

NEWS RELEASE

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Collaboration key to making Indiana Project Lead the Way first in nation

WEST LAFAYETTE, Ind. - Indiana Project Lead the Way, part of a national non-profit program that provides engineering and technology education curricula for teachers in middle and high schools, has grown to 231 schools this year, a 45 percent increase from 2006.

The increase puts it first in the nation for schools implementing the Project Lead the Way curriculum.

Michael O'Hair, associate dean for engagement in Purdue's College of Technology and co-chairman of Indiana Project Lead the Way, credits the spike in participation to several factors, with the common thread being the collaborative effort among Purdue, state agencies and schools.

"We've had steady growth since the program started in Indiana in 2001, but it's been significant in the past year due to continued and strong support and collaboration with the Indiana Department of Workforce Development and Department of Education," he said. "Their backing has enabled us to get the word out to schools, receive more funding and grow the program in new directions."

In 2006 there were 159 schools in Indiana offering the pre-engineering program, and this year there are 231 participating schools.

O'Hair said that two recent developments - a new curriculum focus and an influx of funding - will result in even greater growth.

Project Lead the Way has traditionally been focused on increasing the number and quality of engineers and engineering technologists, but this fall the program expanded to offer a college-level course that focuses on the principles of biomedical sciences.

Indiana is one of seven states piloting the program in biomedical sciences, and 15 high schools are offering the course, more than twice the number of any other state.

The high schools offering the new curriculum each received \$25,000 from the Indiana Department of Workforce Development to start the program.

Terri Schulz, leader of program innovation for the department, said they supported the pilot program because the biomedical industry is a high-skill, high-wage industry that is growing rapidly in the state.

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"There's a tremendous demand for highly educated workers from the many biomedical-based companies we have in Indiana, and the Project Lead the Way curriculum is a great way to get students interested early," she said. "Those who complete degrees in biomedical sciences can go on to careers as doctors, dentists, registered nurses, laboratory technicians and other roles in health care. The rigorous, problem-based curriculum is a great foundation for any postsecondary course of study."

Schulz said offering a health-care component in Project Lead the Way will help attract more girls to the program, which, with its focus on engineering, has traditionally attracted mostly males.

One course is currently being offered, but the plan calls for additional courses to be available in years two, three and four of the program, focusing on human body systems, medical intervention and science research, respectively.

An added feature of the biomedical sciences courses is that they can be counted toward an academic honors diploma, said Patty Shutt, director of the office of career and technical education at the Indiana Department of Education.

"What's great about these courses is that they are college-level courses that will prepare students to enroll in scientific programs in college, but even if they don't pursue these careers, the courses will expand their thinking in ways traditional high school science courses might not," she said.

Shutt said that by next year, they hope to have 50 schools around the state signed up for the classes.

The other factor that will likely result in more growth for Project Lead the Way is a \$1.57 million investment that Indiana WIRED (Workforce Innovations in Regional Economic Development) made in the program. WIRED's support provides funding for 74 additional schools to train teachers and purchase software and equipment to be able to offer the Project Lead the Way curriculum, as well as funding for a computer-integrated manufacturing course. The grant is for 14 counties in the north-central Indiana WIRED region.

Indiana WIRED will provide a \$15,000 incentive for each of the 31 high schools and 43 middle schools in its area that have not yet implemented the program. It is estimated that in the first year each high school would have to invest about \$25,000 for training, hardware, software and other expenses to start the program, and that cost is about \$20,000 for each middle school.

O'Hair said the funding doesn't guarantee that all 74 schools will implement the program, but it does greatly increase the chances that the program will grow.

Purdue is the project administrator for Indiana WIRED.

O'Hair said the spirit of collaboration in Project Lead the Way is a major reason why so many teachers and administrators request that the program be implemented in their schools. This collaboration was honored in 2005 when Indiana Project Lead the Way, which is administered by Purdue's College of Technology and the state's departments of Education and Workforce

Development, was given a national award for efforts to work together to address the shortage of U.S. engineering and engineering technology students.

"We are growing due to this strong support and also because of word of mouth," O'Hair said. "The students are saying they want these courses, the teachers are saying they want the training to teach the courses, and we're hearing from employers that they like the qualities that the students possess once they've been through the program: critical thinking, teamwork, leadership and real-world experience.

"The interest and corresponding growth is an indication that we're doing something right."

Purdue is the affiliate university for Project Lead the Way in the state. The university also is responsible for training the program's high school teachers for the pre-engineering curriculum. Indiana University-Purdue University Indianapolis is responsible for training teachers involved in the biomedical sciences courses.

Purdue's engineering/technology teacher education program, which is part of the College of Technology, last year received the nation's first Project Lead the Way certification to offer its graduates Project Lead the Way engineering teacher credentials at the same time they receive their diplomas and Indiana technology education teaching licenses. In 2004 and 2006, the program was chosen as the outstanding engineering and technology teacher education program by the Association for Career and Technical Education's Engineering and Technology Education Division.

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Related Web site:

Indiana Project Lead the Way: <http://www.pltw.purdue.edu/>