

Who We Are

SARSEF's Mission: We create Arizona's future critical thinkers and problem solvers through science and engineering

Everything we do is guided by our organizational values:

- Innovation
- Equity
- Engagement

SARSEF is a Tucson tradition starting in 1955 that now serves statewide.



A Growing Critical Need

STEM occupations are projected to grow by 8.9% from 2014 to 2024, compared to 6.4% growth for non-STEM occupations¹

Nationwide, elementary students spend on average only 20 minutes per day on science instruction, compared to 60 minutes daily for math and 90 minutes each day for reading and language arts. And from school to school, students have unequal access to entire courses of core science topics.²

78.7% of teacher positions in Arizona either remain vacant or were filled by individuals not meeting standard teacher requirements³



1. *STEM Jobs: 2017 update* by US Department of Commerce Released 2017

2. *Call to action for Science Education: Building Opportunity for the Future* by the National Academies of Science, Engineering and Medicine Released 2021

3. Arizona School Personnel Administrators Association: Annual Survey Released January 2022

What We Do to Address that Need

- Reward students for engaging authentically in science and engineering through encouragement, recognition, scholarships and prizes
- Foster learning communities of support that build students' STEM identities throughout their educational careers
 - Ex. In classrooms, schools, families, and out-of-school learning environments
- Give students the confidence and skills to see themselves as scientists and engineers through:
 - Meaningful experiences and connections with STEM fields and professionals
 - Developing their STEM-based skills that are important no matter their path



How We Do It

Work with students and their support communities PreK-High School

- **Competitions** that give out over \$100,000 in scholarships and prizes each year
- **Workshops and outreach** that meet students, teachers, and parents where they are
- **STEM exploration** through our own events as well as at external community events



Our Programs

Competitions



SARSEF Regional Science and Engineering Fair
PreK-High School



Racing the Sun
High School



Arizona Regional Junior Science and Humanities Symposium (JSHS)
High School

Our Programs

Workshops and Outreach



In-School Outreach
PreK-8; High School



Parent Workshops
PreK-8th Grade



**Teacher Professional
Development**
PreK-High School



Our Programs

STEM Exploration



ACES Camp

*Sunnyside Unified School District –
Middle School*



Arizona STEM Adventure

4th-8th Grade



STAR Lab

High School



Current Outcomes



- In the 2020-2021 school year, 53,990 Arizona students participated in one or more of SARSEF's critical thinking program.
- A total of 6,558 students from 132 schools participated in the 2022 SARSEF Regional Fair representing the top 15% of their school fairs. \$128,150 in cash awards and scholarships were given out.
- Over 450 volunteers supported SARSEF's work in the 2021-2022 school year, giving 3,300 hours of time to the SARSEF Fair alone



You Can Be Involved!



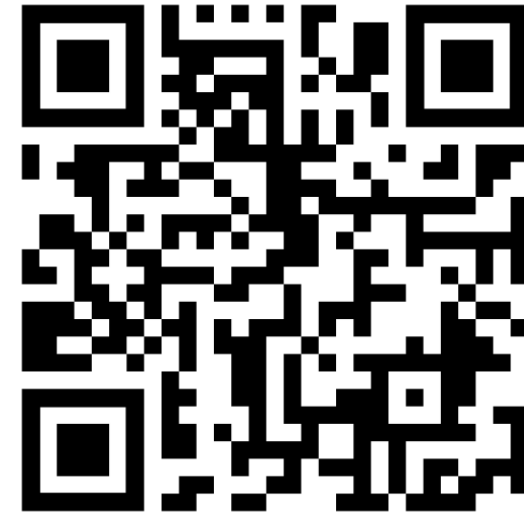
Donate and support our efforts

[Sarsef.org/donate](https://sarsef.org/donate)



Volunteer

[Sarsef.org/volunteer](https://sarsef.org/volunteer)



Be a Science Fair Judge

[Sarsef.org/volunteer](https://sarsef.org/volunteer)



TH  NK YOU

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