

# Gateway to Technology and Engineering

*School Districts Leading Change*

## Why Technology and Engineering?

Just as reading is essential for language literacy and inquiry is essential for scientific literacy, the ability to use the engineering design process—identifying a problem, designing a solution, then testing and improving the design—lies at the heart of technological literacy. As our nation seeks to maintain a leadership role in innovation worldwide, we must “broaden the pipeline” by encouraging learners to apply critical thinking to engineering and technical fields as well as to every other industry.



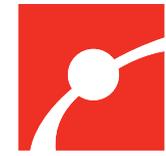
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The National Center for Technological Literacy® (NCTL®) was established by the Museum of Science, Boston to inspire the next generation of engineers and innovators. The NCTL and its Gateway Project both play a critical role in cultivating technological literacy and supporting engineering education.



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Boston, MA 02114-1099

Gateway to Technology and Engineering



**National Center for Technological Literacy®**  
Museum of Science, Boston



## The Gateway Project

The Gateway Project, established in 2005 by the National Center for Technological Literacy, assists school districts in developing a strategic plan of action to implement rigorous and engaging technology and engineering programs at all grade levels. This program, designed to guide systemic change, introduces educators to resources that support standards-based curricula and assessments. Originating in Massachusetts, the Gateway Project has been replicated across the United States as a model to build leadership capacity for technological literacy.

Currently, the Gateway community includes over 300 educational leaders representing 65 rural, suburban, and urban school districts. Gateway teams are comprised of K – 12 educators, curriculum directors, principals, and central office administrators who serve over 380,000 students in public, private, and charter schools.

## The Gateway Summer Institute

The Gateway to Technology and Engineering Summer Institute is a comprehensive three-day program, facilitated by Gateway staff and government and business professionals, that provides K – 12 school district teams with the tools and resources to develop a customized strategic action plan to implement district-wide technology and engineering education.

### Who Should Participate

We encourage school district teams to represent each grade level offered in the district—elementary, middle, and high school—and to invite an administrator such as a superintendent, department chair, or curriculum coordinator to participate. Typically, district teams consist of four to six team members, with secondary educators often having teaching experience in science, technology, engineering, or mathematics (STEM) fields.

### Gateway Institute District Teams

- **Develop a clear vision** for quality K – 12 technology and engineering education in alignment with district goals and state and national standards.
- **Build a professional network** of colleagues committed to strengthening technological literacy in their respective districts.
- **Use Gateway tools** to develop a sustainable strategic action plan.
- **Reconnect through progress sessions**, two full days in which best practices are shared, allowing for capacity-building across districts.
- **Receive in-district support** through school site visits by Gateway staff.
- **Gain access to content-specific workshops** and Gateway Symposiums.
- **Connect with online communities** through the Gateway project member website and the Technology and Engineering Curriculum (TEC) Review.
- **Achieve professional growth** through our Gateway Regional Leader Institute.

### For More Information

617-589-3100, [gateway@mos.org](mailto:gateway@mos.org), [mos.org/nctl](http://mos.org/nctl)



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**“[The institute was] very valuable for me. As a new CTE Director I am concerned about the direction to take with some of the programs in my district. This institute provided me with the necessary information and focus I need to move forward.”**

– Donna Burrill, Director of Business, Technology, and Career Education, Brockton, MA Public Schools

**“My work with [Gateway] has enriched my physics classes by bringing hands-on engineering challenges into my curriculum...The students’ reflective writing from this project really shows the depth of understanding that they developed using the engineering design process.”**

– Dave Parker, Physics Teacher NBPTS, Noble High School, North Berwick, ME

### About the Museum of Science

One of the world’s largest science centers and New England’s most highly attended cultural institution, the Museum of Science is ideally positioned to lead the nationwide effort to promote engineering education awareness, bringing science, technology, engineering, and mathematics alive for over 1.5 million visitors a year through its exhibits and programs.