

# AFTERSCHOOL STEM AS A WORKFORCE SOLUTION

WINTER/SPRING 2017



To meet our future workforce demands, it is critical that we support the next STEM-smart generation. Informal learning environments are a wealth of untapped potential for meaningful engagement opportunities for youth in STEM and part of the workforce solution.

## WHAT IS INFORMAL STEM?

These are STEM activities that happen in programs that meet in the afternoons, on the weekends, or during summer. Informal STEM activities often build off of what students are learning in the classroom and keep students interested in what they're learning.

## WHERE DOES INFORMAL STEM TAKE PLACE?

- » Schools
- » Libraries
- » Museums
- » Science Centers
- » YMCAs
- » Boys and Girls Clubs
- » 4H and FFA
- » Boy Scouts and Girl Scouts

## WHAT CAN INFORMAL STEM LOOK LIKE?

**1** Field trip to the zoo where they have opportunities to interact with animals and zookeepers.

**2** A hands-on robotics activity in an afterschool program.

**3** Building boats to complete challenges using concepts of buoyancy and force.

## SOME OF THE BENEFITS TO STUDENTS PARTICIPATING IN INFORMAL STEM ARE:

- » Gives youth opportunities to further develop their STEM content knowledge and practice, and provide chances to reflect on that learning.
- » Promotes strong relationships among peers and with adults,
- » Connects students' learning to the broader world, and
- » Prioritizes youth voice and choice, empowering students to take on leadership roles.
- » Encourages kids to learn by discovery, play, and independent exploration.

After completing STEM activities in an afterschool program, students showed a 63% increase in their interest in STEM.

\*Based on 350 Common Instrument surveys administered to students in 2016

## HOW CAN YOU SUPPORT INFORMAL STEM?

**1** Maintain Iowa Code section 256.26: the Before and After School Grant Program

**2** Support language for afterschool and STEM in Iowa's ESSA Implementation Plan

**3** Prioritize afterschool and summer programming in STEM initiatives funded or overseen by the State