

Mother Goose Cares About STEM in the Early Years (Fall 2018)

(A training offered by Mother Goose Programs / Vermont Center for the Book, with funding provided by the A.D. Henderson Foundation.)

Goals:

- Educators will learn how to encourage and nurture children's natural curiosity about the world around them through STEM inquiry and explorations.
- Educators will learn how to intentionally incorporate the language, concepts and skills of STEM into their daily interactions with children.

VELS Alignment:

Learning About the World

Mathematics : Number sense and quantity, counting and cardinality, measurement and classification

Science : Physical science

Guiding Principles Alignment:

Outcome B : Acquisition and Use of Knowledge and Skills (showing curiosity and initiative; exploring multiple environments; showing persistence; following through with plans; problem-solving in a variety of ways; communicating and reasoning; demonstrating age-appropriate concept development; exploring materials, representing ideas and stories through pictures and play; building and using vocabulary)

Outcome C : Taking Appropriate Action to Meet Needs (using objects as tools to make things happen; demonstrating self-confidence; communicating in a variety of ways)

Objectives:

Educators will gain knowledge and experience about how to:

- Select materials and STEM content for STEM opportunities that are developmentally appropriate and can be explored from multiple perspectives, in depth, and over time, building on children's curiosity and prior experiences
- Use STEM practices by asking questions and fostering children's questioning, guiding discussions, encouraging new ideas and aiding in data collection and children's representations (drawings, etc.)
- Recognize and guide children's development of other important skills included in the VELs, including working with one another, basic large- and small-motor control, language, and early mathematical understanding while doing science

- Align planning and implementation with VELs with an understanding of recent research and ideas that influence children's science capabilities and learning
- Reflect on STEM interactions with children through writings, photos and other representations (in journal and template provided by instructor)
- Provide information and opportunities for families to participate in their child's STEM learning experiences

Educators will be required to complete an Action Research project, due on a specified date after the second session.

