INDIANA EDITION

Building a Stronger Workforce

A GUIDE FOR EMPLOYERS

How you can collaborate with Project Lead The Way schools to prepare students for careers in science, technology, engineering, and mathematics.

project lead the way® Indiana

Forging The Innovation Generation

Indiana PLTW Communities

Indiana is approaching 300 schools that offer the PLTW curriculum to its students continuing the state's recent reputation as the nation's largest provider of the PLTW program.

The Indiana PLTW program also boasts more than 10,000 high school students annually who take at least one PLTW class.

For more information, visit:

Indiana Project Lead The Way:
- **www.tech.purdue.edu/pltw**
- **pltwinfo@purdue.edu (e-mail)**

Indiana PLTW Participating Schools
- **www.pltw.org/schoollist-new.asp?toSelect=IN**

National PLTW
- **www.pltw.org**

CATERPILLAR®

Production of this brochure is made possible through a grant from Caterpillar Corporation.

Project Lead The Way Partners Make a Difference

Indiana is a leader in our nation's efforts to better prepare students for the rigors of higher education and the 21st century workplace. A program titled Project Lead The Way® (PLTW) is instrumental in this effort. ... And so are the contributions of 500-plus Indiana business and industry volunteers who offer their time and other resources to the Indiana PLTW program.

Among the Indiana employers that are part of the program in our state include:
- Alcoa Inc.
- Boston Scientific - Spencer, IN
- Caterpillar Inc.
- Cummins Inc.
- Delphi Automotive Systems
- Eli Lilly & Company
- Rolls-Royce Inc.

"Building an exceptional engineering and engineering technology workforce will strengthen Indiana's economic development infrastructure. PLTW has and will continue to play a key role in preparing middle and high school students for success in these critical areas."

— France Córdova, president, Purdue University

Your company, whether big or small, can invest time, personnel, and/or resources today and earn huge dividends in the future.

Your involvement can lead to more PLTW graduates that decide to remain in Indiana after college graduation keeping citizens at work in our state.

By working with PLTW, you can influence how education is practiced and have an impact on the quality of students coming from our educational system into the workforce. We invite your company to join a PLTW Partnership Team.

What is Project Lead The Way?

PLTW is a not-for-profit organization that partners with schools and states to offer science, technology, engineering, and mathematics programs for middle and high school students (see far right panel). PLTW programs are in more than 2,500 schools in all 50 states and the District of Columbia. For more information, visit *www.pltw.org*.

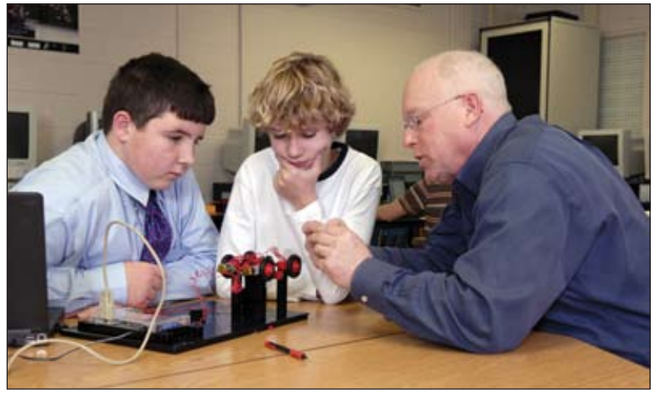
How can PLTW benefit business?

American companies need top talent. They need new generations of engineers and other science and technology workers to drive their growth and prosperity. PLTW starts these professionals on the pathway to success by teaching them the sophisticated skills they will need in college and the workplace, including:

- Problem solving
- Critical thinking
- Teamwork
- Scientific method
- Communication
- Project management

How does PLTW get students ready for careers in engineering, technology, manufacturing, and other high tech, high skill industries?

PLTW curriculum makes math and science relevant for students. By engaging them in hands-on, real-world projects and problems, students understand how the skills they are learning in the classroom can be applied to everyday life. In addition, the rigor and relevance of the PLTW curriculum prepares students for college—and career success.



Why do PLTW schools need corporate partners?

Corporate partners provide the real-world component that is central to PLTW's mission. Schools that become part of the PLTW network are required to form local Partnership Teams. These groups are made up of mentors, coaches, and advisors from local businesses and industries, colleges and universities, and the community. They ensure that classes and curricula reflect the realities of today's workplace.

What does the Partnership Team do?

The specific role of the Partnership Team varies from school to school. Basically, the team helps ensure that the PLTW curriculum provides the greatest possible benefit to students. For example, team members might help PLTW teachers fine tune units of study to include more depth or relevance, serve as mentors for students, or work with teachers to develop new ways to enhance the students' experience in their PLTW classes.

How much time are employers expected to contribute to Partnership Teams?

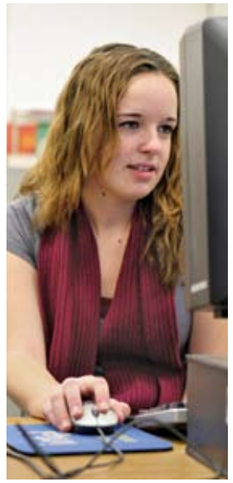
Each employer decides how involved it gets in the PLTW programs. Some examples include:

- Meeting one-on-one with teachers to develop and discuss projects and research activities
- Providing internship, job-shadowing, and cooperative education experiences for students and teachers
- Offering facility tours or training sessions
- Participating in school career fairs, assemblies, and panel discussions with parents, teachers, or students
- Developing classroom presentations on real engineering projects
- Serving as judges and providing feedback on student presentations
- Donating project supplies and other materials

How to join a local PLTW Partnership Team?

Contact your local middle school or high school principal.

To learn more about Project Lead The Way or locate the nearest PLTW school or district, see the contact information on the back of this brochure.



PLTW Pre-Engineering and Engineering Technology Programs

Middle School Program: Gateway To Technology (GTT)

GTT is a five-unit middle school program designed to help all students learn math, science, and technology. Students enter high school with foundation knowledge and skills for success in pre-engineering. GTT units include:

- **Design and Modeling**
- **The Magic of Electrons**
- **The Science of Technology**
- **Automation and Robotics**
- **Flight and Space**

High School Program: Pathway To Engineering (PTE)

PTE features a three-tier approach that includes Foundation Courses (F), Specialization Courses (S), and a Capstone Course (C). PTE courses include:

- **Principles of Engineering (F)**
- **Introduction to Engineering Design (F)**
- **Digital Electronics (F)**
- **Computer Integrated Manufacturing (S)**
- **Civil Engineering and Architecture (S)**
- **Biotechnical Engineering (S)**
- **Aerospace Engineering (S)**
- **Engineering Design and Development (C)**

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