What Is the Future for Postsecondary Vocational Education?

by James Jacobs, Macomb Community College and Community College Research Center, Teachers College, Columbia University

R ecently, the U.S. Department of Education's Office of Vocational and Adult Education convened a group of community college administrators and practitioners to discuss future trends in postsecondary education. Within 15 minutes two important and apparently contradictory conclusions were reached. First, all agreed that one of the main directions for all community colleges is workforce development; and second, that traditional design concepts contribute to the perception that vocational education is a vestigial organ within modern community colleges. "It is the land of the dinosaurs," groaned one participant.

Indeed, community college leaders perceive that postsecondary vocational education programs do not fulfill their workforce development mission. A recently released report of the American Association of Community Colleges (AACC), titled *The Knowledge Net* (2000) does not mention vocational education as part of the future course for community colleges. Community college administrators at the recent AACC convention rushed to panels on future trends in customized training, employer use of the Internet, and even the application of the Department of Labor's Workforce Investment Act, but there was no panel devoted to Tech Prep, and only passing reference to the new Perkins Act. While high-skill high-wage work in American industry appears to rely on vocational education beyond high school, the influence of postsecondary vocational education is waning within community colleges. Clearly, vocational education must "reinvent" itself if it is to survive.

In this article I argue that, both in substance and as a learning system, a revitalized vocational education that links itself with other strategies for workforce development and charts a course different from secondary vocational education is needed. If postsecondary vocational education can be understood within the context of the changing structure of work and education, it will not only preserve and strengthen postsecondary education, but provide a means to perhaps redefine and shape the secondary education system as well.

The Quiet Crisis of Postsecondary Vocational Education

The 1994 National Assessment of Vocational Education (NAVE) concluded that postsecondary vocational enrollments have increased in spite of rising costs, apparently because students are attracted by improved "job opportunities and pay." The NAVE study also found that employers viewed postsecondary vocational education positively, and that empirical evidence existed that wages were higher for program completers. The NAVE study, however, compared postsecondary with secondary vocational education, and the study is very critical of secondary vocational programs. When examined within the context of postsecondary education only, the stability of postsecondary vocational education is not as clear.

The demand for higher education has increased sharply among American youth, many of whom assume that a four-year education is the means of obtaining a stable, good paying job. At American community colleges, however, over 90% of students pursue their educational careers while holding a job. Vocational education has found it difficult to relate to this group within the context of its classical mission: the preparation of individuals for entry-level jobs. Postsecondary vocational students also base their futures increasingly on completion of a college degree. This is in sharp contrast to another growing group of individuals attending community colleges called "reverse transfers." These are individuals with a college degree attending a community college, often for specific occupational skills.

The increasing emphasis companies place on incumbent worker training is also impacting postsecondary education. Company-sponsored tuition programs and specific training and education programs use – sometimes regularly – community colleges because of their proximity and flexibility (Doughtery, 1998). Yet, postsecondary vocational education has only marginally benefited from this trend (Grubb, 1996). Often customized training programs are designed and developed by units that are independent from traditional vocational education. As a result, program enrollments can be adversely affected, and transmission of leading technology and corporate contacts are limited for faculty within the traditional vocational programs.

Vocational programs are often not designed to service adult learners in particular, and introductory courses do not appeal to older worker-

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students. While these students sometimes need cross training, they often return to school to further specialize in a particular area. Unless these specializations can be tied to some form of portable credential recognized by employers, there is little need for employees to demand credit.
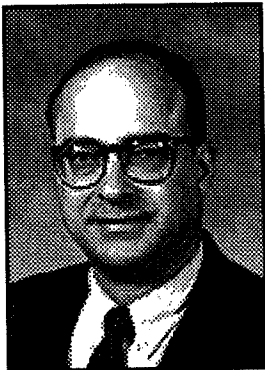
There is also the dilemma of how well postsecondary education is tied to its secondary counterpart. Tech Prep programs with articulation agreements and specific courses of study are not always used. In many states the two subsystems remain fairly separate and the students distinct. Still, postsecondary vocational education is not without success stories, such as the allied health and nursing areas. A nursing pinning ceremony at a local community college provides a moving testimonial of how community colleges provide relevant job skills for people. Similarly, automotive service technician programs can combine the interests of manufacturers with labor demands of local dealers and qualify graduates for high-skill, high-pay work. These programs can combine secondary and postsecondary degree programs and a seamless transition into the world of work. They have a strong business-led organization, Automotive Youth Educational Systems, that aids in guiding the process.

Finally, some of the finest community college teachers, who can interrelate classroom and practical hands-on learning, are in vocational programs. However, few community colleges have supported vocational instructors and attempted to use them as models for other teachers. They may be missing an opportunity to improve the quality of teaching and learning in community colleges overall when they overlook these highly skilled instructors.

Disciplines Within Vocational Education

What accounts for the current dilemma? What can be done to restore vocational education and give it more recognition in community colleges? Part of the dilemma rests with the adoption of an academic model by which postsecondary vocational education organizes its knowledge. This is a major problem since knowledge linked to jobs and the labor market is continuously changing. Vocational fields such as welding, accounting, and machine tools are particular technologies linked to an occupational process, and as the process of work organization is altered, the specific technologies change.

In contrast, academic disciplines do not define their relevance in terms of preparation for occupational achievement. Vocational education, however, must continually sort and re-sort its subject matter based upon an external standard: mastering skill sets that lead to employment. In fact, mastering the particular processes embedded within the work organization of a firm may be of even greater importance than mastering the technology.

Educators sometimes take for granted the distinction between vocational education and many traditional forms of liberal arts education. The specific body of knowledge to be mastered in vocational education is far more changeable and adaptable than in other parts of the college. In almost all postsecondary institutions the organization of vocational education departments mimics the academic units contributing to enormous problems in maintaining relevance for a vocational unit. Compared to secondary educators who teach the fundamentals, postsecondary instructors provide a strong emphasis on more advanced technical skills and mastery of these skills within the context of the workplace. Thus, unlike the academic area, vocational content has to meet a relevance test that is externally controlled by a specific local industry or process, assuming most students are educated for jobs within their communities.

Changes in Labor Markets

A significant change has occurred in U.S. labor markets. Traditional mechanisms by which firms have sought workers and workers have found jobs are of diminishing importance to hiring and promotion decisions. Employment security is declining and implicit commitments of mutual loyalty have ended, especially to middle age workers (Osterman, 1999). The number of workers who experienced involuntary layoff because of plant closings or mergers has increased. Average job tenure in the U.S. is the lowest of any industrialized nation. Prosperity appears interconnected with enormous fluidity and volatility on the job (Bluestone et al., 1999).

Local employers are likely to start workers at a low wage and advance them when "they see how they perform" within the system (Grubb, 1996). Students entering the job market with an associate degree must demonstrate their competence to the prospective employer so the issue of credentials, skill certification, and their legitimacy becomes important. Still, many important things can be learned on the job. How can vocational classes mesh with work site learning? Outside the allied health and nursing programs, many vocational programs have limited emphasis on student placement.

Failure to provide a strong work-based component may compromise an employer's acceptance of course work and willingness to hire community college students with certificates and degrees. Unless individual teachers maintain specific ties with specific firm owners—in a real sense continually marketing their programs and their students—there may be little recognition of graduates. The lack of meaningful credentials may also hold back postsecondary vocational education from developing more interest on the part of students and employers and maintaining or increasing enrollments.

What Is to Be Done

To resolve these problems we will need to employ specific programmatic strategies as well as broader policy changes. Systemic change and paradigm shifts may be tempting, but may prove to be both expensive and unworkable. Assuming the present funding streams and federal priorities remain the same, I offer the following short-term strategies.

1.   Concentrate and focus on local sub-baccalaureate labor market needs.

Postsecondary vocational education should develop niche market programs, rather than comprehensive programs, which should be determined by the particular makeup of the local community served by the institution and fit within the regional labor market. Clusters of local firms should be directly involved through technical training and work-based components. Local industry should also help create career pathways allowing students to advance into a four-year degree, and thus be prepared for a career involving advanced degrees. Critical thinking competencies, communication, and math should be thoroughly integrated within the curriculum. Niche market programs should allow postsecondary vocational education to distinguish itself from more broad-based secondary programs, freeing them up to provide broader exposure to work processes and related careers. Exceptions to this local orientation include meeting the needs of adults reentering the labor market, and program development for institutions that do not serve a particular labor market or are in rural and urban settings with small or weak labor markets.

> **Recommended Actions**
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> • **Concentrate and focus on local sub-baccalaureate labor market needs.**
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> • **Integrate activities within a broader workforce development focus.**
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> • **Maintain ties with secondary vocational education through Tech Prep-like approaches.**
>
> • **Understand the importance of college completion.**
>
> • **Enhance staff development of postsecondary administrators.**

2.   Integrate activities within a broader workforce development focus.

Workforce development in the broadest sense is the process of preparing human capital for productive work within a community. Community colleges prepare individuals for work under federal programs such as the Workforce Investment Act (WIA) and the Temporary Assistance for Needy Families (TANF) Act. Vocational education is the preparation of individuals with specific occupational skills. It is, therefore, the specific role of the community college to develop its community workforce and economy. Programs include those that serve specific firms, customized training for incumbent workers, and counseling in One Stop centers.

3. Maintain ties with secondary vocational education through Tech Prep-like approaches.

Postsecondary education should maintain close ties with secondary school systems, and specifically with students enrolled in secondary vocational programs. Instead of attempting to articulate programs in specific fields, such as accounting, machining, relationships should be structured around career clusters that match the businesses and industries found within the community. This will help insure that secondary students do not see a high school degree as a termination of education before the postsecondary level. The combination of secondary and postsecondary systems should be available to penetrate local labor markets and develop a career path for students. This Tech Prep-like approach can be an extraordinarily powerful attraction for the postsecondary programs. Secondary vocational education provides entry level and foundation competencies for career pathways fitting with local industries. These postsecondary programs should offer more specialized courses that include a work-based learning component. If this focus could be achieved, I believe we would see much of the squabbling between the secondary and postsecondary levels disappear.

> *If most students attend postsecondary education because they want a four-year college degree as a means of obtaining a secure job, it is critical to consider this motivation when designing a program and courses in vocational education.*

4. Understand the importance of college completion.

Part of the success of any program includes understanding the needs of the customer. If most students attend postsecondary education because they want a four-year college degree as a means of obtaining a secure job, it is critical to consider this motivation when designing a program and courses in vocational education. Many postsecondary vocational educators spend incredible amounts of time debunking liberal arts and other college level programs to their students, seemingly unaware that students' dreams are to complete four-year programs eventually. In this case, the issue becomes one of making vocational education fit together with liberal arts for a coherent program of study, not diminishing the role of liberal arts and denying its criticality to postsecondary vocational education programs.

5. Enhance staff development of postsecondary administrators.

Who will train the vocational administrators of the future? Since most schools of education have virtually ceased supplying any postsecondary vocational instructors, they are probably not good sources. It is more likely that the training and education practices of leading companies may be potential models for administrators to follow. Firms that have undergone organizational and cultural change should be examined to understand how to introduce this change within postsecondary vocational education. Models for good vocational administrators may be found in the human resource departments (HRD) of companies, and these models should be researched to determine their transferability.

Conclusion

It has been disappointing that those in the field have taken up so few of these core issues—either in the vocational education or community college leadership arenas. The real issue is not whether postsecondary vocational education is better organized, funded, and growing in comparison with secondary education, but whether postsecondary vocational education is playing a role in the development of a new generation of people prepared to enter the workforce. It is only when postsecondary vocational education can see itself as playing a role in HRD that it will have a future at the postsecondary level. Let's hope this vision is realized before it is too late. ◆

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Community College Leaders as Change Agents: A Response to Jacobs

by Eileen G. Tepatti, Lincoln Land Community College

What does the future hold for postsecondary vocational education? The future of vocational education and training programs in the community college system is clouded by an identity crisis created by a leadership void. The ability of community colleges to respond to the workforce needs of the communities they serve will be impaired unless they fill this vacuum. James Jacobs, in his effort to alleviate the crisis created by the leadership needs, recommends a solution that exacerbates the problem. His solution will systematically drive out the best and the brightest leaders who can provide the most effective means of leading community colleges and workforce development programs into the 21st century.

Jacobs is correct when he points to the need for the development of formal and informal postsecondary leaders, practitioners and administrators, who work with vocational education and workforce systems from within the community college system. However, he dismisses too quickly their development potential, though it is this innate potential, combined with substantive experience, that can make these leaders visionary change agents. He ignores the potential of personnel within community colleges and reveals his corporate bias by favoring vocational administrator models drawn from the ranks of human resources departments (HRD) in large companies and corporate entities.

Jacob's proposal to bring individuals in from the outside will no doubt foster a slowly evolving cancer that will, at first, consume workforce development programs, and then, the community college system itself. Survivors will be left wondering what happened to the community college rather than marveling over its potential and seeking to understand how to make it better and more responsive to community needs. Unless there are comprehensive, practical development programs to create leadership teams that can deal with organizational change, community college leaders will lose their ability to change and will, instead, feel threatened by change.

Change, however, need not be threatening. A simple yet stimulating book on change is *Who Moved My Cheese?* (Johnson, 1998). This book is a quick, easy read, and I recommend it as a catalyst to begin a discussion on change. It is the story of four rodents, Sniff, Scurry, Hem, and Haw, who experience the struggles, emotions, and fears related to change.

Sniff and Scurry possess simple rodent brains, but good instincts. Hem and Haw, use their brains, filled with many beliefs and emotions. When their cheese starts to disappear, Sniff and Scurry leave their comfortable place in search of new cheese. Hem and Haw, afraid to leave the comfortable place, stay put, waiting for the cheese to return. Needless to say, the cheese does not return. At one point in the story, Haw realizes that he is learning some very valuable lessons about moving on from his friends, Sniff and Scurry: movement in a new direction helps you find new cheese, realizing you have old cheese and letting go of it will help you find the new cheese faster, holding on to old beliefs does not lead you to new cheese. Vocational education leaders can learn a valuable lesson from Sniff and Scurry.

The desire of postsecondary vocational educators and administrators to mimic four-year institutions for the sake of a sense of academic respectability is an example of holding on to "old cheese." Holding on to this belief will leave these educators and administrators in a "cheeseless" situation. The lesson here is that community colleges must move past the fear that they will become something less than what they are if traditional vocational Associate-degree programs become too closely associated with short-term job training.

Community college leadership – presidents, vice presidents, deans, department chairs, faculty, support staff, and students — must have a shared vision of the community college of the 21st century including workforce systems. To implement a 21st century vision for workforce development, these leaders must become change agents or risk gaining practical experience in the unemployment line. As the writer of Proverbs put it, "people without a vision shall perish."

Ms. Eileen Tepatti began her professional career as an eighth grade teacher and principal of a K-8 private school, and has also worked in the private industry as a director of field management and career agent of development programs. She currently serves as the Department Chair of Computer and Office Information Systems at Lincoln Land Community College in Springfield, Illinois. Eileen received her masters degree in Educational Administration from Sangamon State University, and is now a student in the Community College Executive Leadership doctoral program at the University of Illinois at Urbana-Champaign. For more information, contact Eileen at eileen.tepatti@llcc.cc.il.us or 217-786-2283.

If we believe that leadership is the property of culture and therefore reflects the stated and operating values of a specific institution, then we must look through that institution's lens to discover how the group identifies itself, who and what matters to the group, how things are done, and what stories will be told about outcomes. When an institution is able to understand itself in these ways, it can begin to use its own leadership in an active quest for a desired change.

In order for leaders to be truly prepared to take on leadership roles that shape the future of the community college, it is imperative that they become engaged in educational programs and seminars that specialize in community college leadership. Understanding the origins and evolution of the community college, as well as the basis for criticisms, are key to understanding where the community college is going and how it is going to get there. The corporate model offers limited relevance for the community college and workforce development systems because it is does not reflect these values and mission. In order to respond to the workforce needs of the communities they serve, personnel from within the community college must become actively engaged in leadership development to further the mission and determine its destiny. ◆

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Community College Leadership Awards at UIUC

Congratulations goes to the following past and present Community College Leadership students who were recently recognized for their academic excellence at the University of Illinois at Urbana-Champaign (UIUC).

Jung-sup Yoo received the Rupert N. Evans Doctoral Student Award, which is given annually to a doctoral student who has achieved high standards of excellence in scholarship, research, and service. Mr. Yoo holds a bachelor's degree in German Language from Seoul National University (1989) and a master's degree in Human Resource Education from UIUC (1998). He is currently pursuing a doctoral degree in Human Resource Education at UIUC, specializing in Community College Leadership. His dissertation is on student readiness for college education and remedial/developmental education at the community college.

Judy Marwick received the Community College Leadership Award, which is presented annually based on faculty recommendations. Ms. Marwick has been an Associate Professor and Department Chair of Mathematics and Computer Science at Prairie State College, and is currently Dean of Arts & Sciences at Morton College in Cicero, IL. She holds a bachelor's degree in mathematics education from Miami University and a master's degree in mathematics from Purdue University. She is currently pursuing a doctoral degree in Educational Organization and Leadership as a member of the Community College Executive Leadership Cohort program.

Debra Daniels, who is featured in this issue's "Focus on Leadership" column, received the Nagel Award for demonstrated leadership. This award is given annually to a recent Human Resource Education graduate who is selected by the faculty. Dr. Daniels graduated from UIUC in 1997 with a doctoral degree in HRE, specializing in Community College Leadership. She is the new Vice President for Academic and Student Services at Parkland College in Champaign, Illinois.

Conference Planner

● **January 24-27, 2001** - Broadening the Horizons, AACC 8th Annual Workforce Development Institute at the Hyatt Regency in Phoenix, Arizona. For more information go to *www.aacc.nche.edu.*

● **February 28-March 3, 2001** - Annual Innovations Conference at the Atlanta Hyatt Regency in Atlanta, Georgia. For more information go to *www.league.org.*

● **March 24-27, 2001** - Balancing Private Gain and Public Good, American Association of Higher Education National Conference at the Marriott Wardman Park, Washington, DC. For more information go to *www.aahe.org/conferences.htm.*

● **March 26-27, 2001** - Employer to Employer: Investing in the Workforce of the Future in Chicago, Illinois at the Fairmont Hotel. For more information go to *www.cord.org/lev1.cfm/3.*

● **March 27-28, 2001** - The Connections Conference in St. Charles, Illinois. For more information go to *lilt.ilstu.edu/connections.*

● **April 4-7, 2001** - AACC Annual Convention in Chicago, Illinois. For more information go to *www.aacc.nche.edu/conf/conferences.htm.*

● **April 8-9, 2001** - Council for the Study of Community Colleges Annual Conference in Chicago, IL. For more information e-mail *dbragg1@uiuc.edu.*

● **June 12-13, 2001** - The Connections Conference in Springfield, Illinois. For more information go to *lilt.ilstu.edu/connections.*

● **June 23-26, 2001** - From Expectations to Results: What Are We Finding, and How Are We Improving? American Association of Higher Education Assessment Conference at the Adam's Mark Hotel in Denver, Colorado. For more information go to *www.aahe.org/conferences.htm.*

Focus on Leadership: An Interview with Debra Daniels, Parkland College

UPDATE: How do you define leadership at the community college?

Daniels: Leadership at the community college is the ability to create and sustain a quality learning and working environment where our stakeholders want to come to learn. This takes a great deal of vision and planning to accomplish.

UPDATE: What leadership strategies work for you in an executive leadership position?

Daniels: I try to establish good lines of communication by listening to people tell me about their job, their issues, and their lives. I also try to establish accessibility by keeping a set office hour everyday and by walking around to areas of the campus. Additionally, I strive to make fair, consistent decisions after first considering and listening to all stakeholders. Above all, I always ask myself if a decision benefits and expands educational opportunities for our students. If it does, it serves our mission and we should do it.

UPDATE: How well does higher education train and provide community college leaders?

Daniels: The Community College Leadership (CCL) program I graduated from at the University of Illinois at Urbana-Champaign did a good job preparing me for higher education administration. I use information and skills gained from that program everyday in my job as an administrator. When I was a student the CCL program did not include community college finance, facilities management, and personnel law and management, but I understand that the program has tried to fill in these gaps. I had to learn about these issues through experience and seminars. Additionally, I have attended leadership training through the American Association of Community Colleges. The course I attended on legislative leadership was outstanding. It gave me a global perspective.

UPDATE: What role do effective leaders play in the various segments of the community college environment at the local, state, and federal levels?

Daniels: Community college leaders have a great opportunity to influence how government at different levels views community colleges. In order to influence government, leaders must keep active by serving on local and state policy committees and interacting with state and US representatives wherever possible and appropriate.

UPDATE: How do community college leaders contribute to increased accountability in education?

Daniels: Community college leaders need to be active in their state governing organizations in order to provide input to government leaders as to what accountability in education should look like. Additionally, they need to lead their institutions in the accountability effort.

UPDATE: As a community college administrator, what do you consider to be the major challenges of community college leaders as community colleges move forward into the new century?

Daniels: One of the biggest issues is replacing the large number of retiring faculty members. On the surface the institution has the potential to save a great deal of money because it will pay new hires less than their retiring counterparts. However, reality is that the college, in the end, will pay just as much to find and hire qualified people, especially in the high tech fields. And these new people will need to be mentored and provided with professional development in order to become master teachers. One of the biggest difficulties is attracting qualified instructor candidates.

UPDATE Newsletter is inaugurating a new and more personal look at community college leadership. We will offer a series of interviews of various Illinois community college leaders. The first in this series is Dr. Debra Daniels, who recently joined the administration of Parkland College in Champaign, Illinois and is a Community College Leadership graduate of UIUC. If you would like to contribute to this column in the future, please contact us. We want to hear from you.

UPDATE: What effect will leadership turnover have on community college leadership?

Daniels: I think that the high turnover in community college leadership in the next few years due to retirements is one of the big challenges facing community colleges. This will have a huge effect on leadership, both good and bad. The good effect will be that some community colleges that have not kept up with changes may be forced to do so with new leadership. On the other hand, from first hand experience, the applicant pool for front line administrators is small. Applicants generally have good educational background but little experience as administrators, while the retiring administrators may have 20-30 years or more of experience. Con-

sequently, the history base of the long-term administrators may be lost if turnover is great. An alternative method of hiring new administrators is to allow for a transition period where the retiring administrator works side by side with the newly hired administrator to provide mentoring and the passing on of history.

UPDATE: How will this considerable turnover in faculty impact student learning?

Daniels: For one thing, students entering the community college have more diverse needs. An increasing number of entering students need remedial or developmental education. Community colleges need to partner with secondary education to discover ways to help high school students become ready for college-level work. Additionally, nontraditional aged students returning to or entering college later in life need special services geared to helping them become college ready.

Dr. Debra Daniels is the Vice President for Academic and Student Services at Parkland College in Champaign, Illinois. Prior to working at Parkland College, Debra was the Associate Campus Director for Instruction at New Mexico State University at Alamogordo from 1998-2000. Additionally, she served as the Dental Assisting Program Supervisor at Illinois Central College in Peoria, Illinois from 1981-1997. In 1997, Debra earned a Doctorate in Human Resource Education at UIUC specializing in Community College Leadership.

In addition to meeting these needs, the community college must continually strive to keep up with technology. The cost of delivering technology courses that reflect current market demands is very high because of quickly changing hardware and software. An institution must be flexible enough to provide courses to meet evolving industry demands, and to hire qualified instructors to teach them.

A related challenge is that, as property taxes rise across the country, communities become less likely to vote for a higher tax to support schools of any kind. Community colleges must keep abreast technologically, serve all students who are not prepared for college, provide short-term training for employees in business and industry, and do all of this at an affordable tuition rate. Consequently, community college leaders will have to search for alternative funding sources. In economic hard times, a leader may also have to be proactive about providing only those services that support the college's mission.

UPDATE: How do these issues differ from those faced by community college leaders in the past?

Daniels: For one thing, the issues are different. Today, issues emerge quickly and community colleges need to respond immediately. A good example of this is the rapidly changing area of technology. In the past, technology did not change as fast, or cost as much, or need specific expertise to facilitate. These issues are interrelated to all areas of the campus. In the past, for example, the library was the library. Students went there to look up

books and articles. Today, the library should be integrated into every part of the teaching and learning process. To provide this service the library must change with the high speed of technology. The library is equipped with computers and offers online research and Internet access not only to our students but also to the community. In order to get the most out of their educational experience, all students and faculty members need to be Internet-research literate.

UPDATE: Who, in your opinion, are the primary competitors of the community college for student bodies and dollars?

Daniels: Besides proprietary schools, one of the primary competitors of community colleges is private business and industry. When community colleges are not fast or flexible enough to offer courses that business and industry needs, they will find a way to train them in-house or through consultant services. For this reason, community colleges need to market aggressively to business and industry and keep abreast of their ever-changing needs.

Another competitor is online education. Many institutions are offering courses and degree completion via the Internet. The student may be taking a course originating from California and working on it through their computer at home in central Illinois. Because they must be done well or you will lose enrollment, community colleges need to decide whether they are going to aggressively participate in Internet courses. Parkland College has taken the lead in online courses in the state of Illinois, offering 80 plus online courses. Online education takes a great deal of administrative commitment and money in order to be successful and other institutions may not be able to commit the necessary resources.

Community colleges also need to partner with four-year institutions to offer online bachelor's degree completion programs. Partnerships with universities will keep our students involved with the home institution so they can take all the courses they can there and then take the upper division courses through the partnership.

UPDATE: What are your thoughts about the future?

Daniels: Leaders of community colleges will have to stay flexible to survive. Choosing personnel who fit the institution's mission will be a big challenge because of the dimishing pool of qualified applicants. We will need to be inventive and engage in more collaborations with industry. A mentoring arrangement is needed to stop thinking about industry and college as two different cultures and find a bridge between the two. ◆

Developmental Education and Faculty Learning Communities

by Vernon Kays, Richland Community College

Nothing is ever totally new. Even as A. N. Whitehead, a mathematician and philosopher of science, wrote years ago, education – and especially developmental education – must reflect a commitment to keeping learning alive in the student. Developmental education includes a broad range of community college enterprises:

- Reading
- Writing
- Mathematics below college level
- Student support services, testing and placement, tutoring, and adaptive services
- Non-teaching support services that support student success.

These activities are available to all students but play a significant role in the success of the under-prepared student.

Unfortunately developmental education continues to be a major part of the "cooling out process," meaning students who start at the lowest levels of developmental education curricula are less likely to complete even a certificate or Applied Associate's degree, let alone an Associate degree or transfer to a four-year institution. However, much has improved over the last twenty years since the "cooling out" notion was advanced by Burton Clark (1960), partly because developmental education has enhanced its professional and curricular development.

Today, we know that successful developmental education programs
- are context-specific and highly valued by the learning community,
- are centrally structured and well coordinated with the organization,
- use instructors committed to the students and the field,
- provide multilevel curricula with credit options and exit criteria,
- ensure the integration of a variety of instructional methods,
- integrate learning and personal development strategies and services, and
- employ an evaluation system focused on outcomes as well as continuous program improvement (McCabe & Day, 1998, p. 22).

Few reforms in the community college are more difficult to enact than to change the culture of classrooms. Each institution has a unique character, yet the classroom remains a sacred space that only students and teaching faculty inhabit. Five of McCabe and Day's qualities of effective developmental education programs involve changing or improving the classroom environment. Community colleges can impact the classroom environment, increase student success, and "keep student learning alive" through two specific activities. These activities are to create faculty learning communities, and allow these communities to create contextually based curricula centered on an understanding of adult learning.

Create Learning Communities Among Developmental Faculty

Faculty in other cultures, such as Japan, meet at the school level to develop teaching and learning curricula review, present specific lessons, and critique the lesson for improvement. They share their knowledge of teaching and learning technology. Placing the teacher in the role of both learner and researcher is integral to their success in teaching and learning mathematics and science. It is not by accident that, of the students who complete high school level education, 90% complete some calculus and high-level science.

In America, these kinds of faculty learning communities are less common. They require a great deal of institutional and faculty support. Merely creating a task force and producing a report will not engender a learning community. Faculty members need to feel safe before they expose their classroom and teaching to other faculty. A teacher's peer needs time to examine curricula in light of student needs and adult learning models, and not just discipline-specific issues.

Detailed questions have to be developed, asked and answered. For example: "How do students learn the concept of fraction most effectively?" This may seem somewhat simple: teach the appropriate algorithm and

> *Theoretical ideas should always find important applications within the pupil's curriculum. This is not an easy doctrine to apply, but a very hard one. It contains within itself the problem of keeping knowledge alive, of preventing it from becoming inert, which is the central problem of all education.... The solution, which I am urging, is to eradicate the fatal disconnection of subjects which kills the vitality of our modern curriculum. There is only one subject matter for education, and that is Life in all its manifestations.*
> —A. N. Whitehead, 1929.

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have students practice the algorithm until they do it correctly. To be taught effectively, however, the student must understand the fundamental concepts of fractions and many other related concepts. Students may do the algorithm correctly for the test but still not be able to take the idea outside the classroom for more then a few days after the test.

To enhance learning, student learning modes must be taken into account. Research on adult learning suggests that the student must be provided with an appropriate context for learning. How, where and when would the student use the concept and skills? Faculty working together can create, observe, critique, refine and improve a specific classroom set of activities focused on faculty and student outcomes.

Community college educators can no longer view teaching as a lone teacher behind closed doors with students, where grades magically appear on transcripts, and students have learned the necessary content to continue to their next course. Political forces outside the college are bringing pressure to bear on the college's functions. The issues of merit, equity, access, and workforce preparation continue to push and pull the institution in conflicting directions. By merit is meant increased accountability of which performance-based funding and statewide testing are two current examples. Equity and access, as well as compulsory placement testing, are seen in the many support services directed toward the under-prepared student. Workforce preparation continues to find funding at both the state and the national level via Tech Prep, the Workforce Investment Act, and the regular technical programs of the comprehensive community college. Within the college these issues often compete for funds, faculty, and support, yet in the best developmental education programs all three expectations are met in important and significant ways. Faculty learning communities can reinforce the college's pursuit of these objectives.

Create Contextually-based Curricula

Improvement of classroom teaching through faculty learning communities can be beneficial to adult students who learn best in contextually relevant educational settings. Isolated chunks of content delivered on a conveyor belt of discrete lectures, papers, and testing should no longer suffice. Research tells developmental educators that there must be context, content, and andralogical (adult learning) theory for adult students to succeed. Context must be provided within the immediate education setting, rather than at some later time.

How should content and context be incorporated into the classroom without creating a 'dead' curriculum? One person working alone cannot hope to fill each course with contextually relevant curricula. Faculty learning communities offer a solution to this problem by facilitating connection and integration between disciplines within the college and the local community outside the college. Context must be built into the curriculum by using the local community as a resource to provide for the special contextual needs of the college. In our local community, we have both industrial and agricultural businesses. Faculty learning communities can use Tech Prep and Workforce Development activities of the college to find and produce appropriate contextual learning problems for students. These contextual problems are not easy. In my classroom students sometimes call them "fuzzy" problems because there seems to be little directed faculty teaching occurring.

For the group to succeed, students must be given opportunities to write and plan small similar activities prior to attempting a difficult task. Students can ask other faculty to assist.

A Practical Example

A brief example of a contextually-based problem for Pre-algebra and Basic Algebra courses is to have the groups create a small company. They are asked to submit a bid to construct a park. The architectural drawing is given to the group leader. The group is to determine material needs, estimate costs, and submit a written and oral report as part of their final exam. This problem is very open-ended, yet the final product is very precise. Students struggle with their group, ask questions, and look for examples in their own lives on the bidding process. The problem takes several weeks to evolve. The benefits are worth the investment in time, because this project and others like it give a real context to math concepts most students find difficult to grasp and retain.

- The horticultural faculty can provide specific information about plants, soils, and other materials.

- Building trades and drafting faculty can provide insight into reading and interpreting an architectural drawing and materials.

- Speech and English faculty can provide content on communicating with local businesses and gaining appropriate information from the businesses to prepare their bid as well as how to present their bid in an appropriate format to the whole class.

- Business and computer information faculty could provide technology and training to help make the process less cumbersome.

Clearly, the task of the faculty is formidable. But within the framework of a faculty learning community it very possible to create contextually based curricula.

Final Thoughts

Developmental education can be the funnel to greater academic and technical learning, but it must come from a different perspective. The principles of faculty learning communities and contextually based content provide developmental education with a vehicle to change the very culture of the community college on behalf of the students. It takes a commitment not only from the college's developmental educators, but from the entire faculty, staff and administration. This commitment is evident when the college uses faculty time and resources creatively, and

when the program develops into a long-term part of community college education.

Change is difficult, and it is nearly impossible without leadership from faculty in the daily act of teaching. In the words of Whitehead, "the first requisite for educational reform is the school as a unit, with ... curriculum based on its own needs and evolved by its own staff." By creating faculty learning communities among developmental education faculty, and by emphasizing contextually based learning, community colleges can offer students a better chance at obtaining the academic skills and knowledge they need for our modern society. ◆

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