



To the Biden Education Transition Team:

Thank you for the opportunity to submit these ideas about the future of K-12 science and STEM education.

Members of the Council of State Science Supervisors ([CSSS](#)) coordinate science and STEM education efforts for state departments of education across the country. The National Science Teaching Association ([NSTA](#)), the largest organization in the world dedicated to quality science teaching and learning, represents thousands of educators of science nationwide. The National Science Education Leadership Association ([NSELA](#)) represents science education leaders such as science department heads, supervisors, district coordinators, and university science and science education faculty.

To create this document, we asked our members to share their aspirations for science and STEM education and their policy priorities for the coming year and beyond. The following ideas, which reflect the thinking of our members, are categorized across these four key areas:

- Coherent Resources and Professional Learning for K-12 Science and STEM Learning;
- Diversity, Equity, and Inclusion in Science and STEM;
- Assessment and Accountability in Science; and,
- Emphasis on the Value of Science.

Additionally, the responses we received have been formatted in the letter to address:

- The response to the COVID-19 pandemic;
- Actions for Day One and the First 100 Days of the new Administration; and,
- Long Term Goals and Priorities.

Thank you for your consideration of these ideas. If you need additional information or would like to discuss further, please contact Kevin Anderson, CSSS President, kevin.anderson@dpi.wi.gov; Elizabeth Allan, NSTA President, EAllan@uco.edu; or Larry Plank, NSELA President, larry.plank@hcps.net.

Responding to COVID-19

Create universal access to broadband internet.

Adopt the Recommendations of the National Academies Board on Science Education's [Study on COVID and Its Impacts on Schools](#).

Provide clear and careful guidance for the safe and secure return to school, including guidance on the administration of federally-required assessments and how to interpret results.

Waive federally-required assessment scores from federal accountability measures.

Provide guidance on the importance of a well-rounded education for all students, especially those in elementary grades, that includes science and STEM instruction.

Day One Through First 100 Days

Establish a high-level position at the U.S Department of Education dedicated to STEM education. The position/work would coordinate and align with OSTP STEM, other STEM education specialists in the mission agencies, the Department of Labor, and other workforce agencies/groups. Where absent, reinstate education positions in science-related agencies.

Make science/STEM education programs and resources designed by federal agencies (e.g. NASA, NOAA, EPA) more accessible and aligned to the *Framework for K–12 Science Education* and related standards.

Fund recruitment, training, and retention of diverse teachers and administrators to lead science and STEM.

In order to show a value of science and scientific literacy, appoint highly-qualified candidates for science and STEM related positions. Additionally, implement research-based decision making, such as addressing climate change in policy creation and implementation.

Reinstate the White House Science/STEM Fair and hold public science events.

Emphasize the value of science and STEM education, especially at elementary, which has seen a decline over the last several years as a result of the narrowing of the curriculum caused by No Child Left Behind.

Long Term Goals

In the next reauthorization of the federal education law:

- Restore the Title IIB Math-Science Partnership Program;
- Support well well-rounded education by providing flexibility for science and STEM spending in Title I;
- Include science assessments for federal accountability on par with assessments for math and English Language Arts, as long as the science assessments are truly research-based and standards-aligned;
- Provide more allowance, support, and funding for innovative and high-quality assessments; and
- Provide dedicated funding to develop classroom and school level assessment system supports that address the needs of all students, as inequities are highlighted, but not addressed by, Federally-required assessments.

In addition, we would like to see:

- Allowance for more use and sharing of innovative practices in science and STEM education. Recognize that where research is intended to inform practice, such as the What Works Clearinghouse, the focus tends to be on mathematics and literacy.
- Dedicated funding allocation established for elementary science.

- Dedicated funding provided for open-access science/STEM education resources linked to professional development, especially at the elementary level.

Our society is at a pivotal point. Scientific and STEM literacy are not only critical for current jobs and economic growth, but also for a broadly informed citizenry. Our next generation must have the skills and content understanding to make cognizant decisions and support sustainable policy.

Sincerely,

Kevin Anderson, President, Council of State Science Supervisors

Elizabeth Allan, President, National Science Teaching Association

Larry Plank, President, National Science Education Leadership Association