

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.



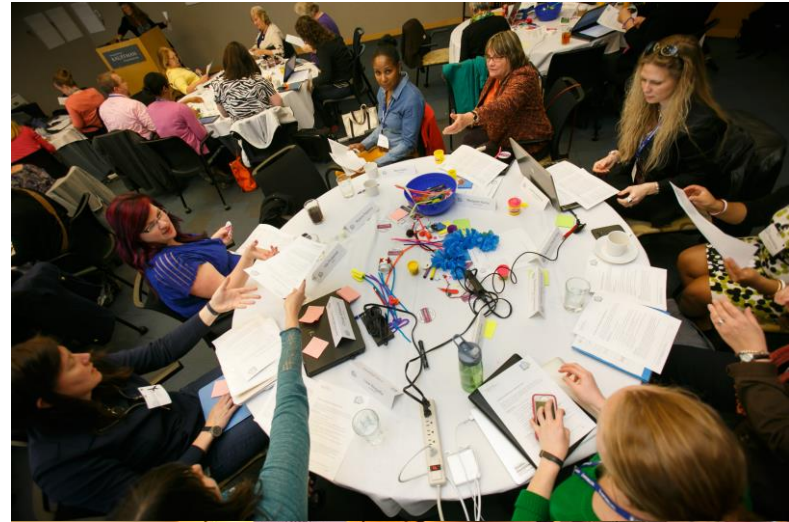
NGCP Vision

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

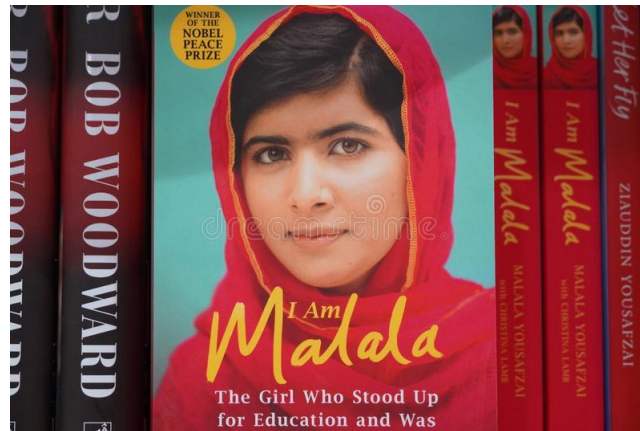
Dr. Stephanie Garcia, PhD, IDRA's STEM and gender equity education specialist

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)

http://www.cypq.org/sites/cypq.org/files/Youth_Voice_GuidebookSample.pdf

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

(Akiva, Philips, & McGovern, 2011; Buck, Cook, Quigley, Prince, & Lucas, 2014; Rahm, Lachaine, & Mathura, 2014; Zeldin, Christens, & Powers, 2013; Zeldin, Gauley, Krauss, Kornbluh, & Collura, 2017)

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



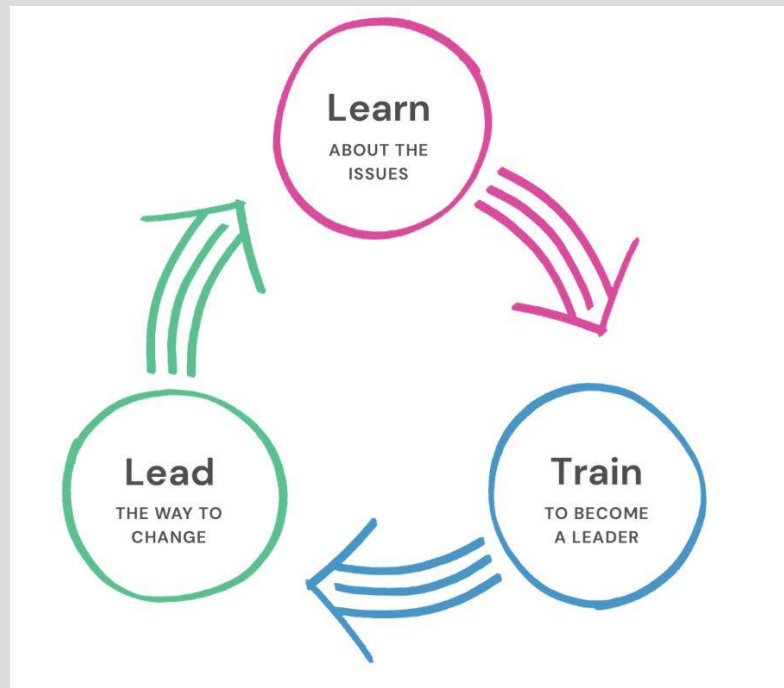
About Girl Up

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

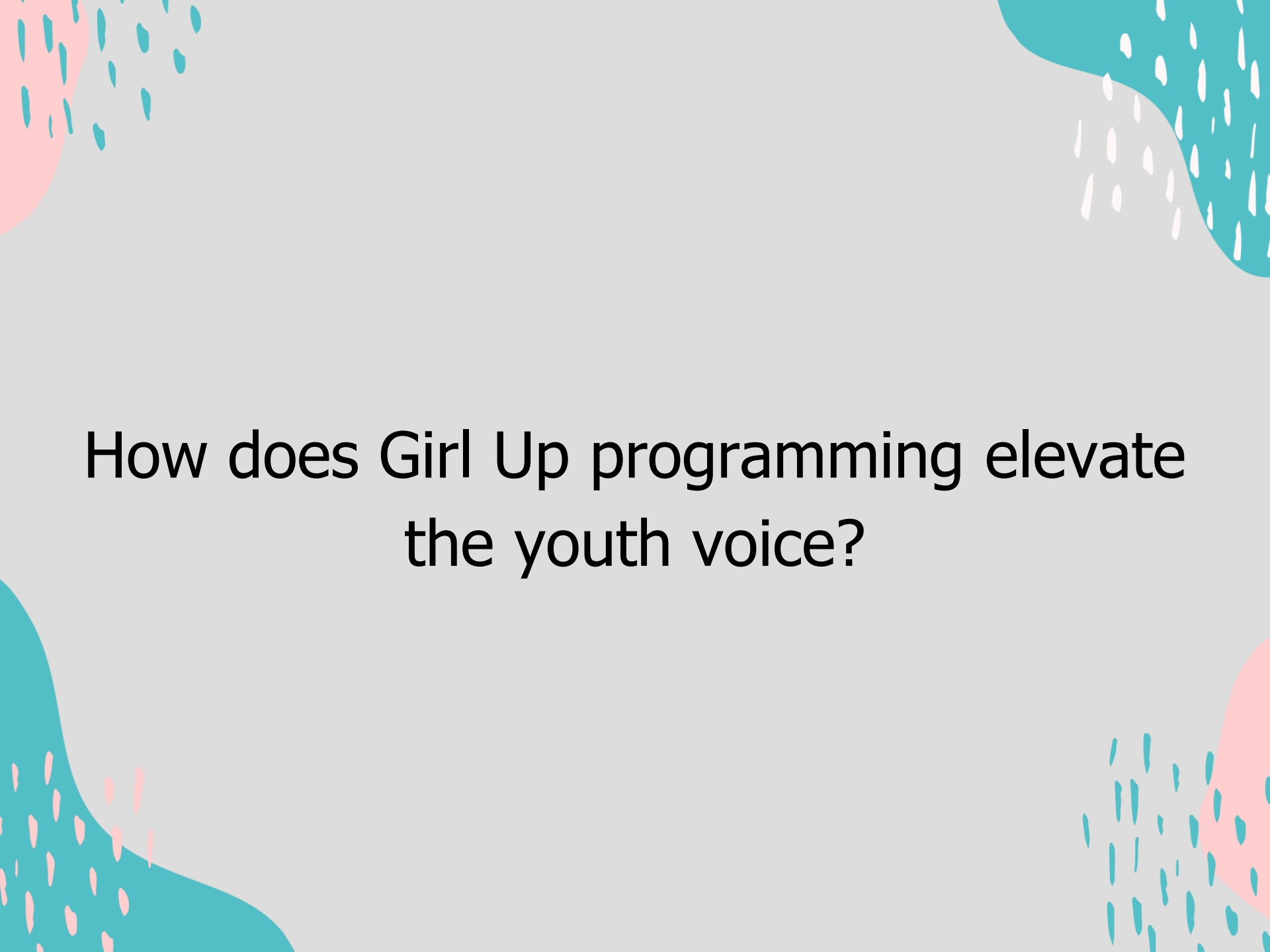
Participants hear from women in STEM, gain an increased understanding of 21st century STEM skills and human centered design, and learn how to develop a STEM-centered solution to a community issue. All participants will have the opportunity to apply for and obtain a \$500 grant to implement their STEM-centered community solution.

Q&A with Leslie Arroyo

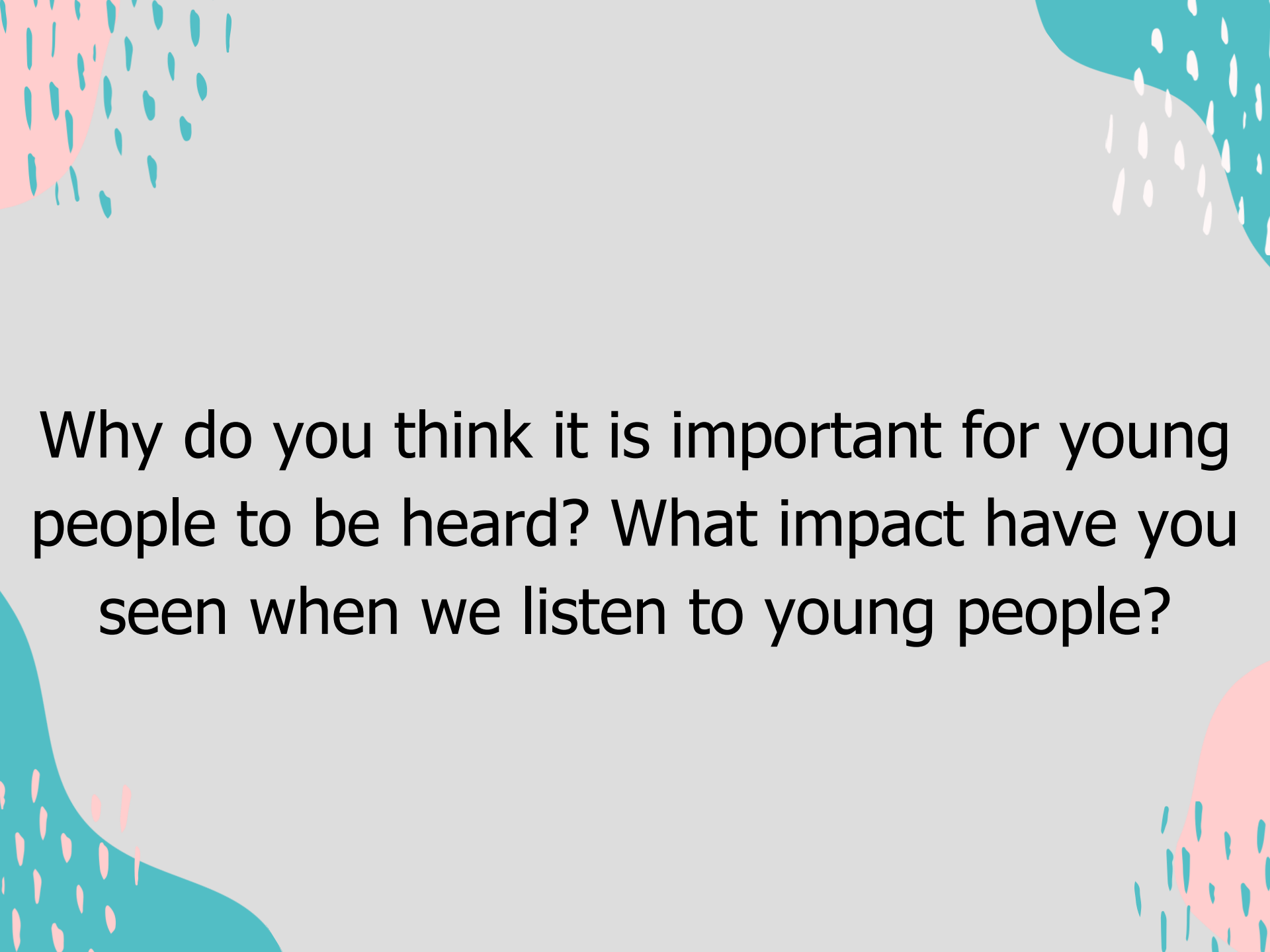




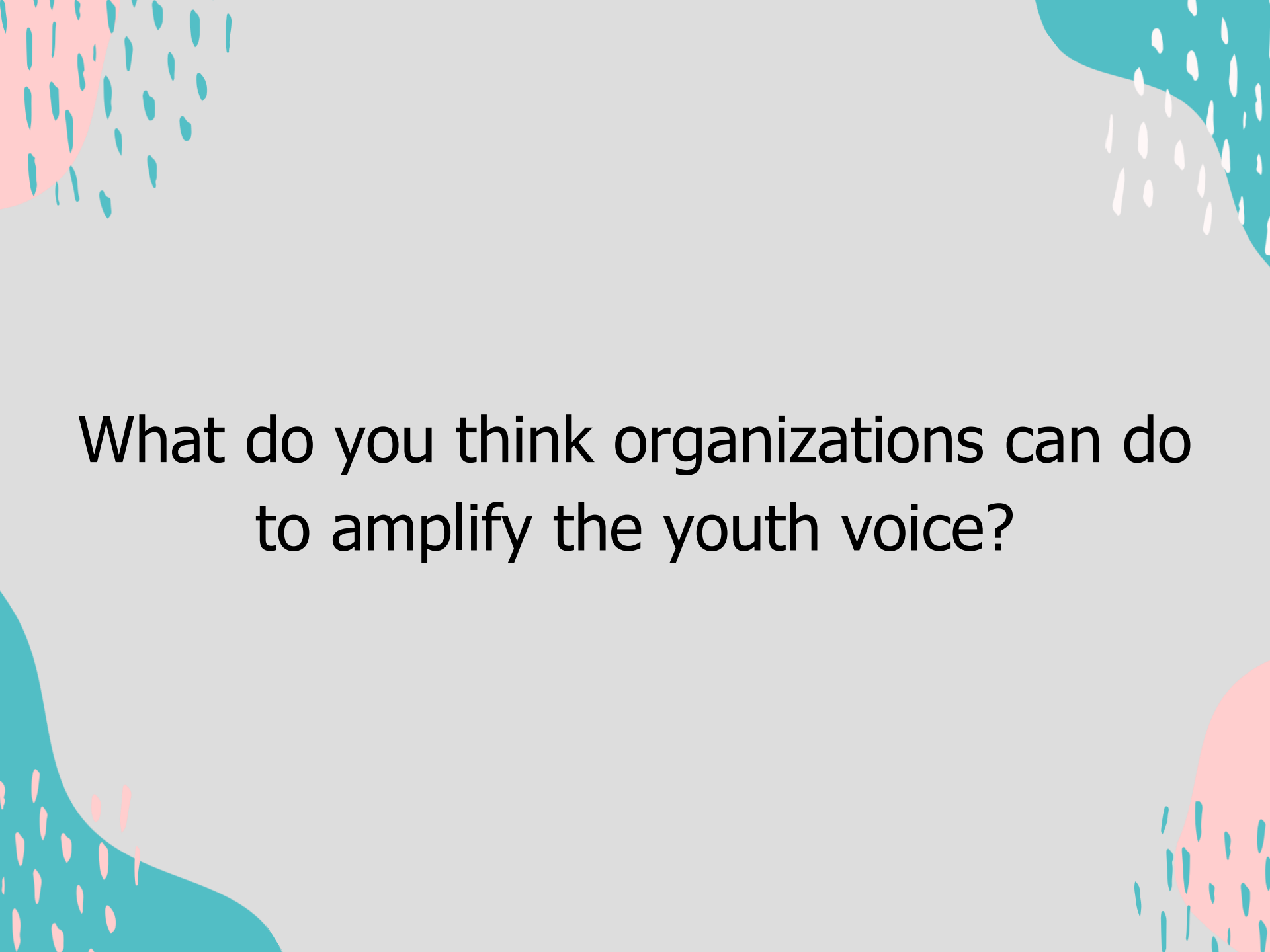
In what ways has Girl Up provided you a platform to make your voice heard?



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](https://www.girlup.org)

 [@girlupcampaign](https://www.instagram.com/girlupcampaign)

 [@GirlUp](https://twitter.com/GirlUp)

 [/Girl Up](https://www.facebook.com/GirlUp)

 [/girlupcampaign](https://www.youtube.com/girlupcampaign)



Thank you for joining us!

Student Voice in STEM



CSO Shreya & Dr. Stephanie Garcia



Intercultural Development Research Association

www.idra.org

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





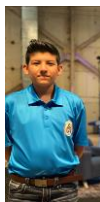
CSO Isela

San Antonio, 2nd Year
Alumna



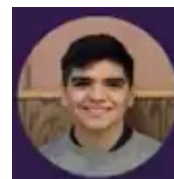
CSO Shreya

San Antonio, 3rd Year
CSO of the Year



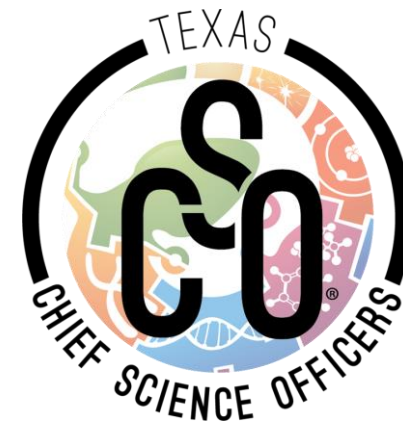
CSO Ian

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



CSO Ernesto

San Antonio, 3rd Year
Level 2



CSO Owen

San Antonio, 2nd Year
Level 2



CSO Reagan

San Antonio, 2nd Year
Level 2



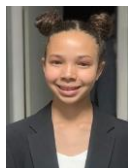
CSO Julisa

San Antonio, 2nd Year



CSO Andrew

San Antonio, 2nd Year



CSO Elizabeth

San Antonio, 3rd Year



CSO Becca

San Antonio, 3rd Year



CSO Alicia

San Antonio, 3rd Year



CSO Arturo

San Antonio, 3rd Year



DON'T JUST HOPE IT HAPPENS-
MAKE IT HAPPEN!

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.

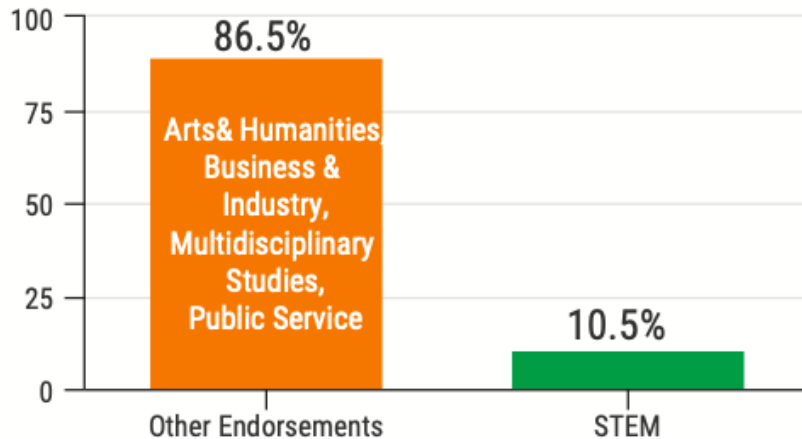


Texas & the STEM Endorsement

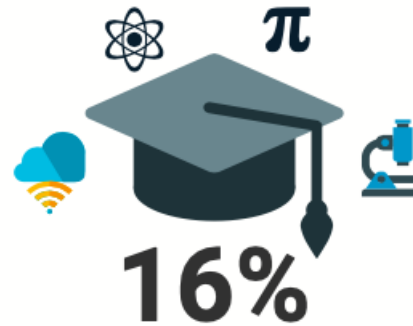
Is Texas Ready?

TEA 2018-2019 Statewide Endorsement Enrollment

<https://tea.texas.gov/>



TEA 2017-2018 Statewide Graduate Report



of Texas high schoolers graduated with a STEM endorsement



San Antonio & Houston Cabinets



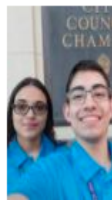
In new San Antonio science and tech program, students call the shots
The Chief Science Officer program aims to stimulate STEM education using middle and high school students rather than adult educators. It also...
expressnews.com

“

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



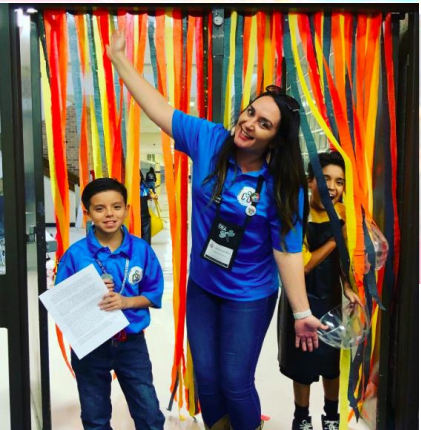


See article by San Antonio's first CSOs: [Building a STEM Identity through the Chief Science Officer Program](#), by Lexis Ratto & Kelly O'Kane, August 2019

“ *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





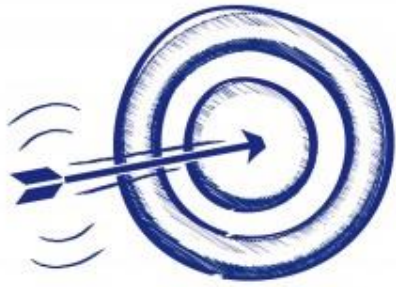
• EAST EARLY COLLEGE HIGH SCHOOL

“

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





OBJECTIVE

STRATEGY



COLLABORATION

Action Plan



IMPLEMENTATION



SCHEDULE





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

Follow us on social media!

@TexasCSO



#CSOtx



@IDRAedu

**Subscribe to
the CSO
Playlist**

Use your phone to scan
this & it will take you to
our 2020-21
registration page!



THANKS!

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

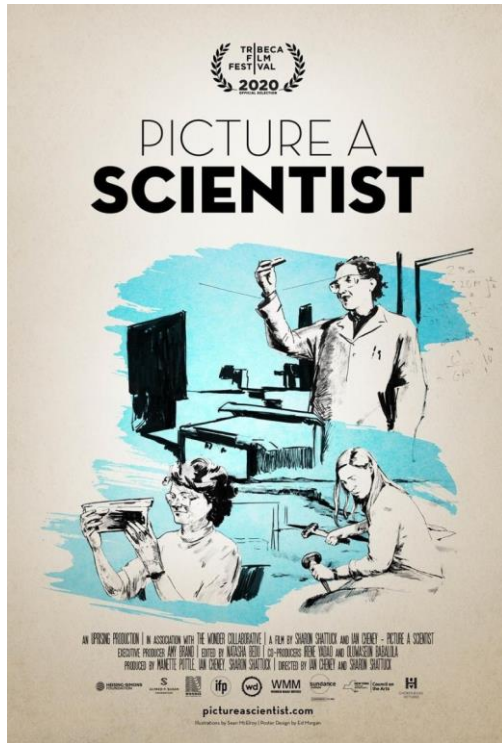
Dr. Stephanie Garcia
Stephanie.Garcia@idra.org
CSO Shreya
shreyacodes@gmail.com



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