



Training Title: STEM: Science on a Shoestring

Training Blurb: Whenever we explore science phenomenon with kids, it is helpful to look for concepts or “big ideas” that span across the disciplines of physical, life and earth science. In this way, kids begin to see the way science fits together and how investigations can be linked together. Afterschool staff will be exposed to the seven “cross cutting concepts” identified in the Next Generation Science Standards adopted by Vermont Agency of Education in 2013. Each concept will be illustrated through participation in a simple, low-cost investigation appropriate for afterschool settings.

Goals:

1. To understand the benefits of learning the seven “big ideas” (cross-cutting concepts) that link the major science disciplines together while exploring the actual practices of a scientist.
2. To deconstruct a science and recognize its value by extracting three key ingredients – learning value, engagement potential, and “cost” benefit ratio in time, staff expertise and money.

Training Audience: Direct Service Staff

Trainer Category:

- Core Trainer
- Professional Trainer
- Partnership Trainer

Content Applicable for Child Grade Range:

K - 6

Content Level: Basic

Instructional Methods:

- Pre-Reading
- Pre-Assessment
- Lecture
- Guest Speaker/Team Teaching
- PowerPoint
- Large Group Discussion
- Investigations/Practice
- Active Movement
- Creating a Product/Sample

Core Competency:

- Child and Youth Development
- Curriculum and Learning Environment
- Families and Communities
- Healthy and Safe Environment
- Program Organization and Professionalism

Training Duration: 2 hours

Participant Capacity: 8 Min / 25 Max

- Video/Audio
- Role Playing/Modeling
- Team/Partner Exercises
- Take-Away Samples/Lesson Plans/Forms
- Goal-Setting/Action Steps for Future
- Bibliography/Websites/Handouts
- Other _____