# Transform a Student's Future

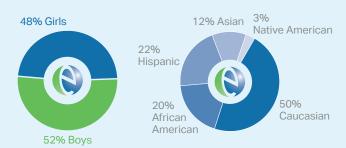


# **5.5M** Students Engaged in a STEM Experience



114

Average number of students reached per educator or volunteer



I've been using DiscoverE activities for many years.
When I see some former participants, they still
remember what we did and share their favorites!"

- Bobbi Weigel, Engineer & Volunteer, NJ

# **59%** DiscoverE Educators Teach in Title I Schools

**92%** students knew what an engineer did after attending a DiscoverE Engineers Week event.





**90%** students involved in DiscoverE Girl Day report they gained confidence in their ability to do engineering activities.

DiscoverE is a resource I can rely on for professional quality materials and curriculum. I very often refer teachers and others to the site."

 — Susan Brown, Asst. Professor of Engineering Instruction, Hope College, MI

# \$0 Cost per Student to Participate in DiscoverE Programs



**9 OUT OF 10** educators and volunteers agree it is important to have access to DiscoverE's free resources to engage students in STEM.

Participating in Future City with my students will forever be the highlight of my teaching career."

— Future City Educator

# **80** Corporate and Nonprofit Partners

## **YOUR LOGO HERE!**

DiscoverE is the definitive voice on engineering and STEM, the go-to resource for the messaging that anyone can use, and the place where the engineering community collaborates to help inform and educate the public on the value and essential nature of engineering.

 Jane Howell, Chief Communications Officer, American Society of Civil Engineers

#### **Why This Matters**

- By 2025, the demand for STEM professionals will outstrip supply and over 1 million STEM jobs will be unfilled.<sup>1</sup>
- STEM skills are relevant in all industries and depend on an increasing level of math and science literacy.

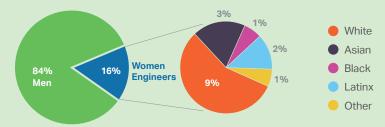
### The need to interest students in STEM early is well documented.

- Students fall out of STEM pathways as early as 4th grade.
- Children who are introduced to STEM early, set the stage for their college curriculum; score higher on the SAT; need less remedial classes; and are most likely to pursue a STEM career with confidence.<sup>3</sup>

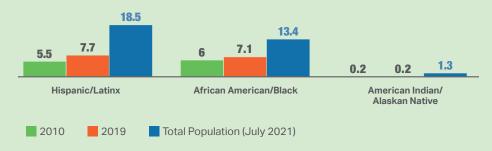




2019 Engineering Workforce by Gender<sup>4</sup>



#### Demographic Makeup of the STEM Workforce (%)4



### Why DiscoverE?

### DiscoverE believes every student in the world deserves <u>free</u> STEM and engineering experiences.

- We are the founder of one of the first STEM programs in the US,
   Engineers Week, which occurs every year.
- DiscoverE programs are used by thousands of organizations and individuals around the world.
- It is our intent to remain no cost, true to our guiding principle of Access for All.



- 1 Xue, Y and Larson, R. 'STEM Crisis or STEM Surplus? Yes and yes'. Monthly Labor Review. May 2015. https://www.bls.gov/opub/mlr/2015/article/stem-crisis-or-stem-surplus-yes-and-yes.htm
- 2 Bureau of Labor Statistics. https://www.bls.gov/emp/tables/stem-employment.htm
- 3 Marak, U. 'Why STEM education should be introduced early on for children.' Mand Labs: step by step. May 5, 2020. https://www.mandlabs.com/why-stem-education-should-be-introduced-early-on-for-children/
- 4 Georgetown University Center on Education and the Workforce, Mission Not Accomplished: Unequal Opportunities and Outcomes for Black and Latinx Engineers, 2021.



#### By 2030, DiscoverE will:

- Create 10 million additional K-12 engineering experiences.
- With a focus on ensuring 5 million are underrepresented students.



#### How will we accomplish this bold goal?

#### • Engineers Week (1951)

DiscoverE's signature program is a year-round commitment to celebrate engineers, technicians, and technologists and to engage millions of students around the world in STEM.

#### Future City (1992)

An international engineering and tech competition where 45,000 6th, 7th, and 8th-grade students strengthen their STEM skills to imagine, research, design, and build cities of the future.

#### Introduce a Girl to Engineering (2001)

Volunteers, educators, and others act as role models, facilitate STEM activities, and show 500,000 girls how engineers change our world.

#### Persist Series (2005)

A monthly series that explores how to create a thriving culture for engineers and technicians, especially for women and people of color. (222,000 participants in 2021).

#### World Engineering Day (2016)

With partners UNESCO and WFEO, DiscoverE leads the international movement to celebrate engineers' achievements and improve the public understanding of engineering and technology.

#### Chats with Change Makers (2020)

Each month DiscoverE's high school student host interviews STEM professionals. 131,000 viewers (live and on-demand) tuned in from classrooms, after-school programs, libraries, and homes.

#### **Stronger Together**

DiscoverE has built an active community of organizations, volunteers and educators who use our free programs and services including:

- Robust career library featuring 15 different STEM fields
- Growing collection of 160 STEM activities
- Well-attended volunteer and educator trainings
- Original research examining proven ways to engage students and effective engineering messages



#### 3.4B Impressions

People reached with positive messages about engineers and engineering via stories or posts about a DiscoverE resource or program.\*

\* 2020 analysis performed by Sayles & Winnikoff.

#### **About DiscoverE**

DiscoverE is a nonprofit dedicated to providing global resources, programs, and connections between K-12 students and engineers and STEM professionals. We have a special focus on reaching girls and underrepresented and underserved students. DiscoverE is the backbone organization behind some of the earliest and most broadly adopted STEM and engineering programs available. They are free to all students and it is our intent to remain no cost. DiscoverE is supported by generous donors including the Bechtel Corporation, Bentley Systems, Collins Aerospace, ExxonMobil, NCEES, Northrop Grumman Foundation, the Overdeck Family Foundation, Project Management Institute, Shell Oil Company, TE Connectivity and others.

