Established in 2003 by the **National Science Foundation (NSF)** to address the looming shortage of technology workers in the United States, the **INNOVATIVE TECHNOLOGY EXPERIENCES FOR STUDENTS AND TEACHERS (ITEST)** program:

- Includes **326** current and past projects across **45** states and the District of Columbia
- Helps students and teachers build the skills needed to succeed in a science and technology driven world

ITEST PROJECTS PROVIDE DIRECT EXPERIENCE WITH INNOVATIVE TECHNOLOGY APPLICATIONS, INCLUDING:

- **3-D Scanning and Printing**, computational modeling, and modern statistics bring paleontology to life for middle and high school youth.
- **Nanotechnology** projects generate interest in scientific research and foster career readiness in related fields for low-income youth.
- **Computer Game-based Learning** and hands on biotechnology activities engage middle school students in genetics research.
- **Unmanned Arial Vehicles and Remote Sensing Technologies** provide tools for Native American high school students to study their surrounding ecosystems.


Opportunities to learn STEM effectively - for people of all ages, from all corners of the Nation, and in many venues (e.g., classrooms and living rooms; science centers and virtual centers) - are the foundation for a scientifically literate society and strong scientific workforce.

(NSF ITEST 2014 Solicitation)

ACROSS THE ITEST PORTFOLIO TEACHERS AND YOUTH PARTICIPATE IN DIVERSE STEM EXPERIENCES

- **Computer Science:** gaming & simulations, multimedia, programming, web development
- **Bioscience:** bioinformatics, biomedicine, biotechnology, DNA sequencing, neuroscience
- **Environmental Science:** climate modeling, geospatial technology
- **Engineering:** aerospace, astronomy, design, robotics, nanotechnology
- **Mathematics:** scientific algebra, geometry

Mathematics 3%
STEM 8%
Bioscience 9%
Computer Science 26%
Engineering 33%
Environmental Science 22%
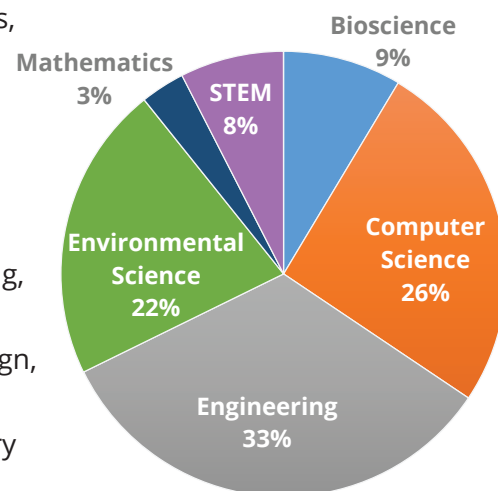
GOALS OF THE ITEST PROGRAM

- **Increase student awareness** of STEM and ICT careers
- **Motivate students** to pursue the education necessary to participate in STEM and ICT careers technology-rich experiences
- **Provide students with technology-rich experiences** that develop their knowledge of related content and skills (including critical thinking skills) needed for entering the STEM workforce

ITEST PROJECTS REACH YOUTH, EDUCATORS AND FAMILIES

Since its inception, ITEST projects have served more than **433,800** individuals:

- 415,900 **Youth**
- 12,800 **Educators**
- 5,100 **Parents and caregivers**

In 2015, **111,000** youth engaged in ITEST projects either directly, or through educators who participated in an ITEST program

85,900

25,100

Youth Engaged
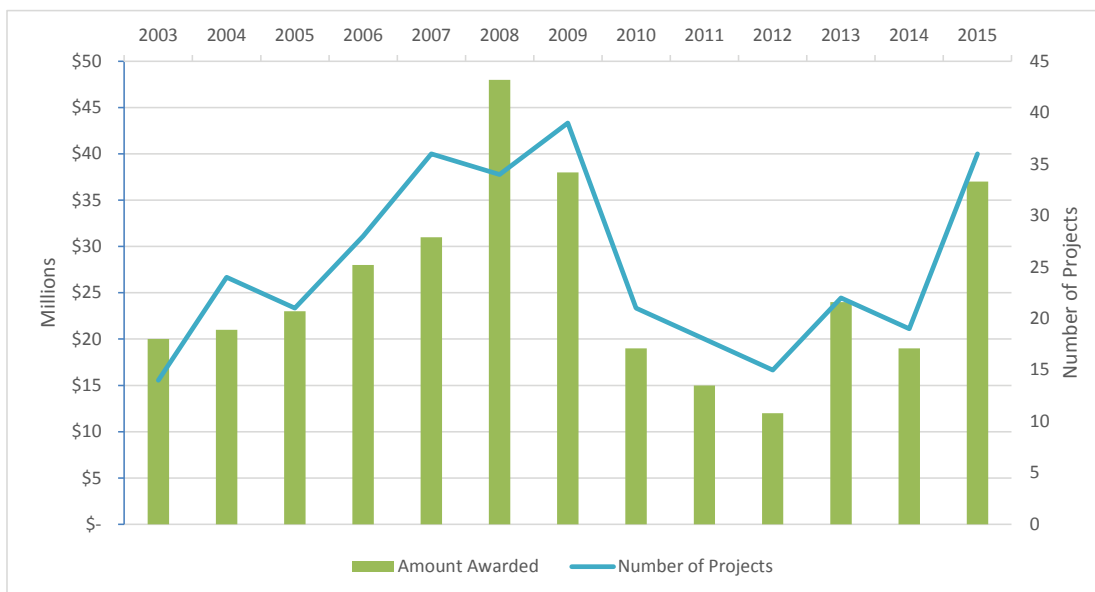
■ Directly   ■ Through Educators
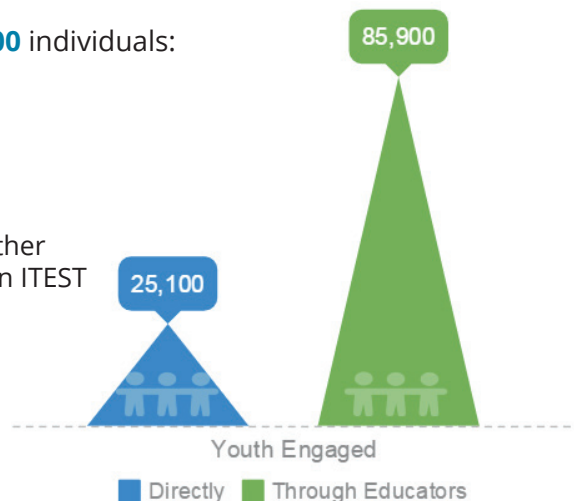
ITEST PROJECTS ARE ACTIVE IN RURAL, SUBURBAN, AND URBAN SETTINGS

While ITEST projects work across many different geographic settings, **83%** do at least some of their work in urban areas.

86% of ITEST projects work with middle and/or high school youth.

SINCE 2003, NSF HAS INVESTED OVER $335 MILLION IN ITEST PROJECTS, PROVIDING FUNDING TO AN AVERAGE OF 25 PROJECTS PER YEAR

ITEST is funded by H-1B visa revenues in direct response to current concerns about effectively responding to extant and emerging areas requiring specialists at all levels and in all fields of science, technology, engineering, and mathematics (STEM), including cognate domains. (NSF ITEST Solicitation)

■ Amount Awarded   — Number of Projects

EDC Learning transforms lives.

NSF