

Computer Science Fundamentals
2019-2020 STEM Scale-Up Program

Grade Levels: Kindergarten-5, available in school or out of school

Website: <https://newbo.co/code-org-partnership/>

Video Link: <https://youtu.be/rNIM1fzJ8u0>

Award Provides:

- Curriculum by Code.org.
- Connections with other Iowa computer science teachers through in-state support network.
- Ongoing support during implementation from NewBoCo staff, facilitators, and online forums.
- Lunch during the workshop.

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

- None

Approximate Sustainability Cost After Award Period:

- The curriculum is free forever. Estimated classroom supply costs are \$25-\$50 per class, with many supplies that can be reused year after year.

Program Summary:

Code.org's six Computer Science Fundamentals courses are designed to be flexible for your K-5 classroom. How you implement is up to you - teach CS Fundamentals for your next science unit, use it to support math concepts, add technology time to your schedule once a week, or go deeper with extension activities and projects!

NewBoCo's 1-day CS Fundamentals Intro Workshop provides support for teachers, requiring no prior computer science experience to get started. The curriculum and workshop are also designed to foster equity and diversity in the classroom, breaking down barriers and stereotypes around computer science.

Code.org's curriculum was created with the 2017 Computer Science Teachers Association (CSTA) standards in mind, but also includes opportunities to support national Math, English Language Arts, and Science standards. In fact, a recent research study (<http://bit.ly/CSAchieve>) found that classrooms with resourceful teachers see higher scores on English, math, and science standardized tests after teaching these lessons. In addition, the curriculum is available online at no cost for anyone, anywhere to teach. For more information about Code.org's goals and approach to their courses, please visit their website for curriculum values and professional learning values.

Requirements to Implement the Program:

Educator(s) must register for one of the Iowa workshops offered throughout the state. STEM Region Managers will have registration links for workshops in each STEM region.

Professional Development:

Several 1-day workshops will be held throughout the 2019-20 year. Workshops require a minimum of 12 registrations to be held. If a workshop is cancelled due to low registration, you may register for another workshop. Workshops will be offered during the summer in all six STEM regions, and additional public workshops will be available throughout the school year.

Duration: 1 day

Date(s): Multiple options will be offered in July and August. STEM Region Managers will have registration links for workshops in each STEM region.

Locations: Multiple options will be offered in July and August. STEM Region Managers will have registration links for workshops in each STEM region.