Welcome to the NGCP National Webinar

Elevating Youth Voice in STEM Programming

Tuesday, October 6, 2020

Please respond to the poll and introduce yourself in the chat.

Use the chat to ask questions, respond to one another, and share resources.
The National Girls Collaborative Project brings together organizations committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM).
NGCP Goals

1. Maximize access to shared resources within organizations interested in engaging girls in STEM.

2. Strengthen the capacity of programs by sharing exemplary practice research and models.

3. Use the leverage of a network to achieve gender equity in STEM.
NGCP Activities

Increased Collaboration Benefits Girl-Serving STEM Programs

- Helped us better serve girls: 82%
- Increased girls’ interest in STEM: 78%
- Helped my program be more effective: 77%
- Increased girls’ confidence in STEM: 77%

Source: NGCP 2015 Annual Survey
National Network of Collaborative Teams
Elevating Youth Voice in STEM Programming speakers:

Brenda Britsch, Senior Research Scientist with the National Girls Collaborative Project

Leslie Arroyo, Sophomore at Harvard University and former Teen Advisor for Girl Up

Isa Alcalde, Senior WiSci Program Associate with Girl Up

Shreya, Chief Science Officer of the Year 2019 and current high school junior

Dr. Stephanie Garcia, PhD, IDRA’s STEM and gender equity education specialist
Youth Voice

Youth voice is the means through which young people become actors in their own learning, participate in the decisions that affect them, and become active citizens. (Zeldin, Gurtner, & Chapa, 2018)
**Opportunities for Youth Voice**

**Input:** Youth provide input and feedback to adults

**Choice:** Youth make relevant and meaningful choices

**Shared Leadership:** Youth experience shared leadership of program with adults

From *Youth Voice* (2011)

Please respond to the poll:
Benefits of Youth Voice for Youth

• Positive impact on young people’s sense of agency, self-efficacy, belonging, competence, and identity development

• More likely to feel a sense of ‘ownership’ of program and engage fully

• More likely to feel personally empowered and emotionally connected to their communities

Benefits of Youth Voice for Programs & Staff

- Contributes substantially to higher-quality programming, higher levels of participation, and improved youth-adult interactions

- Staff gain a greater understanding of youth development, improved skills in engaging youth, and a stronger motivation and commitment to working with young people

(Remy, 2013; Zeldin, Gurtner, & Chapa, 2018)
Questions to consider…

• Is youth voice embedded in the most important things that we do?
• Why and where do we most need youth voice within our organization?
• Do we provide young people with opportunities to express their views every day?
• Do we legitimately give weight and respond to youth opinions?

From Preparing for Youth Engagement: Youth Voice, Youth-Adult Partnership, Youth Organizing (2018)
http://actforyouth.net/resources/pm/pm_preparing-youth-engagement_0818.pdf
Girl Up x NGCP
Youth Voice
Leslie Arroyo & Isa Alcalde
About Girl Up

We’re a movement to advance girls’ skills, rights, and opportunities to be leaders.

When girls rise, we all rise.

Girl Up guides and champions girls along their journey from leader to changemaker with specialized programming on global gender issues and in organizing, advocacy, fundraising, and communication.
Girl Up Leadership Model

We focus on building leadership within individual girls first, including self-confidence, personal accountability and long-term aspirations.
Teen Advisors

Girl Up’s Teen Advisory Board leads our by girls, for girls movement; advancing our mission, providing feedback on key strategy, representing Girl Up at major events during critical moments, and energizing others to take action for girls around the world.

The 2020-2021 Teen Advisory Board is made up of 25 girls representing 11 U.S. states, eight countries – Australia, Brazil, Colombia, India, Mexico, Taiwan, Zambia, the United States – and the British Virgin Islands.
Women in Science (WiSci) & STEM for Social Good

**WiSci Camps**
WiSci Camps are a safe, supportive, and girl-centered environment, bringing together 100 teen girls from three or more countries, to live and learn together for two weeks while exploring their interests in STEAM. Camps include expert facilitators in STEM and girls’ leadership who provide a first-class classroom curriculum, mentorship opportunities, and skills training.

**STEM for Social Good Bootcamps**
Participants hear from women in STEM, gain an increased understanding of 21st century STEM skills and human centered design, and learn how to develop a STEM-centered solution to a community issue. All participants will have a the opportunity to apply for and obtain a $500 grant to implement their STEM-centered community solution.
Q&A with Leslie Arroyo
In what ways has Girl Up provided you a platform to make your voice heard?
How does Girl Up programming elevate the youth voice?
Why do you think it is important for young people to be heard? What impact have you seen when we listen to young people?
What do you think organizations can do to amplify the youth voice?
Connect with Girl Up

🌐 GirlUp.org
Instagram 📸 @girlupcampaig
Twitter 🐦 @GirlUp
Facebook 🎥 /Girl Up
YouTube 🎥 /girlupcampaig
Thank you for joining us!
Student Voice in STEM

CSO Shreya & Dr. Stephanie Garcia
Who We Are
Non-profit organization established in 1973 dedicated to ensuring educational opportunity for every child.

What We Do
We serve to strengthen and transform public education by providing:
- Dynamic training
- Useful research
- Evaluation
- Frameworks for action
- Timely policy analyses
- Innovative materials and programs

www.idra.org
CSO Ernesto  
San Antonio, 3rd Year  
*Level 2*

CSO Isela  
San Antonio, 2nd Year  
*Alumna*

CSO Owen  
San Antonio, 2nd Year  
*Level 2*

CSO Reagan  
San Antonio, 2nd Year  
*Level 2*

CSO Elizabeth  
San Antonio, 3rd Year

CSO Shreya  
San Antonio, 3rd Year  
*CSO of the Year*

CSO Ian  
San Antonio, 2nd Year  
*CSO of the Year, Level 2*

CSO Julisa  
San Antonio, 2nd Year

CSO Alicia  
San Antonio, 3rd Year

CSO Becca  
San Antonio, 3rd Year

CSO Andrew  
San Antonio, 2nd Year

CSO Arturo  
San Antonio, 3rd Year
IDRA’s Chief Science Officers Program

6th – 12th Grade Youth STEM Leaders
CSO Program Goals

Create a pipeline of **diverse STEM leaders**

Foster **communication and collaboration** among CSOs.

Enrich **school STEM culture** and career awareness.

Amplify **student voice** in STEM conversations in the community.
Texas & the STEM Endorsement

Is Texas Ready?

TEA 2018-2019 Statewide Endorsement Enrollment
https://tea.texas.gov/

![Bar Chart]
- 86.5% Arts & Humanities
- 10.5% Business & Industry, Multidisciplinary Studies, Public Service
- 100% Other Endorsements

16% of Texas high schoolers graduated with a STEM endorsement

TEA 2017-2018 Statewide Graduate Report
San Antonio & Houston Cabinets

In new San Antonio science and tech program, students call the shots.

The Chief Science Officer program aims to stimulate STEM education using middle and high school students rather than adult educators. It also...

expressnews.com

Yeah, for sure. I think I’m really glad you guys are doing this because it is and again another way to increase that goal of fostering communication and collaboration among classes. I mean, yeah, I think we’ll just have some really positive outcomes with that and action plans giving each other advice and just building those bonds within the...
We are going to open up new opportunities for new kids… we are going to show them: ‘You are somebody, and you will make a great impact on our future.’

– Middle school Chief Science Officer, Alicia South San Antonio ISD
All the experiences within the CSO program, such as student-driven STEM initiatives and mentorship experiences… all function as a catalyst for STEM identity transformations.

– Alumna Chief Science Officer, Lexis
This program helped my son with his speaking abilities and social skills. He’s getting better at presenting in front of others and leading others.

- Texas CSO Parent
Action Plan

- Objective
- Strategy
- Collaboration
- Implementation
- Check
- Improvement
- Schedule
- Act
What does being a CSO mean to you?
Don't Just Hope It Happens, Make It Happen!

- 95% of CSOs expressed increased interest in a STEM career
- 87% of CSOs self-reported progress in inspiring their peers with STEM
- 72% of adults intend to share the program with their associates after meeting a CSO
- 90% of CSOs expressed increased connection with the STEM community
THANKS!

Any questions? Want to join the Texas CSO program? Email us!

Dr. Stephanie Garcia
Stephanie.Garcia@idra.org
CSO Shreya
shreyacodes@gmail.com
Questions?
Upcoming NGCP Webinars

*Picture a Scientist: Bringing Gender Equity in Science to the Big Screen*

Tuesday, October 13, 2020

Register on the NGCP website