stelar
STEM LEARNING AND RESEARCH CENTER
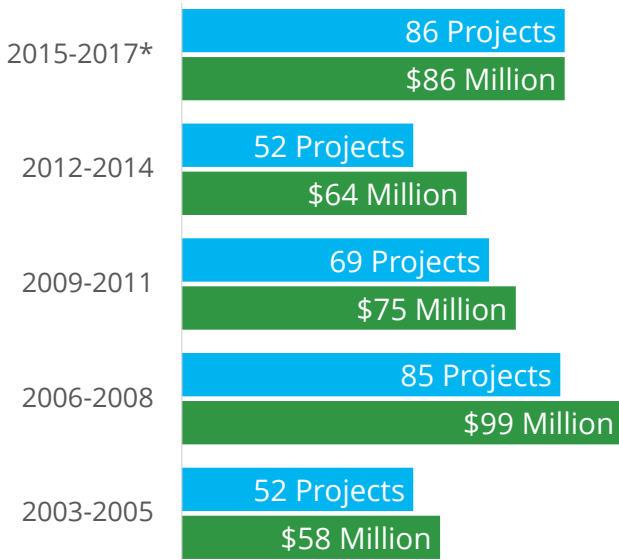
ITEST SNAPSHOT 2017
AN OVERVIEW OF NSF'S ITEST PROGRAM

The Innovative Technology Experiences for Students and Teachers (ITEST) program was established in 2003 by the National Science Foundation (NSF) to address the shortage of technology workers in the U.S.

Since 2003, NSF has invested $382 MILLION in more than 344 ITEST projects[a]

2015-2017*
- 86 Projects
- $86 Million

2012-2014
- 52 Projects
- $64 Million

2009-2011
- 69 Projects
- $75 Million

2006-2008
- 85 Projects
- $99 Million

2003-2005
- 52 Projects
- $58 Million

Funding for the ITEST program is provided by revenue from the **H-1B visa program**, which permits overseas workers to fill vacant U.S. engineering, science or mathematics positions.
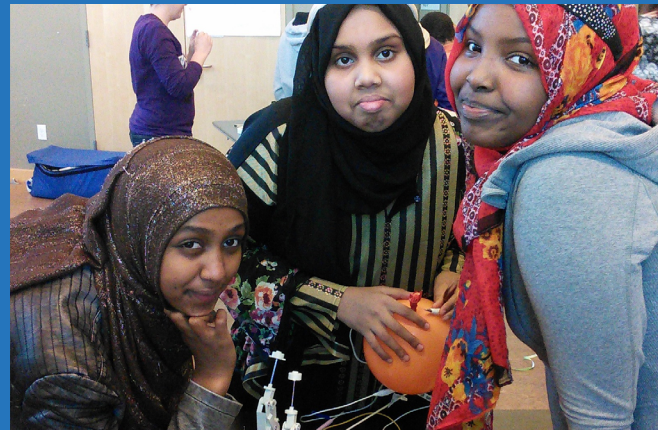
...and has awarded funding to organizations located in **46 STATES** and the District of Columbia
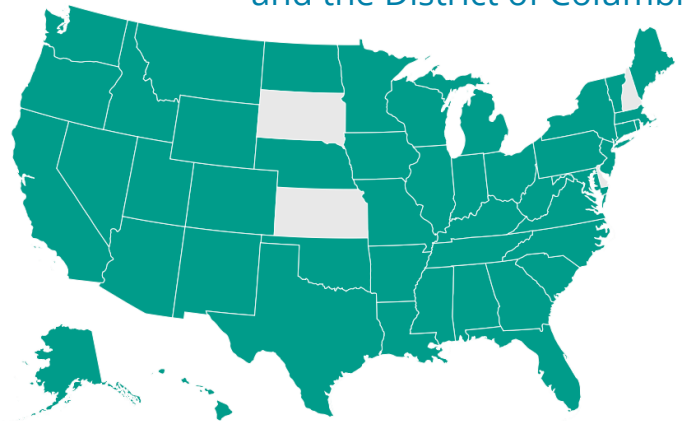
As of 2016, the ITEST program has reached:
566,500 youth
16,900 educators
6,800 parents & caregivers

The ITEST program seeks to enrich the formal and informal learning experiences of PreK-12 students by supporting projects that:

ITEST Project STUDIO: Build Our World

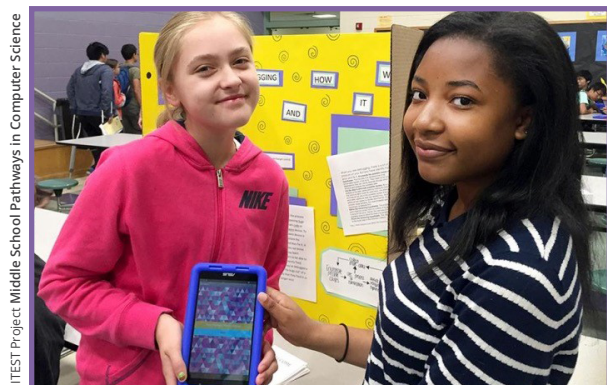**Increase awareness** of STEM and ICT careers
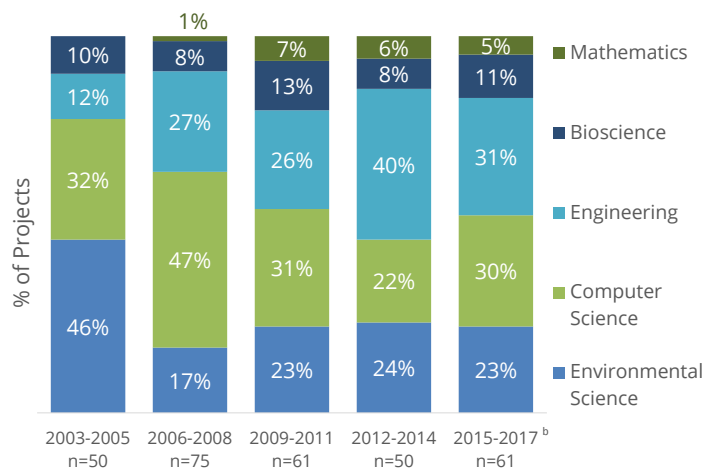
Motivate students to pursue the education necessary to participate in those careers

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
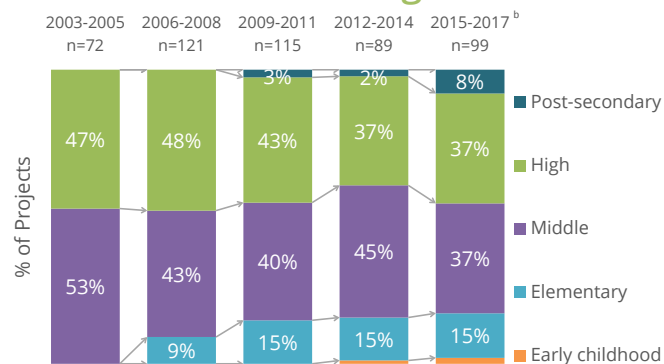
EDC Learning transforms lives.

NSF

Since 2003, ITEST participants have engaged in activies across a variety of STEM disciplines

% of Projects

	2003-2005 n=50	2006-2008 n=75	2009-2011 n=61	2012-2014 n=50	2015-2017 b n=61
Mathematics	10%	1% 8%	7%	6%	5%
Bioscience			13%	8%	11%
Engineering	12%	27%	26%	40%	31%
Computer Science	32%	47%	31%	22%	30%
Environmental Science	46%	17%	23%	24%	23%

ITEST Project Middle School Pathways in Computer Science

ITEST youth and educators learn to use cutting-edge technologies

- Visualization/computer modeling
- Multi-media authoring
- Game development
- Simulations & virtual reality
- Geospatial technologies
- Imaging technologies
- Wearable technologies
- Energy monitoring devices
- Mobile air quality detection systems

Projects span grades PreK -12 but most work with middle or high school

% of Projects

	2003-2005 n=72	2006-2008 n=121	2009-2011 n=115	2012-2014 n=89	2015-2017 b n=99
Post-secondary			3%	2%	8%
High	47%	48%	43%	37%	37%
Middle	53%	43%	40%	45%	37%
Elementary		9%	15%	15%	15%
Early childhood				1%	2%

Broadening Participation:

NSF's mission calls for broadening the participation of groups, institutions, and geographic regions that are underrepresented in STEM disciplines - which is essential to the health and vitality of science and engineering.

The ITEST community is comprised of more than **230 unique institutions and partners** including:

- 2 and 4 year colleges & universities
- informal science education organizations
- PreK, Elementary, Middle and High Schools
- Community-based organizations

34% of College & University partners are **Minority Serving Institutions**

Of the participants served directly by ITEST projects:

38% of youth are from racial groups underrepresented in STEM

These groups represented 29% of the total US adult population, but only 13% of the science and engineering workforce in 2013.[c]

56% of ITEST projects specifically target girls

Women comprised only 29% of science and engineering workers, although they accounted for half of the overall college-educated workforce in 2013.[c]

Sources and references:
a. "Projects" are defined as all awards under a project title - collaborative awards are counted as a single project
b. Includes projects awarded funding in 2017 under NSF Solicitation 15-599
c. National Science Board, *Science and Engineering Indicators 2016*

Data for this report was derived from:
- NSF report of all ITEST awards
- Management Information System (MIS) survey data from 2016 (n=81)
- Longitudinal MIS survey data from 2003-2016 (n=340)
- Newly awarded project survey data (n=34)
- NSF Solicitation 15-599

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