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Today's Education Preparing Tomorrow's Workforce

By Louise H. Feroe

As Connecticut closely examines the impact of higher education, some fascinating trends have emerged at the Connecticut State University System (CSUS). With 36,600 students attending Central, Eastern, Southern and Western Connecticut State Universities, CSUS is a catalyst for Connecticut, providing academic programs clearly tied to business needs. Nearly 9 out of every 10 graduates stay in the state after receiving their degrees, which underscores why the academic paths they take are critical to the state's economic prospects.

Connecticut – and especially our state's businesses - should be encouraged.

Science: The number of students majoring in the sciences has increased by 43 percent since 2005. That includes an increase of or 8% in just the past year. The overall increase of nearly 600 students as compared with 2005 is a strong response to the need in the state and nation for more young people to pursue careers in science and science education.

While the number of science majors at the undergraduate level has increased at all four universities, the growth has been most dramatic – more than 60 percent – at the two universities, Eastern and Western, where new academic science buildings have opened to students in recent years. Majors include biochemistry, biomolecular sciences, meteorology, chemistry, earth science, environmental science, and

physics– tracking nicely with industries Connecticut would like to grow. An increasing number of non-majors are also taking a wide range of science classes.

Nursing: During the past five years, CSUS awarded more bachelor's degrees in nursing than any other institution of higher education in Connecticut, including a 46 percent increase between 2008 and 2010. Overall, CSUS awarded 27 percent of all the nursing bachelor's degrees in the state in 2010, up from 21 percent in 2008. The numbers reflect CSUS' commitment to respond to projections of a nursing shortage in Connecticut. Nursing is now among the most popular undergraduate majors at Southern and Western.

Green Jobs: The universities have stepped up programs focusing on the "green economy." In doing so, students are provided with opportunities to gain the expertise necessary to excel in emerging fields, such as environmental sustainability and energy efficiency, which offer both the promise of career pathways and a means of accelerating Connecticut's economic recovery.

Eastern's Environmental Earth Science Department, for example, has developed an Energy Science track within the Bachelor of Science Environmental Earth Science (EES) major and two new "Green" Certificates in Sustainable Energy Management are offered through the School of Continuing Education.



Central offers a Master of Science in Geography with a specialization in Global Sustainability, designed to enable students to examine global environmental, social and economic challenges facing society and to explore and develop possible sustainable solutions.

World Language: The number of students taking world language courses has increased by nearly 10 percent this year, an increase of more than 300 students and the largest ever one-year increase.

Students majoring in a wide variety of fields are taking language classes not only to fulfill requirements, but to further career prospects. Courses in Chinese, Japanese, Arabic, Portuguese, Hebrew, and Russian have been added, as students recognize – and business tell us – that knowledge of more than one language and culture can be a tremendous asset in their careers and their lives.

Accounting: State Department of Labor data indicates that “accountants and auditors” are among the leading growth fields for students with bachelor’s degrees seeking to enter the workforce through 2018. In response, the number of accounting majors at CSUS institutions has increased by 30 percent in the past five years.

Central currently has the largest number of students with an accounting major, and

Southern has seen the most dramatic growth - a jump of 70 percent since 2006. John Cantillon, an Eastern graduate and vice president and controller at Pratt & Whitney, says his company “hires CSUS students for internships or co-ops that may develop into permanent positions. We are getting a high quality, diverse workforce with a great work ethic.”

Mechanical Engineering: It wasn’t long ago that our former Board Chairman served on a statewide task force which identified engineering as a critical workforce need for Connecticut. We responded quickly, establishing new programs in civil and mechanical engineering at Central. From 2006 to today, the program has grown from 42 students to 166. Connecticut industries are taking notice.

Even as budgetary cutbacks are imposed and faculty and staff are continually pressed to maintain the quality and caliber of our universities with diminishing resources, our connections and collaborations with the businesses that drive our state’s economy have intensified.

If these numbers and the academic programs they represent are any indication – and I believe they are - the return on investment will be resoundingly positive for our inspiring students and our state.

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