

# Nevada STEMList of Recommended STEM Programs

## September 2023

### BootUp PD



#### Program Overview

BootUp is a national 501(c)(3) organization specializing in sustainable, district-wide elementary computer science professional development focused on coding, computational thinking, creativity and problem-solving. BootUp has worked with more than 1,000 elementary schools in twenty-six states, directly impacting over 600,000 students. Through ongoing professional development, model teaching, and instructional coach support, BootUp prepares participants to become confident, innovative educators who engage students with meaningful, project-based, open-ended, age-appropriate coding activities. BootUp provides beginner to advanced, interest-driven, project-based lesson plans for teachers.

#### Target Population Grades or Ages

K-5th Grade

#### A Unique or Special Focus of the Program

BootUp focuses on equipping teachers to engage students in block-based programming languages, enabling them to create and share interactive content while fostering problem-solving and fundamental computer science skills in K-5th grade students, with an emphasis on inclusivity and accessibility, all supported by a free, interest-driven curriculum.

#### Impact on Participants

The program empowers students to develop coding skills and computational thinking by engaging in personally meaningful, interest-driven projects, fostering creativity and problem-solving abilities while promoting inclusivity through culturally relevant resources.

#### Specific Skills

Students learn computational thinking and computer science concepts and practices (based on the K12 CS framework and CSTA standards). To drive deep learning, students learn to adapt and remix interest-driven coding projects that are personally meaningful to them. The BootUp curriculum features the Scratch block-based programming language and ScratchJr for non-readers so students may explore their interests with code through design, music, art, animation, games, or stories.

#### Resources Provided to Facilitators/Users

Educators receive over 100 teacher lesson plans and projects that include process and product objectives, standards, practices, concepts, vocabulary, a project sequence, and assessment suggestions. Project extensions, debugging practices, differentiation, video resources, and presentation guides are also included. All are available at no cost and updated on the website.

#### Website

<http://www.bootuppd.org>

#### Contact Information

Suzanne Carlson

[info@bootuppd.org](mailto:info@bootuppd.org)

(414) 212-5037