



**National Center for
Technological Literacy®**

Museum of Science, Boston

LEGISLATIVE PRIORITIES FOR THE REAUTHORIZATION OF THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA)

The National Center for Technological Literacy (NCTL) ® at the Museum of Science, Boston aims to enhance teacher and student knowledge of technology and engineering and to inspire the next generation of engineers, inventors, and innovators. Recognizing that a 21st-century curriculum must include today's human-made world, the goal of the NCTL is to introduce engineering as early as elementary school and continue it through high school. NCTL works nationwide with leaders in education, government, and industry to integrate engineering as a new discipline.

Technology and Engineering education includes curriculum and instruction that: (a) teaches innovation and the engineering design process using a variety of tools, mathematical models, materials, processes, and other resources; (b) develops an understanding of the many fields of technology, engineering, and related careers; and (c) enhances proficiency in problem solving techniques, through the application of engineering design principles. Since our focus is on Technology and Engineering in STEM (science, technology, engineering and mathematics) education and in advancing Technological Literacy, NCTL recommends that the reauthorization of ESEA:

1. Ensure any definition of "technology literacy" is consistent with the Preparing Teachers for Digital Age Learners program under P.L. 110-315, Part B of the Higher Education Opportunity Act, which provides that the term include the ability to use technology to, "analyze and solve problems, including the application of the engineering design process;"
2. Allow informal STEM education centers and other non-profit educational organizations to receive funds to provide teacher professional development;
3. Ensure Technology and Engineering educators are included in professional development opportunities for teachers; allow Colleges of Technology and Engineering to participate partnership activities (in addition to Colleges of Arts and Sciences);
4. Include Technology and Engineering instruction in any new provisions dealing with core curriculum development and/or expanded learning time;
5. Allow States to include Technology and Engineering in any definition of "rigorous curricula;"
6. Allow after school program funds to be used for Technology and Engineering activities;
7. Allow States that develop multiple State assessment models or indicators for accountability purposes to include measures related to Technology and Engineering; and,
8. Encourage State science assessments to reflect the National Assessment of Educational Progress (NAEP) Science 2009 Framework, which includes "technological design" items.