

Session 9: Inquiring Minds and Promoting Discussions

Session Overview

This session is one of four *Apply and Refine* sessions. It introduces and provides an overview of inquiry in informal environments. Participants conduct an investigation, then observe visitors and facilitators interacting as they engage in an inquiry on the museum floor. The second part of this session focuses on how educators can build upon learners' diverse responses to questions to engage them in learning through discussions and offers practical discussion-leading strategies.

Session Objectives

In this session, participants:

- . are made aware of how inquiry science looks in informal settings;
- . experience inquiry-based, hands-on ocean sciences activities used in informal settings;
- . observe an experienced educator's use of questioning and response strategies with visitors;
- . discuss the essential features of inquiry;
- . learn about and analyze a variety of responding strategies to promote discussions between facilitator and visitors;
- . learn how to effectively:
 - draw in all learners to understand what they are thinking;
 - create an open intellectual environment where learners learn through doing and discourse;
 - build upon learners' diverse responses to questions to engage them in learning through discussions.

Session Activities at a Glance

Quick Write. Participants reflect on and write about their thoughts from the reading. They share their ideas.

Activity: Crayfish Investigation. Participants do a crayfish investigation, a modified informal version of a hands-on inquiry-based activity originally designed for the classroom.

Observation: Inquiry on the Floor. Participants have the opportunity to observe an on-the-floor version of the Crayfish Investigation. They take notes about the similarities and differences between the version they did in the classroom and the floor version.

Discussion: Comparing and Debriefing Crayfish Investigations.

Participants revisit the crayfish inquiry investigation and discuss how leading the activity for general visitors in an informal setting differs from the classroom experience they had.

Research Discussion: Responding strategies. Participants are given a handout describing ideas from research about effective ways to respond to learner's questions and comments while encouraging discussions. They review the ideas then apply them to their own experiences.

Activity: Apply responding strategies. This activity provides an opportunity for participants to apply what they've learned about responding strategies.

Discussion: Overview of essential features of inquiry. The essential features of inquiry are discussed and common patterns of inquiry in museums described.

Science Briefing: Seaweeds. A presentation about seaweeds provides participants with content about seaweeds for their use as they present on the floor. This presentation is also used to model (1) how to present science content in an interactive way, and (2) how to effectively respond to questions and comments while encouraging discussions.

Work with Partner. Participants work with their partner to incorporate new ideas into the design of their activity.

Homework. Readings and tasks are assigned.