This issue of On Research and Leadership Update (v13 n1) focuses on the concerns surrounding dual enrollment and dual credit. "Dual Enrollment Programs: Assessing the American Dream," by Katherine Boswell, addresses the problems inherent in development of these programs when institutions fail to collaborate with one another in an effective way. Boswell makes suggestions for state policy implementation regarding dual and concurrent enrollment. "Articulation: A Primer on Partnerships," by Rob Kerr, defines three key terms: basic articulation, articulated credit, and dual credit, in an effort to minimize the confusion over articulation that rests in terminology. "Dual-Credit Partnerships," by Robert Mees and Julia Schroeder, gives an overview of the dual credit arrangements John A. Logan College (Illinois) has developed with 11 high schools in its district. "Dual-Credit: Delivery Options for Secondary Students," by Hans Andrews and Jackie Davis, discusses the Olney Central College (Illinois) dual-credit options being offered to seven of its district high schools. "Helping High School Students to 'Think College,'" by Linda Uzureau, describes the Prairie State College (Illinois) program, which offers tuition-free career and technical programs in local high schools. Finally, "West Virginia's Seamless Curriculum Initiative," by Kathy D'Antoni, discusses how the initiative is affecting curriculum and testing in secondary and postsecondary schools. The second part (v13 n2) includes the following articles: "Changing Credentials in Community Colleges: An Interview with David Pierce," "The Community College Baccalaureate Degree: A New Paradigm," by Kenneth P. Walker, "Community College Roles in Teacher Preparation," by James E. Bartlett, II, "Certificates Up and Down the Ladder: Get a Skill, Get a Job," by Susan McRae, and "The Challenges of Changing Credentials," a book review by Catherine Wilhelms. (Individual papers contain references.) (NB)
Update on Research and Leadership

Elizabeth Bartlett, Ed.

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One of the central and most compelling themes of the American success story, (and a key reason that the U.S. has always been a magnet to immigrants from around the world) has been the belief that America provides an opportunity to the individual who isn’t afraid of hard work to achieve the “good life.” However, in today’s highly competitive and interdependent global economy, hard work alone is no longer a guarantee of access to the American dream.

With more than 80% of today’s jobs requiring at least some postsecondary education or training, attending a college or university for additional education and/or job preparation has, for all intents and purposes, become the primary route into the middle class. Teenagers and their parents are coming to understand this reality, and today somewhere between 70 and 80% of currently enrolled high school students indicate that they intend to go on to college.

Two-year colleges, which have celebrated their 100th anniversary this year, are playing an increasingly significant role in providing access to the education and training that both traditional-age students and returning adults need in order to succeed in today’s economy. Policymakers see the community college as pivotal in helping to create seamless P-16 systems (pre-school through baccalaureate education) where every student is able to smoothly and successfully progress through the different levels of education to accomplish their goals.

Education System Disconnects

Education scholars suggest that the U.S. has the most disconnected education pipeline in the world. Primarily because of our traditional emphasis on local control and support of education, high schools, two-year colleges and universities have each developed their own standards and requirements for admissions and/or graduation, usually with little consultation with the receiving institution. Because of separate governance and funding systems between K-12, vocational education, two-year, and four-year colleges and universities, it has been difficult to hold the educational system as a whole responsible for learning that crosses institutions.

Editors’ Note:

This issue of UPDATE focuses on dual credit/enrollment, and articulation between secondary and postsecondary educational systems. The speed with which related programs are evolving in Illinois and in the nation led us to believe that information is urgently needed on this sometimes controversial topic.

In a recent speech in Bloomington, Illinois, Carol D’Amico, Assistant Secretary of the U.S. Office of Vocational and Adult Education, made it clear that the expansion of dual enrollment programs is a priority for the current administration in Washington. It has also been a priority in Illinois as evidenced by rapidly increasing student participation. We hope that the authors’ theoretical and practical perspectives will be helpful to those involved in these efforts.
An oft-cited example of this disconnect is the high-stakes standards and tests that states have increasingly mandated for secondary students to demonstrate certain skills mastery before being allowed to graduate from high school. These standards and tests, however, bear little or no relationship to college admittance tests (typically the SAT or ACT). And the college admittance tests in turn, have little or no relationship to tests that determine the placement of students in college-level general education courses. These disconnects between secondary and postsecondary systems often prevent students from using the senior year to fully prepare for college level work. Instead, many high school seniors take easy classes, cut corners, or work long hours at after-school jobs.

State policymakers have become increasingly frustrated by statistics that indicate that 30% of college freshman require at least one remedial course (NCES, 1996). The Bridge Project at Stanford University estimates that 50% of entering high school seniors do not meet placement-exam standards at the community college level and should not be enrolled in college credit courses. The lack of accountability, unnecessary duplication of effort and/or artificial barriers created by separate requirements have led policymakers to begin to mandate a number of policy initiatives that seek to streamline the educational pipeline and ensure that students are better prepared for postsecondary education.

**Dual/Concurrent Enrollment at High Schools and Community Colleges**

One example of such an initiative is the growth in postsecondary enrollment option programs being offered to high school students. Enrollment options allow high school students the opportunity to get a head start on their college careers by participation in challenging courses that allow them to earn college credits upon admittance to a postsecondary institution. Dual/concurrent enrollment, Advanced Placement, I.B. (International Baccalaureate), and Tech-Prep programs are all designed to provide high school students the opportunity to take classes that have the rigor of a college curriculum and the potential to receive both high school and college credit.

Dual and concurrent enrollment programs allow high school students to enroll in college-level courses taught at the high school, at their local community college, or on-line via a distance learning provider. Some of the benefits policymakers cite for their increasing interest in creating postsecondary enrollment options include:

- Reducing college tuition costs for students and their families
- Accelerating student progress towards a degree in order to free up space on campus to meet the projected growth of new students coming to college
- Providing greater academic challenge to high school students to help overcome "senioritis"
- Removing the artificial barriers that get in the way of students moving seamlessly between systems by encouraging greater collaboration between high school and college faculty
- Increasing student aspirations to go to college
- Providing greater academic opportunities for students at small rural schools
- Building closer ties between colleges and their communities.

Critics of dual and concurrent enrollment programs argue that significant numbers of concurrent classes don’t maintain the academic rigor of the same courses taught on college campuses; or that such courses, while accepted at the community college for credit, may not be accepted for credit when the student later transfers to a university. State fiscal agents express concern about “double dipping,” in states where both the high school and college are allowed to collect state aid for the concurrently enrolled student.

**State Policy Approaches to Dual/Concurrent Enrollment**

Despite such concerns, policies encouraging dual and concurrent enrollment options are growing dramatically across the nation. Nineteen states have adopted state statutes regarding dual and concurrent enrollment, while an additional 14 have adopted state board policies encouraging the practice. In an additional 14 states, such programs are negotiated at the institutional level between local schools and community college districts. In a survey of postsecondary enrollment options conducted by the Education Commission of the States in 2000, there were only three states where there was no evidence of such agreements.

The state of Minnesota takes credit for being the first state to institute concurrent enrollment policies for high school students in 1985 with the intent “to promote rigorous academic pursuits and provide a variety of options for juniors and seniors in high school by giving them the opportunity to take college courses at state expense.” In
a study by the Minnesota Legislative Auditor, it was estimated that students and their parents saved an estimated $10.9 million in costs for tuition, fees and books had students enrolled in the same postsecondary courses without the program.

The Running Start program was created by the Washington State Legislature in 1990 to expand educational opportunities for public school students. Running Start allows 11th and 12th graders who pass a test demonstrating that they have the skills needed to succeed at college, to take tuition-free college-level courses at Washington’s 33 community and technical colleges. A University of Washington study on Running Start transfer students who later transferred to the University reported that the students graduated with a 3.42 GPA, significantly higher than the 3.14 GPA of students who began their college admission at UW. The Running Start students also graduated at a higher rate than other students.

The state of Utah has encouraged high school participation in dual and concurrent enrollment for many years, partly as a means to accelerate students’ educational progress in order to cope with the projected demands for increased access at the state’s colleges and universities. In 1999, Governor Michael Leavitt announced a new initiative to award New Century scholarships to any Utah high school students who accelerated their educational progress and completed the requirements for an associate degree prior to September 1st of the year in which they graduated from high school. The New Century scholarship awards the student 75% of actual tuition costs for two years at any of Utah’s public or private colleges and universities. The associate degree may be earned by a combination of credits earned through concurrent enrollment, AP and/or summer school attendance.

More recently, a number of states are reporting new initiatives between community colleges and universities to promote dual admission. Community college students who ultimately want to complete a baccalaureate degree are encouraged to simultaneously apply for acceptance to a four-year university and community college which have entered into a partnership. In many of these programs the jointly admitted student receives counseling and/or mentoring by a faculty advisor or admissions counselor from the community college and university, ensuring a guaranteed and smooth transition between the two- and four-year institutions.

Funding for dual and concurrent enrollment comes from a wide mix of sources. Five states require the local school district to pay student tuition costs for dual enrollment classes, while in four others the state automatically picks up tuition costs. In 20 states high school students are responsible for paying their own tuition. Twenty-seven states allow both the K-12 school district and the community college to count the dually enrolled high school student as an FTE (full time equivalent) for purposes of generating state support.

Conclusion

Despite the emerging fiscal crisis in the states, there is no evidence that state policymakers are showing any hesitancy in continuing to promote greater cooperation between secondary, two- and four-year colleges and universities as a means to ensure more seamless education systems.

In light of drastic cutbacks in state revenues and the inevitable reduction in support to higher education that can be expected as a result of the current fiscal crisis, it is more critical than ever that all educational institutions work together to overcome or ease any barrier that may limit the ability of our most at-risk citizens from getting the education or training they need to participate fully in our economy and to access the American dream.

References


Katherine Boswell is Executive Director of the Center for Community College Policy of the Education Commission of the States located in Denver, Colorado. kboswell@ecs.org. For more information see www.communitycollegepolicy.org.
Articulation: A Primer on Partnerships

by Rob Kerr, Illinois Community College Board

Articulating the Articulation Issues

Education reform programs, such as Tech Prep and Education to Careers (ETC), have opened up state-level debate on many issues that local educational systems have been dealing with for some time. One of the most important of these issues centers around articulation. Often it seems that the questions outnumber the answers on this topic - What does articulation mean? How can it be accomplished? What effect will it have or should it have on the relationship between schools and colleges?

Much of the confusion over articulation rests in the terminology associated with this topic. What one system calls “articulated credit,” another calls “credit-in-escrow;” what one college calls “dual credit” is defined elsewhere as “concurrent enrollment.” All of this creates a sort of “Tower of Babel” syndrome, especially when these topics are raised at statewide meetings. Precious time is spent trying to translate terms and detangle the web of confusion. If we are to effectively share best practices and learn from the success and failures of our peers, we must first agree as to what we are talking about. To that end, I offer the following as a starting point in this endeavor.

Making a Whole from the Parts: A Three-Phase Definition

**Basic Articulation**: While articulation is not the wholly owned domain of Tech Prep, due to its legislative charter, this program has spent considerable time and energy exploring the topic and attempting to define and exploit its various components. The state of Illinois Tech Prep guidelines describe articulation as:

- Activities to update or implement written agreements designed to provide students with a nonduplicative course of study, which includes incentives and leads to an associate degree in a technical field, two-year certificate or apprenticeship in a Tech Prep program.

This definition provides a good basis to begin the task of expanding and defining the more specific degrees of articulation. The state definition itself does not attempt to detail the particular form or substance that any articulation process should adhere to. Instead, it provides a conceptual framework that guides administrators as they attempt to tackle articulation issues as a part of their efforts to implement the essential elements of Tech Prep.

What we can take directly from the Illinois definition is that articulation is an activity (i.e. a process) that must produce some sort of written agreement. Further, this agreement must be the basis of a nonduplicative program, which includes incentives, and leads to an approved credential of some kind. There is quite a bit of latitude in how local consortia may define these terms, and this is where much of the confusion over articulation begins.

In its most basic form, Tech Prep articulation is the process by which secondary institutions and postsecondary institutions come together in order to connect their parallel programs. This has been going on in career and technical education (CTE) well before Tech Prep, and in fact it was partnering of this type in areas like agriculture that helped lay the groundwork for Tech Prep's development in the early 1990's. It is fairly clear now that this level of cooperation is good for education in general, and serves to strengthen curriculum offerings at all levels. Basic articulation does not necessarily need to include any discussion of college credit or enrollment. This initial step focuses instead on course and program content, and seeks to identify the curricular gaps and start the process of bridging those gaps. It brings educators together to align content, reduce curricular duplication, and develop some basic written coordination agreements that will ultimately help students succeed.

After that first step, then things can get rolling.

**Articulated Credit** (a.k.a. “Credit-in-Escrow” or “Tech Prep Credit”): Once a basic agreement has been reached, actions can turn to expanding the depth of these partnerships through articulated credit. In this model, articulated credit is granted by the community college after a student completes specific requirements as spelled out in a written agreement. In many instances, secondary courses (or a sequence of courses) are considered equivalent to community college courses, as
determined after analysis of their intended learner outcomes. This approach requires representatives of secondary and postsecondary institutions to come to the table with relevant course information and begin the process of matching outcomes to reduce duplication. At the end of the session, if all goes well, an agreement is reached identifying a nonduplicative pathway that offers students college credit for their work and/or allows them to bypass the entry-level course(s) in the community college program. The secondary students are not normally considered enrolled in the college and the credit associated with the agreement is usually awarded at a later point.

The actual act by which credit is granted to the student varies by location. In most cases, credit is not transcripted immediately; instead the student is required to finish high school and enroll at the community college in the appropriate program. Often colleges require students to successfully complete a preset number of hours, after which the articulated credit is placed on the student's transcript. This allows the college to effectively guarantee the student's ability in given subject areas before credit is granted. Credit granted in this manner is similar to transfer credit, whereby the hours are added to the student's total without a specific letter grade (affecting cumulative hours, but not G.P.A.).

**Dual Credit (a.k.a. Advanced Placement) vs. Dual Enrollment (a.k.a. Concurrent Enrollment):** Building on the articulated credit agreements, dual enrollment takes this cooperation to the next level. In this case the secondary and postsecondary program linkages are strengthened to the point that high school students are actually enrolled at the community college. What was previously an agreement that merely laid out similar learner outcomes develops into a truly seamless program. What was a simple agreement between administrators becomes a process by which faculty at both levels are brought together to structure, plan, and teach an integrated "2+2" program of study.

Dual credit, extends access to affordable higher education, reduces college costs to students, enables timely degree completion, and delivers a truly cumulative and sequential curriculum. These courses offer simultaneous credit (secondary and postsecondary), and can be offered at either the high school or community college. However, they must reflect the same content and rigor as those offered to college students. Ultimately, the students transition to postsecondary education through a slow and steady process during their junior and senior years, and graduate high school with real college credit on an official transcript.

Available data clearly shows that dual credit/concurrent enrollment programs are increasing. Enrollments by high school students in Illinois community colleges have risen significantly over the past few years. In the fall semester of 2000, 5,767 high school students attended Illinois community colleges, up 26.6% from 1999, up 38.7% from 1998, and up a staggering 100.6% from 1997 (Data and Characteristics of the Illinois Public Community College System, 2001/2000/1999/1998). Of the 2000 group, 41.6% chose occupational or vocational courses and 53% enrolled in baccalaureate/transfer courses, compared to 36.0% of students enrolled in vocational and occupational courses and 40.3% enrolled in baccalaureate/transfer courses in the community college system as a whole.

Much of the recent increase in dual credit can be traced to two actions that the Illinois Community College Board (ICCB) has taken. First, in 1996 the board made an administrative rule change relative to concurrent enrollment and credit hour grants. The changes allow community colleges offering dual credit courses to receive funding regardless of whether the secondary school receives average daily attendance (ADA) funding. Prior to this, only 63% of colleges were offering dual credit courses, but just three years later all 48 colleges were offering them (Andrews, 2000). Second, since FY 2001, the ICCB has dedicated $2.5 million to the Accelerated College Enrollment (ACE) grants. These funds allow community colleges to expand the services they offer high schools students by providing funds to cover tuition and fee costs. The result has been an increased emphasis on dual credit/concurrent enrollment partnerships by the individual colleges, and an overall rise in the profile of these programs within the state.

Many questions confront any consortia that embark on a new articulation process. What level of articulation are they comfortable with? Who will teach the courses and where? How will roadblocks like college tuition, book purchases, and student transportation be overcome? These questions must all be addressed to establish a viable system. However, for the process to ultimately succeed, it comes down to simple trust. State definitions and regulations cannot replace the foundation that must be laid institution-to-institution, program-to-program, and most importantly,
teacher-to-teacher. Each of these groups must be certain that what is being taught under the banner of articulation is, in fact, what was agreed upon. High schools need to be a true partner in this process and not marginalized or left behind. Colleges need to know that all of the program components are strong and that the content is true to the spirit of the agreement. This trust is the heart of any articulation agreement at any level, and it is the one thing that, if achieved, can serve to improve student learning and student success.

For more information on ICCB rules on dual credit/dual enrollment programs, see http://www.iccb.state.il.us/pdf/manuals/sysrules.pdf, page 61.

References


Rob Kerr is Associate Director for Career Instruction Initiatives, Illinois Community College Board, Springfield, Illinois. rkerr@iccb.state.il.us

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Dual-Credit Partnerships

by Robert Mees and Julia Schroeder, John A. Logan College

During fiscal year 2001, John A. Logan College had dual credit agreements with each of the eleven high schools in the College district. Dual credit courses are college courses offered to secondary school students who enroll and receive college credit as well as credit toward secondary school graduation. The College has fully implemented this agreement with three possible options. Participation from the high schools is voluntary and some high schools have selected participation in all three options while others have chosen only one.

The first option involves dual credit courses delivered in secondary schools and offered during the regular school day. The second option provides courses offered at the college or at other off-campus sites during the day or evening. The third and most popular option is the participation in Tech Prep articulated programs offered at the high schools. The dual credit agreement provides secondary school administrators, teachers and counselors an option to challenge students during their junior and senior years.

Quality safeguards have been implemented in dual credit courses, including points approved by the Illinois Community College Board (ICCB) in 1996:

- College courses offered at off-campus sites, including high schools, are of the same quality, cover the same content, and have the same rigor as courses at John A. Logan College.
- All state policies specified by the Illinois Community College Board, accreditation standards specified by the North Central Association, and John A. Logan College policies that apply to courses, instructional procedures and academic standards at the college apply to college-level courses offered by the college on campus, at off-campus sites, and at secondary schools.
- The instructors for these courses are selected from full-time faculty and/or from adjunct/part-time faculty with appropriate credentials and demonstrated teaching competencies at the college level.
- Courses are selected from transfer courses that have been previously articulated with senior institutions in Illinois or from the first-year courses in ICCB-approved Associate in Applied Science degree programs.
- The outlines and materials utilized for courses offered at secondary schools are the same as for courses offered on campus, and at other off-campus sites, and contain the content previously outlined in articulation agreements with colleges and universities in the state of Illinois and outside the state.
The determination for whether a college course is offered for concurrent credit is made jointly between the secondary level and John A. Logan College according to the policies and practices of the school district and College.

This program has resulted in a number of benefits to students and the educational community. We have seen increased enrollment on campus of students committed to obtaining an Associate Degree. College completion rates are expected to improve over the next few years. Relationships between the College and the high schools have improved. Increased visitations have occurred by faculty and administration on both the College campus and at the individual high schools. There is also a greater number of students from the high schools visiting John A. Logan College.

However, the collaborative effort between the College and the high schools has met some resistance on both the College and high school campuses. The respective teachers' unions were quite involved in trying to resolve and, at times, to block this effort. Concerns were expressed about the qualifications, compensation, and possible penalties for teachers of these classes. Issues related to quality of teaching, academic freedom, and possible loss of students also came up. Open lines of communication between teachers, administrators, students, parents, board members and community members have been an important factor to help resolve the issues and to implement the dual credit program.

Dual credit programs are not designed to replace a substantial segment of the academic experience on the college campus, but rather are created to provide high-achieving high school students with opportunities for acceleration. The transition from high school to college is eased by dual credit programs, giving students time to adjust to rigorous academic expectations while remaining in a more comfortable setting, often with smaller classes and more opportunity to ask questions. Dual credit saves students time and money on their journey to earning a degree in higher education, and supports the P-16 (Pre-kindergarten through higher education) movement that is emerging as a priority throughout the nation.

Dr. Robert Mees is President and Dr. Julia Schroeder is Vice President for Instruction at John A. Logan College, Carterville, Illinois. robert.mees@jalc.cc.il.us

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Dual-Credit: Delivery Options for Secondary Students

by Hans A. Andrews and Jackie L. Davis, Olney Central College

In many high schools large numbers of juniors and seniors simply “blow off” the senior and part of the junior year. Leon Botstein (2001) stated that, “the majority of college-bound seniors admit that their final year of high school is a waste of time.” Increasingly, that criticism is being leveled at the last two years.

Concerns

Acceleration of course work for students has been well researched and is a desirable option that has been shown to improve achievement for gifted students (Benbow & Lupinski, 1996). However, acceleration was rarely a solution chosen by schools until recent years (Jones & Southern, 1989). It was often felt that students receiving advanced class work would quickly outpace the curricular offerings that the school could provide.

Further, concerns were expressed about quality standards, including the acceptability of these courses to the colleges and universities to which the students might apply.

This state of affairs has dramatically changed during the last years of the 20th Century and leading into the 21st Century, with increasing numbers of states and schools offering accelerated course options. In the process, quality standards are also being addressed. Andrews (2001) identified 48 states in which state laws and administrative guidelines or local policies are helping to assure that programs are meeting the required standards for college transfer to colleges and universities. Many states are coming to realize the value of this new option and are being pressured by parents, students and secondary schools to make it more widely available.
One Campus: Various Options

Various options are utilized in the delivery of these dual-credit courses. While many are taught at the high school utilizing the college course syllabus, textbook, and grading standards, others may be offered on a community college campus, or at workplaces. While location at a high school increases accessibility for high school students, other locales offer situations in which students can take advantage of hands-on learning opportunities, or the more extensive resources of a college campus.

Olney Central College (OCC) and seven of its district high schools make up a service area in rural Southeastern Illinois which is highly committed to offering dual enrollment options to high school students. This program has become a major force in the education of local juniors and seniors over the past four years, providing them access to both academic and career and technical courses.

In recent years many area secondary schools had had to curtail their career and technical education offerings due to lack of available faculty or resources. The dual-credit option with the community college opens the door to over 100 students a year in six vocationally-oriented program options. The courses, type of delivery, location, and high schools are outlined in the boxed Delivery Options. Some students from East and West Richland High Schools are bussed to the college campus while enrolled in semester long career and technical education segments, taught by Olney Central College faculty.

Students from five high schools attend Industrial Maintenance courses at the Hella Electronics plant in Flora, Illinois. They are given lecture time in the industry training room, followed by live observation and hands-on experiences using equipment on the plant floor. The industry sees this as a means of attracting and orienting potential future workers.

Transfer classes have also been developed to help local high schools offer a greater variety of classes, while also providing dual credit options. These classes address the general education requirements for most colleges and universities and are offered in the secondary school during the regular school day for dual credit. They are taught by high school teachers who are carefully selected and meet the employment qualification guidelines of the college district. In addition, college transfer courses are offered via telecommunications to Flora High School students at their school, located 25 miles from campus. The courses are offered over the college and high school distance learning system, and the classes contain a mix of college and secondary dual-credit students. Faculty chosen to teach these classes come from the full-time faculty on the OCC campus.

Summary

The dual-credit course option provides an exceptional marriage between secondary schools, community colleges and some universities. The growth over the last few years has been phenomenal. Andrews (2000-2001) found in Illinois a 240% increase in secondary schools coming into this program since 1996-1997.

The 21st Century isn't off to a great start in the area of innovative planning and delivery of services involving partnerships among secondary schools and community colleges and universities. Cooperative dual-credit programs meet the needs of high school juniors and seniors by jump-starting their college careers and providing a challenge.

References


Hans A. Andrews is President and Jackie L. Davis is Dean of Instruction at Olney Central College in Illinois. andrewsh@iecc.cc.il.us
Helping High School Students to “Think College”: The Prairie State College Experience

by Linda Uzureau, Prairie State College

It is well known that 85% percent of the jobs in the new economy require postsecondary education, though not necessarily a baccalaureate degree. Yet many high schools continue to track students into either a college prep or a vocational track. Unfortunately, the message received by students who are enrolled in career or technical courses is that they are not preparing for college. A major challenge for community colleges is to help high schools change that mindset. We need to be sure that Tech Prep students, their parents and guidance counselors understand how important it is for these students to prepare for college too. Prairie State College’s new dual credit initiative, which we refer to as “AP credit for tech students,” is one way to encourage career and technical students to “think college.”

In 2000, the Illinois Community College Board launched the Accelerated College Enrollment (ACE) grants that support tuition waivers for high school students who are enrolled in dual credit courses. Many of the downstate community colleges, serving small, rural high school districts unable to provide college-level academic courses (e.g., calculus or physics), are using the ACE grants to provide those courses to their district high schools. Because the Prairie State College district is located in the south suburbs of Chicago, our eight suburban high schools already offer many honors and AP courses and would not welcome our offering dual credit in traditional academic courses.

Instead, the college saw the ACE grants as an excellent opportunity to develop a dual credit program focusing on specific career and technical courses in our local high schools. By removing one major obstacle—tuition payments!—these grants facilitated work with high school administrators and faculty to convert some Tech Prep, fully articulated courses into dual credit courses. The response of our high school colleagues exceeded expectations. We had initially hoped to establish one dual credit course in each of a limited number of high schools. However, due to the enthusiastic response of both high school administrators and faculty, in the first year (2000-2001) we offered at least one dual credit course in all eight high schools. A total of 233 high school students successfully completed the courses and were awarded Prairie State College credit. Homewood-Flossmoor High School, the high school with the largest career and technical program, offered four dual credit courses.

The foundation for this effort was the close partnership already established between Prairie State College (PSC) and district high schools through the Career Preparation Network (CPN), the regional Tech Prep coordinating council. Every two years the College and the CPN have co-hosted an articulation meeting between the career program coordinators at the College and their faculty counterparts in the high schools. At these meetings, College faculty members review the qualifications of the high school faculty and the content of their course outlines to ensure comparability and then sign articulation agreements. Typically a technical class (e.g., Welding 1), which meets for two semesters at the high school, is found to be equivalent to the introductory college course (Welding 101) which meets for one semester. Students who successfully complete the high school course are given a certificate of articulated credit which, upon enrollment at PSC, is posted to their transcript. This grants college credit to the student and permits him/her to advance to the next course in the career program, thus saving the student and family time and money. These bi-annual meetings and articulated credit agreements have built a solid foundation of mutual respect and cooperation between the career faculty at the College and in our high schools.

Why, when some community colleges have experienced strong resistance from their high school districts, has Prairie State College been so successful in this dual credit initiative? Clearly the focus upon career and technical courses was the basis of our success. When we first approached our high school principals with this opportunity, we made it clear we did not intend to “invade...
their territory" in the honors and AP program. They were, however, very receptive to providing students enrolled in their Tech Prep courses with the opportunity for dual credit. The vocational administrators and high school faculty who teach in the Tech Prep programs also felt that the dual credit option would help them build interest and enrollment in their programs, as well as providing students with an important linkage to the College.

Prior to approaching our high school counterparts, PSC administrators developed two sets of guidelines for this dual credit program. The administrative guidelines outline the procedures for determining which courses are eligible, communicating with parents, and advising, enrolling, and grading students. They also address faculty qualifications and compensation and the coordination of College and high school administrative procedures.

The student guidelines, presented in a straightforward question-and-answer format, focus on the issues of greatest interest to students and their parents. We take great care to ensure "truth in advertising" for this program: students and their parents are informed that, although these dual credit courses provide college credit in specified career and technical programs (e.g., automotive technology, computer networking (NetPrep), welding, manufacturing technology, CAD/CAM, office administration technology) at Prairie State College, other colleges and universities will probably not grant credit for these courses unless the student completes an A.A.S. degree and matriculates into a capstone baccalaureate degree program.

To enroll in a dual credit course, the high school student, his/her parent and the high school guidance counselor must all sign a contract, which clarifies the procedures. In anticipation of guidance counselors’ concerns that high school students may earn a poor grade on their college transcript, PSC included a guideline requiring the faculty members to notify us of any high school student at risk of getting a D or F in a dual credit course. That student is then administratively withdrawn from the course at the College.

Prairie State’s dual credit program has had several important benefits to the College. It has led to even closer collaboration and articulation with the career and technical faculty and programs in our district high schools. We view this initiative as the culmination of a long effort to develop a clear curricular continuum in technical education, which starts in our high schools, leads to enrollment in A.A.S. programs at the College, and then provides opportunities for our students to complete a baccalaureate capstone program at Southern Illinois University, Governors State University, Purdue University Calumet or other private colleges in our region. In addition to significantly increasing the number of students enrolled in our career programs, this program has also enhanced our efforts to connect with Tech Prep students before they graduate from high school.

In addition, the ACE grant funding facilitated our establishment of a dual credit computer networking program with two of our high schools with probable expansion to a third high school next year. Moreover, we have been able to secure both a Special Initiative Grant in technology from the Illinois Community College Board and two technology grants from our State Representative, George Scully, to purchase equipment and provide faculty training for the NetPrep program, both in the high schools and at the College. Scully made it clear that we got his support for funding because we were able to demonstrate the close high school/College collaboration that is necessary to provide good technical education in our community.

Prairie State College intends to build upon its successful dual credit program. Five new dual credit courses have been added this year and the college anticipates increasing the number of student completers by 50%. Dual credit is a win-win program for the high schools and the College. The biggest winners, however, are the Tech Prep students who have begun to view themselves as "college material" and to make their postsecondary plans to prepare for a technical career.

Linda Uzureau is Vice President of Academic Affairs and Dean of Faculty at Prairie State College in Illinois. For further information on their dual credit program, including copies of the administrative or student guidelines, e-mail Linda at luzureau@prairie.cc.il.us.
West Virginia’s Seamless Curriculum Initiative

by Kathy D’Antoni, West Virginia Joint Commission for Vocational-Technical-Occupational Education

An extensive review of West Virginia’s education system during the 90’s has prompted sweeping changes in the secondary and postsecondary education levels within the state. The data reported low college attendance rates, increases in remedial college courses for incoming freshmen, high postsecondary dropout rates, and a growing concern by the business community relative to the quality of education being delivered. Reaction to the reports resulted in the passage of state legislation intended to insure changes in the way education and training were being delivered in West Virginia. One of the outgrowths of the legislation was the “seamless curriculum initiative.”

West Virginia defines a seamless curriculum as a continuum of competencies which provides transition from one level to another without unnecessary duplication. Student progression is based on the mastery of competencies to established standards.

At the onset of the seamless curriculum initiative, a major problem surfaced. The West Virginia Department of Education had established broad standards for each secondary subject area, but due to the scope of these standards, teacher interpretation became a variable. Additionally, the course content at the postsecondary level was not standardized, so there were variations in course content from class to class.

It quickly became apparent that in order to accomplish the seamless curriculum development steps, both education levels needed to use the same methodology to “unmask” the curriculum in their respective courses by identifying required competencies and mastery levels. To accomplish this task, both education levels agreed to use Instructional Performance Systems, Inc. (IPSI), a curriculum development process tool. The IPSI sessions resulted in two important products: 1) syllabi that could be analyzed for alignment, gaps and duplication, and 2) criterion-referenced test banks.

The process not only provided an effective medium for developing seamless curriculum, but a high level of trust began to evolve between the education levels. This trust materialized into a system that allowed for the development of an approach new to West Virginia’s education system.

Transcript in Escrow

The seamless curriculum process has identified, to date, 26 courses that are duplicated between the high school and postsecondary levels. To eliminate the duplication, community colleges have agreed to award college credit for these classes. Students can access the credits by enrolling in the identified classes, which utilize the IPSI syllabi, and then obtaining a passing grade on the final exam which is developed from the criterion-referenced test banks (with a passing score of 70% on the grading scale). Upon successful completion of these classes, a college transcript is immediately generated for the student and is placed in escrow until the student enrolls in college. Once enrolled, the student’s transcript is taken out of escrow and becomes an active, legal transcript. Currently, there are over 750 students enrolled in these classes.

While the West Virginia seamless initiative is in its infancy, its impact is already being noticed. In addition to Transcript in Escrow, the effort is reducing the number of students enrolled in college remedial classes, and the increase in the college-going rate is promising. All in all, this seamless initiative is proving to be an answer to some of West Virginia’s most persistent educational challenges.

Kathy D’Antoni is the Assistant Director of Federal Programs, West Virginia Higher Education Policy Commission. She is National President of the National Association for Tech Prep Leadership. dantoni@hepc.wvnet.edu
Upcoming Conferences

COMMUNITY COLLEGE LEADERSHIP RETREAT
Sponsored by UIUC- College of Education
(third annual)
May 21st and 22nd, 2002
Allerton Park, Monticello, Illinois

- “Workforce Development Institute,” sponsored by the American Association of Community Colleges, January 30th-February 2nd in Miami, Florida. See www.aacc.nche.edu.
- National Institute for Staff and Organizational Development International Conference, May 26th-29th in Austin, Texas. See www.nisod.org/conference/.

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, Business, Community and Family Partnerships Center, with funding from the Carl D. Perkins Vocational and Applied Technology Education Act of 1998.

The contents of this newsletter do not necessarily represent the positions or policies of OCCRL personnel or the Illinois State Board of Education.

See OCCRL’s website at http://occrl.ed.uiuc.edu for previous issues and other resources.

STAFF
Debra D. Bragg, Ph.D., Director, OCCRL and Associate Professor, UIUC
Elisabeth Barnett, UPDATE Editor and Information Specialist, UIUC
Linda Iliff, UPDATE Production Manager and Administrative Assistant, 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.
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 halft 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.

David Pierce served for many years as President of the American Association of Community Colleges. He is currently on the higher education faculty at the University of Illinois at Urbana-Champaign. His e-mail address is dpierce280@aol.com.

The interview was conducted by Elisabeth Barnett, Information Specialist at the Office of Community College Research and Leadership at UIUC. Ms. Barnett's e-mail address is ebarnett@uiuc.edu.

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. 

Kenneth P. Walker, Ph.D, is District President of Edison Community College in Ft. Meyers, Florida. His e-mail address is kwalker@edison.edu.
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. ♦

**References**


Enhancing Teacher Education in Illinois:
The Role of Community Colleges
and Four-Year Institutions

This Institute is a forum to discuss current issues regarding teacher education/preparation in Illinois, including current policy, state standards, articulation issues, and best practices. The Institute provides an opportunity to disseminate the latest information about teacher preparation in Illinois and to enhance programs and partnerships among community colleges and four-year institutions. The primary audience is community college and four-year faculty and administrators of teacher education programs. For program information contact: Frankie Laanan, e-mail: laanan@uiuc.edu.

Date: June 20-22, 2002
Length: Thursday, 1 PM–Saturday, 3 PM
Location: Law Building, University of Illinois at Urbana-Champaign
Cost: $175, includes lunch and refreshment breaks
Web Site and Registration: http://www.conted.uiuc.edu/commcollege/


McCann, J. (2001). Teacher preparation is part of the community college mission. Community College Week, 13(12), 4-6.


James E. Bartlett, II, is an Assistant Professor of Human Resource Education at the University of Illinois at Urbana Champaign. His e-mail address is jbartlett@uiuc.edu.
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 **
- Accounting Cycle using worksheets, adjust/close entries
- Customer Service Skills
- Accounts Receivables
- Banking Procedures
- General Ledgers
- Special Journals
- Accounts Payables
- Accounting with Peachtree
- Special Journals
- Accounts Payables
- Accounting with Peachtree

** Computerized Accounts Receivable Clerk - 700 hours / 20 weeks **
- Accounts Receivable Applications with Peachtree
- Computerized Accounts Receivable/Payable Clerk - 770 hours / 22 weeks
- Accounts Payable Applications with Peachtree
- Computerized Accounting/Payroll Clerk - 875 hours / 25 weeks
- Payroll with Peachtree
- Computing Wages
- Social Security Taxes
- Federal Income Taxes
- Peachtree Applications
- FUTA / SUTA Taxes
- Computerized Accounting/Payroll Associate - 980 hours / 28 weeks **
- 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.

Susan McRae is Assistant Director for Instruction at Maricopa Skill Center. For more information see the Center’s website: www.gwc.maricopa.edu/msc/ or contact the author at susan.mcrae@gwmail.maricopa.edu.

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.


Catherine Wilhelms is Associate Dean of Instruction and Community Education Services at Rock Valley Community College and a doctoral student in Community College Executive Leadership at UIUC. Her e-mail address is C.Wilhelms@rvcc.cccill.us
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