

**Project Lead The Way** is the nation's leading provider of science, technology, engineering, and math (STEM) curriculum for middle and high school students.



## Our mission is to **prepare** students for the **global economy.**



## Why PLTW? Why now?

The United States ranks 17<sup>th</sup> in science achievement; 25<sup>th</sup> in math ability out of 65 countries.<sup>1</sup>

By 2018... – STEM jobs will grow by 17 percent<sup>2</sup> – 1.2 million STEM jobs will go unfilled<sup>3</sup>



How do we prepare students to have the **right skills** and the **right interests** to fill those 1.2 million jobs and **close the United States' skills gap**?

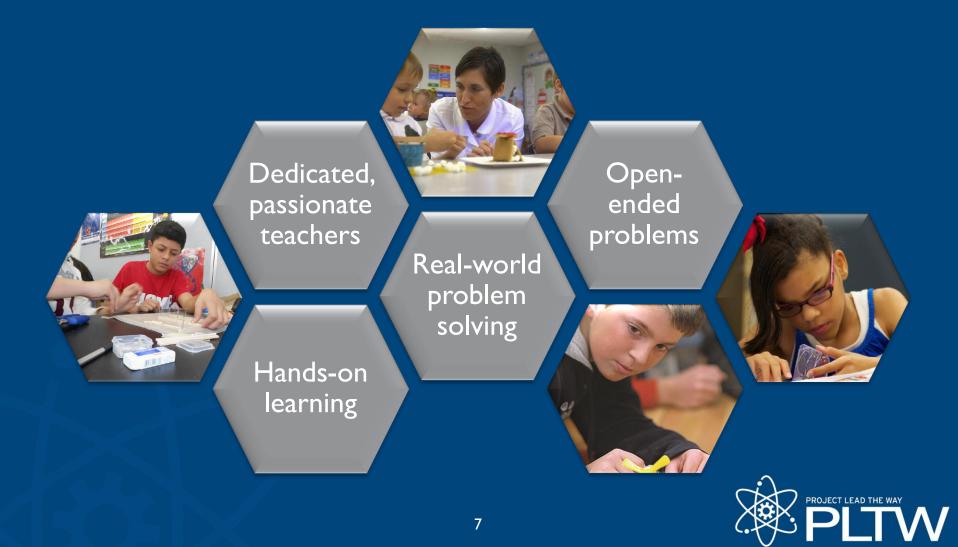


# Engage their minds and their interest early.





#### ...through rigorous, relevant learning.



## It's what Project Lead The Way does on a regular basis.

We engage students' minds while inspiring their interest in STEM subjects through hands-on learning and real-world problem solving.

## Here's how.



#### Preparing Students For the Global Economy



## LEADERSHIP • INNOVATION CONTINUOUS IMPROVEMENT ACCOUNTABILITY



#### World-Class Curriculum

Our curriculum is designed and consistently reviewed and improved by:

- PLTW teachers
- University educators
- Industry experts
- School administrators





#### World-Class Curriculum

- All PLTW curriculum is activities-, project-, problem-based.
- PLTW curriculum aligns with Common Core and Next Generation Science Standards.





#### PLTW's curriculum creates a classroom experience unlike any other.





#### World Class-Curriculum







#### Gateway To Technology

Challenging, inspiring, and flexible, GTT engages students' natural curiosity and imagination through creative problem solving.





#### Gateway To Technology

#### **Independent units:**

- Design and Modeling
- Automation and Robotics
- Energy and Environment
- Flight and Space
- Green Architecture
- Science of Technology
- Magic of Electrons
- Medical Detectives





#### Pathway To Engineering

Collaborative, rigorous, and relevant, PTE students solve openended problems; learn and apply the engineering design process; and develop teamwork, communication, and critical thinking skills.





## Pathway To Engineering

#### Courses:

- Introduction to Engineering Design
- Principles of Engineering
- Digital Electronics
- Aerospace Engineering
- Biotechnical Engineering
- Civil Engineering and Architecture
- Computer Integrated
  Manufacturing
- Engineering Design and Development
- \*New in 2014: Computer Science and Software Engineering





#### **Biomedical Sciences**

Students play the roles of biomedical professionals as they investigate and study the concepts of human medicine, physiology, genetics, microbiology, and public health.





#### **Biomedical Sciences**

#### Courses:

- Principles of the Biomedical Sciences
- Human Body Systems
- Medical Interventions
- Biomedical Innovations





#### PLTW elementary

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.



#### PLTW elementary

Topic-based modules engage students in design problems, collaboration, analysis, problem solving, and computational thinking.





# High-quality professional development prepares teachers to get students engaged in STEM.

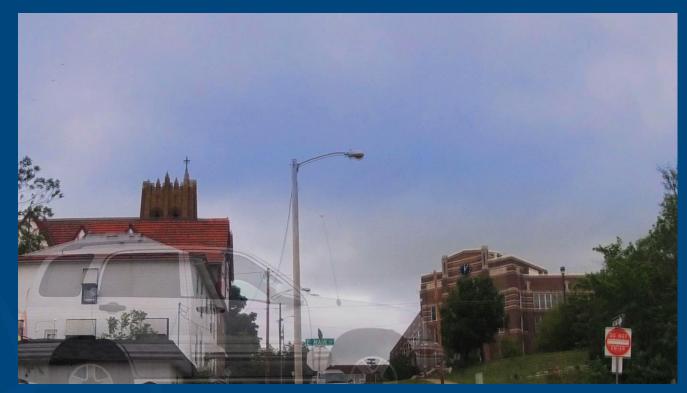


# High-quality professional development for teachers

- Three phases:
  - Readiness training
  - Core training
  - Ongoing training
- Conducted in partnership with more than 51 colleges and universities across the country.
- More than 3,500 teachers trained in summer 2013.



#### PLTW **partners** with leading corporation, philanthropic organizations, and educational institutions.





#### An engaged network of partners





#### So, does it work?



PLTW students achieve **significantly higher scores** in reading, mathematics, and science, and in some cases, have the opportunity to **receive college credit.** 



#### So, does it work?

PLTW alumni study engineering and technology in greater numbers than the national average, with a higher retention rate in college engineering, science, and related programs than non-PLTW students.





#### So, does it work?

"We need to cultivate, nurture that (STEM) interest early, and that's what Project Lead The Way does...It does it with the nuts and bolts of teaching."

> -William Bennett, U.S. Secretary of Education, 1985-1988

"We've been very, **very impressed** by both the **quality of the materials and the training** they're able to provide to educators." —*Tim Fliss,Vice President of Human* 

Resources, Bemis Company

"If I had to say what got our name out there as a school, it would be Project lead the way. I don't understand why schools would not use Project Lead The Way. The curriculum is there. The **training** is there. It's extensive It's detailed. The **success** we've had here at Toppenish is in large part due to our relationship with **Project Lead The Way.** 

> -Trevor Greene, principal, Toppenish High School, Washington



#### We continue to improve. Every day.

PLTW follows a **continuous improvement model.** 

Teachers can **expect** to see **improvements** in course material **each year.** 

New, **future-reaching** programs and delivery models are constantly in development.



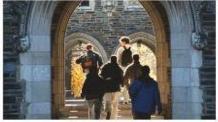
#### America's STEM Solution

#### Over 6,500 programs More than 5,500 schools









#### more than 13,000 teachers trained 100s of partners





Be a part of the solution.

**Bring** PLTW to your school or community.

Mentor PLTW students.

Join a school partnership team.

Financially support PLTW program implementation.

**Voice** your endorsement of PLTW.



#### Let's continue the conversation.

For more information visit **pltw.org** or contact school support at **SchoolSupport@pltw.org**.



