**5 Ways FIRST Aligns to Goals for Learning Outcomes with 21st Century Students**

**FIRST Student Outcomes**

FIRST students are significantly more likely to show gains in STEM outcomes than comparison students.

| 2.4x | Interest |
| 2.1x | Careers  |
| 2.0x | Identity |
| 1.8x | Activity |
| 1.7x | Knowledge |

**Project-Based Learning**

FIRST seeks to blend training and education through project-based learning that creates authentic learning opportunities through experiences provided by our programs, both competitive team and classroom-based opportunities.

**More Than Robots**

Education today in the U.S. is more than teaching facts and figures. Social and emotional learning in practice happens during participation in FIRST:

- **Intellectual Challenge**
  - Ages: 12-18
  - 95% Improve Time Management Skills

- **Public Product**
  - Ages: 4-16*
  - 95% Solve Disagreements

- **Project Management**
  - Ages: 14-18
  - 95% Increased Leadership Skills

- **Career Readiness**
  - FIRST strengthened post-high school success
  - 83% of students report feeling more confident in leadership roles
  - 74% of students feel more prepared for college courses
  - 72% of students gained access to mentors and peers in STEM

**Rigor, Relevance and Relationships**

- **Rigor**
  - Facilitators guide a student-led, engaging experience involving activities related to robotics, coding, engineering, research, or innovative design that is experienced in a cross-curricular environment.

- **Relevance**
  - Students acquire technology literacy by experiencing authentic activities with ties to STEM careers that build technical and holistic skills through real-world problem solving.

- **Relationships**
  - Students are engaged in a mentor-based program that fosters pathways to STEM careers with the mission of building a better society and activating students to action in their communities.

*Sources: Brandeis University, 2020, FIRST Longitudinal Study: findings at 72 month follow-up. FIRST 2015 FIRST Alumni Study. Brandeis University, 2011, FIRST Tech Challenge and FIRST Robotics Competition Evaluation. Brandeis University, 2013, FIRST LEGO League Evaluation. Learn more at firstinspires.org*