

CAREER ACADEMIES:
WHERE SMALLER IS
BETTER

PATHWAYS TO POSTSECONDARY

INDIANA CAREER MAJORS

By Terri Schulz

THE INDIANA CAREER MAJORS INITIATIVE IS INCREASING STUDENT ACHIEVEMENT AS WELL AS HELPING STUDENTS TRANSITION SEAMLESSLY INTO POSTSECONDARY EDUCATION.

Education today for the work of tomorrow must take on an entirely new look if the United States is to remain competitive in the global economy. Today's students need to be critical thinkers and problem solvers, have excellent communication and digital literacy skills and master challenging core content.

Indiana is a leader in creating high school initiatives that provide this new look for education in the 21st century. These innovative education initiatives help students master core subject matter and 21st century skills while enjoying learning. Foremost among these programs is our Pathways to Postsecondary: Indiana Career Majors initiative.

The goal of this program is to increase student achievement and the number of students who complete postsecondary education. How do we do this?

- By instituting more rigorous and relevant standards.
- By improving the school curriculum and student learning experiences.

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- By an increased focus on career guidance and a seamless transition to postsecondary education.

Career majors increase high school student motivation and achievement by helping students make the connection between what they are learning in school and success in future educational and employment opportunities. This school improvement model is being used effectively in both comprehensive high schools and career centers.

Background

In 1999, the Indiana Department of Workforce Development began working with a handful of high schools across the state that were interested in adding rigor and relevance to their curriculum by creating career academies or career pathways. Academies and career pathways help students understand how their high school education prepares them for their future. Schools create thematic instruction by integrating academic and technical education, provide students with career guidance to help them choose courses based on their interests and aptitudes, and further explore interests through extra learning opportunities such as internships and student competitions.

What state officials and school administrators wanted to look at was the possibility of using career majors systems to give all students the tools and the motivation they need for success in high school, postsecondary—and in life.

Indiana has continued to connect education with lifelong student success. Indiana's Education Roundtable, a standing community and government taskforce on education reform, is dedicated to increasing the number of high school students who complete more rigorous Core 40, Academic Honors and Technical Honors graduation requirements, and thus improve their chances

for satisfying, rewarding employment.

Providing all Indiana children with the academic foundation needed to successfully navigate in the world of today is the basis of the Education Roundtable's P-16 Plan for Improving Student Achievement. This success will only be realized if Indiana's entire education system (from the early days of a child's life, through early childhood education, elementary school, middle school, high school and college) is geared to prepare and enable all students to achieve at high levels.

The Indiana Career Majors initiative builds on these efforts by connecting education with future opportunities. The Department of Workforce Development has grown from an initial eight pilot sites in 1999 to 110 schools around the state for the planning and establishment of career majors. By pursuing education in the context of chosen career majors, students better realize the relevance of education to their lives and set to work building futures that match their aspirations.

Best Practices

An example of a career major is science and engineering. For most schools in Indiana, this major or pathway would include the Project Lead the Way (PLTW) pre-engineering sequence of courses. Indiana has 160 schools utilizing the PLTW curriculum and professional development system. The program centers on developing better problem-solving skills by immersing students in real-world engineering problems. The challenging courses use project-based learning experiences to teach students the key elements and skills of engineering and technology-based careers.

Each PLTW course integrates math, science, technology, teamwork and communication skills in a rigorous hands-on-activity-based curriculum that excels at developing students' critical-thinking skills. This provides an excellent foundation for any future course of study.

Teachers must complete a rigorous two-week professional development course at a summer training institute prior to teaching each high school course. In addition, students have opportunities for dual credit with several postsecondary institutions. Many

schools also offer these students extra learning opportunities related to science and engineering, such as participation on a robotics team or an internship. A similar program is being developed for a health curriculum called PLTW Biomedical Sciences. Indiana will have 17 schools pilot this new career major next year.

An important aspect of Indiana Career Majors is helping students understand how their high school experience prepares them for their future through career guidance. All students should

have some idea of their likes, dislikes and aptitudes to help them determine where they are going after high school. Students also need an education and a career plan that transcends from high school into at least the first two years of postsecondary education or training to make sure they have their next steps planned after high school.

Indiana schools are encouraged to utilize the Indiana Gold Star School Counseling initiative to achieve this goal. Identified by the Pathways to College Network as a program that "reflects research-based principles and actions to improve college access and success," the Indiana Gold Star School Counseling initiative helps schools develop accountable counseling programs that provide sound academic and career guidance for all students and counseling for students experiencing personal or social problems that interfere with learning.

The Gold Star School Counseling initiative enables students to: 1) master defined guidance standards, 2) make choices that support high achievement, and 3) reach standards of high achievement.

Another important element of student success is the opportunity for students to explore learning activities outside the school. These include internships, mentorships, job shadowing, school-based enterprises, service-learning and a variety of student competitions such as robotics and super-high-mileage cars. This real-world learning is very effective in engaging students in learning and motivating students to excel. Real-world experiences can come in a variety of forms. Students not only participate in traditional shadowing and after-school/summer internships, but special opportunities that arise quickly and

Key Elements

Key elements of a working career majors system include:

- rigorous curriculum focusing on the integration of academic and technical standards, with opportunities to enhance critical-thinking and problem-solving skills, organized around high-skill, high-demand career areas;
- guidance to help students gain the personalized self-knowledge necessary for education and career decision-making, including a course plan with a flexible, coherent sequence of courses that extends into postsecondary;
- professional development for teachers and faculty on applied, contextual teaching methods, team teaching, curriculum integration and strategic planning;
- partnerships between secondary institutions, postsecondary institutions, business, labor, and other community-based organizations;
- extra learning opportunities such as senior projects, internships, mentorships, school-based enterprises and team competitions such as robotics, solar cars and super-high-mileage vehicles; and
- seamless connections to postsecondary opportunities that include articulation and dual credit opportunities.

depend on flexibility within the system.

Students at an Indianapolis career and technical center were invited to send a team of five A+/Network+ certified students to a large local office to do new computer installs on four successive Saturdays. Students were paid \$12.00 per hour for eight hours to do the new installs and configurations. The students were supervised by IT people from the company and received pay and experience and networking opportunities within a major local company. The company got good service and a close-up look at the capabilities and qualities of the students. Everybody benefits, and everybody wins.

One of the biggest benefits of the Indiana Career Majors initiative is helping students make a seamless transition to postsecondary education with articulation agreements and dual-credit opportunities. Dual-credit opportunities are increasing rapidly with these new high school postsecondary partnerships. As noted earlier, PLTW students can receive dual credit at several postsecondary institutions.

Jefferson High School in Lafayette has created an early college/high school program with Ivy Tech Lafayette for all interested juniors. Students can choose to start their day by taking two classes at Ivy Tech Community College. Students who complete the program will graduate with a high school diploma and an associate degree.

At Ivy Tech Sellersburg, students at area schools can

participate in a “five-year associate degree” in which students graduate from high school with one year of an associate degree completed at a cost savings to them of approximately \$6,000. Schools are reporting positive public relations with parents due to their appreciation of the time and money savings that the students receive through increased dual-credit opportunities.

Conclusion

The global economy is constantly creating new pressures on how we educate our students to achieve at the very best of their ability. A high school diploma is no longer enough education for today’s students to compete in this new global marketplace. Rapid change is a part of the world we live in, and education initiatives such as the Indiana Career Majors must continuously reinvent themselves to keep up with this change. But the basic tenets stay the same.

The Pathways to Postsecondary: Indiana Career Majors initiative

helps students find rigor and relevance in their education, drawing up education and career plans, finding work-based learning opportunities and plotting postsecondary education that will enable them to build successful, satisfying careers. Career majors help engage students in rigorous studies and help them make the connection between what they are learning in school and what they want out of life. ■

Explore More Along the Pathways

For more information about career and technical education in Indiana, including the Indiana Career Majors initiative, visit www.in.gov/dwd/partners/tech_ed.html.

For more information on Project Lead the Way, visit www.pltw.org.

To learn more about PLTW in Indiana and to view pictures of the summer training institutes, visit www.pltw.purdue.edu.

For more information on Gold Star School Counseling, visit www.asainstitute.org/goldstar.html.

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