STEAM Stretches Across the ELOF Domains

<table>
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<th>CENTRAL DOMAINS</th>
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<td>APPROACHES TO LEARNING</td>
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<td>INFANT/TODDLER DOMAINS</td>
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NATIONAL CENTER ON
Early Childhood Development, Teaching and Learning
STEAM Stretches Across the ELOF Domains

- Cognition (Infant/Toddler)
  - Exploration and Discovery
  - Memory
  - Reasoning and Problem-Solving
- Cognition (Preschooler)
  - Mathematics Development
  - Scientific Reasoning
- Approaches to Learning
- Social and Emotional Development
- Language and Communication
- Perceptual Motor and Physical Development
Nurturing, responsive, and effective interactions and engaging environments

Highly individualized teaching and learning

Implementing research-based curriculum and teaching practices

Parent/family engagement

Screening and ongoing child assessment
Objectives

• **Identify** ways infants, toddlers, and preschoolers naturally engage in inquiry, reasoning, and problem solving through every day routines and learning opportunities

• **Describe** how the STEAM components share a common approach and focus

• **Provide strategies** to support children’s inquiry and STEAM skills in the early education setting and at home
What is STEAM?

Science  Technology  Engineering  Art  Math
STEAM is for Everyone

STEAM is about how people explore the world, not which facts they know.
STEAM is All Around
A Common Approach and Focus

STEAM Mindset

STEAM Knowledge

Language of STEAM

STEAM-related Skills
STEAM Mindset
STEAM Knowledge
Language of STEAM

What happens when the weather changes?

¿Qué pasa cuando cambia el clima?
Speak The Language Of STEAM

- Observe, observation
- Question
- Predict, prediction
- Similar, different
- Compare, contrast
- Measure
- Count
- Investigate
- Explore
- Experiment
- Test
- Discover
- Record
- Explain
- Hypothesize, hypothesis, guess

[Image of child observing a tank with a chart of STEAM activities]
STEAM-related Skills
How We Can Support STEAM Learning

Engaging Environments

Nurturing, Responsive, & Effective Interactions

Learning Experiences / Activities
Engaging Environments

- Provide open-ended materials
- Use a variety of materials
- Pay attention to children’s interests
- Engage the senses
- Consider children’s developmental levels
- Arrange materials so they are accessible
Nurturing, Responsive, & Effective Interactions
Learning Experiences/Activities
Learning Activity: STEAM in Everyday Experiences & Activities
Review