



ONLINE
WORKSHOPS

STEM Identity & Career Interest for Students Traditionally Underrepresented in STEM

Online Workshop Summary of Resources
January 14, 2025

Online Workshop Presenters

- **Dr. Susan Sunbury**, Educational Researcher and Project Manager, Smithsonian Astrophysical Observatory: <https://www.cfa.harvard.edu/research/topic/stem-education-research>, ssunbury@cfa.harvard.edu
- **Dr. Tingting Reid**, Post-Doctoral Fellow, Harvard University, Harvard College Observatory: <https://hco.cfa.harvard.edu/>, tingting.reid@cfa.harvard.edu
- **Amdad Ahmed Awsaf**, Graduate Research Assistant, Florida International University, Talking Science, <https://www.talkingscience.net/about/>, aawsa001@fiu.edu

Recording of the Online Workshop on Vimeo

- <https://vimeo.com/nisenet/workshop-recording-stem-id-2025>

Online Workshop Links to Resources Shared During the Workshop

NISE Network Resources

- Recording & Resources from 2023 NISE Network Online Workshop: **STEM Identity, STEM Career Interest, and Participation in Out-of-School Time Activities**, featuring Dr. Susan Sunbury and Dr. Gerhard Sonnert, Senior Research Scientist at Harvard University: <https://www.nisenet.org/catalog/online-workshop-recording-stem-identity-stem-career-interest-and-participation-out-school>
- Getting Started with the NISE Network: <https://nisenet.org/gettingstarted>
- Browse NISE Network Resources by Topic: <https://www.nisenet.org/browse-topic>
- Read the NISE Network Monthly Newsletter: <https://nisenet.org/newsletter>
- Find the NISE Network on Social Media: <https://nisenet.org/social>
- Future NISE Network Events & Workshops (stay tuned): <https://www.nisenet.org/events>
- Recordings of Past NISE Network Online Workshops: <https://www.nisenet.org/online-workshop-recordings>
- Register for the next NISE Network Online Workshop: **Introduction to STEM Learning Ecosystems - Principles and Practices for Community-wide Partnerships**, Tuesday, February 11, 2025 at 2pm Eastern: <https://nisenet.org/events/online-workshop/online-workshop-introduction-stem-learning-ecosystems>

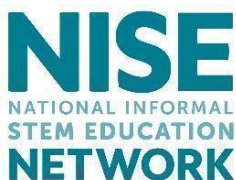
Resources

- National Center for Science and Engineering Statistics Definition of “Underrepresented Minorities” from <https://nces.nsf.gov/pubs/nsf23315/report/glossary>

- These particular analyses relied on the definition of Underrepresented Minorities provided by the National Center for Science and Engineering Statistics stating “Races or ethnicities whose representation in STEM employment and S&E education is smaller than their representation in the U.S. population. This includes Blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives.”
- For these particular analyses, students who self-identified as Black and Hispanic are considered as URM
- Science Education Article “The trouble with STEAM and why we use it anyway” (shared in the chat to address questions of STEM & STEAM):
<https://onlinelibrary.wiley.com/share/PDBRBQU6FWDEXJGTUWQD?target=10.1002/sce.21605>
- Chen, C., Doyle, J. Sonnert, G., & Sadler, P. (2024). Shrinking gender gaps in STEM persistence: a ten-year comparison of the stability and volatility of STEM career interest in high school by gender. *International Journal of Science Education*, 1-21, 2024:
<https://www.tandfonline.com/doi/full/10.1080/09500693.2024.2388880#abstract>
- Chen, C., Hardjo, S., Sonnert, G. et al. (2023). The role of media in influencing students’ STEM career interest. *International Journal of STEM Education* 10 (1), 56:
<https://link.springer.com/article/10.1186/s40594-023-00448-1>
- Medina, A., Chen, C., Doyle, J., Sonnert, G., & Sadler, P. (2021). The Association of Career Outcome Expectations and STEM Career Choice Among Hispanic First-Generation Students: A Unique Pattern. *Journal of First-generation Student Success*, 1(3), 203-223:
<https://www.tandfonline.com/doi/abs/10.1080/26906015.2021.2004081>
- Dou, R., Villa, N., Cian, H., Sunbury, S. E., Sadler, P. M., & Sonnert, G. (2025). Unlocking STEM Identities Through Family Conversations About Topics In and Beyond STEM: The Contributions of Family Communication Patterns. *Behavioral Sciences*, 15(2), 106: <https://www.mdpi.com/2076-328X/15/2/106>
- Dou, R., Cian, H., Hazari, Z., Sonnert, G., & Sadler, P. M. (2023). Childhood experiences and undergraduate student interest in STEM disciplines: Attending to setting and activity type. *Ann NY Acad Sci.*, 1526, 138–147:
<https://nyaspubs.onlinelibrary.wiley.com/doi/10.1111/nyas.15013>

Staying Connected to the NISE Network

- Upcoming NISE Network online workshops: <https://www.nisenet.org/events>
 - Read the monthly newsletter: <https://www.nisenet.org/newsletter>
 - Follow #nisenet on social media: <https://www.nisenet.org/social>
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