

2014 Innovative CTE Grant Awards

Region 2 Awards:

- **Elkhart Area Career Center**

- Grant funding: \$124,500
- Private match: \$42,500
- Sector(s): Health Care
- Partners
 - 7 school districts, Elkhart Area Career Center (grantee)
 - Ivy Tech
 - IU Health Systems, Beacon Health Systems, Lycro Products Company, Morrison Industrial Equipment, Overhead Door
 - Horizon Education Alliance, Region 2 WIB, WorkOne, Business Education Roundtable, College and Career Success Coalition
- Includes the Early College Model (Horizon). Students who choose to enroll will participate in work-based learning through Career Pathways in Health Care. These students will graduate with stackable and portable credentials, as many as 30 transcriptable college credits, a minimum of two health-related industry certifications, worksite experience, employer mentor relationships, and ambitious yet attainable plans for future study and career advancement. Industry partners/employers will be involved in creating the plan for the experiential learning component of the program, which will include a College and Career Exploration Seminar, mentoring, job shadowing, and a summer internship. Grant funds will be used to hire career advisors, who will work with industry partners as well as participating schools and Ivy Tech Community College.

- **Fairfield Junior-Senior High School**

- Grant funding: \$13,667
- Private match: \$6,891
- Sector(s): Advanced Manufacturing
- Partners
 - Fairfield High School (grantee), Wawasee Area Career and Technical Cooperative
 - Ivy Tech
 - Goshen Die Cutting (GDC), New Horizons Aviation
 - Conexus
- Utilizes HIRE Technology Curriculum. Students will tour GDC facilities, job shadow, and intern with GDC, and speakers from GDC will be invited into the Conexus classes to talk with students about current trends and careers in in AML. Courses will also help students with writing resumes and improve their interviewing skills. Students will take exploratory technology and career courses in 7th and 8th grades to begin building a foundation for the manufacturing and logistics pathway. The instructor for the proposed curriculum will be trained through a Conexus summer institute and will be considered a member of Ivy Tech's adjunct faculty.

- **South Bend Community School Corporation**

- Grant funding: \$39,819
- Private match: \$13,370
- Sector(s): Automation and Robotics (Mechatronics)
- Partners
 - South Bend Community School Corp (grantee)
 - Ivy Tech
 - Koontz-Wagner, General Sheet Metal, Federal Mogul
 - St. Joe County Chamber of Commerce, WorkOne
- Curriculum will be aligned directly with the Mechatronics program at Ivy Tech with a focus on automation and robotics. Provides students with the opportunity to study for three years at the high school level, earn 34 dual credits in both academic and technical subjects, complete a Technical Certificate from Ivy Tech upon receiving their high school diploma and participate in work-based learning during both their junior and senior years in high schools. This grant would be used to fund equipment for the Mechatronics program, professional development for the teacher, support for additional academic programs needed to earn the Technical Certificate, and a work-based learning coordinator for this and all other CTE programs. Cycle 1 of this grant will cover expenses for curriculum development, laboratory planning, professional development, offering academic opportunities needed in the Technical Certificate requirements for Ivy Tech Community College, and for marketing of the new automation and robotics pathway. Also the organization and beginning implementation of the work-based learning opportunities will be started. To fully implement the new advanced manufacturing pathway, Cycle 2 funding must be secured. All students will participate in field trips, all will participate in job shadows and in the third year of the program, all students will participate in either job shadowing experiences or internships depending on age requirements. In addition, mentors will be assigned to all enrolled students to provide guidance and networking experiences.

- **Warsaw Area Career Center**

- Grant funding: \$350,000
- Private match: \$160,035
- Sector(s): Welding and Machining
- Partners
 - Warsaw Area Career Center
 - Ivy Tech
 - OrthoWorx, various biomedical companies
 - WorkOne
- The curriculum will be based on a combination of models utilizing classroom instruction, extensive hands-on laboratory project time and work-based learning. Students will use three different welding processes to obtain AWS certifications and will have advanced training in the first year of the program on all three processes. Precision Machining Technology (PMT) students will achieve NIMS certification by implementing learned skills in the disciplines of shop safety, project layout, precision measurement, manual lathe, manual mill, CNC Programming, and CNC machine setup and operation. These skills will be proven with NIMS standard projects and rated by the Metrology Technician

Committee. Students will then continue to the NIMS online certification testing process for complete certification in the related disciplines. Once completed, the student will move into either the work based learning pathway or continue at the career center in an advanced student learning role. Students will utilize the new project design lab and project launch center within the Precision Welding Technologies and PMT labs. The advanced learning role will offer real-world project scenarios where students will design and manufacture a project.

Region 4 Awards:

- **Chrysler Group LLC**

- Grant funding: \$100,000
- Private match: \$2,975,292
- Sector(s): Advanced Innovative Manufacturing
- Partners
 - 10 high schools and 4 CTE Centers
 - Ivy Tech Kokomo, Purdue Kokomo
 - Chrysler Group (grantee)
 - Conexus
- Ivy Tech is currently developing the curriculum with input from local employers and employer intermediaries such as Conexus Indiana and the Indiana Automotive Council. The curriculum features a stackable degree structure which features the potential for a complete early college experience; student may graduate high school with several nationally recognized certifications and a technical certificate in hand. Local school and workforce partners will provide transportation, wrap around supports, and counseling/career coordinators to help prepare Individual Development Plans for each participant, with support from a full time Ivy Tech "Integrated Technology Education Program" (ITEP) Student Advisor. ITEP will be wrapped around and significantly expand upon another high school based program for advanced manufacturers, the 9-15 credit hour HIRE Technology Program operated by a partnership of Ivy Tech and Conexus Indiana in several high schools in the target area. Both HIRE and ITEP draw upon project based learning methods. The proposed ITEP program is a form of "polytechnic." It is competency based, with 2000-4500 hours of instruction, sequenced in three stackable steps.

- **Kokomo School Corporation**

- Grant funding: \$75,338
- Private match: \$76,000
- Sector(s): Entrepreneurship (CEO Program)
- Partners
 - 10 school corporations, Kokomo Area Career Center (KACC)
 - Ivy Tech Kokomo, IU Kokomo, PU Kokomo
 - Andymark, Delphi, Duke Energy, GM, Liberty Financial, St. Joseph Hospital, Merrell Bros., Coca-Cola Bottling, (and many others)
 - Howard County Community Foundation, Greater Kokomo Economic Development Alliance (Inventrek)

- The CEO Program will enable students to become self-reliant, enterprising individuals that will become entrepreneurs or entrepreneurial thinkers while also contributing to the future economic development of the Greater Kokomo region. Participants will gain exposure to learning basic work skills and soft skills. The program will be one year, four credit classes at KACC. All classes occur on-site with regional businesses. The location for instruction will change between business partners every nine weeks. Guidance for the class is built around the National Entrepreneurship Standards. Students will collaborate as a class to develop a business plan for a company and will work with a business leader mentor to develop their own individual business plan. The class will count as an elective for all three of the Core 40 diplomas.

- **Tecumseh Area Partnership**

- Grant funding: \$174,292
- Private match: \$87,680
- Sector(s): Advanced Manufacturing
- Partners
 - 7 School Corporations, West Central and Wildcat Creek Career and Technical Cooperatives
 - Ivy tech
 - SIA, Caterpillar, Wabash National, Kirby Risk, Nucor Steel
 - Conexus, Frankfort/Clinton County Chamber of Commerce, WorkOne, Tecumseh Area Partnership (TAP)
- Incorporates the two year HIRE Technology Curriculum with an additional year for instruction in adv. mfg. Includes opportunities for internships and the development of two business liaison positions. Liaisons will work with schools and manufacturers to establish working partnerships, secure a mfg. Champion and A+ partner for each participating school, make students and parents aware of mfg. career opportunities, work with school counselors to promote and enroll students in the mfg. pathway, secure job shadowing opportunities for students, and develop beneficial WBL experience for students.

Regions 4 and 5:

- **Conexus**

- Grant funding: \$289,050
- Private match: \$121,040
- Sector(s): Advanced Manufacturing and Logistics (AML)
- Partners
 - Many schools partner with Conexus
 - Chrysler, Cummins, Allison Transmission
 - Region 4 WIB, Conexus (grantee)
- Focuses on summer internships for students with major industries, including Cummins, Chrysler, and Allison Transmission. Utilizes the infrastructure of HIRE Technology, A+ Partners, and Dream It Do It Indiana. Includes the creation of a cohort program based on industry models, which may help create a sense of AML community among participants. This concept is transferable to additional industry clusters.

Region 5 Awards:

- **Anderson Community School Corporation**

- Grant funding: \$292,320
- Private match: \$79,700
- Sector(s): Manufacturing and Logistics
- Partners
 - Anderson High School (grantee)
 - Ivy Tech, Purdue-Anderson
 - Greenville Technology Inc., XADS, Carter Logistics, Keihin, Mancor, Park Avenue Solutions
 - City of Anderson, Madison County Education Coalition, NAACP, WorkOne
- During the piloting process, the instructor for the manufacturing program will be consulting with Conexus, manufacturing partners which were set up through Conexus, participating manufacturers in the Economic Development Manufacturing Roundtable, and all contributing participants on the Manufacturing Advisory Board. Since the HIRE Technology curriculum is a two-year program, Anderson will utilize that curriculum for year one in the Intro to Advanced Manufacturing and Logistics followed by year two with the Advanced Manufacturing I course. In the first full implementation year of HIRE Technology, the instructor will be utilizing the HIRE Technology computer software-based curriculum. This program will supplement each HIRE technology e-learning module with a project reinforcing the skills taught within the module. Students entering the Advanced Manufacturing II course will complete a curriculum focused on the application of the two-year Conexus HIRE Technology curriculum solely through PBL. To prepare for the 15-16 school year, a workplace learning coordinator will make workplace connections to set up additional Internship partners and aide those partners in creating the implementation of the internship.

- **Central 9 Career Center**

- Grant funding: \$126,900
- Private match: \$42,300
- Sector(s): Manufacturing (may replicate curriculum for Construction)
- Partners
 - 8 school corps (feeder schools, Central Nine Career Center (grantee)
 - Vincennes University
 - Caterpillar Remanufacturing, Endress+Hauser, Major Tool & Machine, Westport Homes
 - Johnson County Development Corporation, Aspire Johnson County
- Expanding Dream It Do It and adding an Industrial Repair and Maintenance course. All students enrolled in Central Nine Advanced Manufacturing (Conexus HIRE Technology), Electronics, Precision Machining, and Welding will also be enrolled in one credit of Industrial Repair and Maintenance. Students will be primarily enrolled in their program of choice, but would rotate as a whole class for one-week sessions through each of the other manufacturing programs once a semester. Offers PBL training and cross visits with industry for teachers. The addition of a business/educational liaison position will provide a way to continue to strengthen relationships and connect resources. This

person will be the central contact/hub for the CTE Region, and would work with both business and educational representatives in connecting resources for presentations, tours, field trips, job shadows, internships, etc. This position of VU Recruitment Partner will serve C9 and all of its sending schools. The VU Recruitment Partner will work with high school students to utilize career assessment and interest inventories data to identify VU prospective students, increase awareness of Vincennes University and its programs/majors, and promote specifically CTE Pathways to targeted programs/majors.

- **Goodwill Education Initiatives, Inc.**

- Grant funding: \$314,993
- Private match: \$151,800
- Sector(s): Health, Manufacturing, and Logistics
- Partners
 - Indianapolis Metropolitan High School (IMET), The Excel Center
 - Ivy Tech, Vincennes University
 - Eskenazi Health, IU Health, St. Vincent's Health System, Applied Composites, Wood-Mizer, Global Plastics, UPS
 - TalentSource, Nurse-Family Partnership
- Focuses on both adult and high school students. Uses HIRE Tech curriculum. Taught at IMET and Excel Center.

Region 6 Awards:

- **Jay School Corporation**

- Grant funding: \$153,776
- Private match: \$61,514
- Sector(s): Advanced Manufacturing
- Partners
 - Jay School Corp (grantee), Blackford Schools, Area 18 CTE District
 - Vincennes University
 - Tyson, FCC, Fort Recovery Industries, Sunoco
 - John Jay Center for Learning, CELL, Conexus
- Proposes to innovate the implementation of the Conexus/HIRE Technology curriculum by embedding it in a Project-based - Early Credentialing high school model that synthesizes the roles and resources of secondary, post-secondary, adult workforce development, and local manufacturers in five ways: 1) provide students the opportunity to earn an Ivy Tech Technical Credential in Advanced Manufacturing and Mechatronics prior to graduating high school. 2) Develop curriculum that connects competitive high school robotics to existing Ivy Tech MRPO Advanced Manufacturing courses offered in Indiana high schools. 3) Develop curriculum to evaluate and report Soft Skill attainment for high school students in each CTE pathway that includes creativity and innovation, critical thinking and problem solving, teamwork, time management and work ethic. 4) Create work-based experience curriculum and "on-the-factory-floor" instructional opportunities for students, teachers and counselors. 5) Integrate our innovative CTE curriculum fully with the John Jay Center in order to provide integrated services that are student and adult centric.

Region 7 Awards:

- **Area 30 Career Center**
 - Grant funding: \$82,505
 - Private match: \$55,000
 - Sector(s): WIRED (Welding, Innovation, Robotics, Engineering, and Design)
 - Partners
 - 5 high schools and Area 30 Career Center (grantee)
 - Rose Hulman, Vincennes University, Ivy Tech
 - Heartland Automotive, Crown Equipment Corp., Nucor Steel, Tomlinson Mfg. Group, DEPCO, Liberty Industries Inc., JBH Technologies
 - Putnam County Community Foundation, Greencastle/Putnam County Economic Development Center
 - WIRED curriculum will specifically address the needs of the advanced manufacturing industry in the region by introducing students in the first year course to a wide spectrum of related skills including welding, industrial maintenance, programmable logic controllers (PLCs), design, computer numerical control (CNC) machines, robotics and more. In the second year, students will focus on one specific career area to continue building their knowledge, skills and experience. Business partners will provide internship opportunities.

- **Parke-Vermillion Education and Training Interlocal (PVETI)**
 - Grant funding: \$89,710
 - Private match: \$62,600
 - Sector(s): Energy Production, Systems, and Delivery
 - Partners
 - 5 high schools, PVETI (grantee)
 - Ivy Tech
 - Ceres Solutions, Nucor Steel, Duke Energy
 - Vermillion Rise Mega Park
 - Focus is on the energy sector and incorporates flipped-classroom instruction. Incorporates workplace preparedness. Standards and curriculum will be developed for an introductory course for energy, Energy I, and an Energy II course. The curriculum development team will also work to create "pre-certifications" that indicate to employers that students have completed the initial steps and requirements to continue on to certification.

Region 9 Award:

- **Columbus Area Career Connection (C4)**
 - Grant funding: \$204,805
 - Private match: \$70,000
 - Sector(s): Maintenance Technician
 - Partners
 - Multiple high schools (feeder schools for C4)

- Ivy Tech Columbus, Purdue Columbus
 - Enkei America, Honda, Cummins Inc., NTN Driveshaft Inc., Caltherm
 - EcO15, SIPS
- New courses will be designed to model a polytechnic institute. Curriculum consists of a 2-3 year course of study. The 2-year (720 hour) curriculum for Maintenance Technician courses will guide students through the skills described as necessary by the GAP Analysis process, including: safety, robotics, hydraulics, pneumatics, basic and preventive machining, instrumentation, basic micro processes, blueprint reading, welding, HVAC, rigging, CNC programmable controllers, and gauge reading. Students may specialize in Electronics or Machining. WBL options in senior year.

Region 10 Award:

- **Prosser Career Education Center**

- Grant funding: \$294,693
- Private match: \$128,000
- Sector(s): Advanced Manufacturing and Advanced Machine Tool
- Partners
 - 21 high schools, Prosser Career Center (grantee)
 - Ivy Tech, Vincennes University
 - Amatrol, ACI Tool Sales
- Develops and implements a project-based Advanced Manufacturing curriculum that places a heavy focus on Industrial Maintenance by blending traditional training equipment with interactive multimedia and virtual simulator software. Internships will be required. This grant proposal is submitted, in part, to finalize the transformation of this traditional Electricity program into a 21st century Advanced Manufacturing program that addresses the needs of Region 10.

Region 11 Awards:

- **Perry Central Community School Corporation**

- Grant funding: \$76,101
- Private match: \$37,000
- Sector(s): Advanced Manufacturing
- Partners
 - Perry Central and Tell City High Schools
 - Ivy Tech, Vincennes University Jasper Campus, Perry County College
 - Waupaca Foundry, Inc.
 - Conexus, ATTC (an A+ partner through Conexus), Perry County Development Corporation
- Development of a new curriculum in advanced manufacturing, building upon HIRE Technology and PLTW. Will develop an applied math course encompassing content taught in Ivy Tech's Math 122 and VU-J's Math 103. Also, will develop a CTE Pilot course using evidence-based pedagogical models such as PBL. In this course, each student will complete a self-selected project in which they innovate and develop prototypes using equipment in a digital lab.

- **Vincennes University Jasper Campus**

- Grant funding: \$250,265
- Private match: \$116,000
- Sector(s): Advanced Manufacturing
- Partners
 - 4 high schools, Southern Indiana Education Service Center
 - Vincennes University Jasper Campus (grantee)
 - Jasper Engines, Kimball Electronics, Toyota, Indiana Furniture Industries, OFS Brands, Master Brand Cabinets, Jasper Rubber, Wabash Valley Produce
 - Region 11 WIB, I69 BrainPower Group, Dubois Strong, Purdue TAP
- Has broad employer partnerships. Supplements and builds off of four existing programs. New model centered on trusted improvement methodologies (TPS, Lean Six Sigma). Secondary academic and technology teachers will work with post-secondary faculty and trainers from area DOJOs to develop and integrate curriculum targeting the skills gap areas of technical math, programming, mechatronics, technical communications, and soft skills. The Conexus HIRE curriculum grid, merged with the CAP and Toyota curriculum will allow VU to develop the appropriate skills and standards recommended by industry. Over 50 students will enroll in I.C.E. and internships, 100 in PLTW programs, and 50 in related mfg. programs. Specific marketing efforts will aim at counselors and parents.