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Still at the Head of the Class

Thorough preparation and real-world experience make Cal U teachers stand out

Josh Cramer ’05 (left) teaches technology classes at South Park Middle School. Joining him is student teacher Brad Kozlowski.

S t u d e n t - f o c u s e d educators of the 21st century may have something in common with those normal-school teachers who staffed Pennsylvania’s one-room schoolhouses in the mid-1800s. If they received their teacher training at one particular institution, they all graduated with more than just a thorough knowledge of the three R’s. Then, as now, education majors at California University of Pennsylvania also acquired a deep-rooted sense of pedagogy and professionalism. That makes all the difference in the world when it comes to actually securing teaching jobs, says Dr. Dan Engstrom, acting associate dean and director of student teaching for the College of Education and Human Services.

“At Cal U, there’s always been a strong connection between theory and practice,” he says. “Not only are our faculty members experienced educators themselves, we make sure our students have more classroom experience than students from most other schools.”

Professional development partnerships with four local school districts are just one way that Cal U professors and students test educational theories in the classroom. By collaborating with teachers in Uniontown, Charleroi, Belle Vernon and California area school districts, Cal U’s pre-service teachers learn firsthand what really works in the classroom.

On-the-job training

According to Engstrom, one trend in education is a push toward more practicum hours for students entering the profession. Right now, Pennsylvania requires 45 hours of field work for education majors; eventually it will require as many as 190.

“Most Cal U students have more than 100 hours of field observations and 15 weeks of full-time student teaching experience before graduation,” says Engstrom.

“More practicums make for better-prepared graduates,” adds Melissa Nelson, a December ’09 graduate with a dual Master of Education degree in elementary education and special education. “When a student goes on an interview, it becomes apparent very quickly whether he or she is comfortable in the classroom.”

Preparedness leads to employment. In a recent survey by payscale.com, graduates currently working as educators were asked to name their alma mater. When the results were compiled, California University of Pennsylvania ranked as the 15th most popular teaching college in the United States.

The only Pennsylvania university to be included in this elite group, Cal U boasts about 30,000 teacher education alumni working in schools across the commonwealth.

In spite of Cal U’s reputation for excellent teacher preparation, graduates face fierce competition for new positions. Every year the American Association for Employment in Education assesses the supply and demand for certain teaching positions across the United States, as well as by region. In its 2010 Job Search Handbook for Educators, the Mid-Atlantic region appears to be “balanced” when it comes to many jobs in elementary and middle schools, and in traditional subject areas such as language arts and social studies. That means there are enough educators per position, and vice versa. On the other hand, disciplines such as math, the sciences and special education are experiencing a teacher shortage.

In this type of environment, educators agree that it is imperative for students to differentiate themselves. Many are obtaining dual certification — adding special education or reading specialist credentials, for example — to show their ability to facilitate learning in all student populations.

Others are looking for jobs outside the region, where the need is greater. Cal U graduates are regularly recruited by school districts across the country at job fairs such as the annual PERC Fair, held every April by the Pittsburgh Education Recruitment Consortium. To help students find employment, the College of Education and Human Services hosted its inaugural Student Teaching Showcase in December. In all, 120 student teachers met in the Performance Center to demonstrate their professional experiences and leadership activities to an audience of faculty, family members, other students, and administrators and teachers from local school districts.

Tech Ed: Not Your Father’s Wood Shop

One of the brightest spots on the horizon for education majors is technology education. Unlike the woodshop or metalworking classes of years gone by, “tech ed” utilizes engineering and design theory to solve problems.

Although Cal U has had some type of “technology” teacher preparation courses in its curriculum since 1889, the current tech ed program is ranked among the best in the country. In a national study reported in The Tech Teacher, national data indicate that Pennsylvania is a powerhouse in technology education, producing 27 percent of all tech ed teachers in the United States. Cal U accounted for 15 percent of those teachers.

Dr. Stanley Komacek, a professor of technology education, says Cal U not only has one of the largest tech ed teacher programs in the country, but also one of the strongest student bodies. The University’s student club, TEAC (Technology Ed Association of Cal), regularly competes in engineering design and problem-solving competitions, and its members earn national championships.

“Technological literacy is a critical competence in today’s workforce,” says Komacek. “That is why technology education is growing in importance in K-12 education. Today’s students must be technologically literate if we expect them to be successful in tomorrow’s workforce.”

In his technology education classes at South Park Middle School, alumnus Josh Cramer ’05 challenges students to think critically and utilize engineering and design processes to solve problems. Through partnerships with local companies, including Kennametal and Westinghouse Electric, Cramer brings young engineers into his classroom to talk with students about how technology skills are used in the real world.

“We do a lot of projects, and they have a lot of fun. But in the end, it’s about problem solving,” he says. “If I get one future engineer out of each class and one person to support that engineer, I’d feel really successful.”

Cramer sees technology education moving from the high school and middle school to the elementary level. This trend, coupled with the retirement of an estimated 56 tech ed teachers in Pennsylvania schools by 2015, makes the employment outlook excellent for Cal U’s technology education students.

It also ensures Cal U will continue to sit at the head of the class when it comes to educating future educators.

By Lindy Kravec, a Peters Township-based writer

JOB OPPORTUNITIES

The Pennsylvania Center for Workforce Information and Analysis (www.paworkinfo.state.pa.us) projects that these occupations will have the greatest number of openings for workers through 2014:

1. Food Preparation/Service
2. Management
3. Health Care Practitioners/technicians
4. Health Care Support
5. Personal Care/Service
6. Education, Training and Library Services
7. Transportation and Material-moving
8. Building and Grounds Cleaning/Maintenance
9. Food and Beverage Service
10. Motor Vehicle Operations
We often think of nurses as the ones who tend to playground injuries at school, check vital signs in a doctor’s office and dispense medicines in the hospital. Yet these skilled practitioners are responsible for saving lives and improving patient outcomes like no other health care professionals.

As their role becomes broader and increasingly more important, the demand for nurses grows — and Cal U is helping to meet that demand with a continuum of degree programs.

According to the American Association of Colleges of Nursing, there is an unprecedented shortage of registered nurses. Although RNs currently account for 2.9 million jobs, the U.S. Bureau of Labor Statistics projects there will be 587,000 new jobs for registered nurses. Although RNs currently account for about 100 students per year, more than 160 in the current class.

In an effort to meet the need for nurses today are being held to a higher level of accountability in every environment in which they work, Hettman says.

“There’s a trend for hospitals to seek ‘magnet status,’ a credential that recognizes quality patient care and nursing excellence,” she explains. “Because of this, many hospitals now seek to hire only nurses with a BSN degree, or they are reimbursing their current staff if they return to school to complete their bachelor’s degree.”

In a landmark study published in the Journal of the American Medical Association, registered nurse Linda Aiken, who holds a Ph.D., linked rates of surgical patient mortality at 168 Pennsylvania hospitals to whether nurses had bachelor’s degrees.

Aiken noted that patient death rates were nearly twice as high at hospitals where fewer than 10 percent of the nurses held bachelor’s degrees as they were at hospitals where more than 70 percent did. A follow-up study conducted in 2008 confirmed these findings were true.

Enrollment in Cal U’s RN-BSN program has grown steadily over the past five years, from about 100 students per year to more than 160 in the current class.

The program is attractive to both new RNs and professionals who have been working for many years. They may continue their education without quitting their jobs by attending classes in the evenings on either the California or Southpointe campus, or at CCAC South in West Mifflin — another example of the cooperative relationship between Cal U and CCAC.

Opening doors

“It’s going to open up so many doors for me, both professionally and financially,” says Benjamin Lego. A May ’08 graduate with an associate degree from a small college in central Pennsylvania, Lego currently works in the emergency room at The Univerity Hospital in University, Pa. He is pursuing his RN-BSN at Cal U and hopes eventually to complete a master’s degree.

Cal U’s upper-level nursing courses are highly competitive but flexible in nature.

“The student body in our RN-BSN program is composed of working nurses who are very motivated and very dedicated,” Hettman says. “We set high expectations for them, and they meet them. One sign of the success of Cal’s RN-BSN program is the feedback that comes from graduates and the institutions where they are employed. Hettman is gratified when he hears how students use what they have learned in class to implement new protocols.

“Great experiences come out of this program,” she says, “and many people benefit from them.”

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The faculty in the RN-BSN program at Cal was wonderful,” declares Michaelene McForrester, RN-BSN ’08 and a staff nurse in the emergency room at Magee-Womens Hospital of UPMC. “They are nurses, they’ve been on units in hospitals, and they know what we’re facing. They really get it.”

McForrester is a member of the first class of Cal U’s new Master of Science in Nursing-Nursing Administration and Leadership program, which started in January.

Offered completely online, the new MSN program attracts an eclectic cohort of students — from those like McForrester who would like to move into management and leadership roles to highly experienced nurse managers and administrators who work in diverse settings, such as acute care hospitals, primary care centers, home care agencies, skilled nursing facilities, industry and sales, and the military.

“In order to have career mobility, it’s essential for nurses to continue their education,” Hettman says.

Blending theory and practice

Dr. Mary O’Connor, coordinator of the MSN-Nursing Administration and Leadership program, explains its value.

“This advanced degree blends health care and nursing principles and theories with practice, and will develop strong and visionary leaders who excel in all dimensions of nursing — from health care policy and finance to legal and ethical practice and the delivery systems of care. It is designed to prepare nurse administrators and leaders to respond effectively to today’s dynamic health care environment,” she says.

“Leadership is part of every nurse’s role, and it is an essential part of the nurse administrator’s role,” O’Connor adds. “In the advanced practice role of nursing administration and leadership, graduates of the MSN program will be well prepared to make a difference in patient outcomes, staff preparation and job satisfaction, and retention of nurses.”

Whether students choose the entry-to-practice curriculum, the RN-BSN program or the new MSN degree, they can be sure their Cal U experience will help them make a healthy contribution to Pennsylvania’s workforce.

By Lindy Kravec, a Peters Township-based writer
**Riding the gap between academic training and industry needs, advisory boards guide the growth and development of many programs at Cal U.**

These panels of experienced professionals offer their counsel in areas as different as Health Science, Legal Studies and robotics.

Although a Cal U diploma is not required, many advisory board members are, in fact, alumni who volunteer in the spirit of Cal U for Life.

The common goal of all members: to ensure real-world applications in degree programs, to enhance students’ employment opportunities, and to support those faculty members who seek out and use industry input.

“From faculty to department chairs to college deans, we continue to be impressed with the caliber of people we work with at Cal U,” says David Landis, vice president for education and training at The Technology Collaborative, which partnered with Cal U’s Department of Applied Engineering and Technology (AET) to craft a high-school-to-college program, then expanded the relationship.

“They are willing contributors who show a sincere interest in projects that serve students, local industry and the region. They take industry input seriously and value the opportunity to work in partnership,” he says.

The AET Department calls on its advisory boards when considering ways to keep programs relevant to industry needs and when designing programs.

For example, board members who helped to launch the new Robotics Engineering Technology associate degree also provided input for the next stage of the tiered program, a four-year degree in Mechatronics Engineering Technology.

The advisory board is part of NCETE, the National Center for Robotics Engineering Technology Education. The 13 advisors represent a “solid mix” of industry, workforce training and academic professionals, says NCETE director Anthony Rodi.

“They see we have hard-working students who are learning applied skills,” he says. “Companies can be assured they will get trained people with transferable skills in Cal U graduates.”

When advisory board members create internships, those students often become the “go-to people” when jobs are available, Rodi adds.

Pedro Delgado of Rail Transit Consultants Inc. says he welcomes sharing his industry experience so that students are introduced to the details of real-life engineering problems. This practical experience helps students to think in real time, he says.

Advisory boards also address accreditation needs. Many national accrediting agencies require detailed industry input and strong evidence that faculty have adjusted programs based on advice from their boards.

For instance, Cal U’s bachelor’s degree in Computer Engineering Technology recently received accreditation by ABET’s Technology Accreditation Commission, in part because of the active role played by advisory board members.

In fact, every bachelor’s program in AET — Electrical Engineering Technology, Computer Engineering Technology, Industrial Technology, Graphics and Multimedia, and Technology Education — is accredited, and each has its own advisory board functioning in a critical role with earning and maintaining accreditation.

To stay on the cutting edge, the AET Department “looks outward, not inward,” says Paul Koontz ’78, NCETE advisory board member and president of 484 Consulting LLC, a technology education company based in Medina, Ohio.

“The faculty, staff and board constantly look to ensure that programs meet real industry needs.”

By Colleen C. Derda, a Pittsburgh-based writer

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**Cal U students need scholarships — and the IA/TE Alumni Society is gearing up to help.**

The nonprofit organization of industrial arts and technology education graduates is raffling off a 2010 Harley-Davidson Road King motorcycle to boost its endowed scholarship fund.

“The goal is to give something back to California,” says Paul Koontz ’78, president of the alumni society.

“Personally, Cal gave me a lot more than just academics. It gave me a foundation for my professional life, and I want to help pass that opportunity along to others.”

A total of 5,000 tickets are available, at a cost of $10 each. Every ticket has two numbers, doubling the chance to win. The winning ticket will match the Pennsylvania Lottery’s “Big 4” lottery numbers drawn on the evening of May 3, 2010.

The winner will be notified by certified mail. The holder of the winning ticket must provide proof of insurance and a valid driver’s license for registration purposes. Complete rules are posted online at www.cal-aia-te-alumni.org.

The winner will be announced at a special event for society members, although he or she need not be present to win.

Organizers are hoping the winner will ride the motorcycle in the 2010 Homecoming parade, sparking interest in a second fundraiser.

Before it is wheeled into the winner’s garage, the red-and-black touring bike is scheduled to make several “road trips” to society events, traveling securely inside a covered trailer.

The Harley may make a December stop at an alumni event at the Carnegie Science Center, and society members hope to show it off again this spring at the International Technology Education Association’s national conference in Charlotte, N.C.

Sixty cents of every dollar raised through the raffle will go into the society’s endowed scholarship fund, which is managed by the Foundation for California University of Pennsylvania. Members are, in fact, alumni who volunteer in the spirit of Cal U for Life.

The society gives alumni a chance to network, both professionally and socially, and to stay in touch with the University, its faculty and students.

The group also works to increase support for technology education and to provide scholarships.

“As I’ve said many times, scholarships are Cal U’s greatest need,” says University President Angelo Armenti, Jr. “It’s great to see our alumni reaching out to help our current students.

“Many of those alumni remember someone who was willing to lend them a hand during their own student days. Now they are using their creativity to ‘pay it forward’ — and they’re having a good time doing it.”

For more information, please call 724-938-4085 or 724-938-4169.

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**Alumni society offers chances on a red-hot Harley**

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**Leaders of the Pack**

President Angelo Armenti, Jr. and First Lady Barbara Armenti try out the Harley-Davidson Road King — painted Cal U red and black.

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**Cal’s school colors,” Koontz says. Membership in the IA/TE Alumni Association is awarded automatically to anyone who earns certification or an undergraduate or graduate degree in industrial arts or technology education at Cal U. Faculty and retired faculty also are members.**

The society gives alumni a chance to network, both professionally and socially, and to stay in touch with the University, its faculty and students.

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**Pedro Delgado, engineer at Rail Transit Consultants in Penn, Pa.**