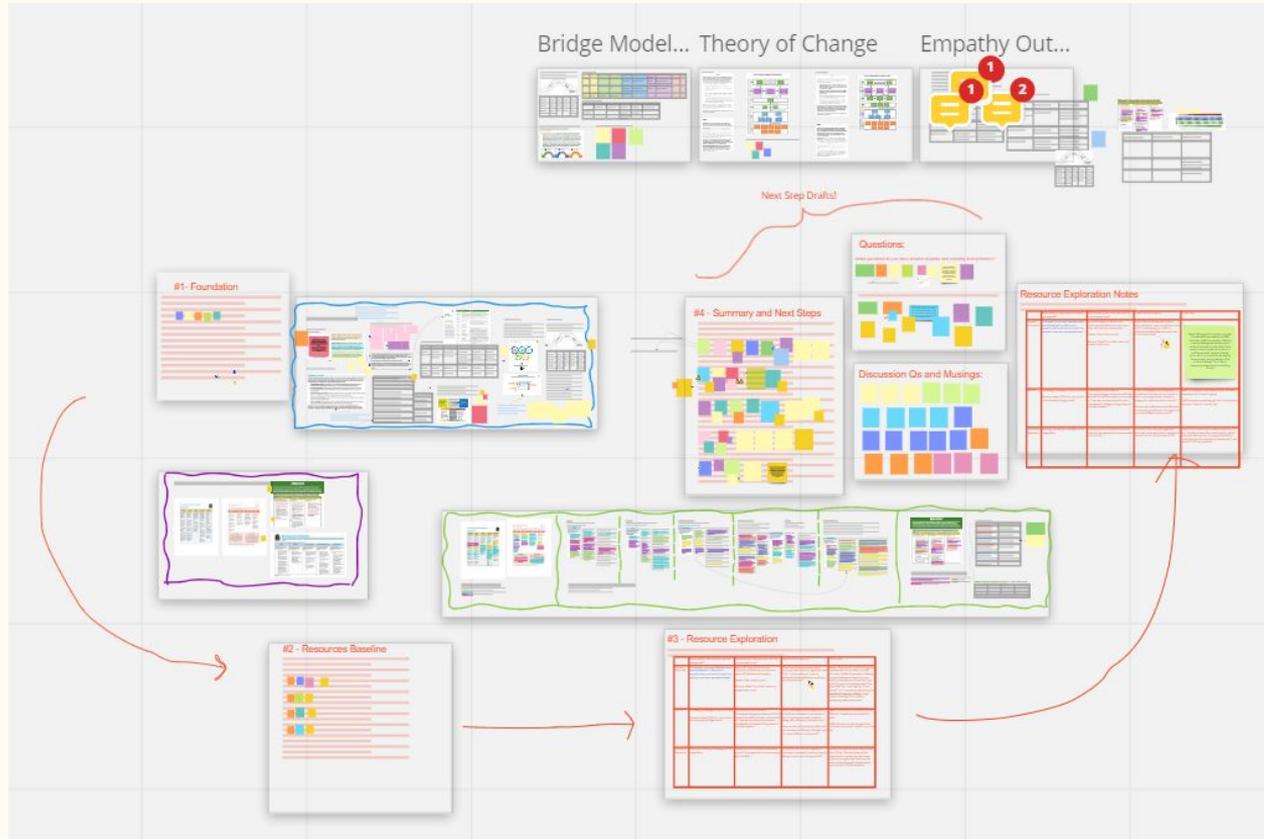
- **operationalize** empathy best practices and
- **increase capacity** to develop and deliver effective empathy-based programming and experiences



ADVANCING
CONSERVATION
THROUGH
**EMPATHY FOR
WILDLIFE**



Part I: The Big Think



What hurt our brains:

- Affective Empathy
- Best Practices and The Bridge Model
- Empathy Outcomes and Related Emotions
- Path from Empathy to Conservation Action



Affective Empathy

Affective Empathy is described as the vicarious feelings or emotions that arise in response to observing the emotions or experience of another. In this construct one can physically feel the emotions or experience of another...

The Big Question:

Can we **effectively** influence affective empathy at our institutions (and should it be a priority)?

Best Practices and The Bridge Model

MECAP Best Practices: Framing, Modeling, Increasing Knowledge, Providing Experiences, Practice, Activating Imagination

WPZ Bridge Model Practices: Assuring Welfare, Introducing the Animal, Informing our Audience, Inviting Perspective-Taking, and Connecting to Caring Action

The Big Question:

Which practices would be most **practical** and **effective** for our staff and volunteers?

Empathy Outcomes and Building-Blocks

One of ROADMAP's core elements is the development of program outcomes under three categories: Feel, Learn, and Act. A goal of this project was to develop an empathy-based outcome "menu."

The Big Question:

Do we focus on established indicators of empathy or also on building-blocks, like related emotions, that are known precursors to empathy?

Path from Empathy to Conservation Action

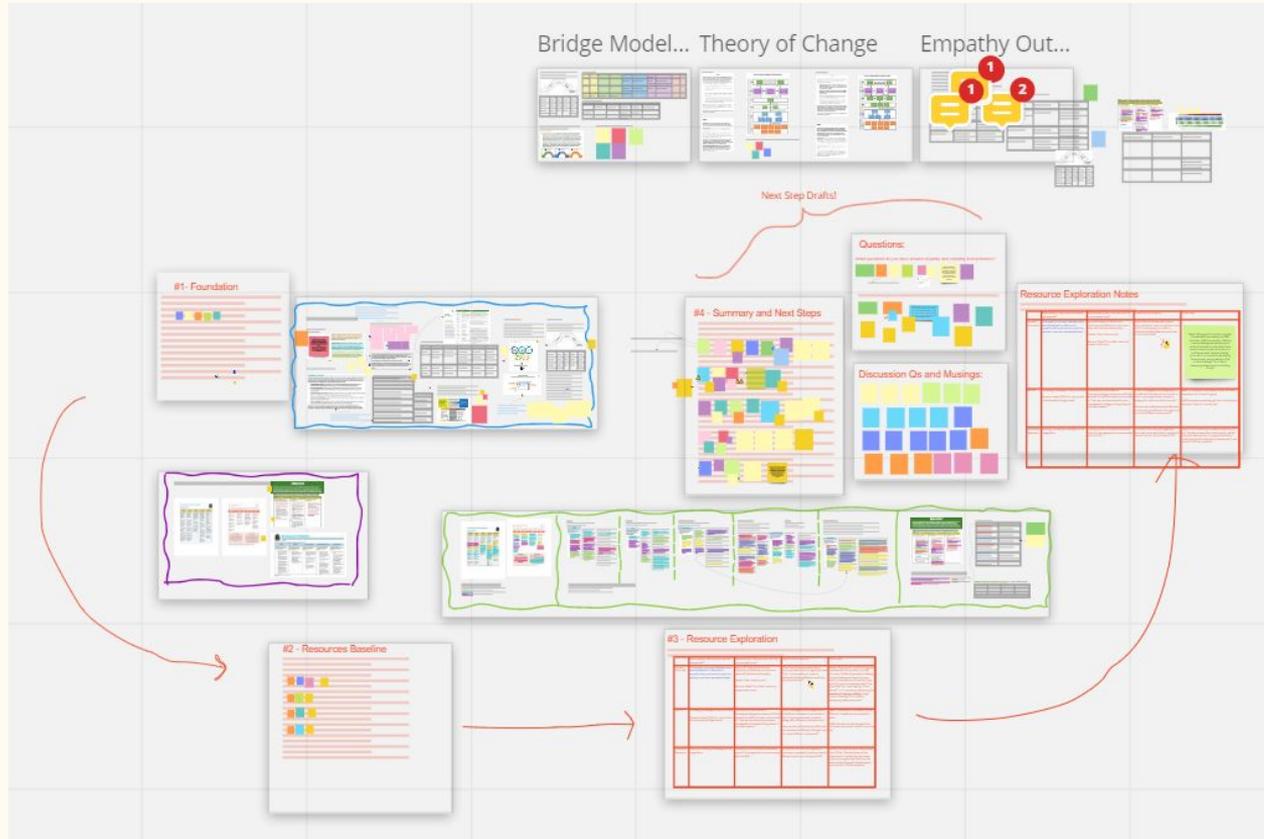
ACE for Wildlife:

- Purpose: We bring together like-minded professionals to strengthen how accredited institutions create, use and evaluate practices to foster empathy for wildlife and people, **leading to** conservation actions.
- Value #2: We believe that empathy is a leading **pathway to** behavior change.

The Big Question:

Empathy → ????????? → Conservation Action

Part I: The Big Think



What hurt our brains:

- Affective Empathy
- Best Practices and The Bridge Model
- Empathy Outcomes and Related Emotions
- Path from Empathy to Conservation Action



Theory of Change

Caring Action: A person shows positive behavior towards or engages in direct action to help a specific, individual animal/plant. For example, self-regulates behavior to make the animal feel safe or provides direct care for the animal/plant.

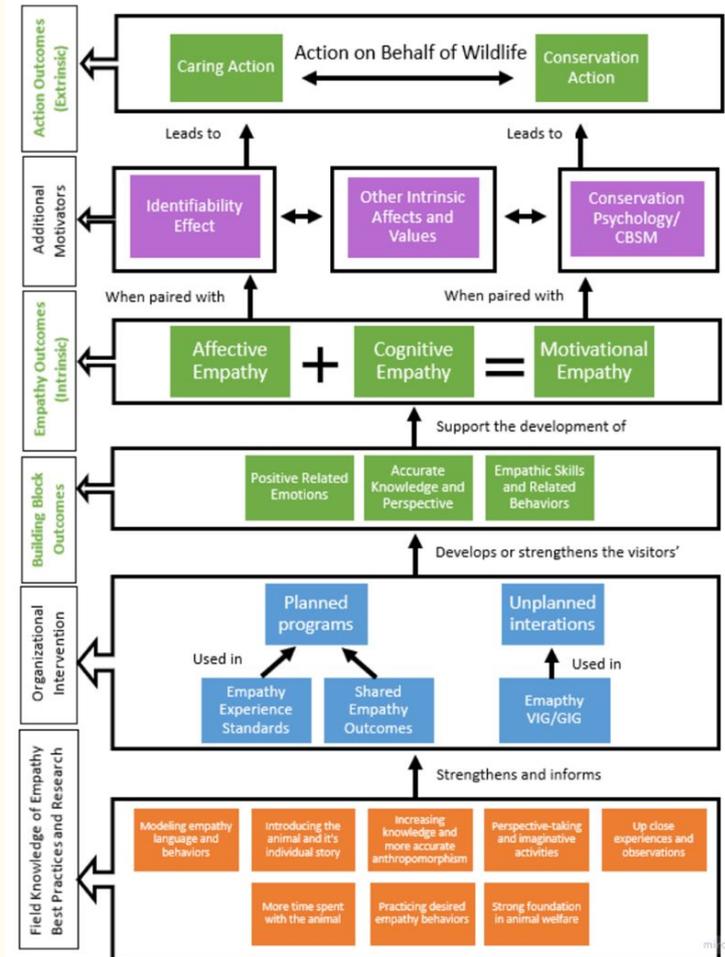
Conservation Action: A person takes action to help species/ecosystems/the environment. For example, donates to a conservation organization or makes an “eco-friendly” lifestyle choice.

Identifiability Effect: A person is much more likely to have and act on empathic feelings with a specific, identifiable individual, compared to larger, vaguer groups. This is strongest when the individual is in their presence or is known to them. However, this can also apply to a story of an individual if the helping action can be taken while the person is still engaged with the story.

Intrinsic Affects and Values: There are many affects and values, besides empathy, that correlate to an increase in beneficial action on behalf of wildlife. These include emotional affinity towards nature, feeling a part of nature, environmental self-efficacy, positive experiences in nature, and personal values.

Community-Based Social Marketing (CBSM): One of the strong branches of conservation psychology is community-based social marketing (CBSM), which applies research in social psychology to promote sustainable behaviors at the individual and community level. High-level, CBSM focuses on increasing motivations and reducing barriers.

Theory of Change: ROADMAP to Empathy Project

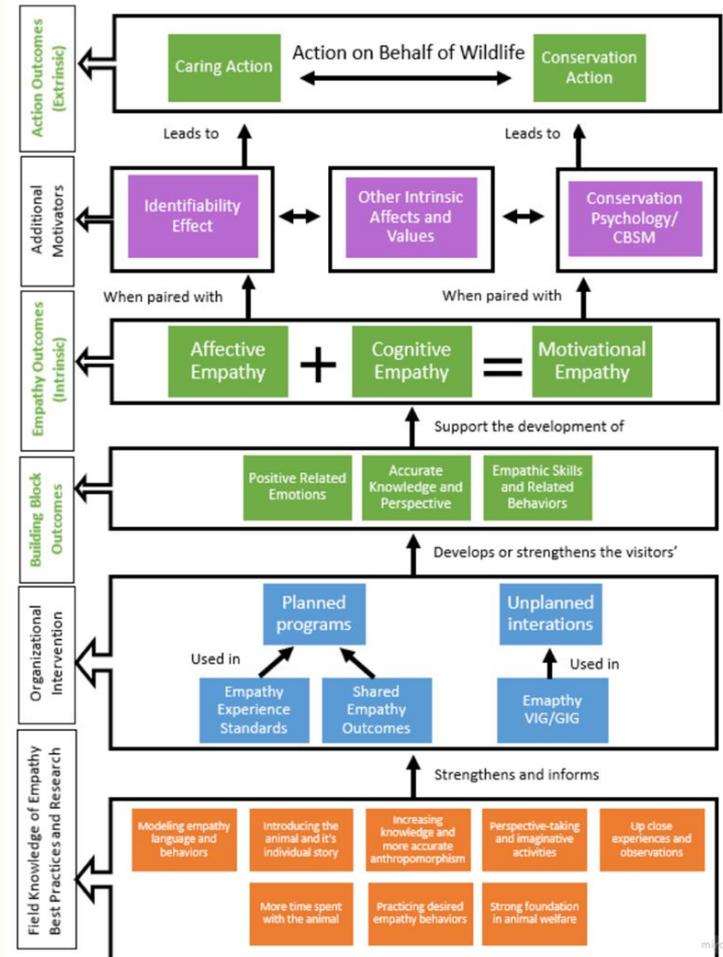


Theory of Change

1. For some audiences or programs, it might be appropriate to focus just on **Building Block Outcomes** which are known to support the development of empathy. These might be intrinsic or extrinsic changes we want to see as a result of a program or experience.
2. For others, we might want to additionally and specifically target **Empathy Outcomes** (the three types of empathy) which are solely intrinsic changes within an individual.
3. In some cases, we could target additional motivators to be more likely to achieve extrinsic **Caring Action Outcomes** which include an outward commitment to act or the behavior of caring action.
4. And in certain circumstances, we might be able to target many additional motivators (and remove barriers) to be more likely to achieve specific extrinsic **Conservation Action Outcomes**, which include an outward commitment to act or the behavior of conservation action.

We want to acknowledge that few of our empathy-based programs will be able to single-handedly achieve our institutions' goal of conservation action on behalf of wildlife. We also want to emphasize that **every outcome level (green) is as valuable as the next** and all our empathy-based programs support guests on the path to empathy and action.

Theory of Change: ROADMAP to Empathy Project



Empathy-Based Outcomes

FEEL	LEARN	ACT
<p>As a result of programming, our audiences will develop/strengthen or reduce/end their:</p> <p><u>Related Emotions</u> ↑</p> <ul style="list-style-type: none"> - connection to ___ - desire to spend more time with ___ - confidence in animal welfare at CPZC/DZ - feelings of love, like, admiration of ___ - appreciation for ___ - interest in learning about ___ - curiosity for ___ <p><u>Related Emotions</u> ↓</p> <ul style="list-style-type: none"> - fear or disgust of ___ - prejudice/cultural stigma (?) of ___ 	<p>As a result of programming, our audiences will know or comprehend:</p> <p><u>Knowledge that builds empathy</u></p> <ul style="list-style-type: none"> - animal welfare at - the life/personal history of - the natural history of - the needs and wants of - similarities and differences - another as an individual/whole being with agency and mind - staff's emotions and knowledge about <p><u>Cognitive Empathy</u></p> <ul style="list-style-type: none"> - emotions of another - experience of another - perspective of another 	<p>As a result of programming, our audiences will be more likely to:</p> <p><u>Empathic Behavior:</u></p> <ul style="list-style-type: none"> - model empathy - teach others - use empathic language - use observation skills - spend more time with - practice perspective taking, take the perspective of - demonstrate recognition of animal as an individual (uses names and pronouns, greets animal, comments on individuality, etc.) <p><u>Caring Action</u></p> <ul style="list-style-type: none"> - express a desire to help an individual - make a commitment to help an individual - take action to help an individual (behave respectfully around, provide direct care for, protect from danger, donate time or money to care of individual, etc.)
<p><u>Empathy-Based Emotions</u></p> <ul style="list-style-type: none"> - desire to help (motivational empathy) - accurate "emotional sharing" or vicarious feelings (affective empathy) 	<p><u>Empathic Skills</u></p> <ul style="list-style-type: none"> - how to observe another - how to interpret behavior - how to take another's perspective - how to use empathic language - how to model empathy - how to take caring action - how to take conservation action 	<p><u>Conservation Action</u></p> <ul style="list-style-type: none"> - express (verbally, written, etc.) a desire to help species/ecosystems - make a commitment to help species/ecosystems - take action to help (donation of time or money to conservation, change in personal behavior/life choices,

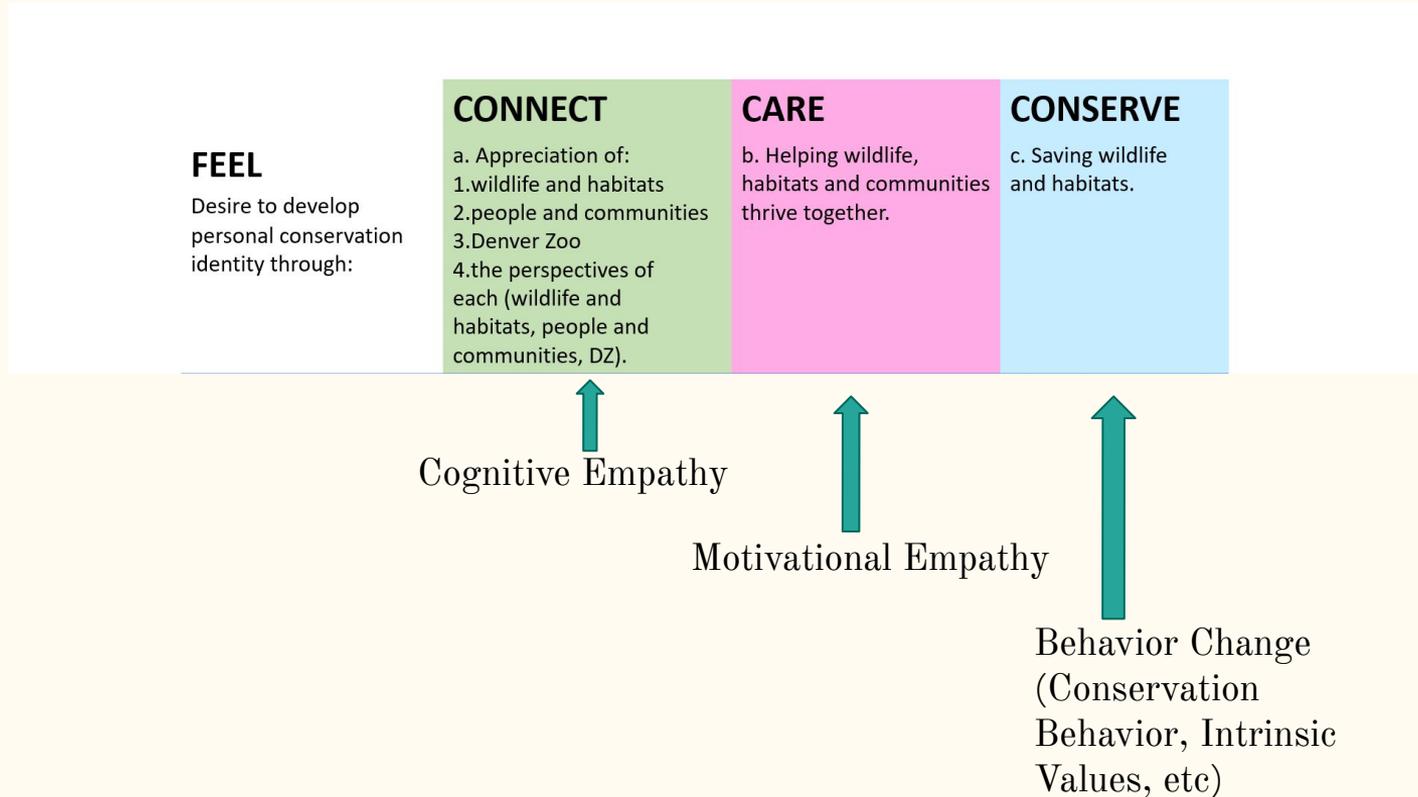
- The three types of empathy live in this document, but the majority of outcomes are empathy building-blocks like related emotions, knowledge, skills, and behaviors.
- You'll also see outcomes related to both caring and conservation action.

Interpretive Master Plan

FEEL Desire to develop personal conservation identity through:	CONNECT a. Appreciation of: 1.wildlife and habitats 2.people and communities 3.Denver Zoo 4.the perspectives of each (wildlife and habitats, people and communities, DZ).	CARE b. Helping wildlife, habitats and communities thrive together.	CONSERVE c. Saving wildlife and habitats.
LEARN People (communities), wildlife, and habitats rely on each other (One Health).	a. People, wildlife and habitats are interconnected. i. People are part of a larger ecosystem.	b. People can care for and about wildlife, habitats, and communities/people to help them thrive.	c. People can positively impact and conserve wildlife and habitats.
ACT Engage in	a. Caring actions which build to conservation actions.	b. Caring actions which build to conservation actions.	c. Conservation actions, as supported by caring actions.



Empathy as Pathway to Conservation Action



Empathy in Practice

CONNECT

Interconnectedness
One Health
Empathy

onehealth
names
ecology birthdates
adapataions empathy
naturalhistory
positiveemotionalreactions
sex
interconnectedness
fosteringconservationidentity

Experience Standards



Development of Empathy

12

Our programs integrate experiences that enhance participants' abilities to perceive, understand and care about the experiences or perspectives of others.

Denver Zoo programmed learning experiences provide opportunities for...

Framing	Modeling	Increasing Knowledge	Animal Interaction & Practice	Taking Perspective
<p><i>Facilitators choose words that acknowledge the/an animal as an individual. Facilitators:</i></p> <ul style="list-style-type: none"> • Frame conversations about animals as individuals with unique experiences, jobs, needs, personalities and intentions. • Intentionally choose words (names, pronouns) that encourage participants to see animals as individuals. • Provide space and time to talk about and reflect on an animal's experiences, personality and intentions, and compare and contrast those to our own. • Verbally acknowledge an animal's experience in conversation, leaving space for questions about an animal's perceived thoughts or feelings. 	<p><i>Facilitators demonstrate their own positive attitudes, values and behaviors toward animals and nature. Facilitators:</i></p> <ul style="list-style-type: none"> • Physically model the empathic behaviors we want participants to perform. • Support teachers and caregivers as role models by engaging them and modeling ways of interacting, asking questions, and talking about animals with children. 	<p><i>Facilitators share information about an animal's needs, experiences, behaviors and life history. Facilitators:</i></p> <ul style="list-style-type: none"> • Share information that helps participants understand how and why an animal behaves a certain way. • Facilitate conversations that share information about individual animals, their job at the Zoo, and their relationship to their wild relatives. • Draw on similarities and differences between an animal's experiences and our own. 	<p><i>Facilitators provide opportunities for rich, direct and meaningful interaction with animals. Facilitators:</i></p> <ul style="list-style-type: none"> • Provide opportunities for participants to care for, feed, train and/or interact with animals in ways that require empathy. • Have discussions about how to know what different animals need. • Call out and positively acknowledge when desired empathetic statements, questions and resulting behaviors are displayed. • Provide repeated experiences and consider opportunities for multiple interactions with the same animal. 	<p><i>Facilitators activate the imagination of participants to take on the perspective of others. Facilitators:</i></p> <ul style="list-style-type: none"> • Enable perspective-taking dialog. • Facilitate role playing to take on the identity of an animal or human (community member, scientist, etc) based on observations and species knowledge. • Use storytelling about an animal's life to help participants identify with the animal. • Provide opportunities for participants to use mimicry to activate kinesthetic empathy, in order to increase understanding about the animal.

Experience Standards to Facilitation

 EMPATHY BEST PRACTICES & FACILITATION TECHNIQUES			
Technique	Best Practice	In Practice	Example Language Notes
Model/Frame Behaviors	Framing an animal/plants as an individual with unique experiences, jobs, welfare/needs, personalities/personal history, and intentions/agency	Facilitators use an individual animal's name, pronoun, and perspectives to highlight an animal as an individual rather than a species.	
	Using words that matter	Facilitators use words such as "Habitat" or "home" when describing an animal's living space, rather than "exhibit" which refers to the design of the whole space. Facilitators use the words "habitat" or "home" to highlight that the space belongs to a living, breathing animal instead of an object that is on display.	
	Acknowledging guests' perceived thoughts/feelings about animals/pants	Facilitators validate participants' thoughts, feelings, and knowledge of animals through statements of understanding and reassurance. While facilitators do acknowledge that some people may feel fear or disgust, they do not reinforce it and instead talk about the benefits of having decomposers like them in our environment.	"I understand how you could think that because..." or "That makes sense. I used to think the same thing until I learned..."
	Sharing personal emotions, experiences, and/or perspectives	Facilitators share personal relationships, and of love, like, admiration, curiosity, and/or connections toward animals and nature.	
	Model how to make observations, ask questions, interpret behavior, take others' perspective, and perform caring actions toward animals/plants/others.	Facilitators utilize language that frames how to make observations, express curiosity, and/or watch an animal to better understand animal behavior. Facilitators demonstrate/call attention to/positively reinforce caring actions preformed. Note: Caring actions could include expressions of desire to help animals/others, behaving respectfully around animals/others, protecting	"I've noticed that if I keep my hand still, the millipede starts to feel comfortable/safe and will begin to uncoil and walk around on my hand!" "I have found the best way to touch a stingray is by keeping my hand flat in the water, so that when they choose to swim close enough I am able to touch them done their back, just like they had to be touched!"

Experience Standards to Facilitation

<p style="text-align: center;">Increase Understanding</p>	<p>Utilize welfare indicators to emphasize how one knows what different animals need or why they behave in a certain way.</p>	<p>Facilitators utilize welfare Indicators such as health, comfort, safety, opportunity/choice/agency, and ability to develop relationships, and engage with their environment.</p>	
		<p>Facilitators narrate animal behaviors and connect them to (interpretations of) the individual animal's emotions and intentions. Facilitators share how and why an animal is or is not behaving a certain way</p>	
	<p>Utilize storytelling to help guests understand the animal's role in their ecosystem, at the zoo and/or their relationship to their wild relatives.</p>	<p>Facilitators utilize storytelling about the lives of the animals/plants and/or from the animal's/plant's perspective to create empathic responses as participants identify with the characters.</p>	
	<p>Provide comparisons between human and nonhuman animals. Reinforce differences with appropriate species natural history</p>	<p>Facilitators point out simple similarities and differences between participants and the animal or plant including their needs, specific characteristics, behaviors or other comparisons.</p>	<p>"Nikita the tiger might look lonely because that's how we would feel. But Amur tigers live alone and are happier that way, except during mating."</p>

Experience Standards to Facilitation

Develop Guest Skills	Activating the imagination by encouraging role play or mimicry of an animal.	Facilitators encourage people to imagine themselves as an individual animal, and ask open-ended questions about their personal needs, wants and likes or dislikes from the animal's perspective in a given context. These questions help the participant to focus on the perspective of the animal and build empathy, rather than sympathy which does not involve a shared perspective.	"What do you notice about Maddy the penguin's movement? Can you move like her? Why do you think you/she has to move in this specific way?"
	Encouraging guests to interpret animal behavior.	Facilitators prompt focused observation of an animal's physical characteristics and movements to interpret participants' noticings . Facilitators help form connections between observations and interpretation of animal behavior through narration of participant noticings .	
	Identifying and positively acknowledge when guests display desired empathic statements, questions, and caring action behaviors.	Facilitators verbally acknowledge people when desired empathic statements, questions and behaviors are displayed	"Thank you for observing 15-year-old Jelani quietly and not tapping on the glass."
	Providing opportunities for guests to share feelings (emotional sharing) with an animal by caring for, feeding, training, and experiencing repeated interactions (continuity) with animal/plant.	Facilitators create/narrate experiences that show or highlight an animal demonstrating natural behaviors/showing a sense of agency. If possible, facilitators provide repeated and extended experiences for participants to engage with animals and learn new things about them.	

Part II: Coming Soon

Final Project Share Out (2023):

- Empathy-infused ROADMAP Resources
- Empathy Trainings for Staff
- Empathy-based Programs and Interactions
- Evaluation and Focus Group Data
- More Reflections and Lessons Learned
- Empathy for Plants?!

