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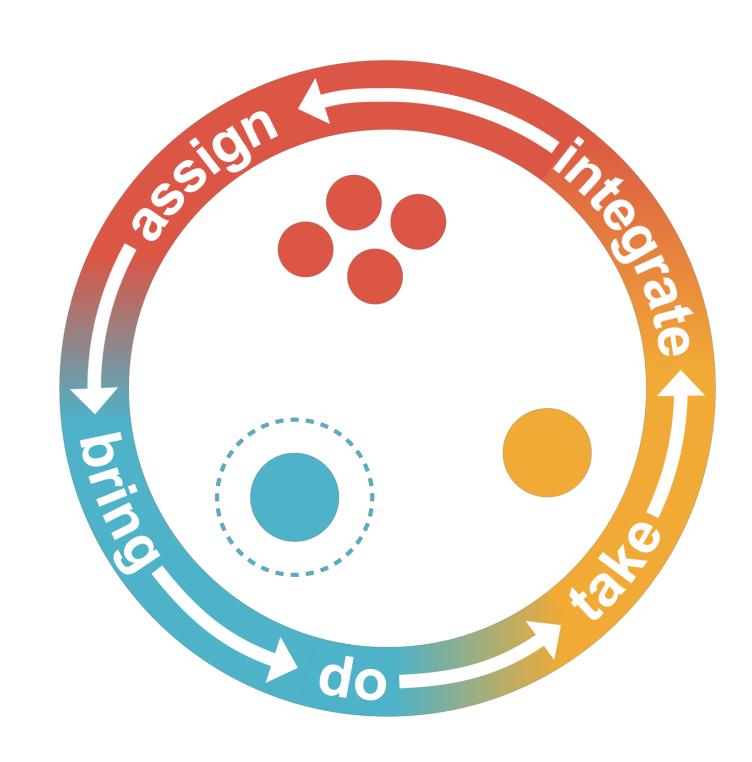
# Why Zoos & Aquariums Matter Wave 3: STEM Matters

### visit: wzam.org

#### **PROJECT GOALS:**

The project asks, "What are the real outcomes of the zoo or aquarium enterprise, both as a visitor destination and as a public voice in public media?" and has the following three aims:

- 1. To understand how visitor goals and behavior impact learning;
- 2. How the conservation education agenda of most Z/As interlaces with those goals; and
- 3. How the public situates the voice of Z/As in society.



This a collaborative study between three research teams – New Knowledge Organization, the Lifelong Learning Group at COSI, and the Center for Research on Lifelong STEM Learning at Oregon State University – to understand how visitor preconceptions, agendas, behavior, and learning relate to the conservation education agenda of most zoos and aquariums (Z/As).

#### PROJECT FRAMEWORK

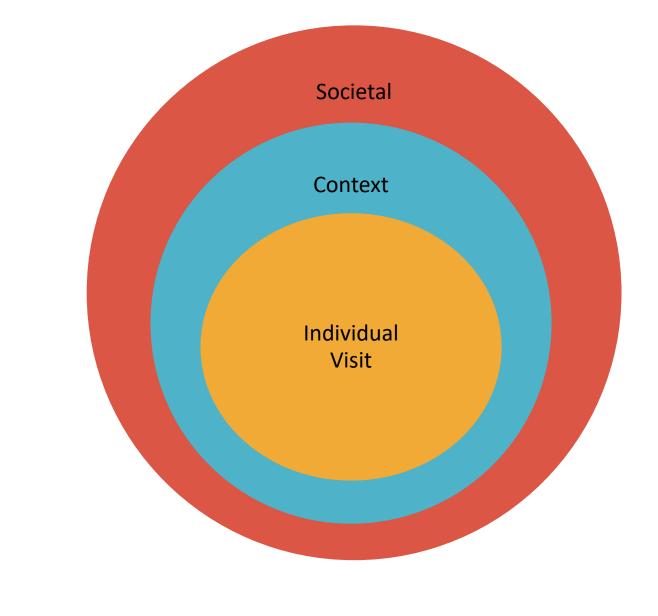
Using a psychology-driven framework, we identify the process of experiencing Z/As during a visit or from hearing about Z/As in different forms of media.



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#### HERE'S WHAT MATTERS:

 Looking at the societal, contextual, and visit level of an individual to more fully understand outcomes from a single visit



- Triangulation of data cross the five phases of pre-entry, entry, visit, depart, and reflect
- Go-pro study to understand within visit dialogues;
   experimental treatments within a visit to understand dialogues and behaviors
- Distributed data collection on the largest study of Z/A visitors to date; fully contextualized the conditions of an individual's visit
- Largest, most complex zoo/aquarium visitor education study to date
- The public wants to trust Z/As but desires:
  - More ethical transparency
  - More evidence of inter-institutional collaboration
  - More direct and broad STEM learning offerings
- A future study will focus on how staff and volunteers drive community STEM discourses through their social networks.

#### RESEARCH PARTNERS AND QUESTIONS



- What are the public perceptions of Z/As as part of the STEM Learning Ecology?
- What is the institutional voice of Z/As in the public sphere and how is the Z/A voice situated within the landscape of informal STEM content providers?



- What is the individual condition of the visit?
- How is the visit contextualized in the life stage and learning ecology of the individual?
- What are common entry themes and exit outcomes tied to those themes, and how dominant is each across the visiting population?



- What are the entry characteristics of visitors?
- How do entry characteristics inform behaviors during a visit?
- How does learning conversation relate to movement and ingroup behaviors and choices?

### garıbaygroup

Process and outcomes evaluation.

#### ASSOCIATION OF ZOOS AQUARIUMS

• Coordination, practitioner guidance to the project, curriculum development and training tools development.



Curriculum development.