

The Early Science Initiative presents

# PROFESSIONAL LEARNING EXPERIENCES

Below are a few of the current professional learning experiences we are offering to educators. Contact us to learn more and to create a customized professional learning experience to best meet your needs.

## Welcome to ESI: Cultivating collaborative networks for sustainability & quality improvement

ESI promotes science as a driving force for high quality teaching and learning for infants, toddlers, and preschoolers. Using the Early Science Framework, adapted from the K-12 framework, participants will begin to see science all around them, offering endless opportunities to engage children in hands-on, minds-on learning. By slowing down and providing children the time to dig more deeply within an experience using all their senses, participants will develop their own lens of science as well as see how it connects learning across learning domains.

## Engaging in Science Practices: Exploring How Things Move with Ramps and Balls

Science Practices are how children actively engage in discovering the answers to their questions. Through the lens of the Early Science Framework, participants will get "hands-on" as they engage in various challenges around ramps and balls, supporting understanding of science practices. Through reflection and small-group discussions, participants will further consider how to adapt the use of these practices across ages as well as how to access family's funds of knowledge to make their lessons more meaningful and relevant.

## Using the Early Science Framework as the Foundation of Planning: Investigating Clothes

Extended experiences provide opportunities for children deepen their learning about concepts as well as extend their understanding across contexts. Through the lens of the Early Science Framework and focus on clothing, participants will engage in hands-on experiences and discussion groups to stretch their thinking in planning extended experiences for their children and engaging families in the learning process.



**EARLYSCIENCEINITIATIVE™**

## **Science Read-Alouds: A Springboard into 3-Dimensional Learning for Young Children**

Literacy and science go hand in hand. Stories, specifically, offer an excellent way to springboard into specific science learning. Whether the story is non-fiction, a science-based fictional story or classroom favorite, stories provide relatable examples that help surface the science and make connections to children's own lives. We will begin with stories and then build out science experiences in groups, ensuring they are relevant, hands-on, minds-on and DAP. Participants will also collaborate in discussion groups on ways to engage families, highlighting the importance of keeping experiences simple and reflective of children's daily lives.

## **Designing Culturally Relevant Science Opportunities: Accessing families' funds of knowledge**

Building relationships with families and learning about their culture is a first step. How you then use that information in your classroom is what makes your planning more meaningful and culturally relevant. Families are a valuable resource of information and should be viewed as our partners in children's learning. Through our own reflections of our childhood and small group discussions, participants will see how children's lives and family experiences help us surface science in deeper and more meaningful ways.

## **Stop and Smell the Roses: Surfacing cross cutting concepts**

Crosscutting concepts are the big ideas that connect experiences and deepen children's learning. Within most experiences, there are multiple crosscutting concepts that can be surfaced. Through the focus of plants, we will identify crosscutting concepts and how to engage children in their understanding. We will develop connected experiences around plants that allow us to highlight crosscutting concepts, one at a time.

## **Scientists from Birth: Teaching practices that support infant and toddlers' curiosities and excitement to learn**

Infants are born ready to learn about the world around them through exploration with all their senses. We can support a strong science foundation with infants and young toddlers through our teaching practices. Participants will engage in multi-sensory experiences and small group discussions to broaden their ideas as to how to offer rich science opportunities and engaging environments that provoke children's curiosities and welcomes their exploration.

## **Out of This World: Exploring earth and space science in meaningful and hands-on ways with young children.**

Outer space, rockets, and astronauts are exciting topics, full of science possibilities. However, they are also very abstract for young children, making meaningful and hands-on learning a bit difficult. We will peel back the layers around Earth and Space Science to better understand what this core idea really encompasses. We will come back down to earth to explore earth and space science that is around us as well as brainstorm ways to provide hands-on experiences meet children's interests that are out of this world.