





# The Iowa Million Girls Moonshot Minute

April 2021

Welcome to the Iowa Million Girls Moonshot Minute! This new, monthly publication from the Iowa Afterschool Alliance provides dozens of STEM out-of-school time professional development opportunities and activities to strengthen the quality of programs across the state. We hope that you find these resources valuable! Learn more about the national Million Girls Moonshot movement here.

# **Iowa STEM Resources and Trainings**

## Survey

#### Let's Show the Nation how lowa does STEM in Afterschool!

The Iowa Afterschool Alliance is a part of the Million Girls Moonshot, helping out-of-school time programs as they increase the quality of STEM learning opportunities for all young people, especially for underserved and underrepresented youth. (Learn more **here**)

The Moonshot seeks to re-imagine who can engineer, who can build, who can make. It will inspire and prepare the next generation of innovators by engaging one million more girls in Science, Technology, Engineering, and Math (STEM) learning opportunities through afterschool and summer programs over the next 5 years.

Every state is asking afterschool and summer programs to share more about how they do STEM through a nationwide survey. Please join this important effort! Your answers will help us to better understand how we can best support afterschool and summer programs statewide. The survey should take 5-10 minutes to complete.

Everyone who completes the survey will have exclusive access to a webinar on engaging kids in hands-on engineering activities from home. Everyone who responds will be entered into a drawing for a \$100 gift certificate. **Surveys must be submitted by April 30.** 

# Million Girls Moonshot Resources

#### Featured Webinars

# Recorded Webinar: From Research to Practice: An Up-To-Date Look at Gender Equity in STEM

In this research-to-practice webinar, we will learn about up-to-date research regarding gender equity in STEM and how it impacts girls and women learning and working in STEM. We will also engage in conversation around strategies and resources for continued progress in supporting girls and women in STEM.

View the recorded webinar here.



#### Best Practice and Professional Development

#### For STEM Partners

- IF/THEN Collection Assets: Role Model Profile Videos The below assets are free profile videos of IF/THEN Ambassador and carnivore ecologist, Dr. Rae Wynn-Grant.
  - Long profile of Dr. Rae Wynn-Grant
  - On-the-job video of Dr. Rae Wynn-Grant
  - Field shot 3 of Dr. Rae Wynn-Grant
  - Field shot 10 of Dr. Rae Wynn-Grant
- IF/THEN Collection Assets: Role Model Profile Videos The below assets are free profile videos of IF/THEN Ambassador and climate scientist, Dr. Victoria Herrmann.
  - Long profile of Dr. Victoria Herrmann
  - STEM journey video of Dr. Victoria Herrmann

#### For Programs and Providers

- Article: Becoming Visible: STEM Role Models & Mentors for Disabled Students -An interesting post about the importance of having STEM role models for disabled students.
- Role Model Profile: STEM is for Everyone! Profile of scientists with disabilities.

## EARTH DAY (APRIL 22) AND

#### **NATIONAL ENVIRONMENTAL EDUCATION WEEK (APRIL 19-23)**

- Mission Unstoppable: Tracking Bears with Dr. Rae Wynn-Grant
- Posters: This is what a scientist looks like of IF/THEN Ambassador and carnivore
  ecologist, Dr. Rae Wynn-Grant. This poster can be used in your physical spaces to
  highlight an inspiring role model in nuclear engineering.
- Curiosity Camp: Recycled Plant Paper activity sheet with the I'm a Kid...Does
   Climate Change Affect Me? video featuring IF/THEN Ambassador and climate
   scientist Kimberly Miner. This is one of many activity sheets and accompanying videos
   that can be found on the IF/THEN Collection. These activity sheets and videos are
   designed to be plug and play for programs.

## Together at Home – Activities for Youth and Families

- Student Activity: Toxic Popcorn Design Challenge This lesson introduces youth to
  the engineering design process as youth work in teams to design both a product and
  process to safely remove "toxic" popcorn and save the city.
- Student Activity: Engineering a Flotation Device Youth use the engineering design
  process to design a device that uses simple chemical reactions to create a floatable
  device for a cell phone.
- Student Activity: Design Your Own Snazzy Sneaker Youth use the engineering design process to design an environmentally sustainable shoe that meets design

requirements they specify.

 Group Activity: Team Building for STEM Challenges - In this team building activity, youth work together to lift an object by using a set of strings attached to a center ring. Each student grabs a few strings and must work together to raise the item in the center. The task requires concentration and communication and introduces the value of teamwork.

# Mizzen by Mott App

Mizzen By Mott inspires, engages and sparks learning in young people. Supported by the Mott Foundation, Mizzen is available at no cost to afterschool professionals! Please be sure to download the Mizzen By Mott app to access the activities below.

- Aluminum Boats and the Edmund Fitzgerald
- Build Your Own Roller Coaster
- Engineering a Tetrahedron Kite
- Make It Move 1 -5: Transportation Prototype Design Challenge

This work of the Iowa Afterschool Alliance is made possible by funding from STEM Next and the Million Girls Moonshot Innovator Grant. The mission of MGM is to expand STEM opportunities, specifically in the field of Engineering, for girls across the United States, which is made possible through state partnerships.





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