

September 2022 Assets For the Field

Good afternoon,

We have revamped our monthly asset packages to better suit the needs of the Field — partners and program providers and staff. **All of the following assets are specifically for the Field** and are categorized by: (1) professional development and no cost training on curriculum, (2) activities, and (3) resources focused on the transformative programming areas. We ask that Networks share, lift and lay these assets in all their distribution efforts to the field. This month's Media Assets are also linked within sections below.

To help students see themselves with a future in STEM and to broaden understanding of science history, it is important for students to learn about a diverse range of scientists and engineers. In honor of Hispanic Heritage Month, we highlight a few of the Hispanic and Latinx scientists and engineers who made (and are making) important contributions to science, technology, engineering, and math (STEM), and share useful resources for program providers.

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PROFESSIONAL DEVELOPMENT

To promote these professional development opportunities, <u>click here</u> to access the Media Assets

- ACRES Training Cohort: <u>Facilitating Math Practices</u>
- Dates: 2:00 PM 4:00 PM EST on the following
 Wednesdays: 9/28/2022, 10/12/2022, 10/26/2022 Are you looking for fun ways to help youth build number sense and problem-solving skills? Math can take on new meaning when it





is integrated into daily routines in our afterschool programs. In this module, after school educators will explore and practice strategies for making math engaging and accessible. *The expectation is that you will be live at all three sessions and an active member of this coaching cohort. Register: Use the code AC240MP

• Best Practice Webinar: <u>Leveraging Collective Impact</u> to <u>Support STEM Programs and Resources</u>

September 29, 2022 12:00 - 1:00 PM PT / 3:00 - 4:00 PM ET - In this webinar, learn how NGCP and other organizations leverage collective impact in order to



provide the opportunity for programs to increase their ability to maintain interest and participation of girls in STEM through collaboration. Hear from a dynamic panel of speakers on strategies for successful STEM collaborations and how to nurture and scale effective STEM learning opportunities for all young people. (Register and learn more via link above).

ACRES Training Cohort: <u>Facilitating Engineering</u>
 Practices

Dates: 9:00 AM - 11:00 AM EST on the following Tuesdays: 10/4/2022, 10/18/2022, 11/01/2022

Engineering has become a staple of STEM programming for youth. How can we confidently bring engineering into our programming and support youth as they engage in 02problem solving? In this module, participants gain first-hand experience with engineering by solving a design



problem. They examine the components of the engineering design process and discuss ways to model the process with youth. Asking Purposeful Questions is a prerequisite to this skill. *The expectation is that you will be live at all three sessions and an active member of this coaching cohort. Register: Use the code AC281EP

 ACRES Training Cohort: <u>Asking Purposeful Questions</u> Dates: 10:00 AM - 12:00 PM EST on the following Thursdays: 10/13/2022, 10/27/2022, 11/10/2022

Questions are the beginning of a path towards discovery, imagination, and STEM exploration. How can we help youth expand and clarify their thinking and develop their reasoning through the questions we ask them? This module is a great way to train new summer staff on how to facilitate STEM learning. Experienced educators also love being part of a cohort as a way to connect with other educators across the country, to learn new lesson plans, and to reflect on practice. This is our introductory module and a prerequisite to other opportunities. *The expectation is that you will be live at all three sessions and an active member of this coaching cohort. Register: Use the code AC282PQ



Best Practice Webinar: <u>Addressing STEM Stereotypes with Youth and Young Adults</u>

October 13, 2022 11:00 AM - 12:00 PM PT / 2:00 - 3:00 PM ET - This webinar, the first of a two-webinar series, will dig deeply into research and best practices related to addressing STEM stereotypes with older youth and young adults. Researchers and educators will share strategies and resources to counter and break down STEM stereotypes.



Speakers include: Claudia Fracchiolla, American Physical Society (APS), Michelle Higgins, The University of Arizona, Corinne Okada Takara, Bioartist and STEAM Educator. (Register and learn more via link above).

Quality STEM Webinar: DOS Certification Training
 October 19-20 7:00 AM - 1:00 PM PT / 10:00 - 4:00
 PM ET (register by October 5) - The training
 process involves a two-day live webinar training,
 completion of video calibration exercises, a one-hour
 live calibration session, and successful completion of



two practice observations in the field. PEAR staff offer live, webinar DoS training monthly and in-person training for state networks or organizations can be arranged as needed for an additional cost. PEAR staff provides ongoing technical assistance, quarterly data reports, and online data management support for all DoS observers for two years post-certification.

- Best Practice Webinar: Addressing STEM Stereotypes with Young Children
 October 20, 2022 11:00 AM 12:00 PM PT / 2:00 3:00 PM ET This webinar, the
 second in the series, will dive into research and best practices related to addressing
 STEM stereotypes with young children beginning in preschool. Researchers and
 educators will share strategies and resources for discussing and addressing STEM
 stereotypes with young children. Speakers include: Dr. Allison Master, University of
 Houston College of Education, Carmelo Piazza, Brooklyn Preschool of Science, Kim
 Collazo, Public School Educator & Author. (Register and learn more via link above).
- Best Practice Webinar: <u>Creating Inclusive Computer Science Learning: A Virtual</u>
 Workshop

October 25 3:00 PM EST - Join the Click2ComputerScience team as they review specific strategies to create an inclusive computer science learning environment in out of school time. You will leave the workshop with specific



tactics to implement, computer science activities and resources to continue your professional learning on computer science.

- Best Practice Webinar: Preparing yourself to Lead Computer Science: A Virtual
 Workshop November 8 3:00 PM EST Join the Click2ComputerScience team as they
 review specific strategies and ways out of school time educators can prepare
 themselves, their programs, and space to lead computer science with youth. You will
 leave the workshop with specific tactics to implement, computer science activities and
 resources to continue your professional learning on computer science.
- Quality STEM Webinar: Recertification Training for DOS
 Observers November 8, 2022 7:00 10:00 AM / 10:00
 1:00 PM ET (register by October 25) Please note that observers that have been certified for two or more years need to complete recertification to make sure they are continuing to use the tool reliably.



 ACRES Training Cohort: <u>Facilitating Science Practices</u>
 Dates: 6:30 PM- 8:30 PM EST on the following Tuesdays: 11/8/2022, 11/29/2022, 12/13/2022

How can we make sure that 'hands on' science experiences for youth are also 'minds on?' In this module, participants learn how to support youth as they engage in the science practices to learn science ideas, including planning and conducting investigations around testable questions. They'll talk about the similarities and differences of questioning in science versus questioning in engineering contexts. Register: Use the code AC283SP.



Role Models Matters Training for STEM Volunteers

Ready to train volunteers and role models in your Network, school, or afterschool program? **COMPLETE THIS REGISTRATION FORM** to gain access to the Role Models Matter training developed by Techbridge Girls.



More graphics for your newsletters, social media and more and HERE.



NO COST TRAINING ON CURRICULUM

To promote these no cost training opportunities, <u>click here</u> to access the Media Assets

Click2Engineering Community of Practice

This community of practice is a component of Click2Engineering, an asynchronous, module-based online professional development program for after-school educators. Participants in this community of practice get to be a part of developing future learning experiences and will have special access to existing Click2Engineering resources, including new curriculum and one-on-one coaching opportunities! Online meetings will include learning, working with materials, reflection, and sharing your ideas with others. You will grow your understanding of engineering and increase your confidence and ability to lead engineering sessions with youth **SUBMIT AN INTEREST FORM**





NO COST ACTIVITIES



To promote these no cost activities, click here to access the Media Assets

Supported by the Mott Foundation, Mizzen is available at no cost to afterschool professionals! Encourage partners to download the Mizzen By Mott app to access STEM activities at your finger-touch! You'll find it in Mizzen here.



Featured Activities & Playlists



- Mizzen Playlist: STEM Activities for K-5th Grade in Small Groups This playlist is a
 great mix of engineering and science activities that are easy and fun for small groups of
 students.
- Mizzen Playlist: Science Notebooks for 3rd 12th Grade Keeping a notebook can help your students think and act like scientists and engineers. Sample these easy-to-implement strategies and lessons to bring science notebooking into your program.
- Mizzen Module: S.INQ Up Earth and Space for 6-8th Grade Earth and Space is an
 inquiry and exploration-based curriculum that uses hands-on activities focused on the
 relationships between the earth, the solar system, and human impacts on our global
 environment.
- Curriculum: After-School Science PLUS Download Building with Wonderful Junk and take the challenge! Build a bridge or a platform that meets a set of requirements and test it. Challenge the kids to add to the activity (For example build a bridge that will hold a student up 6 inches from the floor).
- Activity Toolkit: <u>STEM Educators Academy Activity Toolkit from ExpandED Schools</u>
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 This Activity Toolkit offers hybrid learning engineering design challenges, STEM facilitation skill builder videos, and engineering design activities categorized by content areas.
- Activity Toolkit: Engineering is Elementary's NASA Partnership free units A suite of free NASA-funded STEM resources for students in grades 3-8. All resources are research-based and classroom-tested. They are designed to support students' understanding of space, while helping them see themselves as capable problem solvers.
- Student Activities: 30 Active Math and Activities for Kids Who Love to Move When kids think of math, they usually picture worksheets and flashcards. But math doesn't have to be dull! These active math games get kids up and moving, using their whole bodies to learn facts and skills. Lots of these ideas can be adapted to suit a variety of math concepts, so choose a few to try out with your math students soon.
- Student Activity: <u>Try Engineering Lesson Plan: Take Flight!</u> This lesson for ages 8-12 explores how flight is possible and how engineers have improved glider designs and materials to improve flight accuracy and distance.

NO COST ADDITIONAL RESOURCES



To promote these no cost resources, <u>click here</u> to access the Media Assets



- Hispanic Heritage Month Resource: 21 Scientists and engineers to learn more about! To encourage youth to learn more about these scientists and to explore related science
 projects and careers for scientists they find interesting, for each scientist, we have
 included a short biographical summary, links to 1-2 hands-on science projects related to
 the scientist's area of study, links to relevant science career profiles, and a link to a
 biography below.
- Hispanic Heritage Month Resource: <u>Celebrating Latinx Scientists and Their Work:</u>
 <u>Resources for your Afterschool Program</u> National Hispanic Heritage Month offers a
 great opportunity for students to learn about the many Latinx contributions to STEM.
 During this month (which runs September 15 to October 15)—and all year—you can use
 the groundbreaking discoveries of Latinx scientists as the foundation for STEM learning
 activities.
- Hispanic Heritage Month Resource: 4 Read Alouds and STEM Challenges for
 Hispanic Heritage Month September is Hispanic Heritage Month, and it's the
 perfect time to integrate STEM and literacy to help teach students about diversity
 in STEM and professional careers. Here are 4 of our favorite STEM Read Aloud
 activities and challenges for kids to use in your classroom during Hispanic
 Heritage Month!
- Hispanic Heritage Month Resource: <u>Latina Girls Code</u> The program was created to fill the diversity gap between girls who are interested in technology through education and resources, including mentors, access to hardware and digital tools as well as internships through various programs and events throughout the year serving girls ages 7-17.
- Hispanic Heritage Month Resource: <u>Space Place by NASA (in Spanish)</u> Aims to
 inspire and enrich upper-elementary-aged youth's learning of space and Earth science
 through games, hands-on activities, informative articles, and videos. Includes resources
 for parents and educators.
- Family Engagement Resource: Welcome Back to Afterschool 2022 Five Big Ideas to
 Spark Family Engagement in STEM STEM can spark a curiosity in children that can
 inspire a lasting love of learning. Interest may come from a hands-on science
 investigation, a role model who codes for good causes, or words of encouragement from
 a teacher or afterschool instructor. Learn about five ideas to spark family engagement in
 your program and community.

ASSETS FROM THE IF/THEN® COLLECTION Hispanic Heritage Month





These assets feature IF/THEN Ambassador Roselin Rosario-Meléndez, Polymer Chemist, Minerva Cordero, Mathematician and Mathematics Professor, and Luz Claudio, Environmental Health Scientist, and can be used in marketing, presentations, social media, and conference presentations.

Role Model Profile Videos and Photos

- Greetchen Díaz Role Model Resources:
 - o Greetchen Diaz Long Profile
 - o Video: Why Diversity and Supporting Women in STEM is important



- Posters: This Is What A Scientist Looks Like poster featuring Greetchen Díaz who advocates for girls and women in STEM Careers in addition to her own STEM career.
- Marie Claire Feature: Greetchen Díaz shows up on the pages of Marie Claire as a STEM Role Model



- Dana Bolles Role Model Resources:
 - Space Agency Science Communicator
- Video: Are There Aliens Really Out There?! Space Professional, Dana Bolles Thinks So!

Jessica Esquivel Role Model Resources:

- Video: <u>Everything Dr.</u>
 <u>Jessica Esquivel does is</u>
 Collaborative
- Posters: This is What A
 Scientist Looks Like poster featuring particle physicist Dr. Esquivel, an AfroLatinX PhD holder breaking barriers and paving the way.



ABOUT THE MOONSHOT

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), Andria Parrott (aparrott@stemnext.org) or Victoria Wegener.