

**Storytime STEM-packs™**  
2021-2022 STEM Scale-Up Program

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

**Website:** <https://storytimestem.com/> / [Detailed Description & Standards Alignment](#)

**Video Link:** <https://youtu.be/qHjRWuThtec>

**Award Provides:**

- **1 Storytime STEM + Computer Science Adventure** (choose Moon, Dragonland or Earth Day Adventures)
- **1 Science or Engineering Design Storytime STEM-pack** (choose 1 from *When the Wind Blows*, *Drum City*, *The Boy Who Harnessed the Wind*, *Giraffes Can't Dance*, or *On the Construction Site*)
- **1 Mathematics Storytime STEM-pack** (choose 1 from *The Secret Life of Squirrels*, *Ten Black Dots*, *Over and Under the Pond*, *The Rainbow Fish*, or *Margaret and the Moon*)
- 3 hours virtual synchronous PD
- \$ 60.00 stipend

**Additional Cost(s) to Awardee In 2021-2022:**  
N/A

**Approximate Sustainability Cost After Award Period:**  
Refurbishment costs for consumable materials range between \$10-\$20 per Storytime STEM+C Adventure, and between \$0-\$12 per Storytime STEM-pack.

**Program Summary:**

Storytime STEM-packs are a PreK-2 educational innovation designed to connect children's literature with STEM. They enable educators of young children to successfully incorporate age-appropriate STEM concepts into children's programming.

Using the storybook as context, Storytime STEM-packs present children with a phenomenon or problem. Through engagement in the practice standards for science, engineering or mathematics, and the use of a crosscutting concept, children collaboratively explain the phenomenon or solve the problem, thereby making sense of the STEM concept. The facilitation guide offers suggestions for open-ended questions to elicit children's thinking and promote discussion.

Developed as part of a National Science Foundation I-Corps grant, Storytime STEM-packs are fun and engaging for kids, easy to use with minimal preparation time and aligned to Next Generation Science and Common Core Mathematics Standards, also with alignment to Iowa content and 21<sup>st</sup> century standards.

Storytime STEM-packs can be used in classrooms, as centers, in STEAM labs, as well as public libraries, STEM camps, out-of-school programs and summer school. It takes approximately 45 minutes to complete one Storytime STEM+C Challenge or one STEM-pack.

**Included in each Storytime STEM+C Adventure:**

- 3 Storybooks
- Facilitator guides for each of the five learning challenges (each 45 min)
- Print materials
- Hands-on materials for 24 children
- 6 colorful themed vinyl mats
- 6 Bee-Bots with charging station

**Included in each Storytime STEM-pack:**

- 1 Storybook
- A facilitator guide with STEM-background and lesson plan (45 min)
- Print materials
- Hands-on materials for 24 children

**What is Required to Implement the Program:**

Educator(s) choose 1 Storytime STEM+C Adventure and 2 Storytime STEM-packs (1 science/engineering and 1 mathematics) and attend the half-day professional development. A memorandum of understanding signed by the building administrator is required before materials can be delivered. Participation in the STEM Council Scale-Up Educator Survey is also required.

**Professional Development:**

Professional Development includes an introduction to STEM learning for young children and Storytime STEM-packs, engagement in parts of your selected Storytime STEM+C Adventure and facilitation support for math and science Storytime STEM-packs.

**Duration:** Half-day training (3 hours)

**Date(s):** Summer, Tuesday-Thursday, July 13- August 5, 2021

**Location:** Synchronous virtual