



Pint Size Science 2019-2020 STEM Scale-Up Program

Grade Levels: PreK-2, available in or out of school

Information Session: 4 PM, 2/6, <https://uni.zoom.us/j/746193422>

Website: www.sciowa.org/scaleup

Video Link: https://www.youtube.com/watch?v=QP_sOIH8nMY&t=5s

Award Provides:

- Full day of Professional Development
- Program guide including lesson prompts, teacher resources and books for teacher instruction
- A kit of four curriculum modules with lesson plans and classroom materials for implementation
- Additional resources, including a variety of videos and assessments accessible through the PSS website
- Multiple webinar sessions offered for ongoing professional development and collaboration amongst implementers
- Educator stipend/sub-pay (\$120) to attend professional development
- Travel stipend (\$50) to attend professional development

Additional Cost(s) to Awardee In 2019-2020:

- Opportunity for teacher license or CEU's

Approximate Sustainability Cost After Award Period:

- Replacements of consumables are not to exceed \$50

Program Summary:

Pint Size Science introduces children to STEM topics through discovery learning. Using a hands-on approach that engages and inspires young minds to explore scientific phenomena, the program works to not only build science understanding but also respond to the ever-changing interests and abilities of children. Pint Size Science includes a literacy component that pulls together the most important ideas of the STEM topic being discussed. Fundamental mathematical skills are also reinforced through activities, including counting, numbering, and graphing.

The Pint Size Science kit includes four modules of lesson prompts, materials for investigation and children's literature. The foundation of the program is the introduction module titled, "Science Sprouts". This provides an introduction to the STEM fields and scientific investigation. Recognizing the need to be flexible to existing school curriculum materials and needs of organizations, schools and students, Pint Size Science allows educators to pick the remaining three modules to complete their set of instructional materials. Implementers chose one module from each of the following groups:

Group 1	Group 2	Group3
Bits and Bots will provide an introduction for students in learning programming and coding	Classifying Creatures develops math skills in sorting and classifying as children observe and compare features of various animals and insects	Exploring Engineering continues children's natural curiosity in to how things work
Colorful Chemistry introduces young learners to the three phases of matter found on earth; solids, liquids and gases	Mini Meteorologist inspires students to measure and understand the weather happening around us	Push and Pull investigates the forces that cause motion
Tiny Tinkerers brings the Maker Movement to the early childhood learning environment	Homes and Habitats challenges students to think about where different animals live based on their environments	Fascinating Farmers brings the world of agriculture to young children

Requirements to Implement the Program:

Educator(s) must attend a full day of professional development. A memorandum of understanding signed by the building administrator is required before training or materials can be delivered.

Professional Development:

Training to create deeper connections and instructional techniques to implement a STEM rich environment with a focus on inquiry, project-based learning, questioning and evaluation of student learning. Training includes a walk-through of each classroom curriculum module.

Duration: 1 day

Date(s): Multiple options in each region will be offered July-September 2019

Location: Trainings are held in each of the six STEM regions

STEM Scale-Up Program Application Link: www.iowaSTEM.gov/Scale-Up-Application