Preparing Students for the Global Economy
PLTW is the nation’s leading provider of K-12 science, technology, engineering, and math programs.
OUR MISSION is to prepare students for the global economy.
The United States ranks 23rd in science achievement and 30th in math ability out of 65 countries.

By 2018 …

- STEM jobs will grow by 17 percent.
- 1.2 million STEM jobs will go unfilled.
How do we prepare students to have the right skills and the right interests to fill those jobs and close the United States’ skills gap?
RIGOROUS, RELEVANT LEARNING

Dedicated, passionate teachers

Open-ended problems

Real-world problem solving

Hands-on learning
PLTW engages students’ minds while inspiring their interest in STEM subjects through real-world problem solving.
PLTW OFFERS K-12 STEM PATHWAYS
Students decide as early as second and third grade whether they like, and think they are good at, math and science.

WE NEED TO REACH THEM FIRST.
Topic-based modules engage students in design problems, collaboration, analysis, problem solving, and computational thinking.
Challenging, inspiring, and flexible, PLTW Gateway engages students’ natural curiosity and imagination through creative problem solving.
Nine-Week Independent Units:

- Design and Modeling
- Automation and Robotics
- Energy and Environment
- Flight and Space
- Green Architecture
- Science of Technology
- Magic of Electrons
- Medical Detectives
Rigorous and relevant, PLTW Engineering challenges students to solve open-ended problems; learn and apply the engineering design process; and develop teamwork, communication, and critical-thinking skills.
Full-Year Courses:

- Introduction to Engineering Design
- Principles Of Engineering
- Digital Electronics
- Aerospace Engineering
- Civil Engineering and Architecture
- Computer Integrated Manufacturing
- Computer Science and Software Engineering
- Engineering Design and Development
- Environmental Sustainability
Students play the roles of biomedical professionals as they investigate and study the concepts of human medicine, physiology, genetics, microbiology, and public health.
Full-Year Courses:

• Principles of Biomedical Science
• Human Body Systems
• Medical Interventions
• Biomedical Innovations
Students focus on computational thinking and real-world applications, not just learning to code. PLTW provides tremendous teacher support, industry relevance, and an emphasis on careers in computer science.
Courses:

• Introduction to Computer Science (0.5 year)
• Computer Science and Software Engineering (1 year)
• Computer Science Applications (1 year)
• Simulation and Modeling (0.5 year)
• Artificial Intelligence (0.5 year)
• Cybersecurity (0.5 year)
• Computational Problem Solving (1 year)
PLTW PARTNERS WITH LEADING CORPORATIONS, PHILANTHROPIC ORGANIZATIONS, AND EDUCATIONAL INSTITUTIONS.
DOES PLTW WORK?

YES.

PLTW contributes a strong, positive impact to mathematics and science achievement and offers a pathway to prepare and motivate students to enter careers in STEM fields.