### How often do students have a voice...



...in making STEM connections in THEIR communities

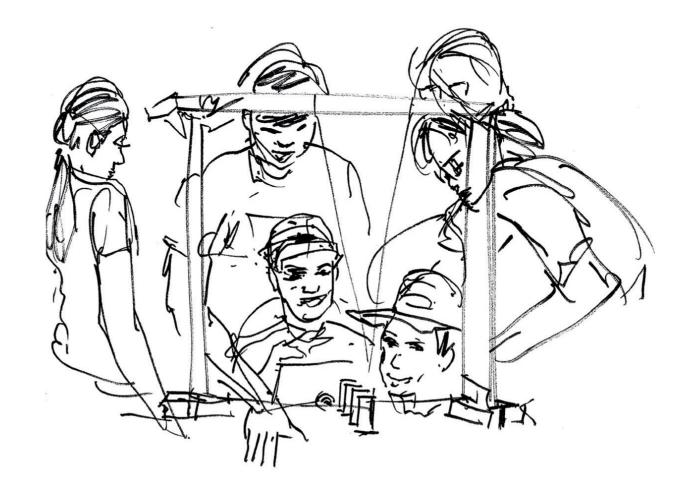
# How often do students have a voice...

...in advocating for STEM in THEIR schools

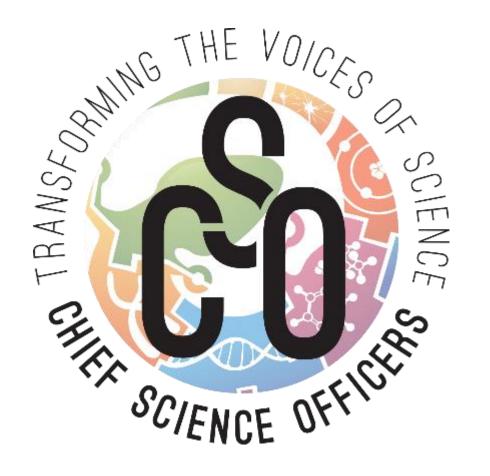


# How often do students have a voice...

...in planning the jobs of THEIR future



#### **Introducing the Nation's First Chief Science Officers!**





#### **Chief Science Officers: Who are we?**

- 6<sup>th</sup> to 12<sup>th</sup> grade student that demonstrates interest in STEM & Innovation
- **<u>Elected</u>** by their peers
- Year 2 250 elected from 110 schools



"Inspire Children to take up careers in STEM" Marie CSO Michael Anderson School



" Show everyone that STEM is fun and a promising field of work to pursue" Jonathan

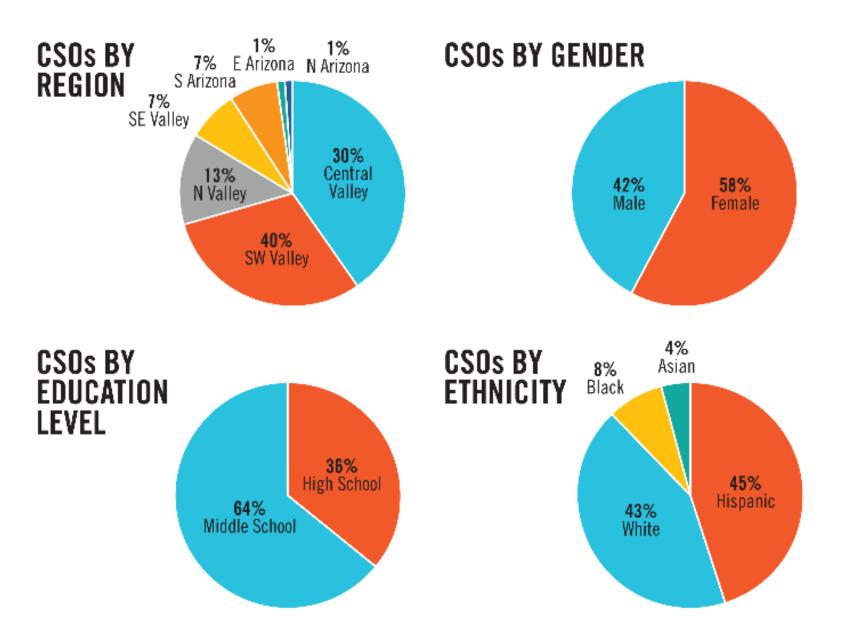
CSO Metro Tech High School



"Science is cool & exciting, & it's certainly proof that magic exists"

Sierra CSO Northpoint Expeditionary Learning Academy

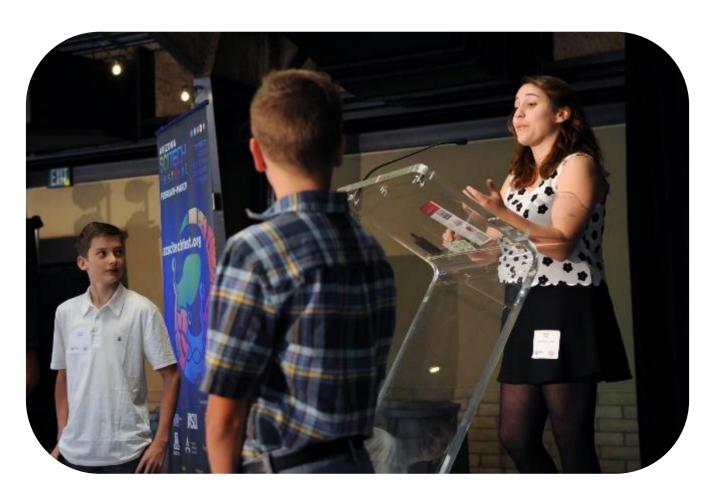
#### **A Diverse Representation Across Arizona**







# Increase student "voice" in STEM conversations at schools and in the community





 Enhance the workforce and employability skills of student CSOs

3. Cultivate the pipeline of diverse STEM leaders





# 4. Enrich middle and high school STEM culture and career awareness





- 5. Increase the
  engagement of STEM
  professionals and
  community partners
  with STEM education
- 6. Build a coalition of
  schools across Arizona
  and the Western USA



#### What does a year in the life of a CSO look like?

- 1. School elections
- 2. Training institute
- 3. Year round activities
  - On campus events & activities
  - Community events
  - Cabinet meetings (State Capitol, Honeywell Airplane Hangar)
  - Arizona SciTech Festival
- 4. End of year debrief and celebration





#### Why type of training to CSO get in summer?





teamwork

strategic planning

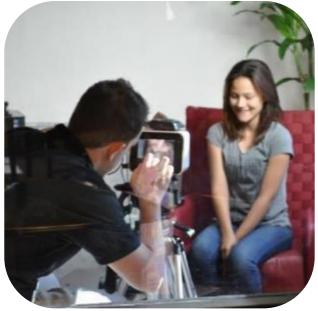
networking

#### Why type of training to CSO get in summer?





public relations



on camera



blog writing



#### Why type of training to CSO get in summer?

#### **STEM Explorations**













#### What does a CSO do... in the community



#### - Ensure the student voice is heard



What Science Means to Me session at the Innovation Arizona Summit in Scottsdale



CSO panel at Change the Equation AZ community leader discussion

#### What does a CSO do... in the community

- Advocate for STEM opportunities for their school and in the community

CSO Panel & site tour at Orbital ATK ASU day hosted by Teachers College





#### What does a CSO do... at their school



- Serve as the school's student voice for STEM
- Encourage STEM with their peers
- Connect STEM professionals with their school
- Support existing or new STEM
   opportunities on campus such as
   science nights, clubs, speakers,
   STEM dances



CSO Jacob presenting his STEM exploration to classmates at Sonoran Science Academy in Tucson

#### What does a CSO do... as a cabinet member



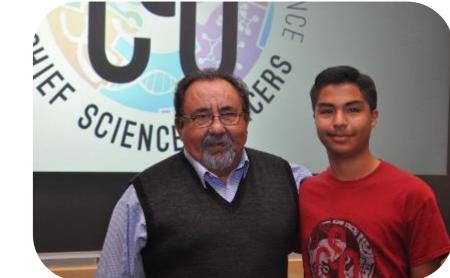
- Team with fellow CSOs on collective action projects
- Form a unified student voice for STEM in Arizona
- Learn, connect & have fun with fellow CSOs



Statewide strategy session at the summer CSO institute at Tonto Creek Camp, Payson

#### **Regional Cabinet with Congressman Grijalva**

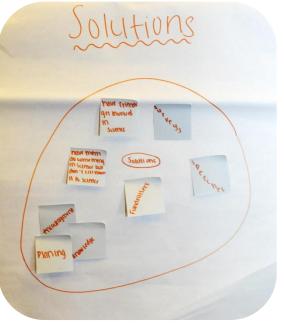












Students worked in teams to develop a brief of barriers and solutions to engaging in STEM careers

Had the opportunity to work directly with US Congressman Grijalva

#### **State Cabinet at Honeywell Airplane Hangar**











Town Hall led by Dawn Wallace, the Governor's Education Policy Advisory

8 interactive Honeywell stations showcasing their innovations

2 Energetic talks from Honeywell Engineers

#### Where do student engage with "SciTech Jedi"



- Summer institute sessions
- School events and activities
- Cabinet meeting discussions
- Company tours
- Community discussions



#### Where do the Jedi come from?

- Arizona Central Credit Union
- Arizona State University
- Castelazo Content
- Cox Communications
- Drury Design
- Flying Overtime
- Flinn Foundation
- Freeport McMoRan
- Grand Canyon University
- Honeywell Aerospace
- Intel Corp.

- Local First
- Maricopa Community Colleges
- Orbital ATK
- PADT Inc.
- PerfOpt
- Pinnacle Transplant Technologies
- SRP
- State Farm
- TGen
- University of Advancing Technology



#### 2015/16 numbers



- 138 CSOs, 78 schools, 25+ districts
- 50+ SciTech Jedi Mentors
- 33 community events
- 41 school based events
- 250+ CSO authored blogs
- 15+ News and media stories
- 3,500 students directly impacted by CSOs
- 40,000 students represented by CSOs



#### **Anticipated Growth**



#### - Arizona

- Year2 250 from 110 schools
- Year3 450
- Year4 700
- Year5 1000
- Western Regional
  - Oregon
  - California (Orange County, Bay, San Diego)
  - CO / NY / PN / MI

