# THE IMPACT OF PLTV

Research demonstrates that Project Lead The Way students outperform their non-PLTW peers in school, are better prepared for post-secondary education, and are more likely to consider STEM careers. PLTW teachers are also found to be more satisfied and effective teachers. The research below illustrates the effects and outcomes of PLTW participation for students and teachers across the United States. *All studies are linked*.

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## STUDENT INTEREST AND ENGAGEMENT

# PLTW students reported that they are more interested in STEM

Preliminary results of an ongoing multi-year evaluation of PLTW in Massachusetts indicate **92%** of high school students reported more interest in STEM and **87%** of middle school students reported more interest in STEM after completing PLTW courses.

Click to learn more.

# Female PLTW students indicated more confidence in their abilities

A 2017 survey of female high school seniors in PLTW indicated **76%** believe they can become an engineer and **62%** reported PLTW encouraged them to major in STEM.

Click to learn more.

# PLTW students are more likely to major in STEM

In a 2024 study of PLTW students in TX who attended college, it was found that PLTW Biomedical Science students, when compared to similar non-PLTW biomedical science students, are 32% more likely to major in STEM. Similarly, PLTW engineering students, when compared to similar non-PLTW engineering students, are 14% more likely to major in STEM.

Click to learn more.

## TRANSPORTABLE AND TECHNICAL SKILLS

# Transportable skills are desired and valued by employers.

A 2019 study conducted by Burning Glass Technologies found transportable skills such as problem solving, critical and creative thinking, collaboration, communication, and ethical reasoning and mindset to be among the **most desired skills** in the workforce.

Click to learn more.

# PLTW students have employable skills immediately after graduating from high school.

A 2013 Texas study found that PLTW students who entered directly into the workforce after high school were observed to **earn higher wages** than non-PLTW students.

Click to learn more.



It's almost impossible to put into words how much Project Lead The Way has contributed to who I am and who I want to be.

Kelsie O'Brien PLTW Biomedical Science Alumna U.S. Air Force Academy



## PREK-12 AND POST-SECONDARY OUTCOMES

## PLTW students perform better in math and science

A 2012 study of PLTW in Iowa found that participating in PLTW led to a statistically significant **increase of five points** on math and science scores on the Iowa Test of Educational Development.

Click to learn more.

#### PLTW students are more likely to enroll in college

A 2024 study of PLTW students in TX found that PLTW Biomedical Science students, when compared to similar non-PLTW biomedical science students, are **49% more likely to enroll in college**. Similarly, PLTW engineering students, when compared to similar non-PLTW engineering students, are **16% more likely to enroll in college**.

Click to learn more.

## PLTW students are more likely to graduate high school

A 2023 study of PLTW students in MO found that PLTW students are **7% more likely to graduate** high school if they complete one PLTW course and **11% more likely to graduate high school** if they take 2 or more courses.

Click to learn more.

#### PLTW students persist in engineering degree programs

A 2019 study provided evidence that participation in PLTW engineering courses in high school **increases retention** in a university engineering program from freshman to sophomore year, especially among minority students.

Click to learn more.

## Black and Hispanic students benefit more from PLTW in terms of post-secondary enrollment

A 2023 study of PLTW in MO found that PLTW students were **15% more likely to enroll in post-secondary institutions** if they completed 2+ courses. These benefits were even larger for Black and Hispanic students who were **17%-19% more likely to enroll in post-secondary institutions**.

Click to learn more.

## **TEACHER EFFICACY, SKILL, AND SATISFACTION**

#### PLTW teachers reported feeling more satisfied and effective

In an ongoing evaluation of PLTW teachers in Massachusetts **66%** of teachers reported feeling **more satisfied** with teaching and **68%** reported feeling **more effective** as a teacher.

Click to learn more.



