National Girls Collaborative Project

NGCP

Collaboration Institute

September 1, 2022

Dear Collaborator,

Thank you for joining us on our collaboration journey! We are looking forward to the 2022 NGCP Collaboration Institute.

REGISTRATION: Registration will be available in Room 304/305 at the David L. Lawrence Convention Center, beginning at 1:00 PM on September 10, 2022. Institute activities begin at 3:00 PM.

SOCIAL MEDIA: Share your Collaborative Institute experience via social media. This year we are using the hashtag: #NGCP20. Please include it in all your updates. We will be tweeting throughout the Collaboration Institute and posting images. We invite you to do the same!

SHARING THE INSTITUTE EXPERIENCE: We hope you will return to your organization and share your experience and reflections from the Institute with others. Your expertise and contributions will help to make the Institute a beneficial experience and sharing with others will help us continue to create STEM experiences that are as diverse as the world we live in.

FRAGRENCE FREE EVENT: The Collaboration Institute will be a fragrance-free event. Please help accommodate participants who are chemically sensitive to fragrances and other scented products. We request that participants refrain from wearing perfume, aftershave, scented hand lotion, fragranced hair products, and or similar products.

HEALTH AND SAFETY: NGCP is closely monitoring the latest guidance from local, state, and federal public health authorities regarding COVID-19. Attendees at the Institute are always welcome to wear a mask; NGCP may require masking in certain situations depending on local guidance and conditions at the time of the Collaboration Institute.

If you have an emergency, you may call me at 206-914-9441.

Keep connected and collaborating!

Karen Peterson, CEO
National Girls Collaborative Project
206-914-9441
kpeterson@ngcproject.org
www.ngcproject.org

Collaboration Institute Resource Index 2022

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6	**Collaboration Networking Tools**
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Collaboration Institute Agenda
September 10 – 11, 2022 in Pittsburgh, PA

Saturday, September 10: The NGCP Collaboration Model	
1:00-3:00 PM	*Registration and Networking*
3:00-4:00 PM	Welcome Institute Overview and NGCP Goals Collaboration Networking
4:00-4:30 PM	Amplifying Girls' Voices: *STEM Experiences and Perspectives*
4:30-4:45 PM	*Break*
4:45-6:00 PM	The NGCP Collaboration Model
6:00-7:30 PM	Working Dinner Effective Elements of the NGCP Model: *Texas, New York* Exploring Identity
Sunday, September 11: Network Building and Sustaining Collaboration	
8:30-9:30 AM	Women in STEM: *Voices and Perspectives*
9:30-10:50 AM	Resources for Network Building: *Sharing Knowledge, Databases to Help Make Connections, Curriculum and Training*
10:50-11:00 AM	*Break*
11:00-11:15 AM	Leveraging Resources for Local Networks: *Tennessee*
11:15 -12:15 PM	Collaborative Technical Support
12:15-1:45 PM	Lunch and Leadership Team Planning Group Photo
1:45-3:00 PM	Collaboration Reflections
4:00-5:30 PM	20th Anniversary Celebration, Children's Museum, Pittsburgh

Collaboration Institute
Goals and Objectives

GOALS

1. Learn about how collaboration as an interactive process can build capacity, sustainability, and lead to more effective partnerships.
2. Strengthen the NGCP Collaboration Community.
3. Prepare Collaborative Leadership Teams and Community Members to effectively implement, support, and leverage NGCP activities in their region.

OBJECTIVES

1. Relate how the goals of the National Girls Collaborative Project compare with community members and leadership team members' goals towards encouraging gender equity in STEM.
2. Explain how the goals and major components of the project promote collaboration between existing organizations, institutions, and businesses committed to expanding the participation of women in STEM.
3. Identify and utilize various sources for technical assistance and implementation support as a reference for supporting local networks.
4. Advocate collaboration between organizations that participate in NGCP activities.
    a. Identify organizations that could benefit by participating in the NGCP.
    b. Prepare to form and engage a diverse Champions Board that will advocate for the project and provide resources as needed.
    c. Include plans for networking at each event.
    d. Promote NGCP to encourage a broad range of organizations to participate in local network activities.
    e. Facilitate connections between local organizations.
5. Create a plan to support local networks.
    a. Create a timeline for implementing the key activities involved in implementing the project in their region.
    b. Explain the roles and responsibilities of Leadership Team members and the Champions Board members.
    c. Define expectations of the Leadership Team.
    d. Identify gaps in competencies and roles and determine sources/contacts for additional Leadership Team members as needed.

Collaboration Institute Participant List

First	Last	Organization	Email
Niki	Becker	Twin Cities PBS	nbecker@tpt.org
Tricia	Berry	The University of Texas at Austin, Women in STEM /// Texas Girls Collaborative Project	triciaberry@txgcp.org
Brenda	Britsch	National Girls Collaborative Project	bbritsch@ngcproject.org
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Collaboration Institute Participant List

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Amanda	Sullivan	National Girls Collaborative Project	asullivan@ngcproject.org
Carol	Tang	Children's Creativity Museum	carol@creativity.org
Kathy	Thomas	National Girls Collaborative Project	kthomas@ngcproject.org
Hannah	Winkler	Girlstart	hannah@girlstart.org
Missy	Wooley	Louisiana Tech University	missywooley@gmail.com
Latasha	Wright	BioBus	latasha@biobus.org

Amplifying Girls' Voices: STEM Experiences and Perspectives

Moderator: Shihadah Saleem
NGCP Board Member (she/her)

Shihadah Saleem is currently the new Director of Youth Programs and Pathways at the New York Hall of Science in Queens, NY. She is from Far Rockaway, Queens, born and raised. Shihadah has three siblings, an older sister and brother and a younger brother. Growing up Shihadah was a VERY shy and nervous child. It was difficult for her to find her words and be independent. Fresh out of graduate school, Shihadah joined the Intrepid Sea, Air & Space Museum (2007-2008) as museum educator and has worn many hats as an informal educator, from providing tours and workshops for K-12 audiences to managing, developing, and facilitating teacher professional developments, hospital schools, co-founding GOALS for Girls, and teen/youth programs. For over 10 years, Shihadah continues to provide rich STEM (science, technology, engineering, and math) and youth development programs and opportunities for students, parents, and the community.

Panelists:

Amanda K.

Ever since middle school, when an exceptional science teacher taught and inspired her, Amanda has been extremely passionate about STEM and plans to continue on this path in the future. She first discovered the gender gap in STEM when she showed up to a biology club meeting and was the only girl! She didn't let this stop her, and this year, Amanda was one of the few underclassmen in her AP Biology class full of upperclassmen. Amanda is now also the president of the Biology Club at her school. Amanda is also captain of her school's Ethics Bowl Team, where she regularly incorporates bioethics. STEM-wise, Amanda had the fantastic opportunity to intern at Novavax, Inc. last summer and worked in the Clinical Immunology Department, reinforcing her interest in biotech. Amanda is a social entrepreneur and founder of two impactful nonprofit organizations.

Eesha P.

From having my first lab experience this summer, I know for sure that I want to pursue the STEM field in my future. At the Magee Women's High School internship, I got to experience working in a lab with other amazing researchers and truly understand the process of a biomedical research lab. I do love the biomedical field, but I equally am interested in computer science. This year, I got the opportunity to found the Girls Who Code club at my high school. Girls Who Code is an organization that is dedicated to teaching young women about the computer science field, and hopefully encourage them to pursue the field in their future. This amazing opportunity has also taught me so much about amazing women in this field, and I hope to be like them in my future. Besides STEM, I enjoy the arts from my Indian heritage, such as Bharatnatyam and Hindustani classical music. I also love playing sports, especially volleyball, and I have been playing for my high school team the past four years.

Amplifying Girls' Voices: STEM Experiences and Perspectives

Fatimah B.

My name is Fatimah, and I am a senior at the Neighborhood Academy! I am interested in pursuing veterinary medicine and studying biology in college. In my free time I enjoy painting, drawing, spending time with friends, and satisfying my curiosity through various STEM programs. I am very big on seeing more women especially, women of color in the STEM field. I hope in the future I can also find a way to reach out to young girls like me who felt that they wouldn't make or excel in a male dominated field!

Joi A.G.

My name is Joi. I currently am a senior at The Neighborhood Academy, which is located in Stanton Heights, PA. My dream college to attend is the University of Pennsylvania and I want to major in biology or the Pre-Med track to become an Orthopedic Surgeon in the future. In my free time, I enjoy reading, art projects of all sorts, and spending time with my friends and family.

Maddy N.

Maddy is a junior in high school who has developed a passion for STEM through exploring the ways technology and art are combined to bring innovative ideas to life. She is the image/graphic design lead on Carnegie Mellon University's FIRST robotics team, Girls of Steel, and enjoys mentoring for its FIRST Lego League program among other outreach initiatives. She is also an alum of Young Women in Bio's Ambassador Program, where she designed flyers for all its chapters across the U.S. and Canada. Young Women in Bio has inspired her to start a biology club at her school to empower girls to explore STEM careers and become future leaders in STEM. In the past year, she has won two gold keys in the Scholastic Art Awards and placed top 10 in Celebrating Art's National Contest.

Amplifying Girls' Voices: STEM Experiences and Perspectives

Maria S.

Maria is a senior in high school in Pittsburgh, Pennsylvania. From a young age, Maria has been drawn towards STEM. She has participated in local university STEM programs as early as second grade. This summer, Maria conducted medical research through the University of Pittsburgh's Hillman Academy Program, which is designed to give research opportunities to underrepresented individuals in the field of medicine. Through this experience, she became inspired not only by her research and experiments but was especially inspired by her mentors. As she continues her research, Maria will work to underscore the importance of female representation in STEM and hopes to be a positive role model for others! Maria has brought her love of the medical field to her high school by serving as the President of the Medical Careers Club. Outside of STEM, Maria is an avid tennis player, and has competed at the state level on her school's varsity team every year! She is also very passionate about serving others. Whether by volunteering at the local hospital, teaching tennis to those on the autism spectrum, or preparing meals for the less fortunate in her community, Maria enjoys giving back to those in need.

Oluwatobiloba O.

Oluwatobiloba, a current Sophomore, is a Piano major at Pittsburgh Creative and Arts (CAPA) 6-12. She is very interested in the STEM field and anything relating to it. She enjoys participating in activities in this field such as the 7-week research program that she completed with the Hillman Cancer Research Center. She is currently a Student Ambassador for her school, a member of the PPS Superintendent's Advisory Council, and is exploring her plans for the future. She enjoys reading a variety of books, engaging in STEM related activities, playing the piano, and listening to music in her spare time.

Regina A.

I am a current senior in high school, and I love science. I have been actively involved in different science programs over the years. For seven years, I participated in the Tour Your Future program at the Carnegie Science Center. I have conducted an annual independent research project for the past seven years and have presented my results at the Pittsburgh Regional Science and Engineering Fair (PRSEF) and the Pennsylvania Junior Academy of Science (PJAS). This past year, I won first place in the senior chemistry division in PRSEF and was recognized as having the best high school chemistry project in the state of Pennsylvania at PJAS. Three years ago, I conducted research on bioluminescent dinoflagellates, a marine alga which emit bioluminescent light. Since concluding my research, I have kept and cared for the bioluminescent dinoflagellates. I have taken them on field trips to educate elementary, middle school, and high school students about these amazing creatures. Last summer, I interned at Magee Women's Hospital and helped with a national study called the Glycemic Observation of Metabolic Outcomes in Mothers and Offspring. My hobbies include hanging out with friends, painting, and baking.

Women in STEM: Voices and Perspectives

Moderator: Jennifer Stancil
NGCP Board Chair (she/her)

Jennifer Stancil is an innovative and visionary C-Suite executive living in North Carolina. As a specialist in start-up nonprofits, particularly those aligned with museum environments, she excels by leading teams to not just strive for, but establish, new best practices in informal education. For more than 20 years, Stancil's ethos of inclusion has permeated her roles, leading educational organizations (Glazer Children's Museum; Girls, Math & Science Partnership at Carnegie Science Center), creating impactful media through work with PBS, WQED, Twin Cities Public Television, and inventing her own, Emmy-award winning TV show, iQ:smartparent. Early in her career she helped open two museums in the Southeast, McWane Science Center and Marbles Children's Museum (previously known as Exploris), that still thrive today. She is a sought out national speaker and advisor for national conferences and TV and blogs on wide-ranging preK-12 educational topics about creativity, innovation, and equity (especially in the STEM fields) in education. Stancil is a former advisor to the Women and Girls Council formed by the Obama White House.

Panelists:

Gabriela A. González, Ph.D.
NGCP Board Member (she/her)

Dr. Gabriela A. González is the Director of Intel's Science, Technology, Engineering, and Mathematics (STEM) Education Research Office where she oversees global STEM education research, policy, governance, initiatives, and thought leadership across the enterprise. Dr. González engages and collaborates with multiple stakeholders across Intel as well as external partners and collaborators in academia, government, industry, and non-profit agencies to drive and influence inclusive and equitable STEM education outcomes. Prior to this role Dr. González was the Deputy Director and Operations Manager of the Intel Foundation informing K12 Science, Technology, Engineering, and Math (STEM) and Women & Girls STEM strategies after serving as a Program Manager for Intel Labs leading Intel's strategic corporate relationships and academic programs with top U.S., Europe, and Latin America research universities. Dr. González held several engineering roles at Intel throughout her career including the transfer of the latest microprocessor technologies from development to high-volume manufacturing and management of equipment capacity, labor, and

Women in STEM: Voices and Perspectives

Mary Murrin
NGCP Board Member (she/her)

Mary Murrin is the Corporate Affairs Advisor to Chief Digital Officer for Chevron, based in Houston. She previously led social investment projects for Chevron in Houston and in Pennsylvania, West Virginia, and Ohio.

Mary graduated from Brown University and began her career in public affairs with Westinghouse Electric, returning to the energy industry with Chevron in 2014. In between, she led marketing and public relations for five Carnegie Mellon University start-ups developing software for web search, online education, and telecommunications. Mary is an active community volunteer, serving on the advisory board of the Houston Community College Foundation and the advisory board of the Hermann Park Conservancy along with NGCP. Mary is a former elected member of Pennsylvania's Allegheny County Democratic Committee.

Carol M. Tang, Ph.D.
Executive Director, Children's Creativity Museum

Dr. Carol Tang is the executive director of the Children's Creativity Museum in the Yerba Buena cultural district of San Francisco. Before coming to the museum in 2015, she was a program officer at a family foundation leading strategic grantmaking for out-of-school time youth programming, director for the national Coalition for Science After School, and head of exhibitions and museum programming for the reopening of the California Academy of Sciences. Dr. Tang serves on the Board of Directors of the Association of Children's Museums, the How Kids Learn Foundation and the Yerba Buena Gardens Conservancy. She was a paleontology professor and the author of several articles, including for the Encyclopedia Britannica Online. She has a Ph.D. in geology from the University of Southern California.

National Girls Collaborative Project

Connect, create, and collaborate to transform STEM for all youth.

The National Girls Collaborative Project (NGCP) envisions a world where science, technology, engineering, and math (STEM) experiences are as diverse as the world we live in.

OUR GOALS

- **Build and sustain a network of advocates** to provide equitable and inclusive STEM opportunities.
- **Catalyze equity in STEM** from research to practice by providing actionable knowledge that transforms the STEM experience.
- **Increase our collective impact** by strengthening organizational effectiveness and enhancing our fiscal sustainability.

NGCP SERVES

- **Girls and youth who have been historically excluded from STEM** by providing access to those who have experienced systemic barriers to identification with STEM and high-quality, relevant STEM opportunities as part of their lived experiences.
- **STEM program practitioners** by providing exemplary practices, research, program models, and opportunities to connect, create, and collaborate as a community.
- **Local Collaboratives** by providing continued support and resources to create long-term sustainable change in the communities they serve.

PROJECT ACTIVITIES

Implementation of the Collaborative Model
Train and mentor participants to create STEM-related collaborations at state and local levels.

Dissemination of Exemplary Practices
Disseminate research-based strategies, resources, and curricula to build the capacity of organizations to effectively collaborate and engage girls in STEM.

Provide Connections to STEM Role Models
Our FabFems directory connects young women, parents, and educational programs to inspiring female STEM role models.

LOCAL COLLABORATIVES

Why Is Collaboration Important?

High levels of collaboration among educators and programs engaging girls in STEM increases efficiency, effectiveness, and overall capacity, resulting in increased opportunities and improved experiences for girls in STEM.

Local Collaboratives build and serve an extensive network of organizations and individuals and host local events that provide networking and professional development. Find a Collaborative at **ngcproject.org**.

86%

NGCP helped us engage girls in our program

82%

NGCP helped my work or program be more effective at meeting our goals

87%

NGCP increased my connection to others doing similar work

81%

NGCP increased girls' interest in STEM

Source: NGCP 2022 Annual Survey

PARTNERS

Afterschool Alliance · ASTC Association of Science and Technology Centers · stemnext Opportunity Fund · Science Near Me · The Franklin Institute · SciGirls · IF/THEN An initiative of Lyda Hill Philanthropies · Google

PROJECT LEADERSHIP

NGCP brings together leaders and experts in STEM and assists in sharing knowledge across organizations, as well as exploring creative concepts across disciplines. We are:

- Led by a National Leadership Team and by Collaborative Leadership Teams across the United States.
- Advocated by a National Champions Board, a prestigious group of professionals invested in decreasing the gender gap in STEM.
- Guided by our Youth Advisory Board, a group of high school students from diverse regions, backgrounds, and STEM interests.

National Girls Collaborative Project (NGCP)

info@ngcproject.org

ngcproject.org

National Girls Collaborative Project

Transforming STEM: NGCP's Reach and Impact

NGCP HAS POSITIVELY IMPACTED PARTICIPANTS IN A VARIETY OF WAYS

86%

NGCP helped us engage girls in our program

82%

NGCP helped my work or program be more effective at meeting our goals

87%

NGCP increased my connection to others doing similar work

81%

NGCP increased girls' interest in STEM

Source: NGCP 2022 Annual Survey

NGCP HAS CREATED AN EXTENSIVE NETWORK

33 state and regional Collaboratives, serving 41 states, connecting 42,500 organizations, serving 20.2 million girls (and 10 million boys)

23,287 e-news subscribers

86,433 practitioners served through in-person events and webinars

15,470 total social media reach — 6,716 Facebook followers, 1,077 Instagram followers, and 12,626 Twitter followers

> **"NGCP is vital and invaluable."**
>
> *—NGCP Champions Board member*

> **"NGCP is a wealth of information and people. The networking opportunities are exceptional and making these connections make all of our work better."**
>
> *—Collaborative Leadership Team member*

NGCP HAS SIGNIFICANT IMPACT ON PARTICIPANTS

89% of participants report that involvement with NGCP positively impacts their practice or program

> **"NGCP has provided many impactful opportunities for our program participants as well as provided me with training and educational opportunities of which I was previously unaware."**
>
> *—NGCP participant*

NGCP strengthens the capacity of girl-serving STEM organizations and programs by sharing exemplary practices based on research. This is done through NGCP's website, webinars, e-newsletter, Partner Projects, and in-person and virtual events.

95% of participants using an exemplary practice indicated it led to a positive outcome in their program

NGCP Partner Projects are done in collaboration with other organizations, with the goal of scaling exemplary practices, resources, and funding opportunities through the NGCP network.

97% of participants involved in a Partner Project indicated it led to a positive outcome for their program

Source: NGCP 2022 Annual Survey

> **"Having access to strong resources and the funding to support their implementation/dissemination has helped us to build broad and long-term partnerships across the community that might not have happened otherwise. The related trainings that were offered in person to some of our most inexperienced staff provided a huge opportunity for learning and expanding their view of educational possibilities."**
>
> *—Collaborative Leadership Team member*

National Girls Collaborative Project
NGCP

info@ngcproject.org
ngcproject.org

Collaborative Community Webinars

To provide on-going support, the NGCP hosts online meetings focused on topics that provide an opportunity for Collaborative Leadership Team members to hear from external partners on strategies, research, and exemplary practices. In addition, the NGCP National Leadership Team shares project updates.

Each Leadership Team is expected to have at least one participant for each meeting and broad representation of Leadership Team members is encouraged. Meeting details and reminders are sent to the Collaborative Leadership Team member distribution list. Meetings are recorded and archived on the NGCP YouTube channel. This schedule will be updated as additional topics and presenters are identified.

All meetings at Noon Pacific, First Thursday each month

DATE	GENERAL TOPICS
October 6, 2022	Sharing from the Institute
November 3, 2022	Local Advocacy
December 1, 2022	Collaborative Choice*
January 5, 2023	Tools for Supporting Role Models and Mentors
February 2, 2023	Updated Research and Practice Resources
March 2, 2023	National Women's History Month
April 6, 2023	Collaborative Choice*
May 4, 2023	Exploring New Networks
June 1, 2023	TBD

Connection Details: URL: https://us02web.zoom.us/j/84351835926

**Topics based on Collaborative requests and needs*

Requests and questions? email collabsupport@ngcproject.org

NGCP Upcoming National Webinar Schedule

For more information and to register:
https://ngcproject.org/events-announcements

Upcoming 2022 National Webinars	
September	Leveraging Collective Impact to Support STEM Programs and Resources
October	Addressing STEM Stereotypes with Youth & Young Adults Addressing STEM Stereotypes with Young Children
November	NGCP Anniversary Fellowship Program The Genius of Play and STEAM GSAWN Exemplary Practices
December	Computer Science Education Week Webinar with MakeCode
Upcoming 2023 National Webinars	
January	Social Justice and Anti-Racism in STEM Programming
February	Strategies for Parents and Caregivers to Break STEM Stereotypes at Home
March	Pathways for Girls & Women in STEM: Perspectives from Across Generations
April	Breaking STEM Stereotypes through Books and Digital Media
May	Designing Culturally Relevant STEAM Learning Programs
June	Rural Areas: How to Support, Engage, and Sustain Men and Boys as Allies to Women and Girls in STEM
July, August, September no webinars	
October	STEAM: Reaching More Students Through Integration of the Arts
November	Meet the 2023 Youth Advisory Board Beyond the Pink and Blue Aisle: Gender Inclusive STEAM Toys, Tools, and Technologies
December	Computer Science Education Week Webinar

Sharing the Collaboration Institute: Action Plan

Action Item *Learning Topic, Task or Goal*	**Notes** (*Resources, to share, etc.)*	**Additional Resources** *What else do you need to do this (materials, people)?*	**Lead/Timeline** *Who and When*
GENERAL NOTES			
The NGCP COLLABORATION MODEL			

MARCH 2022

The State of Girls and Women in STEM

K-12 Education

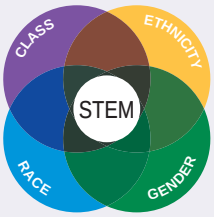
Girls/young women and boys/young men do not significantly differ in their abilities in mathematics and science, but do differ in their interest, confidence, and sense of belonging in science, technology, engineering, and mathematics (STEM).

Girls' and young women's achievement in mathematics and science **is on par with that of boys and young men.**

YOUNG WOMEN PARTICIPATE IN HIGH LEVEL MATHEMATICS AND SCIENCE COURSES AT SIMILAR RATES AS YOUNG MEN,

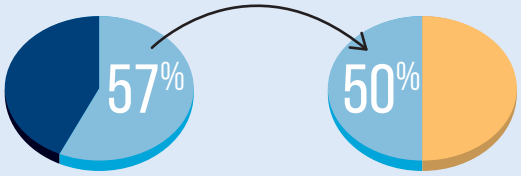
EXCEPT FOR COMPUTER SCIENCE, ENGINEERING, AND PHYSICS.

For girls/young women of color and girls/young women from lower socioeconomic status, **the impacts of the intersectional inequalities of gender, race, ethnicity, and class** can hinder identification with and long-term participation in STEM.



Higher Education

The rates of science and engineering (S&E) coursetaking for women shift at the undergraduate level and gender disparities begin to emerge.



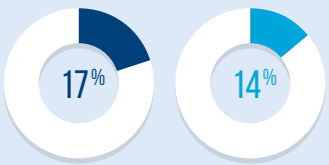
Women earn 57% of bachelor's degrees in all fields

Women earn 50% of bachelor's degrees in S&E

Women earn a majority of bachelor's degrees in psychology, biological sciences, and social sciences, but they earn only

in Engineering **in Computer Science** **in Physics**

Latina, Black, and Indigenous women continue to be underrepresented in STEM, but are gradually increasing their share of STEM degrees.



Latina, Black, and Indigenous women:

- make up **17%** of the total U.S. population
- earn **14%** of bachelor's degrees in STEM fields

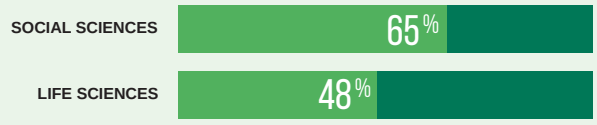
STEM Workforce

Women remain underrepresented in the science and engineering workforce, with the greatest disparities occurring in engineering and computer sciences.

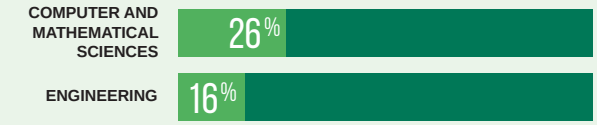
Women constitute **48% of the total workforce.**

Women constitute **34% of the STEM workforce.**

Women STEM professionals are concentrated in different fields than men, with relativity high shares of women in



and relatively low shares of women in



Latina, Black, and Indigenous women represent **less than 10% of the STEM workforce.**

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Looking for resources to support gender equity in your classrooms and programs?

The IF/THEN® Collection is a free digital library with photos, videos, posters, and more, featuring diverse women STEM innovators – all available for educational and other non-commercial use. You'll find thousands of assets showcasing inspiring women whose jobs include training Olympic athletes, creating cosmetics, exploring space, working with animals, and designing everything from buildings and museum exhibits to electronics and medical equipment.

HOW TO GET STARTED

If you haven't already, please watch the IF/THEN Collection Video Tour (https://ifthen.widen.net/s/htpvb27cpl/webtour). It's a quick overview of the site and our favorite resources. For informal educators and others working with youth, we recommend these entry points to find plug-and-play resources:

- **Activity Sheets** (www.ifthencollection.org/activity-sheets)
  A compilation of all the puzzles, games, and hands-on projects included in the Collection, many with educator guides and student activity sheets
- **Equity and Inclusion Assets** (www.ifthencollection.org/MGM)
  A curated set of assets for afterschool and summer learning programs aligned to key strategies for increasing equity and inclusion
- **Educator Hub** (www.ifthencollection.org/educators)
  A one-stop shop with ideas for using the Collection's authentic and relatable content about women in STEM, aligned with learning standards

USING ASSETS

Assets in the Collection can be viewed and streamed on the site. In addition, other uses are authorized ***for educational and other non-commercial purposes related to STEM fields***.

- **Share links** – Want a direct link to email or link to a specific asset? Click the share icon below any asset. It will ask for your email and agreement to the terms of use. Then click **Share Link** and copy the code that appears in the box.
- **Embed codes** – The Collection provides embed code functionality to add individual assets to your website or digital education tools. Click the share icon below any asset. It will ask for your email and agreement to the terms of use. Then click **Embed Code** and copy the code that appears in the box.
- **Printing and Downloads** – The activity and educator guides, as well as other PDF assets such as posters, can be printed or downloaded directly from the site.
  - **To print**, you must first click the asset image to open it in the PDF frame. Then click the printer icon that appears in the top-right corner of the frame.
  - **To download**, click the download icon beneath an individual PDF asset. Additionally, you can select the checkboxes for multiple PDF assets and then click the **Download All** button at the top-right of the listings page.

- **Requesting Downloads** – Educators and non-profit STEM organizations associated with an IF/THEN® Initiative Partner may request downloads of photos and videos. We recommend doing this if you have firewall or Wi-Fi issues that would make streaming difficult. Additionally, the Collection allows for the non-commercial use of the assets in lesson plans and newsletters, as well as social media and other promotions.

    1. In the site footer, click **Contact**.

    2. Follow the directions under **Asset Download Request**.

    3. Use this NGCP Download **Access Code**:

ASTC2022

    4. Click the **Submit** button. You can request as many assets as you would like. The requests typically are filled in 1 to 2 business days but may take up to 7 to process.

QUESTIONS?

The Collection site includes an FAQ section, which details allowable uses of assets and includes tips for refining searches and troubleshooting common issues. You can also send any questions to info@ifthencollection.org.

ABOUT THE IF/THEN® COLLECTION

The Collection is part of the IF/THEN® Initiative, a national effort sponsored by Lyda Hill Philanthropies® to inspire young girls to pursue STEM careers while creating a culture shift in how the world perceives women in STEM. The National Girls Collaborative Project helped develop and manages the IF/THEN Collection.

NGCP
20 YEARS TRANSFORMING STEM

The National Girls Collaborative Project's vision is STEM experiences as diverse as the world we live in. NGCP helped develop and manages the IF/THEN Collection.

ACCESS TO STEM: A FRAMEWORK

CREATING SPACE FOR ALL LEARNERS

MILLION GIRLS MOONSHOT

stemOnext OPPORTUNITY FUND

Strategies are the broad categories within each large concept: **Increasing Access, Youth-Centric, and Skill Development.** ***Tactics*** are the specific actions and tools for each strategy.

INCREASING ACCESS

Strategies that address barriers to participation and build on the experiences within the community.

Strategies	Tactics
Community Engagement	• Create plans for internal and external communication and outreach • Build cross-sector partnerships to cultivate a STEM learning ecosystem • Offer community and family engagement opportunities
Data Informed Decision Making	• Identify ways to collect youth and program level data to improve program quality • Collect feedback from youth and families • Conduct evaluation to assess broader community needs
Program Design (quality and intentionality)	• Involve stakeholders who represent the community and offer diverse perspectives in program design • Form an advisory board with key stakeholders to provide ongoing guidance and feedback • Be intentional in program design to engage and effectively serve all youth
Program Operations	• Ensure all youth have access to programming (location, schedule, transportation, technology) • Ensure all youth feel welcome (broad outreach to diverse populations, marketing designed to engage all youth, welcoming environment) • Recruit and retain staff who are representative of the community

YOUTH-CENTRIC

Strategies that build on the specific strengths, needs, and challenges of youth.

Strategies	Tactics
Peer Support	• Provide a supportive environment for all youth • Encourage positive peer connections • Help all youth feel they are part of a STEM community
Positive Youth Development	• Support all youth to make personal connections to and a greater sense of belonging in STEM • Help all youth develop self-efficacy and confidence in STEM • Elevate all youth voice and choice
Relevance	• Connect programming to school, home, and other settings • Leverage all youth interests, knowledge, and lived experiences • Show how STEM can make a difference in youth's lives and in their communities
Supportive Relationships	• Make community and family connections • Provide opportunities to interact with and learn from diverse STEM role models • Recruit and retain staff skilled in developing and supporting positive relationships

SKILL DEVELOPMENT

Strategies that are personally relevant to youth and enable them to develop STEM and 21st century skills.

Strategies	Tactics
Connected Pathways	• Provide opportunities to learn about and explore a variety of STEM careers • Curate partnerships with other STEM programs to encourage further participation • Provide exposure to relatable STEM role models who have experienced diverse career pathways
Curriculum	• Foster engineering mindset practices (applying math and computer science) • Create a learning environment that offers voice and choice to engage all youth in STEM • Provide opportunities for all youth to do authentic practices that STEM professionals do
Professional Development (for the field)	• Provide opportunities for educators to reflect on their own lived experience • Provide training for educators to make STEM personally relevant to all youth • Engage educators in MGM professional development offerings (role models, engineering mindset, growth mindset, etc.)
21st Century Skills	• Provide opportunities to collaborate and develop collaboration skills • Ask open-ended questions to help youth critically think and deepen their understanding • Facilitate development of a growth mindset

Created for STEM Next Opportunity Fund by the National Girls Collaborative Project

NGCP 20 YEARS TRANSFORMING STEM

VERSION 06/15/2022

National Girls Collaborative Project

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YOUTH ADVISORY BOARD

CONNECTED Girls

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