On Research and Leadership
UPDATE

Vol. 13, No. 2 Spring 2002

Changing Credentials in Community Colleges:
An Interview with David Pierce

The following interview of Dr. David Pierce, Immediate Past President of the American Association of Community Colleges, was conducted in March 2002 by Elisabeth Barnett, Information Specialist with the Office of Community College Research and Leadership at UIUC.

UPDATE: Reflecting on your years in Washington as President of AACC, what do you consider to have been the most significant changes in the way that community colleges do business?

Dr. Pierce: In many respects, they haven't changed dramatically. They are still in the business of access and serving as a gateway for students to pursue their higher education goals, but there are some changes that are worth mentioning. Colleges are probably more business-oriented in terms of being accountable, in terms of thinking that the programs and services that we offer should be fully productive, and/or able to pay their way. I also think that there is more attention to the needs of industry and the community, and more precision in the way they determine those needs. Technology of course has been a big driver of the way we do business, not only in relation to the basic business operations of the college, but also the way we deliver our programs and services. We have many more options now, and we have the abilities to reach more people in and outside of our service areas and our communities.

UPDATE: Community colleges in recent years have begun to offer credentials other than the traditional associate degree. Could you talk about which of these has the most promise in terms of service to students.

Dr. Pierce: This whole area of credentialing is in a state of flux. It's problematic that there are many who believe that degrees as we have known them have become significantly less important over the years. Part of that is because we have not done a very good job of translating meaning to those degrees—what skills do these students have?—what knowledge sets do they have?—what can or can't they do? As this is taking place, I think that industry and business has become less patient with higher education and the whole degree structure. As a consequence, there has been a movement to look at credentialing and to attempt to have credentials offer more meaning.

For years, we've given certificates for the completion of programs involving less than two years of learning. A big difference now is that increasingly we have external groups coming in and certifying or validating these credentials. In many cases, these external groups have actually created the curriculum and the credential itself and said, "Look, here's our deal, get on board." This is not only true for information technology, but for other sectors as well.

Editor's Note:

This issue of UPDATE focuses on the way that credentials offered by community colleges are changing to reflect new workplace needs, advances in technology, competition in the education world, and evolving student needs.

This issue and back issues of UPDATE can be found on the web at: http://occrl.ed.uiuc.edu.

This Issue Features:

UPDATE: Would you characterize that change process as pretty smooth?

Dr. Pierce: I don't think it's necessarily smooth, but some of the well known industries and companies have put a lot of investment into these curricula and therefore the colleges know that they're dealing with class acts. I think that overcomes some of the possible problems.

On another front, a movement that I think worth noting is one that's called the "career transcript." The person doing the greatest amount of work on this is Arnold Packer at Johns Hopkins University, former Assistant Secretary of Manpower and Training for the Department of Labor. He has dedicated his career to the concept of community colleges holding or hosting transcripts for people that contain information about courses taken, experience gained, and skills acquired over a lifetime. They include information on education not necessarily acquired by formal means. He has had a series of foundation funds provided to him and he continues to push the outer edges of the possibilities there. [See www.aypf.org/forumbriefs/1999/fb043099.htm]

UPDATE: How about baccalaureate degrees? There has been a lot of discussion about whether they belong in community colleges.

Dr. Pierce: Let me give you a kind of slow, unfolding opinion on this. First of all, the baccalaureate degree has not done a good job of serving as a certificate that communicates knowledge and skills. It has done a very good job, however, of serving as a passport to status in society. People who have the bachelor's degree basically have a standing that those who don't have it, don't enjoy. So, let's start there.

Over the past 30 or 40 years, the economy has changed, the nature of work has changed, and the nature of business and industry has changed. One of the major drivers, of course, is information technology and our ability to take large amounts of information and analyze and process it. As a consequence, the nature of jobs and the types of jobs have shifted. As that has unfolded, there has been a greater and greater need for more education and more knowledge on the part of workers. The traditional educational structure that we have in higher education is probably oriented better for the economy that we had in 1970 than the economy that we had in 2000 or might have in 2010. Therefore, adjustments are needed in our higher education structure so that it is fine tuned in the right way.

One of the things that many people believe is that there is a need for a new type of baccalaureate degree—the applied baccalaureate degree, one that includes more general education, more technical education, and so forth. It is aimed specifically at providing the right kinds of workers for business and industry.

Here is a good example. In Phoenix, the police department wanted a special bachelor's level degree for their police force. As the story goes, they approached the Arizona State University, asking them to offer this program. Arizona State said, "We've got a degree in criminology: that is our baccalaureate degree, let's offer that to them." The police department said, "No, we're not interested in our policemen having a course in criminology. We want them to be more skilled in how they deal with people, and their ability to communicate in situations that require sensitivity, etc." Arizona State then said that that was not what their baccalaureate degree was about. Enter Maricopa Community College saying, "Sure; we can develop a baccalaureate degree that will satisfy your needs." This is a case in point illustrating situations that have become more typical in our society and in our economy.

A number of people believe that there is a correlation between baccalaureate degree holders in a state and the ability of the state to attract industry, business, etc. For example, Indiana has restructured its higher education system because it wants more adults with baccalaureate degrees; so have Kentucky and several other states. Another factor is the ability of community colleges to educate students for a lower cost than universities. Politicians look at that and say, "Let's just give community colleges the ability to offer baccalaureate degrees."

UPDATE: What do you think about this trend?

Dr. Pierce: I think that if the community colleges truly start offering baccalaureate degrees, they will morph into university-type structures and lose their cost advantages rather quickly. Pressures will mount to shift and reduce loads, to have university-like libraries, and other structures that are like university structures. All of sudden, the community college walks like a duck, quacks like a duck, it's a duck (or in this case, a university).

There have also been community colleges that have recently begun to offer very specialized degrees—like teacher education degrees. I feel more comfortable with this idea when there is an obvious need that the universities are simply unable to fill. That actually happened at Great Basin Community College in Nevada. The president of the college tried to get a university to come and offer a teacher training program in the area because there was a serious local shortage of teachers. And the universities, for whatever reasons, did not respond. So at that point, the community college took off on its own to try to get the authority to offer this degree, and ultimately got it. My guess is that they don't have aspirations of going beyond that. They truly are not trying to create a university. They simply are trying to satisfy a pressing community manpower need. I think that's probably going to work OK.

On the other hand, there's a community college in Utah that offers about 22 different baccalaureate degrees and originally said "We can do this without changing our community college status." But they can't; they aren't—they are basically now a university.

UPDATE: If you were talking to a group of community college presidents, what advice would you give on the idea of offering more advanced degrees.

Dr. Pierce: I would caution them and urge them to think in those terms very, very carefully and conservatively. This nation cannot afford, in my judgment, to lose its community colleges. We've got some good universities that provide very valuable and important services and we should support them in doing that. But community colleges have also played a very important role and we don't want to carelessly, or unintentionally, compromise that.

The day may come that we do offer quite a few baccalaureate degrees, but if we're going in that direction, I hope that its very definitely the applied baccalaureate degree. I also hope that the reasons that we do it are sound and serve the community and the needs of our business and industry—that we do not do it just for the sake of "elevating our institutions" to a higher status or satisfying the needs of faculty.

UPDATE: Any comments on dual credit? Do you think that community colleges should continue to build and further develop this option?

Dr. Pierce: I think that there is a definite belief on the part of many important policy thinkers that high schools in this country need to be restructured. Dual credit is an approach to that restructuring. In other words, if it all works right, then students are accelerated past their first or second year of college, and they save time in the long run, while the state saves money.

I do have serious concerns about the viability of dual credit programs over the long term because of the funding situation. At the present time many states are funding both the high school and the community college at the full funding rate for these students. This can take place as long as it's a marginal program or a program that doesn't have large enrollments. However, if 50% of all high school seniors in the country enroll, all of a sudden it would come to a quick halt because the money just wouldn't be there to do it. This funding flaw will become more and more important as more students become involved.

But this doesn't change the fact that there needs to be serious reform in the whole transition area—the junior and senior years of high school, and the freshman and sophomore years of college. Another big factor here is the fact that completing two years of college is becoming the norm in order to have enough education to maintain your standard of living. It wasn't that many years ago that this was based on high school graduation status. The more this becomes a reality in our society, the more it becomes a legitimate societal goal for all people to achieve two years of college.

As this happens, the inefficient transition from high school to college becomes more pronounced and of more concern. I think our society will probably decide that we've got to restructure the last two years of high school and maybe restructure the first two years of college in some way. In fact, there are plenty of people who think the last one-two years of high school should be completely redone or eliminated.

UPDATE: What role is the role of the community college in all of this?

Dr. Pierce: I think it is to be an alert, constructive partner with the education community as we all work through this together. This is a very important issue and does not have an easy solution; its going to take all of us a lot of effort to come up with the ultimate answer. Back to dual credit, I think dual credit is a good transitional tool, but it is not the ultimate answer to all of this.

UPDATE: What do you think will be the future of the associate degree?

Dr. Pierce: I think we'll continue to have the associate degree for a long time. But the associate degree has never enjoyed life or death status. It is not used as a passport to the good life in society, and it has never really achieved status with industry and business. At the same time, it does serve a need for some students and for some communities and employers. It is our ultimate symbolic statement of achievement. As long as we're a part of the higher education community, I think we'll have the associate degree. ◆

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The Community College Baccalaureate Degree: A New Paradigm

by Kenneth P. Walker

Community colleges have made their mark by providing open access to higher education. In any examination of the trends and changes in credentialing, it is important to consider that the mission of the community college has been in near constant evolution and adaptation since the first junior college was founded more than a century ago.

According to life cycle theory, community colleges have attained the stage of maturity that requires that they adjust their missions to be responsive to the demands and challenges of the new globally competitive economy, or they will begin the decline phase. Further, the rapidly changing demographics of the U.S. population call for a reassessment of the community college mission, which should no longer be defined by the outdated and restrictive term of two-year college. This misnomer is not only unrealistic, it is untrue. Only a small percentage of our students attend for two years. As stated in Ed Gleazer's book, *The Community College Values, Vision & Vitality*, "Any time we can describe the community college in definitive, specific terms, we will destroy it."

Community colleges could be facing an identity crisis in the coming decade. Challenges to the survival of the public community college in the twenty-first century will come from charter colleges, e-colleges, broker colleges and proprietary colleges as well as private non-profit colleges operating as baccalaureate-degree granting institutions. To be competitive in this educational marketplace, the community college must develop new products and delivery systems, and shed the confining title of two-year college. The concept of a community college as "a climate to be created rather than an area to be served" must take hold.

As learner demand for the baccalaureate degree increases, community colleges are in a natural position to serve that need by simply expanding their climate. It is a natural progression to build a four-year degree from an existing two-year degree because, in increasingly more workplaces in the emerging economy, the body of technical knowledge needed will require more time to acquire. Gaining the increasing volume of knowledge and skills needed, and the development of the ability to do more advanced critical thinking and problem solving will often require four years. As Alan Greenspan noted in his speech to the National Governor's Association, "Workers must be equipped not simply with technical know-how, but also with the ability to create, analyze, and transform information, and to interact effectively with others."

Consider some of the trends that are influencing changes in higher education: 1) The marketplace for higher education has become international.

The worldwide web has enabled colleges and universities to enroll students from anywhere in the world. 2) The majority of students in higher education are older, part-time, and working. These students have families, jobs, mortgages, and other demands on their time. They want convenience, good service, and twenty-four hour availability of instruction. 3) The baccalaureate degree is replacing the associate degree as the entry-level credential for good paying jobs. 4) There are new world colleges and universities with no boundaries. 5) There are new brand names and new educational companies and more choices for students. 6) The transition from teaching colleges to learning colleges is accelerating.

In this environment, the competition for learners will be won by those colleges that are most successful at adapting to the changes in the new society. Take note of the words of Charles Darwin who said, "It is not the strongest of the species that survives, nor the most intelligent; it is the one that is most adaptable to change." To remain relevant in the twenty-first century, the community college must prepare to do things it has never done before, not simply continue to do the same things differently. We must rethink the reasons for our existence; the competition and our attitude toward it; the complexity of the modern world that needs our services; the markets for our services; and the leadership that will determine the role of the community college in the new century. That role must include the bachelor's degree.

In his thought provoking book entitled *The Lexus and the Olive Tree*, Thomas L. Friedman writes about the democratization of technology, finance, and information. As these critical elements of power and society are democratized, education through the level of the bachelor's degree must also be democratized. Failure to do so could threaten our democratic society, and threaten the survival of community colleges.

Critics of this concept will talk about competition with universities and the fear that community colleges will forgo their core values. President Franklin D. Roosevelt said it succinctly, "we have nothing to fear but fear itself." This issue is not about institutions; it is about students. The surprising thing to this writer is that the critics never talk about the needs and demands of students, nor the needs of business and industry for well-educated employees. Their focus is fear of competition, fear of change, and fear of whatever.

It is time for a new vision of America's community colleges which will assure their survival and relevance in the twenty-first century. It is time to remember that community colleges have survived and thrived in the last one hundred years because they changed and adapted their missions to remain responsive to the needs of communities.

Our mission should be defined not by the needs of a bygone era, but rather by the responsiveness, adaptation, and growth that are necessary to meet the changing dynamics of the communities we serve. By adding baccalaureate degrees to our offerings, community colleges would help promote:

- Geographical, financial, and academic access to higher education.
- Cost efficiencies through the use of existing infrastructures.
- Success among nontraditional or returning students through smaller classes, less rigid sequencing, and greater scheduling options.
- Ready matriculation and upward mobility for students with associate degrees.
- Stable family and employment relationships for students while they complete their degrees.
- Commitment to economic and workforce development.
- Responsiveness to community needs for specialized programs.

To promote this concept, the Community College Baccalaureate Association was founded on the basis of a vision—a vision that access and opportunity for the baccalaureate degree should be available to all who can benefit from it. This vision calls for the further democratization of higher education by making access to the baccalaureate degree available through the open door colleges of the world. The association now has 70 members from 21 states, 5 Canadian provinces, and 2 Caribbean Island states. It has a website at *www.accbd.org*. The community college baccalaureate movement has grown from a concept to a reality and created a new college paradigm for the twenty-first century. ◆

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Community College Roles in Teacher Preparation

by James E. Bartlett, II

Numerous projections suggest that the need for teachers will dramatically increase in the next decade (Gerald & Hussar, 1998; Fideler & Haselkron, 1999; Darling-Hammond & Berry, et. al., 1999; Bradley, 1999). Further, the *No Child Left Behind Act* requires that by September of 2002, all new teachers hired for core academic subjects be "highly qualified," and that *all* teachers meet this standard by the end of the 2005-06 school year.

As a result, the need for elementary school and secondary teachers is projected to grow 1.1% annually until 2008, while standards for their preparation are also rising. Specifically, 2.05 million new elementary school teachers and 1.19 million new secondary teachers will be needed in this time frame (Gerald & Hussar, 1998).

Illinois and many other states have realized that the teacher education programs currently in place will not meet this demand, and have started to seek new models and/or educational settings for preparing new teachers as well as to assist those needing to upgrade their skills. The National Teacher Recruitment Clearinghouse, developed by the U.S. Department of Education, provides information on alternative routes to certification for 47 states. (See *http://www.recruitingteachers.org/doe.html #alternative*).

The Community College Role

When reviewing the current literature on teacher preparation, it is evident that a number of community colleges are seeing teacher preparation as a part of their mission, connected with academic transfer preparation, vocational-technical education for the community, continuing education for adults, and community service (Cohen & Brawer, 1996). A number of education leaders suggest that it makes sense to start teacher preparation at the community college level since community colleges have an employment standard based on teaching and have been recognized as the nation's premier teaching institutions, (Wood, 2001; McCann, 2001). In fact, McCann (2001) believes that it would be appropriate to place teacher preparation directly in the mission statement of many community colleges.

Community colleges are developing a wide variety of programs related to teacher education, including:

- transfer programs from community colleges to four-year universities,
- partnerships and jointly-administered programs to develop educators, and
- professional education workshops and classes for teachers.

Community colleges are also offering specific courses oriented to future teachers. According to a 1998 National Science Foundation report, "Many future elementary and middle school teachers are taking more, if not all, of their college-level science and mathematics courses at two-year colleges."

Importantly, community colleges are especially well positioned to recruit qualified minority teacher candidates. Hudson (2000) reported that, in a study of community college teacher preparation programs, almost 40% of the participants in the programs were non-white, which even exceeds the national mean of community college students. This fact is especially significant in light of the dearth of non-white teaching professionals: only 13.5% of current teachers are people of color.

Transfer and Articulation: Community Colleges to Four-Year Universities

In a study of community colleges, Hudson (2000) reported that 79% of the respondents have articulation programs in place and 12% are in the process of establishing agreements. He also noted that students in teacher preparation programs achieved a 50% transfer rate to four-year colleges, double the national average of 22%.

In California, the Orange County Community Colleges, Glendale Community College, and Cerritos College have developed a joint program that recruits teachers' aides to become elementary teachers. The participants in the program take courses at local community colleges and then complete their fieldwork in the Orange County public schools. Credits earned are transferred to California State University (Evelyn, 2002).

Community colleges in Maryland were recently authorized to offer an associate degree in teaching by the Maryland Commission on Higher Education. University-level courses are offered by the community colleges and fieldwork is done at local schools. The completion of this degree ensures that students receive full credit when continuing to a public or private four-year institution in the state (Evelyn, 2002; Levison, 2001).

In Texas, two school districts have agreements with Richland College and local universities in which the district pays the tuition for those students who agree to teach in their district for at least two years. The students complete the first two years at Richland College and then transfer to a local university to complete the degree (Evelyn, 2002).

Partnerships and Joint Admission

Baker and Walter (1996) describe a 2+2 partnership involving Pennsylvania College of Technology and The Pennsylvania State University. The goal is to train teachers for career and technical education, facilitating their development of leadership and guidance skills as well as technical competence. After completing an Associate Degree at Pennsylvania College of Technology, the students transfer to Penn State to complete the bachelor's degree and become certified teachers.

In 1999, the Virginia General Assembly approved a House Joint Resolution to request that the State Council on Higher Education encourage articulation between two- and four-year institutions' teacher education programs. These kinds of relationships are exemplified by a partnership among Reynolds Community College, Virginia Commonwealth University, two other two-year colleges, and six other four-year institutions to produce high quality math and science teachers for both the elementary and middle school level. The collaboration of faculty from each institution is a key to its success (Wood, 2001).

Professional Teacher Development and Service to the Community

Community colleges have traditionally offered many human resource development programs to local business and industry. Now, they are developing programs that help teachers to upgrade their skills as well. For example, Delaware Technical and Community College offers an Educational Technologies certificate. The program targets K-12 teachers and college faculty and awards both introductory and advanced certificates (Delaware Technical and Community College, 2002).

Another model program is funded by the National Science Foundation and offers professional teacher development through the University of Illinois at Chicago and six community colleges. The community colleges offer courses for prospective teachers through this program, as well as professional development for both on-campus faculty and teachers in the community (Evelyn, 2002). (For more information, see *http://www.math.uic.edu/IMSE/CETP/uic_cetp.html.)*

Innovative Programs in Community Colleges

In other settings, teacher preparation has evolved to the point where community colleges, such as Florida's St. Petersburg College and Great Basin College in Nevada, are awarding bachelor's degrees in elementary education (Levinson, 2001). In Arizona, Rio Salado College of the Maricopa Community College System is offering a program in which people with a bachelor's degree can complete teacher-certification requirements online in one to two years (Rio Salado College, 2002). The program is accredited by the Norwest Association of Schools and Colleges, the accrediting body for the region (Levinson, 2001).

Implications for the Future

Community colleges are serving their local communities by preparing, or serving as a partner to prepare, qualified teachers for the classroom. With the projected shortage of teachers, community colleges can play an important role in recruiting future teachers, including those from diverse populations. Particularly in areas such as math, science, and technology, where there are critical shortages of teachers, partnerships among state policy-makers, universities, and colleges can be formed to capitalize on opportunities to place greater numbers of highly qualified teachers in the classroom. ◆

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Certificates Up and Down the Ladder: Get a Skill, Get a Job

by Susan McRae

The Maricopa Skill Center (MSC), founded in 1962, is a division of GateWay Community College, part of the family of ten Maricopa Community Colleges in Maricopa County (Phoenix), Arizona. Its unique model is an example of thinking outside the box— proving that learning and credentialing can be custom fit to meet student and employer needs.

Certificates in Tiers

Two students start Meat Cutting training on the same Monday, yet they finish the requirements and graduate, receiving the same certificate, two months apart. In another department, three students enroll in the same Computer Technology Programs training cluster; one receives the target Computer Terminal Operator certificate, one earns a "higher" certificate with more complex competencies—Microcomputer Software Operator—and one becomes a completer of the lower Introductory Computer Skills program. All three begin jobs in the same industry within one month of their graduation dates.

At the Maricopa Skill Center, the non-credit curriculum is structured in tiers, or groups of competencies. Each has a certificate name related to the kind of job it will lead to and a program length listed in clock hours. Clock hours are instructor estimates of the time it will take the average learner with no prior experience to learn and demonstrate the skill sets represented in that certificate.

Instruction is skill-based and job-focused, designed to lead directly to a job, advancement, or certification, with students acquiring the skills they will need on the job through hands-on learning in a working classroom/training lab. Students graduate when they can demonstrate their performance at a "job-ready" level.

An example is the set of Accounting certificates available to Skill Center students (see box). Each is listed in clock hours, and also in 35-hour weeks, illustrating the estimated program length if a student chooses the standard seven-hour day, five-day/week schedule. The open-entry/open-exit, self-paced format permits a five-hour day, 25-hour week, as well as part time schedules.

Computerized Accounting Programs

- Focus: accounting principles, practices and payroll applications, computerized practice sets.
- Includes: keyboarding, computer literacy, computer ten key, clerical skills, bookkeeping, accounting, payroll, manual accounting, computerized accounting, spreadsheets, data base, word processing, internet, accounts receivable, accounts payable, general ledgers, journals, and tax preparation.
- Positions: accounting clerks, receivable and payable clerks, bookkeepers, credit clerks, payroll clerks, accounting data entry, general office/ accounting duties.

Introductory Accounting Skills - 420 hrs/12 weeks

Keyboarding	Computer Ten Key	Calculator Operation
Computer Filing	Decision Making Skills	Microsoft Word
Ten Key Applications	Windows	Accounting Principles
Accounting Cycle	Introduction to Peachtree	Financial Statements

Computerized Accounting Clerk - 630 hours/18 weeks (All of the above, plus:)

Accounting Cycle using worksheets, adjust/close entries		Customer Service Skills
Accounts Receivables	Banking Procedures	General Ledgers
Special Journals	Accounts Payables	Accounting with Peachtree
Accounting with Microsoft Excel		

Computerized Accounts Receivable Clerk - 700 hours/20 weeks (All of the above, plus:)
Accounts Receivable Applications with Peachtree

Computerized Accounts Receivable/Payable Clerk - 770 hours/22 weeks (All of the above, plus:)
Accounts Payable Applications with Peachtree

Computerized Accounting/Payroll Clerk - 875 hours / 25 weeks (All of the above, plus:)

Payroll with Peachtree	Computing Wages	Social Security Taxes
Federal Income Taxes	Peachtree Applications	FUTA / SUTA Taxes

*Computerized Accounting/Payroll Associate - 980 hours/28 weeks*** (All of the above, plus:)

Merchandise Inventory	Bad Debts	Taxes and Forms
Notes Receivable	Notes Payable	Basic Tax Preparation
Introduction to Quickbooks	Introduction to Turbo Tax	

** *College credits: through an articulation agreement with GateWay Community College*

Meeting Diverse Student Needs

The Skill Center's hands-on, modularized instruction is offered on an open-entry/open-exit schedule. Students start class any week, year-round, and graduate on the Friday after they have completed the competencies for their certificate, usually in five to seven months. (An exception is the 12-month Practical Nursing program that starts students three times a year in more traditional 16-week classes.)

Flexible scheduling is the norm—6 a.m. to 9 p.m. in some departments, 7 a.m. to 4:30 p.m. in others. Students have the choice of the 5- or 7-hour day, with both being Pell grant eligible. Eager students may begin training immediately if space is available, while others may begin any Monday that fits their schedule. Each works at his or her own pace, including those who need more time to learn or have a limited educational background.

SHARING WHAT WORKS
This program has been selected as an Exemplary Program by the National Dissemination Center for Career and Technical Education, based at the University of Illinois (Project Director Debra Bragg) and The Ohio State University (Project Director Wesley Budke). For more information on this and other Exemplary and Promising programs, or to submit an application for this designation, see *http://www.nccte.com/programs/exemplary*. This year's deadline for applications is May 31, 2002.

Students pay monthly for the actual hours spent in training during the past month. Those who need additional time to learn may pay more but are not pressured to keep up with any group. The modular format and small group demonstration process enable students to start at their own levels and work at each portion of the training at a different pace.

Employer Connections

The greater Phoenix area offers a large employer base in the 12 training areas offered at MSC:

- Banking
- Computerized Office Procedures
- Computer Technology Programs
- Food Preparation
- Meat Cutting
- Medical Assistant
- Nursing
- Auto Body
- Facilities Maintenance
- Machine Trades
- Printing Trades
- Welding.

While the Skill Center maintains a Career Center with numerous job postings, employer data bases and job search tips, many employers contact the training departments directly when hiring, enabling the instructors to refer students to job environments in which they are most likely to succeed, resulting in a win-win-win for all three parties: the student, the employer, and the training institution. Successful hiring experiences cement teacher-employer relationships, ensuring a continuous flow of the kind of information needed to keep the training up-to-date and relevant to employer needs.

Educational Career Ladders

For many MSC students, the primary goal is short-term training that leads directly to employment with the opportunity to learn and grow on the job. For those whose goal is further education, articulation agreements with Maricopa Community Colleges offer a shortcut to college credit certificates or two-year degree programs. These pathways are most frequently used in Accounting, Machining, Medical Assistant, Nursing, and Welding. ◆

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Book Review

The Challenges of Changing Credentials

by Catherine Wilhelms

The book *Help Wanted...Credentials Required, Community Colleges in the Knowledge Economy*, by Anthony P. Carnevale and Donna M. Desrochers, (2001) provides definitions to commonly used terms for short-term training and examines economic forces that are driving credentialing and certification models. The book is divided into seven parts and draws attention to the importance of collaboration/partnerships and maintaining synergies between the academic and vocational missions in community colleges.

The authors provide a wide range of research findings related to this topic. As senior Educational Testing Service (ETS) researchers, Vice President for Public Leadership Anthony P. Carnevale and Senior Economist Donna M. Desrochers explore changes in the economy that have made non-traditional credentials more valuable. The text is written at a level appropriate for an advanced professional familiar with community colleges, training, vocational/career education, or workforce development, yet it is easy to read and avoids unnecessary use of academic jargon.

Part One emphasizes the fact that every community college is a complex network of programs that play overlapping but distinct roles, and require different forms of validation, with a common aim of teaching to enhance student learning. For example, academic education is validated through the accreditation process, whereas remedial education for English language development and training programs are more likely to receive validation through standards and outcome assessments. New skill requirements and technological change in the workplace lead to a demand for training customized to meet customer specifications. Community colleges' multiple roles force them to struggle with the broader issues of validating learning and effectively balancing the education and training functions. They also face the dilemma of how to best manage the credentialing functions.

With a labyrinth of for-profit and not-for-profit postsecondary institutions, professional, industry, and trade association commercial vendors, and government entities, there is no shortage of certificates or performance-based certifications. **Part Two** describes the various credential-providers and examines definitions of such terms as: certificate, certification, vendor certification, and skills certification. Explanations of licenses, statutory certifications, and voluntary certifications are offered. Interestingly, the authors found that less-than-two-year schools were much more likely to prepare their students to earn an industry credential than were two-year colleges (p. 35).

For a successful career, lifelong learning is necessary for survival. Carnevale and Desrochers address the importance of the current upward movement in skill requirements, and the associated increase in demand for non-degree credentials and certification programs in **Part Three**. Distance learning and web-based training have assisted workers to obtain blocks of skills at different times throughout their careers, outside of traditional classrooms. They note that, contrary to popular belief, while high-tech jobs have doubled, they still account for only approximately 7 percent of all jobs in the economy, with the greatest increase in jobs found in the nation's offices. While work is becoming more high-tech, the technology sector has not generated as many new jobs as other parts of the economy, accounting for only 10 million of 133 million U.S. jobs (p. 45). So why is credentialing for information technology (IT) so prevalent? The authors indicate that: (1) the speed of change in the industry surpasses that of other industries, (2) IT certifications are truly performance-based assessments, and (3) IT certification is training (not education) to achieve proficiency with relevant skill sets.

Part Four explores the shaping of international credential systems in Europe as compared to those in America, with the U.S. differing largely because of our egalitarian bias against tracking students into particular occupations. The chapter continues by outlining changes in skill requirements by decade: the 1970s emphasis on the effects of changing technology and new high-performance work processes, the 1980s which focused on problem-solving skills, and the 1990s which valued diversity, creativity, and new skill requirements.

The rise of the comprehensive community college is covered in **Part Five**, which clearly suggests that the community college has gradually moved toward vocational education, job training, and community service programs. Even though the current "open door" admissions approach provides greater access to postsecondary education, the likelihood of achieving a bachelor's degree is about 15 percent lower for those who start out at the two-year colleges compared to four-year institutions. The authors identify some strategies to promote advancement to the next level, such as community colleges becoming branch campuses closely tied to four-year institutions, common scheduling for cohorts, and vocational programs that foster peer support and group identity. To encourage transitions by vocational students, four-year colleges can also set standards for accepting technical credits and establish "capstone" courses covering general education credits necessary for graduation (p. 77). Performance standards will continue to be an important strategic consideration for community colleges, and labor market outcome standards imposed by the federal Workforce Investment Act (WIA) will continue to force community colleges and proprietary schools to focus on employment outcomes rather than educational outcomes.

In **Part Six**, the authors discuss key issues facing community colleges: fostering institutional change, managing program transformations, aligning curricula to external standards, competing with external providers, and the importance of collaborative partnerships. Of particular interest is the importance of connectivity among departments and the benefits that can be derived from internal collaboration. The authors cite an example where staff who are in contract training programs (and often in the best position to know what kinds of skills are in demand) can share this information with occupational programs. They are then positioned to have an edge in developing new certificate programs or refining existing programs to balance professional skill requirements with local skill demands. The authors challenge us to provide easy access to students, with multiple on-ramps and exits, and credentials that qualify students for both further education and employment.

Finally, **Part Seven** explores ways that community colleges can work to increase synergy among different forms of workforce preparation, nurturing them all while ultimately fostering academic education. Rapidly changing needs for specific workplace skills can be met. A strong academic base can be offered to those needing or desiring a stronger educational foundation. Short term training can serve as a pathway to more extended technical and academic education. The authors encourage community colleges to view the challenges before them not as dangers, but as opportunities. ◆

Book reviewed: Carnevale, A.P., & Desroches, D.M., *Help wanted...credentials required, community colleges in the knowledge economy*. Washington, D.C.: Education Testing Service and the American Association of Community Colleges. Available on the web at: *http://www.ets.org/research/dload/AACCHelp.pdf.*

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The Office of Community College Research and Leadership (OCCRL) was established in 1989 at the UIUC. *Our mission is to provide research, leadership, and service to community college leaders and assist in improving the quality of vocational-technical education in the Illinois community college system.* The Office is supported by the Illinois State Board of Education, Career Development Division, with funding from state Tech Prep.

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