

NewFaceOfHigherEd UPDATE

1 HIGH-QUALITY HUMAN CAPITAL ATTRACTS AND RETAINS GOOD JOBS

Retraining To Retain Jobs

These days skilled workers tend to gravitate to urban centers where there is a high concentration of knowledge economy jobs. Meanwhile less populous counties outside major metropolitan areas are finding that their local industries' needs are changing importantly. More local employers are demanding workers with high level skills, something that the counties may have difficulty supplying.

In Wisconsin, the University of Wisconsin campuses have joined forces with the private sector, community development organizations, Chambers of Commerce, and state legislators to preserve local industry jobs in the state. A key product of this joint effort was the development of a part-time UW baccalaureate engineering degree program for working adults.



A UW-Fox Valley Professor works with a student in the mechanical engineering program. Courtesy UW-Fox Valley

Electric, Oshkosh Corp., Kohler Co., and Kimberly-Clark have hired the graduates as mechanical, design, project, and manufacturing engineers. Two years ago, Fox Valley and Platteville began offering a degree in electrical engineering.

Other UW campuses have created similar partnerships with UW-Platteville, including UW-Rock County in Janesville, which began offering the two engineering degrees in 2005.

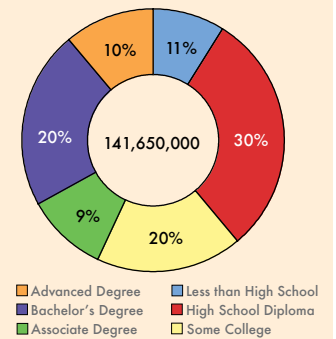
"There are many ways to aid economic development in our communities, but one that is essential is investment in education," says Jack Champeau, Engineering Program Director at UW-Rock County. "In the knowledge economy, this means identifying local industry's needs and preparing students with the proper skill sets. In realizing the value of people training locally to stay and work locally, we've worked to make UW-Platteville's established, reputable engineering program become accessible—and more recognizable—locally."

➔ **ONLINE:** rock.uwc.edu/engineering

Too Few College Graduates

Jobs requiring a college degree are expected to generate 46 percent of all job growth between 2004 and 2014. Meanwhile the United States is not producing enough graduates with the requisite knowledge and skills to fulfill employers' needs, much less replace Baby Boomers who are starting to depart the workforce.

Educational Attainment of the Labor Force, Ages 18-64, in 2006



Source: U.S. Census Bureau, Current Population Survey, 2006

- Nearly 60 percent of the U.S. workforce, age 18 to 64, has a high school diploma and/or some college. Many of these are potential candidates for degree-completion programs.
- Only 30 percent of the U.S. population age 18 to 64 has a bachelor's degree or higher.
- Eleven percent of those in the workforce have less than a high school diploma. Many of these are recent immigrants whose English competency is limited.

IN WISCONSIN Average annual income for workers age 25 and older

- High School Diploma: \$26,123
- Bachelor's Degree: \$45,221
- Advanced Degree: \$59,804



Source: U.S. Census Bureau, 2006

In Northeast Wisconsin, UW-Fox Valley, UW-Platteville and the Fox Cities Chamber of Commerce collaborated in 2001 to offer a B.S. in mechanical engineering on the UW-Fox Valley campus in Menasha. Students earn an accredited UW-Platteville degree in an engineering lab close to home, with late-day and early-evening courses. Thirty-five students have graduated since December, 2005, and local companies such as Miller

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Changing Public Sector Jobs Require Highly Skilled Managers

As the responsibilities of public sector managers have increased over the past two decades, government agencies have raised employee educational requirements. California State University, Northridge's Tseng College of Extended Learning is relied upon by public sector organizations across the state to provide continuing education for employees who need to keep up with changing job requirements.

"The mentality has changed," observes Henrik Minassians, Director of Public Sector Degree Programs at CSUN. "The challenges before government are so serious that you can't just promote people internally who have no formal education and training. Now you need a minimum of a bachelor's degree if you want a top management position, if not a master's or Ph.D."

Public sector organizations need to revamp their workforce and raise the skill level of their employees. At the same time, they have to deal with budget issues and compete with the private sector for qualified college graduates. The public sector

organization that can offer employee education as a benefit often advances both goals.

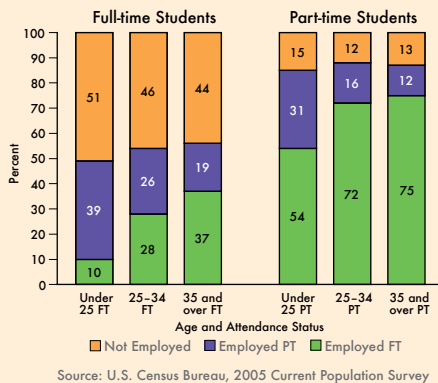
CSUN's Master's in Public Administration program curriculum is designed to develop leadership and to educate students in such public administration principles as executive problem solving, human capital management and policy analysis. Program sessions are held at convenient times to fit the schedules of working students and their sponsoring agencies; CSUN employs a cohort model, wherein groups of students move through the program as a unit, and has established cohorts in several parts of California for those students who cannot attend courses on campus.

CSUN also offers a bachelor's degree program in Public Sector Management, a multidisciplinary, credit degree completion program designed to provide the skills needed by public sector managers. Partners for the program include Los Angeles County and the Los Angeles Departments of Social Services and Public Works, and the City and County of Santa Barbara and the Santa Barbara County Board of Supervisors.

Most Students Hold Jobs

Most U.S. students work while enrolled in college or university. Older students are more likely than younger students to work. Frequently they choose to combine work and studies because they cannot afford to give up a job to pursue a degree.

Attendance and Employment Status of Students, 2005



- Nearly half of all full-time students under age 25 work
- Fifty-four percent of all part-time students under age 25 work full-time.
- Seventy-two percent of part-time students age 25-34 work full-time; and 75 percent of part-time students over age 35 also hold full-time jobs.

Investing in Employee Education Pays Off

United Technology Corporation encourages its employees to pursue higher education. The company's generous Employee Scholar Program (ESP) covers all tuition, fees, and book costs of employees who matriculate in a degree program at a recognized institution, without regard to whether the degree is in a job-related field or not.

Nicole Bunte is one of the thousands of UTC employees who has advanced in the organization in part because of learning that she acquired by taking advantage of the UTC's employee education benefits. In 2004, Bunte joined UTC Fire & Security—a UTC subsidiary in Matteson, IL. At the time, she had completed one semester in a master's degree at Lewis University in nearby Romeoville. Working full-time, she continued to take courses during evenings and weekends. In May 2007, Bunte added a master's degree program in organizational leadership, with a concentration in training and development, to her bachelor's degree in computer management.

The degree has paid off for both employee and employer—Bunte is now



Nicole Bunte on graduation day (Photo courtesy UTC)

an Integration Leader for UTCFS' Fire Safety Services Group (FSSG). She is responsible for developing and implementing standard work to help familiarize new employees with UTC's policies and procedures; she developed her master's thesis around integrating new employees into a company.

UTC began its Employee Scholar Program in 1996; in 2007, some 14,600 employees were enrolled in the U.S. and internationally. More than 24,000 degrees have been earned, and UTC's investment in the Employee Scholar Program has exceeded \$700 million.

Employers that offer education benefits are finding that this investment in higher education pays off in the form of greater employee loyalty and a more capable, upwardly mobile workforce.



The University of California, San Diego Extension offers biomedical courses online (Photos courtesy UC San Diego)

Addressing Biotech Industry Needs

The University of Washington in Seattle and the University of California in San Diego have formed a partnership to develop and deliver a joint Biotech Project Management Certificate Program. The nine-month, online postbaccalaureate program draws on the academic strengths of two leading institutions in the biotechnology field. The specialized certificate program responds to urgent labor needs of two top West Coast biotechnology centers—Seattle and San Diego.

Students enrolled in the online certificate program first take two courses developed by UW Educational Outreach that address the fundamentals of project management. They then take two biomedical online courses from UC San Diego Extension, applying those principles to biotech product development project management processes. Students who complete the program receive a UW-UC San Diego joint Certificate.

Intra-Institutional Partnering

In the Puget Sound region, the University of Washington also is responding to the need for comprehensively trained personnel in fields related to the creation, development, regulation and manufacture of pharmaceutical and medical devices.

Biotechnology firms will require a growing number of skilled workers in coming years. A 2006 industry report estimated that the biotech and medical device industry in Washington state directly employs nearly 20,000, with indirect employment exceeding 55,000.

and is offered by the UW School of Pharmacy in partnership with UW Educational Outreach. The program focuses on the management aspects associated with taking a medical product—drug, device or viologic—from conceptualization to clinical trials to marketing, including post-marketing risk-management.

Designed for working professionals, the new degree program is delivered during evenings and weekends.

UW has developed the Professional Master's of Science in Biomedical Regulatory Affairs. The master's curriculum bridges theory with practice

Targeting Changing Industry Segments

The field of information technology security has experienced rapid growth and change during the last decade. It now touches all sizes and types of businesses. More and more organizations require information systems security managers and professionals who know how to protect information systems, applications, and networks from attack and failure.

In response, University College at the University of Denver has developed two credentials: a Master's of Applied Science degree and a Certificate of Advanced Study in Information Systems Security. The curricula integrate technology and business management coursework, thereby developing graduates who are able to analyze security needs, provide effective solutions, and fill a critical niche in business organizations.

To ensure up-to-minute knowledge and skills, the curriculum was designed around the Common Body of Knowledge for CISSP certification, developed by the International Information Systems Security Certifications Consortium (ISC)2. In addition, the program was developed in collaboration with the Colorado Springs and Denver chapters of the Information Security Systems Association (ISSA).

The Information Security Systems programs belong to a larger University College portfolio of programs in emerging and changing fields such as telecommunications, technology management, and security management. The College seeks to provide programming that is typically not available through traditional avenues.

"In a lot of ways that's our stock in trade," says Dan Callihan, Associate Dean of University College. "We don't offer the traditional programs that the traditional part of our University offers—we offer ones very targeted to specific industry segments. We try to keep up with what are the emerging trends."

Cutting-Edge Global Affairs Master's Degree from NYU

The School of Continuing and Professional Studies at New York University has taken a multidisciplinary approach in its M.S. in Global Affairs. The 42-credit program focuses on the political, economic, cultural, and legal context of international transactions. The program seeks to provide students with a broad framework for understanding the global economy and the private and public sector actors impacting the global community, as well as the tools for functioning effectively therein.

The M.S. in Global Affairs can be completed in two years of full-time study or two and one-half years of part-time study. Classes are held in the afternoon and evening so students may work or intern in the field. MSGA students also can take advantage of intensive study abroad course electives led by NYU faculty.

Health Professions Face Acute Labor Shortages

The health professions are currently experiencing acute labor shortages. The educational requirements for many health care positions have increased, with many now requiring at least a postsecondary degree. Also the demand for health care professionals is projected to grow rapidly in coming years owing to the expansion of the U.S. population and the aging of the baby boomer generation. Both developments are contributing to the increased demand for qualified professionals.

A number of professional and continuing education organizations are responding to the need for trained health care professionals by partnering with medical campuses. It is recognized that many prospective students are already in the health care workforce and that they are most likely to pursue a degree if there are flexible programs that permit them to remain in the workforce while continuing their studies.

The need for emergency managers, for example, has never been greater. Faced with risks to the public's health from infectious disease, environmental hazards, and bio-terrorist threats, the nation's health care system requires managers and related professionals who are equipped to lead and make important decisions that will safeguard the public's health.

The School of Continuing and Professional Studies at Loyola University Chicago, in collaboration with the Loyola University Health System and the Marcella Niehoff School of Nursing in Maywood, IL, is offering a B.S. in Health Care Emergency Management that prepares individuals to take on greater leadership and management roles in emergency and crisis management. Loyola's program is ideal for emergency medical technicians, paramedics, and other frontline emergency responders, as well as other health care workers in education or communication, who are looking



UMass Dartmouth is using innovative programs to respond to the nursing shortage. (Courtesy UMass Dartmouth College of Nursing) for greater career advancement. The program is also well-suited for career changers and working professionals with a background in public health, public policy, or health services administration.

Flexible Online Learning

Increasing numbers of working registered nurses find they are able to pursue a baccalaureate degree because some courses or portions of courses are taught online. This flexibility, together with the new career opportunities that become available to registered nurses once they earn a four-year degree, are attracting many to RN to BSN programs.

The University of Massachusetts Dartmouth offers an RN-BS nursing option through Professional and Continuing Education and the College of Nursing. Courses are provided online through PCE, and blended and face-to-face courses are also offered. Nursing courses build upon registered nurses' prior knowledge and skills.

Students who know that they want to pursue a Master's degree after completing their BSN also have the option of accelerating their progression to a graduate nurse practitioner or community nursing program while completing the BSN.

Tax Incentives Boost Employee Education

The impending exodus of large numbers of baby boomers from the workforce has many organizations scrambling. Employers are both offering tuition reimbursement to prepare younger employees to succeed retirees and implementing new training programs and flexible work schedules in an effort to retain talented seasoned employees.

Federal tax incentives are key to workforce investment. Section 127 under Title 26 of the IRS Tax Code currently permits employers to give workers up to \$5,250 in educational assistance tax-free every year. First enacted in 1978 as a temporary provision, Section 127 has expired and been extended 11 times since.

In 2001, Section 127 was extended for both graduate and undergraduate courses until 2010. According to the Society for Human Resource Management's 2005 Benefits Survey Report, two-thirds of corporations offer some kind of tuition assistance to their employees.

Congress needs to make Section 127 a permanent part of the IRS Tax Code so as to encourage employers to invest in their employees' education and to enable employees to take advantage of such employer-provided education benefits on a tax-free basis.

ABOUT THIS NEWSLETTER: "Non-traditional students"—those learners who are in the workforce, financially independent, typically pursuing education part-time, and often responsible for dependents—now constitute 73 percent of U.S. higher education enrollments. They are the **New Face of Higher Education**.

In today's rapidly changing global economy, education must be a lifelong endeavor. This newsletter examines the key roles played by college and university Professional and Continuing Education organizations in **building a competitive workforce**. For more, visit www.newfaceofhighered.org.

ABOUT UCEA: Founded in 1915, the University Continuing Education Association (UCEA) represents regionally accredited U.S. public and private colleges and universities, international university affiliates, and non-profit organizations with a significant commitment to professional and continuing higher education.

