

From Inspiration to Transformation: Fostering Science Initiatives That Represent a Diversity of Communities

Dr. Alicia S. Conerly, President-Elect NSTA



### **NSTA Member Benefits**









Journals	Full access all journals packed v
Lesson Plans	Free lesson plans featuring sen
Professional Learning	Professional learning and resou
Conferences	Substantial discount on confere
NSTA Press books	20% discount on NSTA Press Tit
E-newsletters	A subscription of our newslette
Awards	Recognition from your peers of
Advocacy	NSTA advocates for science tea
Leadership	Develop your skills while volunt
	Lesson Plans Professional Learning Conferences NSTA Press books E-newsletters Awards

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ensemaking tasks

ources to further your professional journey

rence registration

Titles

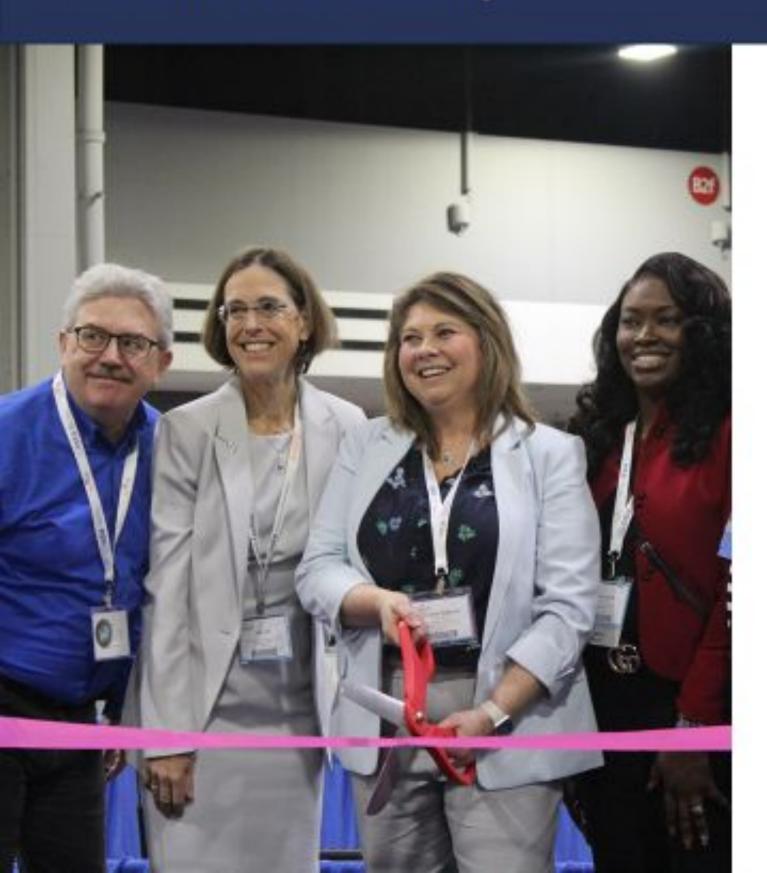
ters to keep up to date

of your accomplishments

eachers at the national and state level

unteering

### **Governance Revisioning**



- Supports NSTA's Community initiative to "Recruit a diverse volunteer leadership pool."
- Started in quarter 1 of 2022 ٠
- ٠ of members and current and former leaders of NSTA, chapters, and affiliated groups
- Proposes changes to Board and creation of new ٠ Leadership Council

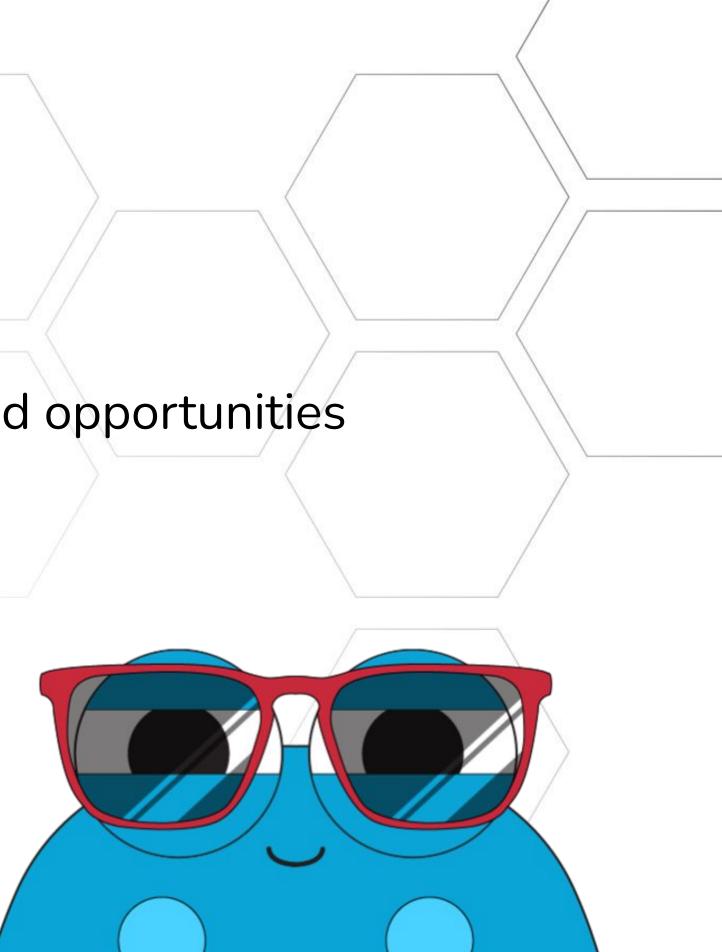
Used interviews, surveys, townhalls, webinars, taskforces

Bylaws are being drafted for a member vote in early 2024

### Purpose

- Importance of intentional investment
- Catalyst for innovation
- Bridge gaps in education, resources, and opportunities
- Advancement of science





### **Underrepresented Populations**

- Challenges faced
- Lack of opportunities
- Importance of inclusion
- Diversity in scientific fields





# **Strategies for Bridging Gaps**

- Engaging underrepresented communities
- Outreach programs
- Scholarships
- Mentorship opportunities

- School partnerships
- Industry collaborations
- Government support



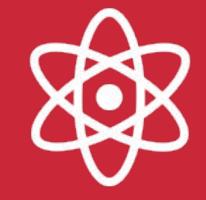


### **Resources Allocation**

- Equitable distribution
- Funding models
- Grants and scholarships

- Enrichment programs







# **Educational Programs** • Curriculum development

### Science clubs and societies



## Programs

Zero Barriers in STEM Education: Accessibility and Inclusion Program https://ssec.si.edu/event/zerobarriersinSTEM

STEM Education Summit: Building a Coalition for Attracting and Retaining a Diverse STEM Teaching Workforce https://ssec.si.edu/event/stem-education-summit-building-coalition-attracting-andretaining-diverse-stem-teaching

**eCYBERMISSION** is a virtual STEM competition for students in grades 6 to 9 that offers students the opportunity to explore STEM in a real-world setting. https://www.usaeop.com/program/ecybermission/



### Programs

The Toshiba/NSTA ExploraVision STEM competition is a perfect virtual and/or in person critical thinking, creative, and collaborative skill learning tool for K-12 students in the U.S and Canada.

https://www.exploravision.org/project-format/

https://www.nsta.org/awards-and-recognition-program https://static.nsta.org/pdfs/NSTAAward Angela.pdf https://static.nsta.org/pdfs/NSTAAward Maitland.pdf https://static.nsta.org/pdfs/NSTAAward Yager.pdf https://static.nsta.org/pdfs/Shell Award.pdf https://static.nsta.org/pdfs/Shell Urban.pdf



## Programs

Academy for Women: It is designed to dispel myths about computer science and intrigue young women with the potential of computing and the excitement of problem-solving. (University of Texas-Austin)

**Camp ARCH**: a summer camp designed to give students an opportunity to experience the professions of Architecture, Construction, Landscape Architecture, Urban Planning, and Visual Design. (Texas A&M University-College Station)

Atlas Scholars: connects students with industry leaders and exposes them to state of the art technologies and environments. The program seeks to provide students with mentorship, scholarship, and exposure to the energy and finance industry. (Various locations in Houston)

**ACE Mentor Houston**: a collaborative effort to bring the multifaceted construction industry, educational institutions and local community together to expose high school students to the world of architecture, construction, engineering and the building trades.



## **Empowering Teachers**

- Professional Development
- Teacher Training
- Encouraging Diversity in the Classroom





- Evaluation metrics



### Impact Assessment

### Measuring effectiveness

### Feedback mechanisms

### Success

### • Mrs. Nadia Bruner, Founder & Managing Member Suttle Freeman, LLC • By using RPA methodology in teacher training and coaching, summer STEM programs with Engineering is Elementary and ongoing tutoring support, McGowen ES in HISD had the highest percentage gaines on the 5th grade Science STAAR test for 2014-2015. Even after 3 principals over 9 years, McGowen continues to see gaines in Science.





Versatile Lessons for Versatile Classrooms<sup>™</sup>

# Main Take-a-Ways

- Long-Term Vision
- Continued Investment
- Sustained Progress

