

#### **December 2020 Assets**

Theme: Engineering Mindsets Support Equity and Skill Development in STEM

Good morning,

November was a busy month for all and December is looking to be fast and furious! We have another fully-loaded asset package for networks to share with their partners and program leaders.

Here are quick links to the Million Girls Moonshot monthly assets and toolkits:

- Access the complete <u>December Content Package</u> and <u>December Media Asset</u> <u>Package</u> as you prepare your dissemination accordingly
- Access previous month's media asset packages through the <u>Afterschool Alliance's</u>
   <u>NPToolkit</u> as well as all communications resources (factsheets, social medial, and more)
- Access the <u>Million Girls Moonshot Toolkit</u> for all resources related to the transformative practices, future webinar opportunities, the Equity and Inclusion Framework, Booster Pack opportunities, and more.

This December we're wrapping up our deep dive into how engineering mindsets further drives equity and inclusion. We ask that all networks disseminate the webinar opportunities to partners and program leaders in their state. Follow the links below to view the full webinar descriptions, registration links, and resources.

# **FEATURED WEBINARS**



**ENGINEERING DESIGN WITH TECHNOVATION WEBINARS** 

**AUDIENCE: FOR PROGRAMS AND PROGRAM STAFF IN YOUR STATE** 



## **Engineering Design Challenges Session 3**

Thursday December 10, 12:00-1:00 pm PST/3:00-4:00 EST

Experts: Technovation Program Staff

### **REGISTER FOR WEBINAR**

- ★ You'll make a plan to help your students deal with hard parts like persisting through failure and encouraging creativity
- ★ You'll reflect and revisit tools introduced earlier to look at them differently
- ★ All while making a water collection system in a design challenge you can use with your students.

Bring these **materials** to the session with you:

- 1. Skewers
- 2. Tape
- 3. Scissors
- 4. Cardboard or foam core
- 5. Cups
- 6. Straws
- 7. Foil
- 8. Cups (with holes punched in the bottom) + water for testing

Audience: For program staff (directors, STEM specialists, and facilitators) in your state

**Engineering Design Challenges Session 1:** Recording, Slides, and hundreds of Engineering Design Challenges on Curiosity Machine

**Engineering Design Challenges Session 2:** Recording, Slides, and hundreds of Engineering Design Challenges on Curiosity Machine

# **EQUITY AND INCLUSION WEBINARS**

#### **AUDIENCE: FOR NETWORKS AND KEY PARTNERS IN YOUR STATE**

Equity & Inclusion in Afterschool: Skill Development in STEM Programming

December 15, 12:00-1:00pm PST/3:00pm-4:00pm EST

Experts: National Girls Collaborative Project Team

REGISTER FOR WEBINAR



Working with the National Girls Collaborative Project, STEM Next developed an <a href="Equity and Inclusion Framework"><u>Equity and Inclusion Framework</u></a> to use as a guide for supporting programs as they identify resources and strategies that broaden participation. This webinar dives more deeply into the Skill Development concept and the strategy of Career Exploration. The webinar highlights research-to-practice as well as resources that can help educators utilize 21st Century Skills within their programs.

Audience: For Network Leads and Key Partners in Your State

Registration Link: <a href="https://bit.ly/3kG1KMW">https://bit.ly/3kG1KMW</a>

## **ENGINEERING MINDSET WEBINARS**

#### **AUDIENCE: FOR PROGRAMS AND PROGRAM STAFF IN YOUR STATE**

**APPLICATION:** Here are **three ideas** for communicating with afterschool program leaders about the Engineering Mindsets Training Module:



- 1) **Share it** with afterschool program staff in your state to improve STEM quality;
- 2) **Incorporate it** into your own professional development or community of practice for afterschool providers;
  - 3) **Feature it** in your virtual state conferences exhibit halls and resources

Engineering Practices Support Equity Part I: Recording Engineering Practices Support Equity Part II: Recording Engineering Practices Support Equity Part III: Recording

**Engineering Mindset Activities** (Includes facilitation instructions and materials list)

# **QUALITY TRAININGS WITH PEAR**

#### **AUDIENCE: FOR PROGRAMS AND PROGRAM STAFF IN YOUR STATE**

**APPLICATION:** Share with Network STEM Staff, Key Partners, and Program Leaders in your state interested in becoming Dimensions of Success Certified. **More information found <u>here</u>**.

#### **Dimensions of Success (DoS) Certification Training**

December 16 - 17th, 2020; 7:00am - 1:00pm PT / 10:00 am - 4:00pm ET

**Experts: PEAR DoS Trainers** 

**REGISTER FOR WEBINAR** 





## **Dimensions of Success (DoS) Certification Training**

January 20th - 21st, 2021; 8:00am - 2:00pm PT / 11:00 am - 5:00pm ET

Experts: PEAR DoS Trainers

**REGISTER FOR WEBINAR** 

# BEST PRACTICE AND PROFESSIONAL DEVELOPMENT

**AUDIENCE: For Networks, Partners, and Programs** 

**APPLICATION:** Share the following best practices and resources about transformative practices with partners and providers in your state. Use them to create professional development for afterschool programs in your state.

### **Developing and Expanding Partnerships**

• Rubric: Are We A Partnership Yet? - This rubric allows partners to assess the maturity of a partnership and provides some direction for growth.

#### **Broadening Participation in STEM**

- Book: Youth Development in Out-of-School Time Setting (2018) Comprehensive book on youth development in out-of-school time settings. It includes a chapter on 10 principles of effective youth development.
- Paper: Why Now? Why Us?: Inclusive 21st Century Learning Paper from the National Center for Learning Disabilities identifying key strategies, case studies and actions for impact.
- <u>Best Practices: Techbridge Essential Elements:</u> Techbridge Girls' Essential elements
  are guiding principles for high-quality, equitable STEM programs for girls. These
  essential elements are based on Techbridge Girls' 18 years of experience, their
  evaluation and research, and research from the field.

# **TOGETHER AT HOME**

**AUDIENCE: For Programs, Youth and Families** 

**APPLICATION:** Share the following engineering activities with programs and families for additional STEM learning in your state.



- Student Activity: Materials and Manufacturing In this activity based on the story of
  the three little pigs, students examine the properties, limitations, and durability of a
  variety of materials, then evaluate which of the materials would be best for building a
  model house.
- Student Activity: Engineering Solutions to Freshwater Problems In this activity, students are introduced to six freshwater supply problems in various locations around the world. Students brainstorm their own ideas for solving each problem and then learn about the specific solutions that engineers have proposed.
- <u>Student Activity: How High Can a Super Ball Bounce?</u> In this activity students
  explore how engineers might use elasticity of material to help them design products.
  Working in pairs, they drop bouncy balls from a meter height and determine how high
  they bounce. Youth measure, record and repeat the process to gather data to calculate
  average bounce heights and coefficients of elasticity.
- Student Activity: Community Engineering This website provides engineering challenges that are community-based and includes learning modules on topics like school gardening, classroom renovation, and designing an accessible playground.
- Engineering Design Activities on Curiosity Machine

   Sign up for hundreds of FREE

   Technovation Engineering Design Activities with facilitation instructions and videos featuring STEM professionals and mentors.

# ADDITIONAL VIRTUAL PROFESSIONAL DEVELOPMENT

**AUDIENCE: For Partners and Programs** 

**APPLICATION:** Share the following training opportunities with partners and program leaders to build their understanding of engineering, equity and inclusion, and STEM.

 Gender Equity in Online STEM Learning - In this webinar recording from the National Girls Collaborative Project (NGCP), find out what works for girls from preschool and early elementary to middle school and high school, potential adaptations, and new ideas to consider when teaching girls <u>STEM online</u>.



• Exemplary Practices using Girls STEAM Ahead with NASA Free Resources - In this webinar recording from the NGCP, explore the free NASA resources, along with accompanying exemplary practices.

#### **ABOUT THE MGM**

#### www.milliongirlsmoonshot.org

Please feel free to contact me with any questions. Also available to provide support are Sabrina Gomez (ms.sabrina.gomez@gmail.com) or Victoria Wegener.