A LEADING HUB FOR HIGH-TECH INNOVATION
A behind-the-scenes look at Lorain County Community College’s Great Lakes Innovation and Development Enterprise

INSIDE:
U of Akron offers new online degrees geared toward teaching
Ohio insurance works to ensure its own future
Where are the Bearcats interning this summer?

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This is a quarterly e-newsletter designed to connect Ohio higher education to the business community. In this publication, you will learn about the efforts of the Ohio Board of Regents to move students from the classroom to the workforce; and about research and idea development happening within the University System of Ohio that is benefiting Ohio businesses.
Welcome to the first issue of our new and improved business newsletter, ConnectED. With each issue, we hope to bring you a better understanding of how Ohio’s higher education community is directly tied to its business community. It is through this connection that we are fulfilling Gov. Kasich’s initiative to train skilled workers that will fill jobs in high-demand industries.

In this issue, you’ll get an inside look at Lorain County Community College’s GLIDE Center, and hear how three University of Cincinnati students are making the most of their education through real-world co-op experiences. We also turn the spotlight on a unique collaboration designed to create a future workforce for the insurance industry.

It’s an exciting time to be in higher education, particularly in Ohio, where we can have a powerful impact on a global economy. Whether you’re part of the University System of Ohio or Ohio’s ever-growing business world, there’s no better time to get ConnectED.
Looking down one of the hallways inside the Great Lakes Innovation and Development Enterprise
A Leading Hub for High-Tech Innovation

A behind-the-scenes look at Lorain County Community College’s Great Lakes Innovation and Development Enterprise

Lorain County Community College is filling the pipeline in northeast Ohio with innovative and dynamic technology companies that are primed for investment, while helping to educate Ohio’s next generation of entrepreneurs.

The Great Lakes Innovation and Development Enterprise (GLIDE) is one of northeast Ohio’s premier drivers of economic development. Housed on the LCCC campus in Elyria, GLIDE utilizes its resources to accelerate innovation and business growth, leading to job creation and technology investment in the region.

Founded in 2001 by a partnership between the Lorain County Commissioners, Lorain County Community College and the Ohio Department of Development, GLIDE mentors entrepreneurs to help them wrap sound business strategies around technology ideas. In July 2006, the State of Ohio designated it an Edison Technology Incubator, the only one in Ohio based on a community college campus.

“GLIDE focuses on the business process rather than specific technologies, thereby ensuring that many more ideas, companies and people at any stage of enterprise development have a place to go for assessment, advice and direction,” said LCCC President Roy Church. “GLIDE has developed an organization that provides any business, or potential business, with the resources and tools needed to navigate toward commercial success.”
THE IMPACT OF GLIDE
GLIDE has incubated more than 50 companies and currently has 21 companies occupying incubator space.

More than 700 jobs with an average salary of $48,000 have been a direct result of the entrepreneurial center’s contributions to the regional economy.

More than 2,500 entrepreneurs have been assisted in bringing their ideas to life. GLIDE assisted companies and entrepreneurs have seen $60M in revenue increases and $81M in follow-on funding.

Not only does GLIDE add to the region’s economic growth, it also offers graduates early access to the workplace, providing valuable exposure to new technologies and fully preparing them for a life and career after college.

SUCCESS STORIES
SMART Center
The SMART Commercialization Center for Microsystems is a collaboration between Lorain County, the State of Ohio, Cleveland State University and the Wright Center for Sensor Systems Engineering, Lorain County Community College and NE-Ohio regional industry. The center is housed inside GLIDE and has produced many spin-out companies. It offers back-end packaging solutions for companies that manufacture sensors and other silicon-fabricated devices.

Founded in 1966, Pressco is the world leader in machine vision inspection tools for the food and beverage container industry. Pressco is working with the SMART Center, to develop and conduct device testing in conjunction with Pressco tooling up its own facility, thereby reducing the development cycle. In addition,
Jonathan Katz, COO said, “Using the capabilities of the Desich SMART Center, Pressco will expand its staff to fulfill product development and marketing demands.”

“Scope” of Success: A Closer Look at a Successful Start-Up
Clear Image Technology is a company that is housed at LCCC’s GLIDE offices. It is a company that specializes in manufacturing medical equipment such as the InnerVue Diagnostic Scope System. It is a device that allows for healthcare professionals to take a closer look at joints inside of the human body. The scope is used in a procedure called a “micro-invasive” diagnosis.

GLIDE’s relationship with Clear Image began when the owners of Micro Medical Devices, a company that has developed several related technologies, met at the LCCC campus in early 2002. GLIDE suggested that Micro Medical spin off the technology for a company to develop exclusively. Clear Image was born out of that process.

“GLIDE has been incredibly helpful to us in working through a variety of issues that startups face. They worked with us to choose the right business structure, raise funds from investors and negotiate a partnership with a large corporation,” said Clear Image’s Chief Technology Officer, Subba Shankar. “GLIDE brought business experience that greatly accelerated our growth.”

The Innervue Diagnostic Scope System (pictured left) is a joint venture between Clear Image Technology and Biomet. Innervue is used to evaluate conditions within the joint. This system can be used in addition to magnetic resonance imaging or alone to determine the next plan of action for each patient. The device, in many instances, can even replace an off-site MRI.

For more information about GLIDE visit http://www.glideit.org/
Online Degrees for Those Wanting to Teach Adults in Corporate Ohio

According to the Ohio Department of Job and Family Services, training and development specialists are “high employment prospects for Ohio.” This group ranks 18th on the state’s list of the top 50 fastest-growing occupations; nationally, it’s ranked 13th. The Bachelor of Science in Teaching and Training Technical Professionals provides individuals working in technical and paraprofessional fields, who hold an associate degree or equivalent, the opportunity to teach and train adults for this growing job market. The program is offered fully online, and students can transfer all of their general education coursework and technical field coursework from other colleges and universities for a total of 96 hours of transfer credit. The last 32 credit hours are offered completely online through The University of Akron, College of Education.

This bachelor’s degree has existed since 1970 through the Department of Educational Foundations and Leadership within the College. Program graduates enter this growing job market without ever having to leave their current place of employment. The Department boasts a 97 percent rate of online degree completion in this program.

The second fully online degree that the University of Akron offers is the Master of Science in Teaching and Training Technical Professionals. This degree is for people with a wider range of backgrounds who are interested in working in business and
industry, community agencies and higher education. According to O*Net OnLine, instructional design is one of the fastest-growing occupations in the country. In Ohio, there has been a 20 percent growth in this field. Nationally, instructional designer jobs are ranked 27th of the top 50 career opportunities; in Ohio, the field is ranked 23rd of the top 50 fastest-growing occupations.

Enrollment in this program has tripled since online courses have been offered. Most students in this program work full-time and attend classes part-time online, with most taking two courses per semester. Graduate assistantships are available for students interested in working full-time with opportunities in instructional design. The demand for graduate technicians and paraprofessionals to teach adults at the postsecondary level and conduct training in business and industry varies by technical area.

Both degree programs are anchored in a solid knowledge of adult learning theories, curriculum development, instructional techniques, learning assessment, cutting-edge educational technologies, leadership skills, and a smooth delivery of learning experiences. Degree candidates are challenged to use and learn new and emerging instructional technology for both learning and instruction. Graduates of the Teaching and Training Technical Professionals program are employed as trainers in business and industry; faculty in two-year colleges; academic advisors; supervisors who need to train others; and learning leaders in the military, government and community agencies.

University of Akron alumni speak highly of the degree program.

“The course work and instruction for this degree were extremely relevant for my work – a blending of education and business,” said Cheryl Beckwith, coordinator of workforce development and continuing education at The University of Akron, and a 2006 graduate of the Teaching and Training Technical Professionals program. “I develop corporate training programs for employees, create noncredit courses for the community and structure professional development seminars and workshops for recertification. I also interview and hire trainers. I learned how to identify needs for training; analyze gaps in the workforce; and build curriculum and instruction with competencies, core abilities, objectives, planning and assessments. I became a better teacher-leader as a result of this degree, and now provide in-service seminars for our instructors.”

For those not interested in a full degree, the university also offers a Certificate in Teaching and Training Technical Professionals. For more information about these programs, contact Kelly Chaff at tntonline@uakron.edu or 888-640-9747 or visit http://www.uakron.edu/education/academic-programs/EFL/programs/pste/certificates/index.dot
Getting a Jump on Jobs

Three University of Cincinnati students are gaining valuable real-world experience through co-ops

When it comes to that all-important post-graduation job search, it’s great to have a college transcript that balances good grades with a variety of extracurricular activities. But few things will place your foot firmly in the door with a potential employer like a co-op or internship during your college career. Co-ops and internships provide real-world experience that you can’t get in a classroom, and three University of Cincinnati students are hoping their co-ops can jump start a career, as well.

**Katie Hunt**
Biomedical Engineering

Katie is currently involved with a co-op experience at Cincinnati Sub-Zero, a medical device company that manufactures equipment for patient temperature management. She’s been there since the beginning of the year and will be there until the end of August.

**Christine Weaver**
Aerospace Engineering

Christine is in the midst of a co-op experience at UTC Aerospace, one of the world’s largest suppliers of technologically advanced aerospace and defense products. UTC employs approximately 40,000 workers on six continents.

**Isabel Milewski**
Information Technology

Isabel is completing an information technology co-op at the Cincinnati office of GE Aviation, the world’s leading manufacturer and service provider for jet engines. GE has operations in 130 countries around the world.
1) How did this co-op opportunity become available to you?

**Katie** – I heard about Cincinnati Sub-Zero because a fellow classmate worked there for his first two co-ops and he said he really liked it. I applied through the UC PlacePro process, which gives us a list of all companies available and we select those we want to send our resume to. The company contacted me through that; they came to campus and interviewed a bunch of students for the positions they had open, and I was selected for the quality engineering co-op.

**Christine** – About a year and a half ago, I met my boss at a UC event called “Evening with the Industry” that was put on by the Society of Women Engineers. I talked to her for a while and got her business card. The next day, I sent her an email to thank her for her time. This past April, I was still looking for a co-op job when I found those emails. I decided to email her and she remembered me right away, and said there was an opening with her team. I had two phone interviews and received the job.

**Isabel** – The co-op program is an integral part of the IT program at UC. Each student is required to complete five semesters of co-op. I attended the Career Fair at UC during the fall semester. Eric Ridder, Information Technology Leadership Program (ITLP) recruiter and UC alumnus, introduced me to GE Aviation’s ITLP and offered me an opportunity to interview.

2) Is this your first co-op experience? If not, describe others you’ve had.

**Katie** – This is my second co-op. My first was with a prosthetic company in Dayton. I worked in their clinic so I actually got to see patients every day. This time two years ago I was there, and I worked there for one quarter.

**Christine** – No, I worked with 3D Engineering Solutions for about a year (some full-time and some part-time while in school). While there, I focused mainly on data collection that could be compared to customer-supplied CAD models or reverse engineered. I also had the opportunity to work on the SRT Viper. I got to work at the plant directly with the customer to help repair frames to bring all the parts into their correct tolerances.

**Isabel** – Yes, this is my first co-op experience. ITLP is a rotation-based program during which co-op students will experience working in the diverse environment at GE. Each rotation is about three to four months in length and a student is assigned to a different division within GE Aviation. I started my first rotation in January and recently started the second rotation.
3 ) How did your courses of study at UC prepare you for this co-op?

**Katie** – For the first co-op, it wasn’t necessarily biomedical engineering work. It was more patient care coordination, but it was interesting seeing the prosthetics, how they work, etc. The current co-op covers the medical device development process, which we have had classes on at UC, and more of what a biomedical engineer will actually do. Most of the stuff I’ve learned involves the design and development of an actual medical device; here, I see more of the behind-the-scenes of what has to be done for compliance. I didn’t realize it was such a big part of the medical device company. This company is worldwide. We send things all over the world.

**Christine** – My most recent classes helped me with my job at UTC because I learned all of the terminology dealing with the taking-off and landing of planes. I was able to jump right in and understand what everyone was talking about.

**Isabel** – The Information Technology program at UC’s College of Education, Criminal Justice and Human Services has a unique curriculum. It covers not only the hardcore technical trainings in software development, but also the project management courses containing topics such as agile methodology. Prior to this, I had many years of experience in the information technology field as a Web programmer. But it’s the formal trainings that I received from UC’s IT program that further prepared me for the co-op rotation.

4 ) How will this experience prepare you for your future career?

**Katie** – When I came into this current co-op, I really wasn’t sure what I wanted to do. My first co-op was interesting, but most biomedical students don’t go into prosthetics. I wasn’t sure what a biomedical engineer does when I got to this co-op. But this has helped me find a niche; I understand it and it is experience that will benefit me in any company I end up working for. I could possibly go back to work at Sub-Zero; several employees had co-ops there and they came back as full-time employees. I’m from the Dayton area and would love to find something between Cincinnati and Dayton after graduation.

**Christine** – I eventually want to work on unmanned aircraft systems, and I have had the opportunity to disassemble and reassemble the brakes for the Global Hawk. I will get to work with other planes also.

**Isabel** – The feedback from the team members allows me to identify my strengths as well as areas on which to work in order to become a future leader in the IT field. Having been formerly trained as a classical musician, working toward perfection is a built-in instinct. During the co-op experience, however, I learned something more important than simply to be outstanding: I learned to be inclusive and to be flexible. These are invaluable life lessons that I would have never learned otherwise.
5) Talk a little bit about the value of a co-op or internship experience versus simply learning in the classroom.

**Katie** – I think the real world co-op experience is really invaluable. They teach you a broad spectrum of topics, but you get into the real world and have to deal with different types of personalities and different processes. Every company is different. I feel like even if you aren’t doing exactly what you want to do, just the experience of being in an office is invaluable – I’ll definitely know more in a year from now about what I want to do, but I have a more realistic understanding of what I’ll be doing after graduation. I always enjoyed biology and anatomy in high school, but wasn’t really sold on being a doctor. My parents kind of pushed me toward getting a more technical degree – I found biomedical engineering and it was the perfect mesh of my technical skills and my desire to help people.

**Christine** – I love being able to co-op because it lets me see what kind of work I will actually be doing once I graduate. Learning in the classroom is nice, but it doesn’t allow students to actually put their knowledge to the test. I have learned much more at my co-ops than I have in school because I am able to see a problem, form a goal and achieve it.

**Isabel** – Your co-op or internship experience provides a hands-on learning environment to practice and dive into the technical space. More importantly, it is a great opportunity to demonstrate your potential as a talented individual to prospective employers. Last but not least, it could be the start of a fantastic career path. The key is to find your niche and move forward!

6) Where do you see yourself in five years?

**Katie** – I would love to work for a company that has a lot of interaction with patients in hospitals – I would love to be the person managing that interaction between what the doctor wants and what the company makes, that initial development process of ideas for new medical equipment.

**Christine** – In five years I would like to be living in Florida with a great job, either through my current company or at a new one that deals with unmanned aircraft systems. I would also like to be thinking of a family by then, too.

**Isabel** – As John Lennon said, “Life is what happens to you while you’re busy making other plans.” In five years, I could be a project manager, an operation lead or a software developer at GE. I could be a successful businesswoman running my own company. The future is limitless. One thing is for certain – I am confident about my technical skills and my ability to lead others because of this co-op experience.
7) What advice would you have for students interested in being part of a co-op but not knowing how to get started or what is available?

**Katie** – UC’s co-op program is amazing. It helps me focus on what I want to do after college. I would tell students to network; talk to people in classes above you who have done some co-ops. Everyone is willing to give advice or share experience, and a lot of our professors know different companies in the area.

**Christine** – I would definitely do co-op, no matter what major you have. It gives you great experience and will look good on resumes for finding a job right after graduation. Not only does co-op help you better understand your school material, it also allows you to connect with other engineers or full-time employees who have wonderful stories that let you see all of the opportunities that are available. A co-op also will let you know if you like your major or not. I honestly don’t know why I chose aerospace engineering other than the fact that I like planes, but so far I have loved it. Not knowing where to start is fine; pick something that interests you and co-op experiences will help you decide whether or not it’s the right choice.

**Isabel** – There are several ways to locate available internship information. Most of the companies have it listed on their website under the “job search” section. The College Career Fair is another good option to obtain internship information. Generally speaking, you should start preparing for the interview a year before applying for the job. To get started, consider working with your academic advisor or other professionals for resume writing advice and mockup interview practice. University of Cincinnati students can also contact advisors from the Professional Practice Division for co-op course and Career Fair information.
Tri-County Adult Career Center:  
Innovation and renovation to advance regional economic development in southeast Ohio

Tri-County Adult Career Center has entered into an innovative partnership with neighboring Hocking College to work collaboratively to expand local workforce development training opportunities to area business. The College and Career Center share a workforce training office and present themselves as one entity to the business community. Having a single point of contact streamlines the process for area businesses that are looking for staff training and development.

This University System of Ohio partnership is also developing a state-of-the-art training facility for use by its business clients. The Business Training Center is a major part of Hocking College’s renovation plan for the former Inn at Hocking College and will include a computer lab, professional testing center, a board room and flexible training spaces. Co-located with Hocking College’s Hospitality program, clients will have the advantage of on-site catering and studio apartments for their trainings and special events. Tri-County Adult Career Center has secured an Appalachian Regional Commission grant that will be used to equip the center with computers, video conferencing and other high-tech equipment.

Business Training Center Director Kim McKinley and Coordinator Tanya Conrath have been working with Hocking College administration and faculty to establish the partnership and promote the Business Training Center to the local business community.

“We are excited to have received an Appalachian Regional Commission grant. With the funds provided, we will be able to equip this center with computers, video conferencing and other technology as requested by businesses in a multi-county area for their training needs. This investment in the workforce will provide our region with increased capacity to both retain and expand existing businesses, and to attract new business,” McKinley said.
Ohio Insurance Industry Works with Higher Ed to Ensure a Future Workforce

Ohio Lt. Gov. Mary Taylor speaks during a press conference at Kent State University about the insurance industry and the degree program offered by the university’s Salem Campus. The press conference highlighted Insuring Ohio Futures, the first effort in the nation designed to attract skilled workers to the insurance sector.

PHOTO: KENT STATE UNIVERSITY
When a disaster strikes – a car accident, a fire, or damage from a powerful storm - one of the first places Ohioans call to start picking up the pieces is their insurance company.

Now, Ohio’s insurance industry is looking to fend off a disaster of its own – an unprecedented shortage of qualified workers to replace its high number of retirees over the next five years. Industry leaders from 13 Ohio insurance companies formed the Insurance Industry Resource Council (IIRC) and recently launched the Insuring Ohio Futures campaign, which is spreading the message that a bright future awaits job seekers in the insurance industry.

And who will prepare these future workers? Ohio colleges and universities.

**BRIDGING THE GAP**

With more than 250 companies and 100,000 employees, Ohio is currently the seventh largest insurance state in the nation. However, most of its workforce comes from the baby boomer generation, which is rapidly reaching retirement age. A recent study by the Center for Workforce Development at Columbus State Community College states that by 2018, Ohio’s insurance industry will need an additional 17,000 new employees just to maintain its current staffing levels.

“Baby boomers formed the foundation for our industry’s success,” said John Bishop, Chairman and CEO of The Motorists Insurance Group and co-chair of the IIRC. “Today we need to solidify those gains by giving a new generation the skills needed for this industry to thrive in the future.”

The impending shortage of qualified workers is not just a local phenomenon – the insurance industry is feeling the same demographic pressure on a national level. Therefore, the solution to Ohio’s shortage of workers will have to be homegrown.

As Brent Maurer, Vice President at Paul Werth Associates and coordinator of the Insuring Ohio Futures campaign, notes, “The long term solution to the Ohio insurance talent gap requires recruiting and training the next generation of industry professionals and therefore the solution is not a matter of simply poaching workers from another state.”

**HIGHER ED TO THE RESCUE**

Ohio’s higher education institutions have already begun to address the shortage. Until recently, none of the state’s 14 public universities or 23 community colleges offered an insurance-specific degree program. But that’s beginning to change.

Earlier this year, Kent State University created a Bachelor of Insurance Studies degree program, joining programs at Clark State Community College and The Ohio State University’s Fisher College of Business that offer students an option to specialize in an insurance-related field.

“Colleges and universities have a critical role in closing the insurance sector’s talent gap,” said Carol Blaine, who helped launch the insurance program at Kent State. Blaine, who arrived at Kent State following a career at Nationwide Insurance, sees Ohio’s education pipeline as a key component of a thriving insurance industry. “The industry is working closely with higher education to develop the next generation of insurance professionals and ensure that graduates meet the needs of the insurance companies around Ohio.”

More schools are getting in on the action. Franklin University in Columbus recently unveiled a Bachelor’s degree in Risk Management & Insurance. Across town, Columbus State Community College is launching an insurance-related certificate program. Several other Ohio universities and community colleges are planning their own insurance-related degree and certificate programs, while 13 Ohio universities already offer programs for actuarial sciences (for a complete list, visit the InsuranceCareers.org website.)

**THE FUTURE LOOKS BRIGHT**

The Insuring Ohio Futures campaign is not only spreading the word about the abundance of job openings in insurance, but also the sheer variety of skills that are needed – everything from math and sales to marketing and IT. The campaign is targeting three primary audiences: high school/college students,
career-changers, and military veterans.

Kent State’s Senior Vice President for Academic Affairs and Provost Todd Diacon notes, “Ohio high school and college graduates represent the best chance for filling the 17,000 insurance job openings expected in Ohio by the end of the decade. Thousands of graduates enter the workforce each year, and those with insurance-related degrees have a near 100 percent placement rate.”

Visitors to the InsuringOhioFutures.com website can explore the various types of jobs available and connect directly with industry experts through the “Ask a Pro” feature. The site also allows visitors to take a quick survey that matches their personal skills and interests to potential insurance career paths.

Openings in the insurance sector should appeal to anyone looking for a career that’s both stable and well-paying – in Ohio, the average salary is more than $50,000 annually.

THE INDUSTRY’S ‘COOL FACTOR’
Those involved with the campaign also hope to address the biggest stigma about the insurance industry, that it’s somewhat lacking in, well… “cool” factor.

Maurer insists this is not the case. “Let me put it to you this way – when that tornado tore through Oklahoma, aside from first responders and National Guard, the next group of people to go in there were insurance reps. If you want to work in an industry that really makes a difference and helps people begin to put their lives back together after a personal or a natural disaster, insurance is a great career to get into.”

For more information, visit the InsuringOhioFutures.com website.

Also, see OhioHigherEd’s Industry Spotlight page for information on schools offering insurance-related degrees and programs: https://ohiohighered.org/industry-spotlight