

What Evidence Supports the Effectiveness of PLTW?

PLTW Encourages Students to Pursue STEM Careers- Of the more than 69,000 PLTW students who participated in a third-party survey prepared by True Outcomes ("Report on the Third Year of Implementation of the True Outcomes Assessment System for Project Lead the Way, October 1, 2007," <http://www.pltw.org/Assessment-Evaluation/True-Outcomes.cfm>):

- 90% of 443 high school seniors in the sample cohort indicated that PLTW courses helped them decide on a college major and career field to pursue.
- 80% of these seniors indicated that their primary area of study after high school will be in engineering, technology, or computer science.

PLTW Reaches Students of All Backgrounds- Because PLTW is offered across all socioeconomic levels, it has been effective in reaching traditionally underrepresented demographic groups as documented by the same True Outcomes evaluation mentioned above.

PLTW Increases Student Aptitude and Retention- Observations by independent entities have shown that PLTW increases student aptitude in STEM fields and increases retention rates in college engineering programs:

- In 2008, 65-70% of incoming freshmen at the Milwaukee School of Engineering stayed with their declared major while 90% of the Milwaukee Schools of Engineering's PLTW students remained in their declared major.
- Research by the Southern Regional Education Board has found that PLTW students achieve significantly higher scores in math and science on the National Assessment of Educational Progress assessment.
- The proportion of female PLTW students reflects the national proportion of female students attracted to college engineering programs (17%). Male and female achievement levels on end-of-course exams are equal in all courses.

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For further information on the Southwest Academy for 21st Century Excellence visit: www.swacademy21.org



Why STEM?

STEM Education is Vital- to the continued prosperity of Wisconsin and the nation. It is projected that 70 percent of all jobs in the United States will require skills in science, technology, engineering, and math.

What is PLTW?

Project Lead the Way (PLTW) is “Best Practice”- Its rigorous, standards-based, project-focused curriculum helps to build the 21st-century STEM workforce pipeline.

PLTW is for All Students- 161 urban, suburban, and rural schools have successfully implemented the program, providing more than 20,000 Wisconsin students in 2008 alone with essential preparation to enter college or careers in fast-growing STEM fields.

PLTW Meets State and National Objectives- Project Lead the Way complements existing Wisconsin initiatives such as Grow Wisconsin, the Wisconsin Covenant, and the Youth Apprenticeship Program, and has been recognized as a premier education program by the Wisconsin Technology Council. Additionally, the program aligns with national and state standards in math, science, and technology.

PLTW is Recognized by Colleges and Universities- Joining others across the nation, Wisconsin’s private universities, technical colleges, the University of Wisconsin System, and the University of Wisconsin Extension and Cooperative Extension recognize Project Lead the Way’s impact and reward student completion with credit or scholarships.

PLTW is a Public/Private Partnership- Public and private partners have joined together with innovative middle and high schools to ensure that Project Lead the Way is growing and sustainable in Wisconsin’s classrooms to benefit our students, teachers and communities.

What is the Southwest Academy for 21st Century Excellence?

Today’s students will read 2,300 web pages and write more than 500 pages of e-mail this year. They will view 1,281 Facebook profiles. They will choose a college major that didn’t exist 10 years ago, and will work in a career that doesn’t exist today solving problems of which we have not yet heard.

How prepared is your son or daughter to enter into this 21st Century work world?

Teachers and school districts in Southwest Wisconsin are quickly adapting classrooms and offerings to keep up to the rapidly changing area of technology. Project Lead the Way was previously thought to be possible only in large districts due to cost, teacher training and available students. The PLTW Rural Initiative has found a cost effective way to join forces and offer PLTW in four small districts (Southwestern, Cuba City, Highland and Iowa-Grant) with a slightly larger district (Platteville) as the lead district.

In an effort to offer the PLTW capstone course, Engineering Design and Development (EDD) will be offered as a “hybrid class” taught by Scott Swan, Southwest Tech Mechanical Design Program Instructor. EDD is a research course that requires students to formulate the solution to an open-ended engineering question. With a community mentor and skills gained in their previous courses, students will create written reports on their applications, defend the reports, and submit them to a panel of outside reviewers at the end of the school year.

To become involved in the EDD course, students will:

- Have completed two previous PLTW classes.
- Apply using the SW Academy for 21st Century Excellence application, which is available for their PLTW instructor.
- Attend the EDD class on Wednesdays from 4:00—6:30 p.m. at a location to be determined.

In return, students will receive three advanced standing credits that will apply at SWTC and other post-secondary institutions with similar offerings.

Inquiry Information

Name _____
Home Address _____
Home Phone _____ School District _____
Student E-mail Address _____
Parent E-mail Address _____

I am interested in receiving more information about the Engineering Design & Development Course and the Academy for 21st Century Excellence.

Please send inquiry request to: Julie Pluemer, STW Curriculum Specialist
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Fennimore, WI 53809