

A Statement of Science, Technology, Engineering, and Mathematics (STEM) Education Stakeholders on Education Standards

December 2014

Our diverse group of national organizations strongly supports state-based efforts to adopt and implement rigorous common standards in mathematics and science that promote deeper learning in STEM subject areas.

Student achievement in the STEM fields is closely linked with our nation's economic prosperity in the modern global economy. Strong STEM skills are also a central element of a well-rounded education and essential to effective participation in the global economy. We also believe that effective policies to promote STEM education should be non-partisan and evidence-based and must be backed up by a strong and united community of stakeholders and advocates in the business, professional, research, and education communities.

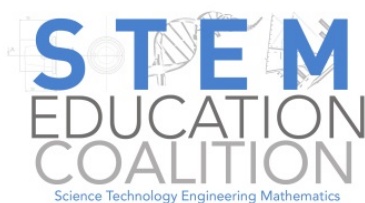
Common standards that will prepare students for college and careers will provide an enormous opportunity for systemic improvement in mathematics and science education in the United States. Education standards in these subjects will offer a means to develop more rigorous, focused, and coherent mathematics and science curricula, as well as instructional materials and assessments that will help promote conceptual understanding and reasoning while also developing specific skills. These wide ranged efforts to promote deeper learning in the STEM subjects will also help ensure that all students are ready for college or for the workforce when they graduate from high school and that they are prepared to take their place as productive, full participants in society.

As individual states proceed with adopting and implementing common standards, we are committed to ensuring the long-term success of this process. To achieve this goal:

- We must mobilize the entire STEM education community – employers, professionals, educators, and their supporting organizations – to become informed about the benefits and implications of standards and to be engaged in their success.
- We must provide robust support for professional development for STEM educators to ensure that education professionals are prepared to implement common standards in mathematics and science and that policymakers understand their needs.
- We must clearly communicate that common standards in mathematics and science will set new and higher student performance expectations in these areas and bring engineering design and principles to more K-12 classrooms.
- We must ensure that state-based programs that support the implementation of common standards in these areas and their related assessments are adequately funded.



NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS



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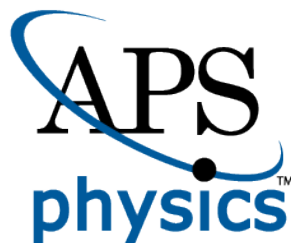


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List of Supporting Organizations

American Geophysical Union
American Institute of Physics
American Physical Society
American Society for Biochemistry and Molecular Biology
American Society for Engineering Education
American Statistical Association
American Vacuum Society
ASME, American Society for Mechanical Engineers
Association of State Supervisors of Mathematics
Augustus Hawkins Foundation
Bay Area Council
California STEM Learning Network
Campaign for Environmental Literacy
Center for Sustainable Communities
C-STEM Teacher & Student Support Services, Inc, University of Houston
Curriculum for Agricultural Science Education (CASE)
DEBLAR & Associates
Dycet Research Group
Education Development Center, Inc.
Entertainment Industries Council (need to add logo)
Hands on Science Partnership
Interactive Science Programs (ISP)
Ithaca College Careers in Science, Technology, Engineering, and Mathematics (C-STEM) Program
LearnOnLine, Inc
Measured Progress
Mentoring Youth Through Technology
Museum of Science, Boston
National Alliance for Partnerships in Equity
National Association of Biology Teachers
National Center for Technological Literacy
National Council of Teachers of Mathematics
National Science Education Leadership Association
National Science Teachers Association
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