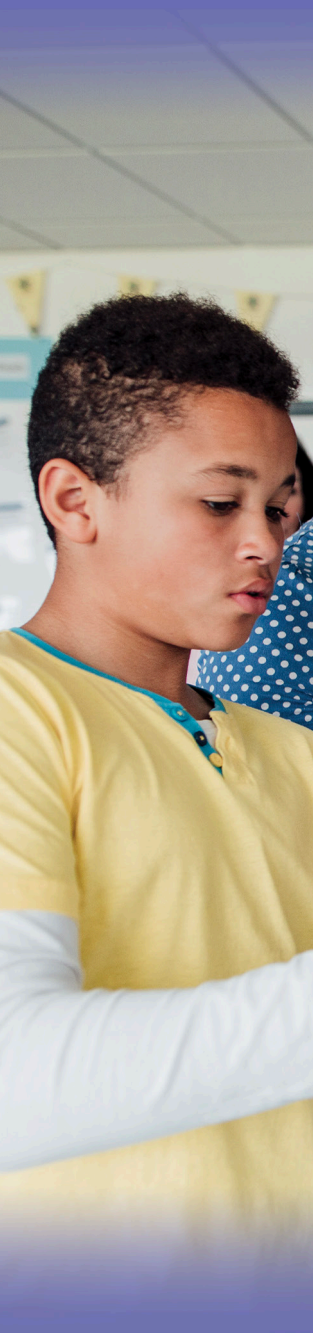
CALL TO ACTION FOR SCIENCE EDUCATION

BUILDING OPPORTUNITY FOR THE FUTURE

Better, More Equitable Science Education for All

High-quality science education is not the national priority it needs to be. There are also deep disparities that have shut too many students out of science learning and careers.

The National Academies of Sciences, Engineering, and Medicine convened a committee of experts to present a detailed vision of better, more equitable science learning from kindergarten to postsecondary education, and to outline recommendations for how policymakers can achieve this vision.



THE VISION: BETTER, MORE EQUITABLE SCIENCE LEARNING FOR ALL

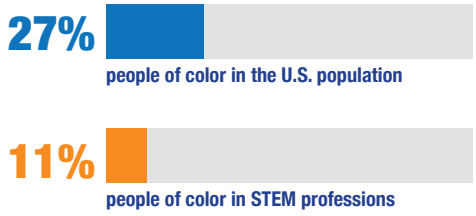
The Call to Action report's vision for K-16 science is that **every student experiences the joy and wonder of science**, learns how science can be used to solve local and global problems, sees the pathways they can take into science-related careers, and feels welcomed and valued in science classrooms.

Paramount to this vision is a renewed and nuanced attention to equity—equity of resources, time, quality instruction and access—so that students of all races, ethnicities, geographic locations, gender and financial circumstances have the opportunity to shape the future.

Why It Matters:

- Scientific thinking and understanding are essential for everyone, not just for scientists and other STEM professionals. Science is crucial for the future workforce and the pursuit of living wage jobs.
- Deep and enduring disparities in K-16 science education have created dire gaps in science opportunities and careers, particularly for Black, Latino/a, and Indigenous students and those who live in poverty and rural areas.
- Stronger support for a high-quality, diverse workforce for teaching science across K-16 is essential.

People of color make up 27% of the U.S. population, but only 11% of STEM professionals



SOURCE: National Science Board, National Science Foundation. (2018). *Science and Engineering Indicators 2018*. NSB-2018-1.

How to Make It Happen:

To achieve this vision and prioritize scientific literacy for all, we must:

- Provide time, materials, and resources for science instruction,
- Develop and support a strong, diverse science teaching workforce,
- Design supportive pathways for students in science,
- Employ well-designed assessments and accountability systems for science education, and
- Use evidence to document progress and inform ongoing improvement efforts.

Only 22% of high school graduates are proficient in science

SOURCE: National Center for Education Statistics. (2019). *Nation's Report Card. National Assessment of Educational Progress.*

The Call to Action committee has provided clear, actionable recommendations for federal and state lawmakers, education leaders, advocates and local communities. To learn more, visit nationalacademies.org/cta-science-education.