This article states that constant changing workplace technology requirements have placed a burden on the employees to remain competent. This problem can be alleviated by community colleges that offer credentials in different occupations. Community colleges can aid in the creation of new jobs by providing students with the skills that are highly desired by employers. The author explains that with the increasing demand for credentials in different industries, it is necessary for community colleges to document individual student competencies, identify meaningful benchmarks of student success, and maintain program relevance. The author discusses two types of certification: (1) certification issued by the industry; and (2) certification issued by organizations or professional associations. The author uses examples from different industries that rely on employee certification including Microsoft, Cisco Systems Corporation, and many health related companies. The document concludes that the need for industry certification programs is due to an increasing demand for a workforce with up to date technical skills. These skills will create a competitive edge in the marketplace for firms. By partnering with industry, community colleges can create a mutually beneficial relationship. (MZ)
Skills Certifications and Workforce Development: Partnering with Industry and Ourselves

Jeffrey A. Cantor

Rapidly changing workplace technology requirements have increased the burden on workers and employers to maintain workplace skills and to document worker competencies. Community colleges have long been recognized for providing vital workforce training to meet the needs of local business and industry, for cost-effective services, and for geographic accessibility. Now community colleges are playing a distinct role by offering credentials in particular occupations, combined with the broader education that is part of a well-rounded degree program. The challenges now posed to the community college to fulfill this mission have become manifest: to document individual student competencies, identify meaningful benchmarks of student success, and maintain program relevance.

One way to meet these challenges is through the use of a new dimension in workforce education, *industry worker certification*, which serves as a resource and benchmark for state-of-the-art curriculum and program development, a tool for marketing program effectiveness and portability to students as well as employers, and a competency-based bridge between noncredit continuing education and degree programs.

All too often, however, certification is separated, even segregated, by curriculum planners. For certification to reach its full potential for work and training, we must end this separation and partner not only with industry, but with ourselves.

Certification and Its Popularity

Some confusion persists about what certification means. In simplest terms, certification is a confirmation of one's adequate knowledge and skills in a specified occupation or occupational specialty. Certification can be classified into two areas: (1) certifications issued by industry that are product-related (e.g., Cisco-CCNA) and (2) certifications issued by organizations or professional associations (e.g., Certified
Professional Accountant). Certifications are generally issued for a defined period of time, after which the individual must satisfy continuing education requirements and pass another series of examinations to demonstrate continued competency. The sponsoring organization oversees the procedures for obtaining the certification and also the standards that are applied to the occupational classifications that are certified.

Increasing numbers of employers are turning to certifications as a means of ensuring that prospective employees actually do have the requisite skills for an occupational specialty. Employers are asking educational institutions to incorporate certification exam opportunities into their programs as a further way for students to demonstrate the necessary workplace skills, along with their diplomas. Students find that certifications can be earned in a much shorter period of time than full associate degree programs take, and that certifications often lead to higher starting salaries.

Today, 15-20 percent of community college students already hold bachelor's degrees. Students enrolling in our colleges for specific courses and programs are not staying for the full associate degree. At one college with a well-developed Information Technology degree program, for example, only 13 percent of the IT students obtained an associate degree over a period of three years. Instead, our colleges have become major retrainers of the workforce. At the same time, while 70 percent of our nation's high school graduates enter college, only about 33 percent complete a degree and one-third of those take jobs that do not require that degree. The data indicate that many community college students attend college to gain relevant occupational skills, not degrees. While the value of a college degree is still recognized, a need for worker continuing education has increased exponentially. Many workers find that their needs are not fully met by the traditional core curriculum.

Skill certifications can be complementary to college programs and can be an effective bridge to industry. They offer state-of-the-art educational programs that afford students recognized credentials attesting to the student's competencies and readiness for work. Many colleges are blending certificate programs into degree programs as an option. Some award credit for specific courses that have skill competencies overlapping with
those demonstrated via the certification. Learning has indeed become less linear as workers are seeking blocks of skills at different times during their careers. They also want documented evidence of their skills for job mobility. As a result, credentialing programs that convey job-related skills are beginning to make lifelong learning's greatest impact.

Certifications as Benchmarks and Resources

Certification requirements are built upon contemporary industry worker skill requirements; therefore, they serve as reasonable foundations for educational program design. College programs designed to incorporate industry-developed certification requirements establish credibility with local industry and ensure industry buy-in. These programs form a foundation for partnerships with industry. Microsoft's Microsoft Certified Systems Engineer (MCSE) and Cisco Systems Corporation's Cisco Certified Networking Associate (CCNA) training and certification preparation programs are two examples of certifications that have been integrated into community college programs. Cisco, for example, provides CCNA guidelines to Norwalk Community College (CT), which then provides a four-course sequence of study as part of an Associate in Applied Science degree. This sequence prepares students to challenge the CCNA exam, administered by a local Sylvan Prometrics Center on behalf of Cisco. Students can complete the four courses, pass the exam, move into the IT industry, and, if they choose, complete the AAS degree. The data on student success in passing the exam is used to determine if the college has satisfied student needs through the CCNA program.

Similarly, Microsoft provides guidelines for offering a curriculum incorporating the requirements of MCSE, MCP, MOUS and other certifications. Several Connecticut community colleges have partnership arrangements with proprietary computer training providers to offer students and local firms access to Microsoft certification training.

Vendor-neutral certification programs such as CompTIA's A+ Computer Repair Technician program offered at Norwalk Community College are also growing in number and popularity. The A+ Computer Repair certification preparation program has been at
capacity enrollment for several years. The A+ Certification and NETWORK+ Certification are based on a CompTIA standard for those working in the personal computer industry as technicians, help desk staff, and support staff.

At Norwalk Community College, we have witnessed a groundswell of interest in programs in computer and information technology. NCC has an internal articulation agreement for the Cisco CCNA as well as the Microsoft MOUS program. These programs have been fully enrolled since their inception. Students who pass the CCNA exam are afforded credit by the NCC faculty toward the Associate in Applied Science degree in Computer Information Systems under our credit by examination policies. They can receive credit for four networking courses. Likewise, they can get credit for passing Microsoft certification exams. This affiliation affords the college an opportunity to expand its noncredit offerings to computer networking technology as well.

Norwalk has similar arrangements in the areas of medical transcription and billing. Other Connecticut community colleges have certification to credit arrangements in Certified Nurse Assistant and Child Development Associate areas.

In the health careers field, many community colleges have long provided Certified Nurse Aide (CNA), Phlebotomy Technician Specialist, and EKG Technician licensure-training programs. Norwalk Community Colleges provides a short program leading to a certification that qualifies the student candidate for Connecticut licensure. Medical coding and billing, and medical transcription, are also popular certification areas. These courses and certifications subscribe to the Academy of Professional Coders standards.

The business and finance milieu also relies on worker skills certifications as benchmarks of competency. Community colleges have entered this arena by offering such certification training as Certified Financial Planner (CFP). The CFP designation is a recognized standard for financial services professionals in insurance, banking, trust management, and accounting. The CFP certification is generally a post-baccalaureate credential, meaning that community colleges provide a continuing professional education
Norwalk Community College is partnering with Kaplan Colleges to offer an online certificate in Financial Planning.

**Program Outcomes**

Why have industry-developed worker competency certification programs proliferated? Business leaders say that a well-rounded education is very important, but today's firms need a workforce with up-to-date technical skills in order to maintain a competitive edge in the marketplace.

Industry certification programs provide colleges with an opportunity to evaluate their program successes and make the outcomes known to students and employers. Through testing venues such as Sylvan Prometrics, colleges can arrange for data on test-taker outcomes to use in evaluating the college programs and thus better advertise them.

The challenge for community college leaders is to provide a lifelong learning opportunity paralleling a worker's career path wherein students can initially gain the skills needed for job entry and later be able to continue through the college degree.

Put simply, by partnering with industry, these certifications lead to jobs; by partnering with ourselves and building certification into ongoing curricular programs, these certifications lead to lifelong learning.

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