This 2002 volume of Leadership Abstracts contains issue numbers 1-12. Articles include: (1) "Skills Certification and Workforce Development: Partnering with Industry and Ourselves," by Jeffrey A. Cantor; (2) "Starting Again: The Brookhaven Success College," by Alice W. Villadsen; (3) "From Digital Divide to Digital Democracy," by Gerardo E. de los Santos, Alfredo de los Santos, Jr., and Mark David Milliron; (4) "Lifelong Learning: A Funding Priority," by Larry J. Warford; (5) "Funding: A Shared Cause for Today's 'Miracle Workers,'" by Senator Edward M. Kennedy; (6) "'Global Village Idiocy' and the Community College," by Thomas L. Friedman; (7) "Creating New Energy for Change," by Nancy Stetson; (8) "Turning Knowledge Into Action: What's Data Got to Do With It?" by Lisa A. Petrides; (9) "Leading the Way to Connect Community to the College," by Charles J. Carlsen; (10) "Leadership by Culture Management," by Christine McPhail; (11) "A View from the Outside In: Community Colleges as Entrepreneurial Community Learning Centers," by Zane Tarence; and (12) "Students' Perspectives on Juggling Work, Family, and College," by Lisa Matus-Grossman and Susan Gooden. (NB)
Rapidly changing workplace technology requirements have increased the burden on workers and employers to maintain workplace skills and to document worker competencies. Community colleges have long been recognized for providing vital workforce training to meet the needs of local business and industry, for cost-effective services, and for geographic accessibility. Now community colleges are playing a distinct role by offering credentials in particular occupations, combined with the broader education that is part of a well-rounded degree program. The challenges now posed to the community college to fulfill this mission have become manifest: to document individual student competencies, identify meaningful benchmarks of student success, and maintain program relevance.

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

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

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

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

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

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

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

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

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

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

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

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

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

Industry certification programs provide colleges with an opportunity to evaluate their program successes and make the outcomes known to students and employers. Through testing venues such as Sylvan Prometrics, colleges can arrange for data on test-taker outcomes to use in evaluating the college programs and thus better advertise them. The challenge for community college leaders is to provide a lifelong learning opportunity paralleling a worker's career path wherein students can initially gain the skills needed for job entry and later be able to continue through the college degree.

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

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STARTING AGAIN: THE BROOKHAVEN SUCCESS COLLEGE

Alice W. Villadsen

Whether we realize it or not, organizations have opportunities to start again. It might be the arrival of a new president, vice-president, dean, or division chair that provides the occasion. The installation of a new information technology system might take many college processes and even policies back to square one, requiring change. Perhaps a college reaches the realization that its planning systems are outmoded, with accreditation on the horizon. It might even be a time marker—a new decade or an anniversary of the college founding—that gives rise to a new-day style of thinking.

As the incoming president of Brookhaven College (BHC) in July of 1998, I knew that my arrival might present an opportunity for starting again at the college. Several circumstances coincided to make me realize the possibility: The college was ready to celebrate its 25th anniversary; we stood at the threshold of the millennium; a sense of optimism and renewal seemed almost touchable at this strong, proud institution; and we were in the throes of migrating to a new computer information system. Given all these signs, who could pass up a reexamination of Brookhaven College's mission and vision?

Some of the processes we have used at Brookhaven to find our new and renewed mission and vision are quite applicable to other institutions, and even parts of institutions. Therefore, I will divide the Brookhaven experience into specific components and lessons, with a word or two about vision itself and the role of the leader in establishing that vision.

I have always been intrigued by the vision question. You know—the one you get in interviews: Tell us, Dr. Villadsen, what is your vision of this institution in the next five (or ten, or—gasp!—twenty) years? Don't misunderstand; I believe a leader needs to know as much as possible about the history of the institution, its current strengths and challenges, the likely scenarios of its future. A vision needs to be clear and focused, balanced rather than misshapen, reality-based but optimistic with some stretch. Joyful, flexible, adaptable, long-distance, anticipatory, prophetic. But how can a new leader be expected to see and know all of that, especially before embarking on the first day of work?

No, a leader must have a means of approaching the development of institutional or unit vision/mission at the opportune time. The process should take advantage of the wisdom, knowledge, and history of the organization itself, right along with the new-blood thinking of the recently appointed leader.

The Eye of the Fly

What I will describe is a process that can produce a compound vision. Remember the fly's eye you studied in grade school? A fly's eye is a compound eye with many lenses. I believe that vision cannot be effective in most community colleges unless it is similarly compound. What lenses are important? Certainly, the president or vice president and the dean, lead instructor, or director must play key roles in vision. But also essential are the lenses of the faculty, the administrators, the staff members, the governing board, the students, the surrounding community, and advisory groups. Once you use the many lenses to develop the compound vision, that vision can then be comprehensive and connected, well known and understood. It can be more readily adopted and engaged throughout the organization. Peter
Senge called this kind of seeing shared: "A shared vision is ... a force in people's hearts, a force of impressive power. ... A shared vision is the answer to the question, 'What do we want to create?"

How does a leader draw forth a compound vision that will be embraced by everyone? For the new leader, or for the leader who is reexamining the vision of the institution that she has been a part of for some time, an important base is self-knowledge. One needs to know herself—career experiences, personal and social attributes, skills and aptitudes—and what kind of leadership ability she can call forth in moving the organization toward this new, compound vision. Self-knowledge is critical if the leader is to find a way to lead an organization through discussion and determination of vision.

The Value of Listening
Before I arrived at Brookhaven, I sent the college employees a questionnaire that asked only three questions: (1) What do you believe makes Brookhaven College special? (2) What would you do to improve the college if you could? (3) What do you think should be the first action of your new president? (This last question took some courage to pose, but I mustered it.) Shortly after I arrived, I asked BHC students the same three questions. Then I compiled the answers and wrote a white paper of the results. I was amazed at the positive response to my three questions. I received answers by email, snail mail, and fax; the pages came to me short and long, signed and unsigned, and from faculty, staff, and administrators. Many indicated that they had not been asked these things before and expressed appreciation for the opportunity to respond. Others said that, thinking carefully through the questions, they realized the depth of their feelings about their college or clarified their appreciation about work and role.

I also listened by having monthly "Conversations with Alice" in which, on a voluntary basis, any employee was invited to come to a small gathering for discussion and refreshments or a simple lunch or breakfast: No Agenda. We moved the meetings around the campus—maintenance, back stage, the student lounge, the library. I sat in with divisions in their regularly scheduled meetings and simply listened. We held student forums. I met monthly with the Faculty Council and regularly with the presidents of the Faculty Association and the Classified Staff Association. I spent as much time as possible out and about on campus, chatting with whoever might pass by. I visited classes. Perhaps most instructive for me, I volunteered to work at the campus help desk, answering students' and visitors' questions.

Mirroring Back
As I listened, I also established more formal communication linkages back to the college. Parker Palmer, educator and philosopher, reminds us in his work that deep listening needs to include mirroring. Those who are listening need to reflect back what they believe they have heard, to make certain that communication is complete and correct. I began writing routinely for the internal newsletter, Chatter, and wrote several articles for the student newspaper in which I attempted to mirror what I had heard from the employees and students. The white paper based upon responses to those initial three questions was distributed to all employees and made available to students. I tried to check and recheck what I was receiving in answers and suggestions. I also tried to keep the administrative team informed of my findings.

The Necessity of Response
Listening and mirroring are not enough. Responding is essential. A familiar theme in all this feedback was that this college wanted more involvement in decision-making. In recognition of that need, we established two new organizations to improve team involvement and decision-making: an Expanded Cabinet and a Budget and Planning Team. The first group
enlarged the small cabinet to include all executive deans, Faculty Association and Classified Staff Association Council presidents, the public information director, and the human resources director. The Budget and Planning Team was initiated and included all key administrators, three members of faculty, three members of classified staff, and two student leaders. Perceptions had been expressed that we were investing too few resources in technology and marketing. Through certain consolidations within budget and organization, we were able to direct significant dollars toward these two college essentials.

Finally, the college wanted more celebrations and a stronger sense of community. And so we began planning a kaleidoscope of activities involving singing and dancing, awards and honors, games, picnics, and parties. All of these first actions gave indication that we were listening to each other and doing positive things that could be accomplished quickly.

Establishing the Compound Vision

Articulation of Possible Directions. In order to establish a compound vision, data was gathered and presented to the college at collegewide meetings. The data included my own perception of the college's strengths and weaknesses, informed by what the college community thought about itself. Added to that data were affirmations of past and present vision and mission statements, histories, and a careful analysis of the natural strengths and weaknesses that came from institutional research. I saw my role as proposing possible visions based upon my research. At those all-college meetings, we debated the five possible directions I suggested: becoming the Technology College, the International College, the Success College, the Sage College, or the Engaged College. Each possibility was proposed and backed up with statistics, trends, characteristics, and natural college strengths or weaknesses that led me to declare those possible directions. The college added a sixth possible direction—the Connected College—at the suggestion of a faculty member.

Selection of the New Vision. Following the all-college meetings, discussion groups formed around organizational units; facilitators were named; a report form was designed; and the college voted on the direction for Brookhaven College. With six possible choices, almost 50 percent of the college chose The Success College as the direction having the most potential impact on the entire institution. We believed that, with emphasis on student retention through goal selection and completion, this was a direction that would lead us to examine all services to students, streamline processes, and prepare ourselves as teachers to provide learning environments appropriate for an increasingly diverse and challenging set of learners.

Living the Vision

Immediately upon establishing the focus of the new vision, we named a Success College Team and asked them to formally define success for us. We wrote a winning Alternative Model proposal to the Southern Association of Colleges and Schools with the Success College as the focus. We are implementing a Title III grant focusing upon aspects of the Success College idea. And we have continued to have all-college meetings to further refine our new vision. Success College has become common language for us, a lexicon for our compound vision. The college—not the president alone—owns this vision.

My experience has opened my eyes to the special elements of vision. It is an ongoing organizational evolution. It is dynamic. Our ideas for Success College will continue to emerge and change over time, and we plan to build on strengths we have discovered and reinforced. Both the process and the vision are markedly our own, brought into brilliant clarity and focus by our special combination of people, resources, and a shared willingness to see.
The forthcoming book *From Digital Divide to Digital Democracy* is one of many League efforts aimed at inspiring community college educators to champion information technology access and instruction for a growing number of underserved and economically challenged populations. In this book, we once again engage community college educators to share with us their research, strategies, and model programs around technology access and instruction to give readers a flavor of what the major issues are and what shape possible solutions might take.

This publication, however, marks a clear shift from the preliminary discourse about hardware, software, and Internet access issues to more in-depth and varied explorations from multiple perspectives. Specifically, we designed the publication to explore technology access and literacy from the perspective of (1) urban community colleges, (2) rural community colleges, (3) suburban community colleges, (4) tribal colleges, (5) African American students, (6) Hispanic students, and (7) female students. Of course there are many other angles we could have taken; nonetheless, these perspectives shed considerable light on emerging issues and helped us take the next step in our equity, diversity, and technology initiatives.

To get a better idea of these perspectives and the associated issues and insights, we will describe the chapters below. We will close with our thoughts about why now is the time to make the shift in our conversations about these issues—the shift from championing solutions to the Digital Divide to embracing solutions for a Digital Democracy.

**Chapters, Issues, and Insights**

The issues, insights, model programs, successful strategies, and research outcomes shared with us by our contributing authors show how some of the most innovative community colleges are continuing to support the forward progress that is leading our students and communities from digital divide to digital democracy.

*From Digital Divide to Digital Democracy.* Community colleges continue to play a critical role in helping address societal technology access and learning needs. But our work rests in the context of the recent national discourse on the Digital Divide, which includes the often-conflicting perspectives of IT access and literacy needs held by government officials, policy makers, and educators. This chapter describes the changing nature of the Digital Divide conversation—particularly in the community college sector—from explorations and arguments about have and have-nots, to more in-depth and varied dialogues about living well in an increasingly technology-enabled and connected world.

*The Divide Continues: A Review of the Trend Literature Related to the Digital Divide.* Multiple sources from various segments of society, education, business, and government show that progress has been made to narrow the gap between those who have access to information technology and those who do not have access. Yet the data clearly reveal the
Divide continues to exist between the IT haves and have-nots. Indeed, in some cases the Divide is growing, and the current state of IT access across income, racial and ethnic group, household, education, gender, and age still makes it quite difficult to argue that we are a nation online.

Urban Community College Perspective. This chapter highlights The Community College of Baltimore's (CCBC) outreach, partnerships, and campus-based efforts to successfully serve a large number of lower income and minority students and provide an underserved, urban community with access to the information highway. Specifically, authors describe CCBC’s two-pronged approach to address the Digital Divide by focusing on the needs of urban students enrolled at the college and then on the needs of the broader urban community.

Rural Community College Perspective. Rural community colleges grapple with particular Digital Divide issues based on multiple challenges including remoteness, poor funding, small populations, and relatively fewer local business partnership opportunities. This chapter further describes the access challenges that rural colleges face and provides creative strategies for overcoming these obstacles.

Suburban Community College Perspective. After extensive research conducted at Sinclair Community College and Johnson County Community College, the authors of this chapter believe there is serious reason to explore the gaps in access and use of technology within suburban communities. They describe several Digital Divides occurring among groups within suburban community college areas: (1) age-based and generation-based Digital Divides, (2) social culture divides, (3) divides within the ranks of the affluent-those who dislike technology and those who embrace it, (4) divides between faculty and younger students, and (5) divides along gender lines.

Tribal College Perspective. Technology is often heralded as the solution to many of the challenges facing underserved populations. Unfortunately, without effective strategies and committed leadership, technology solutions often fail underserved populations. This chapter describes how the Tulalip Tribes looked toward the educational community for technical guidance and educational support to integrate information systems that serve all tribal members and employees, as well as provide access to services and data important to external communities. Specifically, this chapter describes the development of a Digital Divide partnership between the Tulalip Tribes, Everett Community College, and the University of Washington, Bothell—a partnership that is building a vision of the future for the Tulalip Tribes while preserving their culture.

African-American Student Perspective. This chapter focuses on the implications of the Digital Divide as they relate to African Americans nationwide and specifically to African Americans in the St. Louis Community College area. From computer education in Welfare-to-Work training programs, to IT training at community institutions, to family computer ownership programs, to partnering with Cisco in providing network training in low-income St. Louis neighborhoods, this chapter describes how St. Louis Community College is committed to supporting creative solutions that further Digital Democracy.

Hispanic Student Perspective. Data from Census 2000 indicate that Hispanics are the fastest growing racial/ethnic group in the United States. Given community colleges' long history of serving this cohort, it is not surprising that large numbers of Hispanics are knocking at our open door. This chapter further examines Hispanic demographics, as well as the Digital Democracy strategies and programs of two community colleges, Laredo Community College (TX) and Santa Ana College (CA), that primarily serve Hispanic students and communities.
Female Student Perspective. While women outnumber men on community college campuses, barriers associated with the Digital Divide as well as to participation in math, science, and engineering fields continue to plague women in higher education, business, and home. This chapter shares the results of a nationwide community college survey exploring gender issues and access and use of information technology.

Shifting the Dialogue to Digital Democracy
The trendy term Digital Divide has certainly led to heated debate during the last ten years. The debate grew even hotter as our societal adoption of technology reached unprecedented levels, and many communities looked on as this digital world passed them by. Clearly, the Digital Divide should not surprise us; it is merely the technological manifestation of divides that have always existed in our society. And, while debating the actual existence of a divide has become a full-time job for some, we prefer to shift the debate and engage a different dialogue.

Exploring the work in the previous sections, we see clearly that the community college is once again living and serving in its role as democracy's college. And given that we are obviously living in a Digital Democracy—a society increasingly connected, persuaded, and tracked by technology, while still emphasizing individual freedom of choice—it is all the more imperative that we in community colleges embrace our traditionally inclusive role. We must engage our students not only in learning about and with technology, but also in reaching beyond technology. To serve our students well, we must be not only diligent about weaving technology into learning, but also determined about weaving learning into technology.

This bold and colorful new tapestry needs a strand of caution, too. As in any inclusive system, a digital democracy invites certain risks. We must equip our students with the information and ability to perceive the dangers of a digital planet, along with its many marvels. In a world where marketers can analyze our every shopping habit, hate groups can manipulate and connect online with the loneliest of souls, terrorist groups can leverage technology to recruit and spread their evil, and political forces can use e-tools to target messages like never before, our students need our help. They need our help not only to earn well, but also to learn well, so they can live well. Our students need to learn not only how to use technology, but also how not to be used by it or through it. Their ability to live free in a Digital Democracy lies in the balance.

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LIFELONG LEARNING: A FUNDING PRIORITY

Larry J. Warford

Community colleges are a phenomenal success story in United States higher education thanks to their low cost, convenience, quality instruction, and community-based emphasis. Approximately 47 percent of first-time college students attend community colleges. The American Association of Community Colleges (AACC) reported that more than 9 million students took credit courses at community colleges in 1996-97.

But enrollments in community colleges do not end with credit courses. The AACC conservatively estimates 5 million noncredit students enrolled at community colleges. Many practitioners feel that the real number could easily be double that amount.

Need for Lifelong Learning

Based on testimony from a number of hearings, the 21st Century Workforce Commission has suggested that one of the keys to successfully keeping the nation's workforce competitive in the global market is to expand continuous learning. The commission found that access to lifelong learning is the public's single biggest worry about higher education. It also found that "many witnesses expressed concern that existing funding resources are still geared to a traditional postsecondary experience and are not particularly relevant to short-term skills training required for continuous learning." The commission heard testimony that traditional loans and grants require participants to be enrolled in degree programs, essentially eliminating federal student aid for short-term and continuous learning.

The National Center for Education Statistics estimates that there are 90 million adult learners most in nondegree, noncredit programs in the United States. That number compares with 15 million in traditional enrollments in higher education and an estimated 43 million in K-12. Yet public spending on adult learning in the U.S. is minimal in contrast with spending for the K-12 and traditional higher education systems.

A 50-State Survey

In a survey of all 50 states, the National Council for Continuing Education and Training (NCCET) asked, "Does (name of state) provide FTE (full-time equivalent) reimbursement funding to community colleges for noncredit courses/programs?"

Seventeen states reported that they do include noncredit courses for funding on an FTE basis, with workforce training programs and adult literacy courses funded most often. Only Iowa, Maryland, Nebraska, Oregon, Pennsylvania, and Wisconsin reported that general interest courses such as investments and languages qualify for any level of state aid. Arizona, Illinois, and New York limit noncredit FTE reimbursement to remedial/ developmental programs. No states fund hobby, avocational, or recreation noncredit classes.

The NCCET survey also showed that of the 17 states that do fund noncredit on an FTE basis, only three Maryland, Oregon, and Texas are comprehensive in coverage of noncredit programs and do not discount the rate that noncredit programs are reimbursed compared to credit classes. Noncredit classes generally receive 50-75 percent the rate of credit classes.
This is achieved either by requiring noncredit classes to generate more student contact hours to meet an FTE or by using a rate to fund noncredit FTEs that is lower than the rate for credit FTEs.

Several states in addition to the 17 that fund noncredit FTEs indicated that they do provide some state aid for noncredit workforce programs through grants, lump-sum allocations typically divided among the state's community colleges, and contracts with economic development agencies. The survey revealed that 24 states (48 percent) fund noncredit instructional programs in some manner.

**Other Recent Studies**
A November 2000 study by the Education Commission of the States (ECS) asked if noncredit programs generated state support. Twenty-one states answered yes. The difference between the data on the NCCET and ECS surveys can be accounted for by the fact that several states do not provide state aid on an FTE basis, but do provide some type of grant or flat payment of state aid for some noncredit programs.

ECS also surveyed the states on funding for workforce training much of it typically noncredit when directed at the transitional, entrepreneurial, and incumbent workforces. ECS found that 19 states receive support for workforce development in dedicated specific funds as part of the community college appropriation.

Clearly, the need for lifelong learning has reached the policy discussion level. Americans will change careers an estimated six times during their lives. But career change is just one of the many adjustments that create the need for additional training and education. Business and industry are eager to partner with community colleges to make lifelong learning accessible and affordable to employees. Such partnering helps pay the bill for job-related lifelong learning.

Not all lifelong learning is job related. A May 2000 national survey by the State Council of Higher Education for Virginia found that 23 states provide some level of state support for noncredit education. Nineteen are funded through appropriations and four through grants. States typically fund noncredit courses in adult basic education, job preparedness and vocational supplemental (skills upgrading).

**Surveys Agree, Raise Questions**
All three surveys generally suggest a second-class relationship for noncredit funding compared with that of credit programs in America's community colleges. This disparity, coupled with the need for lifelong learning, raises some additional questions that should be debated.

*Does state funding drive local community college priorities?*

One way to ascertain whether state funding affects local program decisions is to look at relative enrollments and FTE generation in states that fund noncredit programs, compared with those that do not. Arizona funds only adult remedial noncredit courses on an FTE basis. Their noncredit FTE represents about 4 percent of the total reimbursable FTE for community colleges in that state. Washington, another state that does not fund noncredit courses in the state FTE formula for community colleges, reported that noncredit courses account for 3 percent of the community college FTE.

Contrast those states with neighboring Oregon, which funds noncredit programs at the same rate as credit programs. In 1999-2000, 32 percent of the total FTE generated by
Oregon community colleges was noncredit. Maryland, another state that funds noncredit programs at parity with credit programs, reported that approximately 26 percent of the FTE generated by Maryland community colleges in fiscal year 2000 were noncredit. It is not unusual for Oregon and Maryland community colleges to enroll more noncredit than credit students.

**Do differences in funding attach status to those funded over those ineligible for state aid?**

Colleges place a higher value on those instructional programs that generate FTE and, in turn, more state dollars for local use. Colleges not asked to report data about part of their instructional program to the state typically do not keep an accurate accounting of these data. If there is no data, then the annual reports, the speeches by the presidents, and the historical records of student enrollment are voided from that part of the instructional program. The result is a system in which noncredit programs operate in the shadow of the "real" college.

**What drives the notion that some or all noncredit programs should not receive state aid, as most credit programs do? Are there philosophical, financial, accountability and outcomes concerns?**

Policymakers sometimes identify credit with quality and noncredit with the lack of quality, especially if their vision of noncredit programs is limited to hobby or recreational programs. The belief persists that noncredit instruction should not be funded by the state. A broader vision of noncredit lifelong learning reveals that instructional activities in adult literacy, occupational upgrading, and a variety of incumbent worker programs are significant to our nation's economy. Policymakers are more likely to fund noncredit instructional activities if they are viewed in this context.

Noncredit programs have a high degree of accountability. Their administrators rely on repeat business. Often the noncredit student is engaged in optional learning and will "walk" if a course or program does not meet specific needs. That many noncredit programs are created in collaboration with business, industry, labor, or other agencies produces additional accountability for these activities.

Colleges and state policymakers need to develop accountability measures that more accurately gauge why students enroll in community colleges. Community colleges need to philosophically embrace the needs of today's learners who want a different relationship with their community college from what they experience with other institutes of higher learning. The reason most often given for not funding noncredit programs, or for funding them at a lower rate, is that noncredit programs are less costly, usually because their instructors are almost exclusively part-time. But noncredit instructors are now commanding higher pay, especially in the area of information technology.

Some policymakers hold to a belief that adult learners are capable of paying a greater portion of their instructional program than traditional credit students. The 21st Century Workforce Commission found Americans' top concern was accessibility and the ability to afford lifelong learning. It emphasized that financial aid programs do not go beyond traditional degree programs to part-time, lifelong learners.

It is not rare for policymakers to suggest that business and industry should pay the state's share of costs for programs that benefit them and their employees. Should it follow that hospitals hiring students who have completed state-subsidized programs help pay for those costs? How about the auto dealers who hire our mechanical technology students? Business
and industry make up a huge portion of the tax base for most community colleges, and their employees are also taxpayers.

**Future Considerations**

At a recent NCCET conference, lifelong learning practitioners were asked what the Council could do to help them get improved funding for their programs. They said:

- Emphasize the value of lifelong learning in America and its need for better funding.
- Do research to quantify the current status and demonstrate that states that do fund lifelong learning provide needed, quality programs.
- Collaborate with national chamber, workforce, labor, and business organizations to persuade policymakers of the need for lifelong learning in this country.

These survey results and the discussion they stimulate should put priority focus on lifelong learning and on the important role of community colleges in providing opportunities for all Americans.

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Cynthia Wilson, Editor in Chief
Boo Browning, Managing Editor
Funding: A Shared Cause for "Today's Miracle Workers"

Senator Edward M. Kennedy

On March 18, Senator Edward M. Kennedy gave a keynote address to the 1,800 delegates at the Innovations 2002 conference in Boston. The following is a complete text of his remarks.

You are truly America's classroom.

You represent the best that our nation offers. You are a national resource to meet many of the great challenges of our time to help young people fulfill their hopes and dreams, to strengthen communities, and to build local economies and a modern American workforce.

Let me focus on two of those challenges today.

The first challenge is ensuring that quality education and training opportunities are available to all Americans. Community colleges are centered in communities, and your mission has always been to open pathways to education and careers for all kinds of students.

Partnerships with local school districts have enabled Tech Prep programs to respond to the growing demand for skilled technical workers in advanced manufacturing and health care. These programs allow high school students to study under college faculty, strengthening our high schools, and opening up a new world of opportunity for young students. With our new education reform law last year, more and more school districts will be looking to Tech Prep and other dual enrollment programs to create new, exciting options for students, while helping them to make the critical link between work and learning.

Meeting the challenge of equal opportunity also means closing the Digital Divide. We cannot allow the promise of high technology to be the province of the few, and a new barrier to equal opportunity. I was pleased to see the number of sessions offered at this conference on the use of technology to expand educational opportunities. Technology and online education can be invaluable tools for delivering courses to students, and we need to make sure that all students have access to the technological skills to make the most of our future and theirs.

The second great challenge is for community colleges to help workers keep pace in today's dynamic and changing economy. Skills in demand today can be obsolete tomorrow, requiring our workers to constantly upgrade and adjust their abilities. Our community colleges are a modern lifeline for workers.

As we look to the changing demands of the future, there is an important role for customized training programs like the Massasoit Community College Early Childhood Career Ladder Program, which offers Head Start and other early education teachers the chance to improve their skills to reflect the current research on how young children learn. Now more than ever, we know the critical role of early education in the lives of our children, and community
colleges must be ready to help our early childhood workers prepare every child in America to start first grade ready to learn.

Many community colleges refuse to wait until a worker is laid off to lend a hand like the Greenfield partnership with Yankee Candle Corporation in Deerfield. These classes at the worksite focus on up-to-the-minute business information systems, and the employer pays half of every employee's tuition and fees. They do it because it's good for workers and good for business.

The Middlesex Community College Open Technology Institute works with businesses in the community to create programs that will meet present and future workforce needs. Identifying the skills that help workers qualify for good jobs in their communities, and creating flexible ways for them to acquire those new skills, is critical to getting better choices for them and better workers for our businesses. Corporate America relies on the community college system to meet its needs and the nation's needs.

In the last year, many areas of our country have seen slower growth in new businesses. But as we know, community colleges can play an indispensable part in promoting economic development and attracting new businesses. Springfield, Massachusetts, was faced with the closing of Digital Equipment in 1992. That closure meant the loss of 1,000 good jobs in the Springfield area. In response, Springfield Technical Community College opened a technology park, an incubator for new businesses in which the college trained the workers and employers had access to them. Senator Mike DeWine and I have introduced legislation to expand that model and to encourage the development of support systems for new companies on college campuses. Our communities need economic development strategies, and our community colleges can meet that need.

Massachusetts' community colleges also have developed courses for the health care industry that is such a major part of our state's economy. This year, our community colleges worked with 32 local providers to offer courses for nursing home workers. To respond to the critical nursing shortage in New England, community colleges have applied for a federal grant to create a Nursing Career Ladder Initiative. The initiative would create a permanent, sustainable infrastructure to reduce attrition rates in nurse education programs and to encourage other workers to pursue training opportunities in the field.

You Are Today's Miracle Workers
You are today's miracle workers. But you can rise to today's challenges only if states and the federal government give you the resources to meet the demands in our communities and in the economy. It is wrong dead wrong for your budgets to be cut at a time when the nation's workers depend on training to move into the future. To sustain the impressive work you do, you have to know that your governors and state legislatures and the federal government understand what you do, appreciate your work, and fund it. That's a cause we share, and here is one United States Senator who will fight for you in Washington.

Years ago, we joined together in the battle to make Pell grants more available to community college students. We fought to improve the definition of "cost of attendance" in the Higher Education Act to more accurately reflect the needs of community college students so that they could qualify for the maximum Pell grant. Together, we won that battle over Pell grants.

Now our common battle for community college students is to allow adult students to include their transportation and child care costs in the Hope Scholarship. An education tax credit should be a benefit for all hard-working Americans and the real cost of attending college
should not be defined only by tuition costs. I will continue to fight to expand the Hope Tax credit, and with your help I know that we can succeed.

You are the entry ramp to opportunity for so many in our communities. Your flexibility and creativity help you to respond in so many ways improving K-12 education, offering adult basic education, providing English language instruction for new immigrants, granting degrees and certifications, exploring new ways to use technology, and responding to the needs of the workforce.

You represent the best of our nation: responsive, energetic, and committed to building strong communities. Your innovation means better lives for millions of Americans. I'm proud of our partnership, and I thank you for all that you do so well every day.

Edward M. Kennedy (kennedy@kennedy.senate.gov) is a Senator from the State of Massachusetts.

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Cynthia Wilson, Editor in Chief
Boo Browning, Managing Editor
During a dinner with Indonesian journalists in Jakarta, I was taken aback when Dini Djalal, a reporter for The Far Eastern Economic Review, suddenly launched into a blistering criticism of the Fox News Channel and Bill O'Reilly. On Fox, said Ms. Djalal, "They say, 'We report, you decide,' but it's biased—they decide before us. They say there is no spin, but I get dizzy looking at it. I also get upset when they invite on Muslims and just insult them." Why didn't she just not watch Fox when she came to America, I wondered? No, no, no, explained Ms. Djalal: The Fox Channel is now part of her Jakarta cable package. The conservative Bill O'Reilly is in her face every night.

Information at Their Fingertips, But Out of Context
On my way to Jakarta I stopped in Dubai, where I watched the Arab News Network (ANN) at 2 a.m. ANN broadcasts from Europe, outside the control of any Arab government, but is seen all over the Middle East. It was running what I'd call the "greatest hits" from the Israeli-Palestinian conflict: nonstop film of Israelis hitting, beating, dragging, clubbing, and shooting Palestinians. I would like to say the footage was out of context, but there was no context. There were no words. It was just pictures and martial music designed to inflame passions.

An Indonesian working for the U.S. Embassy in Jakarta, who had just visited the Islamic fundamentalist stronghold of Jogjakarta, told me this story: "For the first time I saw signs on the streets there saying things like, 'The only solution to the Arab-Israel conflict is jihad—if you are true Muslim, register yourself to be a volunteer.' I heard people saying, 'We have to do something, otherwise the Christians or Jewish will kill us.'

"When we talked to people to find out where [they got these ideas], they said from the Internet. They took for granted that anything they learned from the Internet is true. They believed in a Jewish conspiracy, and that 4,000 Jews were warned not to come to work at the World Trade Center [on September 11]. It was on the Internet."

What's frightening him, he added, is that there is an insidious Digital Divide in Jogjakarta. "Internet users are only 5 percent of the population. But these 5 percent spread rumors to everyone else. They say, 'He got it from the Internet.' They think it's the Bible."

The Danger of an Open Sewer
If there's one thing I learned from this trip to Israel, Jordan, Dubai, and Indonesia, it's that thanks to the Internet and satellite TV, the world is being wired together technologically, but not socially, politically, or culturally. We are now seeing and hearing one another faster and better, but with no corresponding improvement in our ability to learn from, or understand, one another. So integration, at this stage, is producing more anger than anything else. As the writer George Packer recently noted in The New York Times Magazine, "In some ways, global satellite TV and Internet access have actually made the world a less understanding, less tolerant place."
At its best, the Internet can educate more people faster than any media tool we've ever had. At its worst, it can make people dumber faster than any media tool we've ever had. The lie that 4,000 Jews were warned not to go into the World Trade Center on September 11 was spread entirely over the Internet and is now thoroughly believed in the Muslim world. Because the Internet has an aura of "technology" surrounding it, the uneducated believe information from it even more. They don't realize that the Internet, at its ugliest, is just an open sewer: an electronic conduit for untreated, unfiltered information.

Worse, just when you might have thought you were all alone with your extreme views, the Internet puts you together with a community of people from around the world who hate all the things and people you do. You can scrap the BBC and just get your news from those websites that reinforce your own stereotypes.

A couple of years ago, two Filipino college graduates spread the "I Love You" virus over the Internet, causing billions of dollars in damage to computers and software. But at least that virus was curable with the right software. There is another virus going around today, though, that's much more serious. I call it the "I Hate You" virus. It's spread on the Internet and by satellite TV. It infects people's minds with the most vile ideas, and it can't be combated by just downloading a software program. It can be reversed only with education, exchanges, diplomacy, and human interaction stuff you have to upload the old-fashioned way, one on one.

Let's hope it's not too late.

**Editor's Note:** In a dialogue with Thomas L. Friedman after publication of this article in *The New York Times*, the author expressed extreme interest in supporting the role of the community college in combating the challenges he outlines. Friedman urged us to add comments that would more directly bring this discussion into the community college context. The comments that follow are from League President Mark David Milliron:

**All Learning is Global**

As the "Global Village" deals with the good, the bad, and the ugly of the connected world outlined by Friedman, institutions like community colleges are crucial. Community-based adult learning institutions must see it as their mission not only to use their instructional programs to speed the steady stream of technology and media, but to get people ready for the information that floods their way because of it. With the open sewer flowing, it's clear that teaching people basic habits of mind—critical thinking, problem solving, synthesis, analysis, and understanding context—is more important than teaching people how to get online. In fact, teaching the latter without the former is a recipe for disaster.

More important, based on what we're seeing in the Middle East today, community colleges must also begin preparing people not only to access the connected world, but to effect meaningful interaction with the people at the other end of those connections. Getting along with people from different backgrounds, taking the time to see the world from another person's perspective, breaking out of the narrow mindsets that often accompany lack of education and poverty—these are the skills that can help us bridge the gap between what Friedman calls "the Lexus and the Olive Tree," the gap between the new and modern world and the old and traditional world of beliefs, culture, and lifestyle.

I know that your values as community college educators compel you to this kind of challenge. And, in this case, the stakes couldn't be higher. We can't afford to forget for a moment that in this connected world, all learning is global.
Thomas Friedman is International Affairs Columnist for The New York Times and the author of *The Lexus and Olive Tree: Understanding Globalization*. He can be reached at mayaog@nytimes.com. For ordering information on *The Lexus and the Olive Tree*, click here. Mark David Milliron is the President and CEO of the League for Innovation in the Community College. He can be reached at milliron@league.org. Article reprinted with permission from the May 12, 2002 *The New York Times.*

Cynthia Wilson, Editor in Chief
Boo Browning, Managing Editor
Creating New Energy for Change

Nancy Stetson

Community college leaders are beginning to adapt and adopt several highly promising approaches to leading change that have emerged over the past few years: Appreciative Inquiry and Appreciative Process. Both approaches involve focusing the entire college community, or segments of the community, on what's working within a system and deliberately and systematically creating more of it. The system can be the college as a whole, the management team, a particular department, a classroom, or even a relationship between two people.

Traditional approaches to change (e.g., self study, strategic planning, and problem-solving processes) typically involve focusing the college community on what's not working and fixing it by identifying gaps and closing them.

Appreciative Inquiry (AI) and Appreciative Process (AP) assume that systems are not like machines that can be taken apart and fixed, but rather are social systems. As such, they are more like organisms—living, breathing entities that stay healthiest when they are focused on their positive life-giving characteristics, rather than their problematic aspects.

Examples of How AI Is Being Used

Before describing AI and AP in more detail, here are several examples of how AI is successfully being used by community college leaders George Boggs, Mary Spangler, and Tom Gonzales.

Boggs, President and Chief Executive Officer of the American Association of Community Colleges in Washington, D.C., reports, "We recently used AI at a variety of meetings, including a Board retreat, a staff retreat, meetings of our AACC Commissions and Council Chairs, and a design team made up of past Board Chairs. AI helped us to accept all ideas as valid, kept everyone focused, and improved the creative thinking of each of the groups, resulting in inspiring new mission and vision statements for the association. Feedback from the field allowed us to identify AACC's positive core, that is, what the members valued the most. From this feedback, we were able to draft and approve a statement of core values, a vision statement, and six new strategic action areas that will guide the future activities of AACC. Our new mission statement is Building a Nation of Learners by Advancing America's Community Colleges.

Spangler, President of Los Angeles City College says, "Learning about and beginning to practice the concept of focusing on the positive (not the negative) has been a worthwhile and challenging endeavor for our management team. As educators we were trained to use our critical thinking skills in the classroom; as managers we have taken those skills and applied them to administration, often trying to fix problems and find solutions on an issue-by-issue basis. However, by approaching those same issues from a positive perspective, we are able to shift our energy from a problem-solving perspective to a view of ourselves as doing good work much of the time and naturally wanting to replicate that experience to do more and better work in the future. We share the goal of making a difference to our students, our faculty, our community, our institution. Through a focused inquiry into what it
is that we remember about what we are doing right, we can begin to construct a future that we can envision and create together. AI has given us an inspired way to view ourselves and what we have done so that we can repeat those experiences in a habitual way. Now we need more time to apply that learning. We have already set about addressing that objective."

Gonzalez, President of Front Range Community College (CO) adds, "What's remarkable about AI is its focus on what has worked successfully in the past and how it applies to the future. Academic institutions are about tradition. What better legacy for faculty and administrators than to share with a new generation an energetic new vision based on what has been successful? AI is about replicating those successes in changing times. I am constantly amazed at the energy that is created when you bring people together and they talk about the essence of their success. AI is not the latest feel-good fad; it's a proven methodology that draws upon the past to create a new positive organizational culture. AI is the antithesis of problem-solving—appreciating people and processes that have worked and revitalizing the organization by emphasizing its many successes."

**AI: Both a Theory and a Process**

David Cooperrider and his colleagues at Case Western Reserve University developed AI, both a theory of positive change and a process for implementing positive change, in the 1980s. It is now beginning to gain visibility and viability as an organization development intervention. AI involves focusing on positive elements already existing in a given situation, and builds on them. AI is the cooperative search for the best in people, their organizations, and the world around them. It involves systematic discovery of what gives a system life when it is most effective and capable. It posits that resistance to change occurs because of how change is implemented, not because of the particular change itself.

A typical AI process goes something like this: People in the system (i.e., the college as a whole, the management team, a department, students in a classroom, or two people in a relationship) choose a positive topic as the focus of inquiry. When they first begin to use AI, most people choose an issue or problem that then needs to be reframed into a positive topic. People are habituated to be problem solvers; that is the way they frame their organizational reality. An example of a proposed problem to be solved might be an increasing incidence of sexual harassment; a reframe might be exemplary relationships between men and women.

In the first case, if people study sexual harassment, they likely will increase the incidence of its happening—the very thing they don't want. In fact, when colleges implement sexual harassment programs, the incidence usually increases because people are more aware of it and are actually looking for it. They find what they look for, what they focus on. If people study exemplary relationships between men and women, however, they likely will increase the incidence of such relationships. Again, they find what they look for, what they focus on. Next, people in the college create questions to explore the topic. They use those questions to conduct interviews throughout the system, storytelling sessions that explore the conditions that support positive change. After the interviews, people in the process locate themes that appear in their stories and select topics for future inquiry. From these themes, they create shared images for a preferred future. Finally, they find innovative ways to create that future.

Appreciative Inquiry helps people create visions for a system based on people's personal experiences, the best things about their system from the past and present that they have experienced and that they want to carry forward and build on in the future. Traditional visioning processes, while focusing the system on a positive future, tend not to be grounded
in the organization’s reality. As a result, people in the organization tend not to have energy for realizing the vision, even when they have helped create it.

Appreciative Process
Appreciative Process (AP) was developed by Gervase Bushe of Simon Fraser University in Canada and Tom Pitman of Michigan. Unlike Appreciative Inquiry, which typically requires support from the top leaders, AP is a change technique that anyone in any position at the college—trustee, administrator, classified staff, faculty, student—can use at any time to create more of what is desired.

In Clear Leadership, Bushe describes the four stages in Appreciative Process. Stage One involves clarifying what one wants more, rather than less, of. For a college president, that might be expressed as more harmony with the faculty union. Notice the positive frame. The desired end is not to reduce friction between administration and the faculty union, but to increase harmony with the faculty union. These are not just semantic differences; the focus of one’s attention influences what one creates or gets more of.

Stage Two introduces the process of tracking incidents of what is desired. For instance, the college president begins to look for, or track, instances of more harmony with the faculty union. This changes the focus of the college president; she is no longer looking for instances of friction, but of harmony, and she assumes that some harmony already exists, however slight.

Stage Three marks the beginning of what Bushe calls fanning, or amplifying what one wants. Each time the college president sees more harmony, she fans it, as one would fan a small fire to turn it into a roaring blaze. This can take the form of praising a current or past situation or of blessing a future situation.

Stage Four is what Bushe calls meta-fanning, i.e., when the president gets someone else to do the fanning for her. An example might be when a president asks the Academic Senate to sponsor an event that honors excellent teaching and learning.

Change Without Resistance
In the years to come, amid chaos and turbulent change, these two promising approaches to leading change—Appreciative Inquiry and Appreciative Process—can help community colleges stay focused on the best of their organizations. Used as a routine way of doing business, these approaches also can help people continually find new energy for positive change.

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Cynthia Wilson, Editor in Chief
Boo Browning, Managing Editor
Community colleges are constantly seeking new and innovative ways to mobilize their resources in order to meet the demands of state legislatures, trustees, administration, faculty, students, and the community at large. Yet despite this widespread emphasis on gathering and using information to improve decision making and performance, most community colleges do not have a way of collecting, using, or analyzing data and information throughout their whole institutions. Over the past decade, many community colleges, as well as several states and some community college systems, have invested millions of dollars in information technology in order to demonstrate their effectiveness in managing and promoting their enterprise and helping students master knowledge and skills. However, what they are finding is that implementing new technology requires a huge organizational shift that can shake institutions to their core, for two primary reasons.

First, investments in technology are very expensive and the field is changing rapidly. Typically, the only single investment that colleges make that is larger than the purchase of a new technology system is an investment in capital projects. But whereas new buildings and facilities are considered long-term assets with comparatively slow depreciation, there is concern that large-scale information systems will be outmoded in a decade or so, while new software and hardware will be obsolete in as little as three or four years. Given the limited financial resources available to community colleges and the rapid changes in technology, community college leaders often delay new technology purchases as long as possible, which means that when new systems are implemented, they require a sudden shift within the organization to accommodate them.

Second, effective investment in technology requires a systems approach that engages the human element in organizations. For example, a department chair can in many cases get approval to purchase office equipment or even hire a new staff position on a case-by-case basis. But the seemingly simple decision to provide a teacher with a new laptop has systemwide implications involving, at the very least, software and hardware compatibility, and perhaps seniority. Therefore, a decision to invest in a new data warehouse system requires major investigation, research, and planning—a systemwide process that necessarily requires lateral communication and problem solving between administrative units such as finance, student services, and enrollment planning.

However, many community colleges do not have extensive track records in bringing together the staff of separate administrative functions to make decisions that affect day-to-day work processes in each department. Moreover, purchasing and implementing new technology requires extensive vertical communication and problem solving within units—that is, between those who have been the primary users of the old technology (typically lower- and mid-level staff who input data, order reports from information offices, and in some cases crunch the numbers themselves) and those who need access to the information (typically faculty deans and mid- and upper-level managers, many of whom prefer to steer clear of technological details). Sharing information and working both laterally and vertically represents a significant change in organizational styles for many higher education institutions—indeed for many organizations outside of higher education as well.
Given the pressing need for information that can improve decision making, the extremely high cost of new technology, and the extent to which its implementation requires significant organizational transformation, it is not surprising that (1) community colleges have found vastly different ways to collect and process the information they need, and (2) many community colleges do not have campuswide systems that provide administrative and faculty leaders with timely access to basic information that would enable them to make fully informed decisions.

More Than A Feeling: Turning Knowledge Into Action

During the past decade, there has been a wealth of research on how to create and share organizational knowledge, and the relationship between knowledge and organizational change. In this research, data have come to be defined as raw facts, or numbers in a spreadsheet for example, without interpretation or analysis. Data becomes information when humans place it in context through interpretation that might seek to highlight, for instance, patterns, causes, or relationships. Reports are typical examples of information: data placed in context. Knowledge, on the other hand, is information that is further refined by people or groups of people who use dialogue and other means to connect, compare, and evaluate information, and sometimes act on it. It also involves the experience and judgment of the individuals within the organization. Knowledge can be thought of as a belief that is justified and then internalized within individuals and/or within the organization. This knowledge can be lost. It can be shared. It can be hoarded.

Understanding the human and organizational processes—by which raw data is transformed into useful information, information is internalized as tacit or formal knowledge, and knowledge is used to make decisions and take action—has played a leading role in shaping how organizations today plan for their future. Many authors have argued that those organizations that forge ahead in creating and sharing their most precious resource—knowledge—are those that will be most successful in reaching their goals (Argyris & Schon, 1996; Senge, 1997; Brown, 1999).

Much of this research is directly applicable to community colleges. For example, Davenport’s work on information ecology places primary importance not on technology but on humans, their strategic use of information, and the organization’s culture and information politics (Davenport, 1997). This model, which draws on the language of ecology to emphasize holistic systems, suggests that the goals and objectives of an organization can be cultivated simultaneously with the goals and objectives of individuals within it. The ecology metaphor also suggests that the use of knowledge-based information systems requires a framework that mirrors the complexity of community colleges themselves—as active, interdependent, and complex adaptive systems.

Leading to Knowledge Management

Every community college across the country is wrestling with how to get the most out of its information systems. Certainly, there is no single road map for those colleges interested in using more informed decision making to improve performance. But there are important signposts along the way: What organizational challenges are other community colleges facing as they move toward more informed decision making? How is information shared and by whom? Who provides and interprets information? How is information used to resolve conflict? Are people rewarded for sharing information? In many cases, these challenges can be grouped in the following four areas: (1) understanding the current availability of information and its limits for users; (2) determining who are the likely end users of improved information systems and establishing the kinds of information they need in order to make decisions; (3) understanding the college’s internal organizational processes and
external demands for information; and (4) assessing the college’s information culture and politics.

The move from strategies for handling and distributing data to authentic dialogue is the transformation to knowledge management. Knowledge management can impact virtually every key area in the community college. By combining technology with inquiry-based decision making, community colleges can take fullest advantage of Web-based interfaces, data warehouses, and a culture of inquiry that seeks continuous improvement. For example, in teaching and learning, faculty can use classroom-based applications of knowledge management systems in curriculum development, assessment, and course management in order to facilitate successful course completion for a larger percentage of their students. In the area of student services, counselors use information systems to monitor and track prescribed interventions, or use early-alert systems that give counselors the opportunity to respond at the first signs of a potential problem. Enrollment management can take advantage of online admissions and tracking projected course enrollments based on prior course taking patterns. Institutional research and planning offices can serve as the nucleus of information in community colleges and facilitate the flow of information throughout the organization. Administration can encourage managers to use data and information for decision making, and to ensure that there is an information-based culture of research and inquiry in place. And finally, even in the external environment, partnerships with State offices and consortia of data users can work together to meet the challenges of state and systemwide accountability and accreditation mandates.

Recent developments in organizational change research reveal that effective use of data and information can raise performance, productivity, and outcomes at all levels—for students, faculty, administration, and governance. Community colleges that collect data on student performance, analyze it effectively, and share it in meaningful ways can proactively make decisions about investments in programs and services, they can target remedial assistance promptly to those who need it, they can match course availability with student demand, and they can provide better consumer information for prospective students and other important constituents. Unfortunately, many community colleges that would like to improve their information systems may be focusing too much of their attention on technical prospects and obstacles. New technology can help to catalyze organizations toward useful change. In realizing that change, however, the more significant challenges are grounded not in technology but in understanding and transforming the organizational culture in which it is imbedded.

References


Lisa Petrides, President and Founder of the Institute for the Study of Knowledge Management in Education (ISKME), is a professor in the Department of Organization and Leadership, Columbia University Teachers College.
Recent reading on a futurist listserv on the Web reveals, "[E]mployers are increasingly frustrated by workers' deficiencies in fundamental reading, writing, and math skills. The labor shortage is complicated by the difficulty in finding people who are qualified to work...or at least trainable. Insufficient basic education makes training considerably more challenging." Lifelong learning is no longer a choice for people in the 21st century. It's a necessity. And because that learning must take place constantly and continuously, it has to occur both in and out of the traditional classroom. The format may change, or the schedule, or the location. Moreover, the focus may be different—in addition to degrees, students will be looking for certification or other documentation of skills training.

Community college leadership that focuses on the many facets of lifelong learning includes not only the requisite knowledge but also passion and commitment. At Johnson County Community College (JCCC), the passion and commitment were there, but some questions about 21st century workforce education remained unanswered. Early in 2001, JCCC initiated a campuswide audit of externally validated certification programs, along with an informal survey of Kansas City area CEOs, to identify the needs of local employers in terms of workforce and economic development. At about the same time, the League for Innovation in the Community College extended an invitation to community college presidents to attend colloquia addressing the complexities of multiple workforce certification and licensure programs.

The Certification Audit Project
The result of these colloquia—the Certification Audit Project (CAP)—is a joint project of the League and The Chauncey Group International, a division of Educational Testing Service (ETS). CAP's goal is to create a searchable certification database, updated by individual institutions of higher education, that will provide a current view of what institutions are providing for students and an environmental scan of the workforce needs in their local service areas. Not only will CAP identify certification programming currently being offered to business and industry, it will also look for the gaps in such programming. The result will be a quantitative and qualitative approach that will cross the borders of credit and continuing education to build an effective educational bridge for delivery of workplace skills needed in the community.

CAP has three primary features:
- A thorough analysis and cataloguing of all curricular offerings, both credit and noncredit, leading toward externally-validated certification or licensure
- Completion of a survey instrument specifically developed for this project for each such curricular offering
- Creation of an amendable database of the survey data to build benchmark information

CAP activities have identified three different types of licensure and certification that are currently offered either through business or through educational institutions:
• Licenses for occupations that risk harming consumers, such as healthcare, construction, or cosmetology. Licenses generally are required to demonstrate minimal competencies necessary to protect consumers.
• Statutory certifications for occupations that give consumers information that may increase their satisfaction. Examples of affected occupations include healthcare, childcare, home inspection, and massage therapy.
• Voluntary certifications for occupations that give employers information about levels of proficiency and the base knowledge required for jobs. Voluntary certification may also provide a gauge employers can use to determine the need for formal or informal on-the-job training and includes such certification as Work Keys, Microsoft certification, or Chartered Financial Analyst (CFA) certification.

Community Connections
To give a community focus to employer needs, JCCC asked area businesses, in surveys and in focus groups, what they looked for in their employees. In contrast to the educational emphasis on transcripts, employers did not list the information from transcripts as the primary criterion for hiring, nor did they include transcripts themselves among the criteria. This exclusion of transcript information is in keeping with the Carnevale and Desrochers (2000) finding that although educators continue to value transcripts and grades, “employers increasingly value performance-based certifications and community college certificates as indication of more specialized skill.” The employers in the JCCC survey included the following essential skills:
• Listening
• Personal Responsibility/Ethics
• Workplace Responsibility
• Teamwork/Leadership
• Reading
• Decision Making
• Observation
• Ability to Manage Self

In addition to programming and content, CAP also examined delivery modalities. In 2001-2002, JCCC conducted a self study of its delivery modalities to assist with future program development, which could consist of the traditional classroom, nontraditional learning sites, business sites, Web-based delivery, self study, the use of CD-ROMs, or any combination of these.

As performance-based certification in response to community needs becomes a primary focus of educational programming in the 21st century, community colleges are perfectly placed to respond. Individuals as well as business and industry have compelling reasons for turning to community colleges for training, including flexibility, affordable cost, quality, and accessibility. Community colleges play a vital role in workforce training as it relates to the skills employees need to be successful in a rapidly changing environment.

Continuing Connections
As CAP proceeds, JCCC will continue to solicit input from focus groups and advisory councils that interface with both credit and continuing education programming and to prepare to border-cross in deployment to meet community needs. It is imperative for business and industry partners to know that community colleges are capable of helping their employees gain the skills and competencies affirmed by these certifications. Toward that end, JCCC will develop an outcomes-based curriculum defined by the community workforce as area
employers assist in identifying the core competencies their employees need in order to be successful.

JCCC’s goal of agility of educational delivery reinforces to its community that the college is accessible and that it offers quality training and certification. One way to achieve this goal is through partnerships with other community colleges, the business community, the local K-12 school districts, area baccalaureate colleges and universities, the Kansas Board of Regents, and community volunteers. JCCC continues to develop new programs to keep up with the community’s emerging needs, including biotechnology, power plant technology, and bio-informatics. In a recently developed partnership, the college’s biotechnology program was developed in consultation with Stowers Institute, Children’s Mercy Hospital, and University of Kansas Medical School personnel. JCCC collaborated with these groups to establish curriculum and internship positions that would meet the demand for trained biotechnology personnel in the area workforce.

Parallel to its efforts with CAP, the college initiated a second dialogue regarding a proposed facility that would provide demonstration and classroom spaces to showcase emerging technologies. As an innovative focus on technology, the building would house state-of-the-art computer labs and facilities shared by JCCC’s continuing education and credit programs. This facility not only would meet the emerging needs in local workforce training, but also would allow JCCC to assume a leadership role. In this economy, an innovative center for technology and the arts will provide welcome expanded services to area businesses, professionals, and artists in our community workforce.

Ultimately, the goal is to equip all individuals with the knowledge, skills, and desire for lifelong learning in order to meet the challenges in the world of work both now and in the future. The importance of such certifications continues to be reinforced on a national level. The initial report of the Secretary’s Commission on Achieving Necessary Skills (SCANS), What Work Requires of Schools (1991), states:

- A high-performance workplace requires workers who have a solid foundation in the basic literacy and computational skills, in the thinking skills necessary to put the knowledge to work, and in the personal qualities that make workers dedicated and trustworthy.
- High-performance workplaces also require other competencies: the ability to manage resources, to work amicably and productively with others, to acquire and use information, to master complex systems, and to work with a variety of technologies.

The report also focuses on five workplace competencies—resources, interpersonal, information, systems, and technology—and three foundational skills—basic skills, thinking skills, and personal skills.

Strong relationships with business and industry are an important ongoing dynamic as education meets community need in tandem with new and existing partnerships. CAP is one of many initiatives designed to improve economic development for the community while meeting the individual needs of students.

Reference

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Leadership by Culture Management

Christine McPhail

In times past, good academic preparation, basic people skills, and a fair amount of good luck enabled leaders to be effective at their institutions. In today’s challenging times, however, leaders also need the ability to understand and manage the culture of the institution. This culture consists of the myths, rituals, stories, rites, and language through which human meanings and values are transmitted from one generation of an organization to another.

The extent to which leaders are effective largely depends on how well they are able to correctly assess and manage the culture of an organization. If they do not manage the culture, the culture will manage them.

A new leader’s task is to assess the culture of an organization and determine how to navigate through it. Navigating the culture of an organization is a lot like climbing a mountain. Mountain climbers must know something about the mountain; they must be able to set their bearings and understand how to navigate up, down, across, and around the terrain. In the same way, leaders must know something about the culture of the institution, establish their bearings, and understand how to navigate through the various layers of the organizational culture. This article discusses the five stages of leadership by culture management.

Stage I—Preparation
Failure to understand and work within the culture of the organization is likely to create a great amount of difficulty for a new leader. Prior to assuming the job, new leaders are encouraged to take the time to familiarize themselves with the organization. During the application and interview stage, they should study the history, mission, vision, and strategic plans of the institution and keep a journal of all interactions with college or district personnel.

In preparing for an interview, they should request copies of board minutes, faculty and student newspapers, catalogs, schedules, planning documents, and various college and district reports. They may even visit the campus incognito to interact with people without the stress of the interview process. Assessing the institution in advance becomes a tool to help them keep their bearings later on. This advanced preparation places them in a take-charge position instead of leaving events to happenstance.

Stage II—Connection
An essential skill of a leader is the ability to connect with the people within the organization. A variety of techniques can be used. One approach is visibility—meeting and talking with people.

New leaders should greet all constituent groups as early as possible on days when they are not under pressure. That way, when times get stressful, leaders have already made the connection. These connections give leaders bearing. Just as mountain climbers use a compass to set their bearings on a mountain, new leaders use different constituent groups
to gain perspective on the traditions of the institutions. Developing a sense of the ways of the institution is fundamental to making a connection with the people within the organization.

At Kings River Community College (CA), for example, a Dean’s Advisory Committee was established consisting of representatives of various student organizations on campus. It met once per month without a formal agenda. Students talked freely about their life on the campus and felt they had an advocate. Their feedback was used to improve and expand services for students.

A similar approach was used at Cypress College (CA) to reach out to the constituent groups. There the President’s Advisory Committee, consisting of representatives from faculty, staff, and student groups, provided voices about the culture of the organization. A major positive outcome from this structure was the establishment of rules of behavior for implementing shared governance at the college.

Many leaders attempt to change the culture of the institution before they get connected. The concept of connection is very important when attempting to create institutionwide change. Basically, connecting with the culture of the institution means getting a feel of the organization—who has the power and how it is used, work styles of employees, roles and relationships, values people live by, and the way things get done around here. When progress has been made at the connection stage, there is a personal relationship established with the leader and followers. This means that the leader has acquired an understanding of the culture that will provide a bearing for deeper levels of involvement throughout the institution.

Stage III—Involvement
Leadership of an organization brings with it many obligations and expectations. Some of these are demanded by the daily schedule, which signals to leaders what they should be doing and when and where. To many leaders, involvement in all levels of college events and activities is a major challenge and comes with a heavy price. Others accept high levels of involvement without question.

Just as mountain climbers understand that pacing and timing are techniques that are required to ascend and descend a mountain, so must leaders acquire the ability to estimate an appropriate level of involvement. They must understand that overcommitting can be hazardous to their health and careers. When mountain climbers encounter a hazard such as a cliff or avalanche, they find a way of walking around it without losing their overall bearing. This detour is sometimes referred to as a "dogleg" In mountain climbing, this process allows climbers to travel farther and avoid dangerous risks.

In the same way, when confronted with multiple challenges and demands, leaders must create a dogleg that will help them travel further, navigate through the culture of the organization, and manage their level of involvement. To do this, leaders must first determine how their time will be used. This step requires that they be aware of the rituals, systems and structures, traditions, and ceremonies of their institution. They can then become personally involved in those areas most critical to their duties, those that are necessary for executing their vision. Second, they must empower others to assist in areas where their personal involvement is less critical. Once leaders’ need for involvement is adequately met, they are in the position to move to the next stage of culture management: stimulation.
Stage IV—Stimulation
As leaders learn more about an organization's culture, they are likely to be motivated to change it. This pattern of culture management is being played out every day in community colleges. For example, leaders at the 12 Vanguard Learning Colleges—Cascadia Community College (WA), The Community College of Baltimore County (MD), Community College of Denver (CO), Humber College (Toronto, Canada), Kirkwood Community College (IA), Lane Community College (OR), Madison Area Technical College (WI), Moraine Valley Community College (IL), Palomar Community College (CA), Richland Community College (TX), Sinclair Community College (OH), and Valencia Community College (FL)—are serving as incubators and catalysts for the Learning College concept by working to build values that place learning first throughout their institutions. These colleges are developing and strengthening policies, programs, and practices across their institutions with a focus on the five project objectives: organizational culture, staff recruitment and development, technology, learning outcomes, and underprepared students.

The leaders at these institutions are stimulating the culture to change processes, and they are establishing new traditions; they are writing new stories and changing the way things are done. Obviously, they had to undertake considerable preparation to lead their institutions to become learning colleges. By stimulating the organizational culture, these leaders are able to create new visions and vistas for themselves and their institutions.

Stage V—Execution
One of the most common concerns in the literature on community college leadership is that leaders are not able to execute their visions. Because community colleges are becoming increasingly complex, it is difficult for leaders to state and manage a vision of things to come, then revise the vision in light of changing events and circumstances. Dramatic examples abound of community college leaders who have been forced to leave their positions because they were not able to effectively align their vision with that of the faculty, staff, and governing board.

Many obstacles stand in the way of leaders' ability to execute their vision. The most glaring is the leader's inability to effectively manage stages 1, 2, 3, and 4. Leaders must articulate their vision for the institution before they arrive, connect their vision with that of others in the organization, find an appropriate level of involvement, and stimulate an environment where others can accept their vision. The vision must be stated and reinforced over and over again. The purpose of the ongoing process of stating and discussing and debating the vision is to buttress and develop the most critical factors in the development and management of the vision: connecting it to the shared assumptions, beliefs, and values of the various internal and external constituencies of the institution. Leaders must work with others within the organization to make a shift in the cultural norms of the college to the new vision. Throughout the process, leaders are working to create and maintain an environment that supports their vision—a shared vision.

Although both established leaders and new leaders must position themselves to handle the unexpected, most problems occur when a person is new to an institution. It makes sense to anticipate some of the potential pitfalls in order to avoid them. Learning how to manage the culture of an institution using the five stages is an effective way to prevent problems. Leadership by culture management is an evolving process of development and growth. It is based on the conviction that leaders must understand and manage their interaction with the culture of the organization. If leaders desire to continue to develop and improve, culture management is a powerful engine for moving to a higher plane of leadership.
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A View from the Outside In:
Community Colleges as Entrepreneurial Community Learning Centers

Zane Tarence

Community colleges are seeking ways to increase revenue and become less dependent on traditional state revenue sources. Increasingly, college presidents and trustees are finding empty pockets and depleted state coffers, despite the effort and hours spent lobbying legislatures for funding to support three- to five-year strategic plans. With no clear path to funding, essential academic facilities, staffing, technology, and other strategic projects are being put on hold. This reduction in resources occurs at the exact time when community college enrollments are increasing at a dramatic rate. In an attempt to generate funds, creative administrations are beginning to pursue public-private partnerships wrapped around the very attractive educational services market.

Many community colleges are discovering that they have a distinct, competitive position in this lucrative market, and they are poised to profit because of several comparative advantages, including credibility as proven educators and strong corporate and community relationships. Innovative institutional leaders are detailing how to benefit handsomely from this market space and how to outmaneuver the aggressive and hungry for-profit companies. Community colleges find themselves in the enviable position of being able to organize and choreograph the distribution of training, content, instructional technology, and services around the needs of the educational consumer, offering a new and compelling value proposition for this rapidly growing market.

Community colleges are especially positioned to mediate educational services transactions between producers and consumers, creating value for both parties. Innovative leaders are beginning to leverage the opportunity to consolidate the fragmented educational services markets by organizing sellers (suppliers of training, technology, content) and buyers (end users, corporations, governmental agencies, K-12 school districts, not-for-profits) in a rich, value-added environment. As a result, new market efficiency is being created by aggregated demand for suppliers and aggregated supply for customers, all intersecting with the community college as the nexus for aggregated services. In this model, the community college becomes the trusted point of entry for educational services by reducing the search and evaluation costs for the end consumer. The business opportunity is significant as community colleges artfully connect millions of learning consumers to thousands of suppliers of learning and technology in a context that is created, owned, and controlled by the community colleges.

Community colleges are poised to develop a fertile context for learning and training that is best-of-breed and defensible in the market by adding value to the learning transaction that benefits the customer. Value is added by skillfully selecting, organizing, pricing, providing scale, and matching educational services and offerings to the end users' needs. Intentional execution will allow community colleges to facilitate and channel billions of dollars worth of learning transactions through their coffers and ultimately establish themselves as the premier distribution vehicles of learning for a lucrative and growing market. Nationally, community colleges have the opportunity to be the Wal-Mart of high-quality, well-defined
educational services, and no other market player has the ingredients to compete in this space if institutional leaders engage wisely, with authority and creativity.

**Competitive Positioning**

Several opportunity accelerators raise the potential for colleges to prosper in the educational services space:

- **Groups of community colleges** have the opportunity to join together to build regional and national consortia without significant capital requirements. The physical and relational infrastructure is already in place to capitalize on this market opportunity. Consortium members could distribute each other's distinct educational services to every major U.S. market and many international markets. Organized into a consortium, community colleges would also have the clout to negotiate exclusive distribution and packaging rights to innovative technology and to choreograph this technology around existing market demand for educational services. The consortium members are now in control of the packaging, presentation, and distribution of educational products and services, realizing exceptional margins and cementing themselves as the educational services and solutions distribution channel of choice. Any firm desiring to reach this lucrative market would be eager to partner.

- **Community colleges** have a reduced customer acquisition cost, thanks to their presence in the community and history of delivering valuable educational certifications. Newcomers to the local market incur very high customer acquisition costs; therefore, they must support the cost of acquisitions with a higher profit model. For decades, community colleges have been the established provider of learning services and training to regional and local end users as well as to local businesses. Community colleges have the traction to build upon their market share and emerge as the ultimate distribution channel for educational services. However, a careful and intentional strategy must be put in place to strengthen and grow their position in the distribution and acquisition space. Hit-and-miss strategies are not sufficient to fully capitalize on this position of strength.

- **Community colleges** have credibility as proven educators and trainers. Their credentials are not disputed in the market, as they possess the necessary pedagogical skills to deliver effective training. Subject Matter Experts (SME) and instructional designers are readily available to community colleges, and competitors have a difficult time providing the appropriate level of training within the time frame and budget of the typical consumer.

- **Leading community colleges** have built reputations for embracing instructional technology and delivering it effectively to their customers. The experience gained by college personnel over the past decade in distance learning technology is valuable. As private firms, school districts, and governmental agencies attempt to implement e-learning initiatives, they are seeking consulting and implementation assistance. The opportunity exists for community colleges to outsource the e-learning initiatives of corporations, which allows the companies to focus on their core businesses while ensuring quality of instruction and budget adherence. The e-learning platforms that many community colleges have implemented rival those of large corporations, and these infrastructures and experiences can be turned into revenue streams for the colleges. In-demand courses and content can quickly be incorporated into the college's e-learning environments and offered on a subscription basis, either as an entire course or as discrete segments.

- **Community colleges** have the capability to offer a blended learning and training solution. They are poised to cost-effectively set up regional educational Application Service Providers (ASPs). Because colleges can offer the brick-and-mortar experience as well as an e-learning component, they realize an unprecedented
advantage over the typical e-learning competitor. Many firms are attempting to thrive in this market with merely a technology play; they are creating elegant learning portals with elaborate choices of learning products. However, end users still desire learning in a blended environment where online resources and learning are complemented by engaging classroom environments, group activities, and lab experiences. The geographic presence and physical infrastructure enjoyed by community colleges provides an immediate competitive advantage. The costs of creating a local infrastructure present a major barrier of entry for potential competitors and a significant advantage for colleges.

- There are no entrenched competitors in the educational services market. This market is highly fragmented, and it is difficult for a national private company to establish local markets. This fact alone provides for an excellent partnering environment where niche competitors will seek to establish distribution agreements with college partners.

- Execution risk is low. Because of the extensive experience in workforce development training and the robust continuing education programs of many community colleges, the nuisances of operating a training and services business have been ironed out. Strong corporate and community relationships already exist that allow community colleges to collapse the ordinarily long sales and business development time frames in this market. The political environment is also favorable, considering that local and regional politicians are usually pro-community college and will assist in obtaining lucrative regional training contracts. Because of the status of community colleges, grant opportunities are readily available to create and operate various learning initiatives. The goal should be to cover the development costs of the programs with grant funding and then move these programs into the commercial market. The organization of the community colleges allows for minimal additional operating expenses while building a nice revenue stream. Other market entrants have high start-up costs as they build infrastructure and a sales team. Community colleges have reduced the transaction costs of learning and therefore have the business model to keep down these costs.

- Community colleges can bond the customers to their brand and keep them coming back for all lifelong learning needs. The promise to customers is quality, affordability, convenience, sanctioned training, and learning from a trusted local provider. We believe the learning customers will settle on a single trusted supplier of educational services that will ultimately command a large share of their training and educational dollar.

**Market Characteristics**

The addressable learning market (nonmilitary) in the U.S. is a monster $735 billion market. This market can be divided into the following major segments: corporate, higher and continuing education, and K-12. The learning market is growing at a rapid pace in all three sectors as our economy continues to morph into a knowledge economy where skills and knowledge are highly valued. Two pervasive mindsets fuel the growth of the educational services market: (1) Individuals understand that their earning potential is directly tied to their level of education, and (2) Businesses and organizations are finding that organizational knowledge is the last frontier to producing competitive advantages.

Currently, most learning consumers purchase learning resources, training, and educational services from a patchwork of suppliers with whom they maintain loose, independent relationships. Consumers have often paid premium prices to low-quality providers that could not offer the level of the certification that the learner desires. Community colleges have
respected brands and the academic and instructional staff required to customize their educational offerings to the consumers' needs.

The market attractiveness is evident in the meteoric rise of for-fee education providers. Companies such as Apollo Group, DeVry, ITT Educational Services, Sylvan, Kaplan, Strayer Education, and traditional publishers are jockeying with focused strategies for the local learning markets while rolling out impressive national expansion models. New investment money is flowing even in the current economic downturn, signaling that capitalists sense a market opportunity. Other industry outsiders are invading the educational services market with new business models and highly digital infrastructures, and they are offering educational consumers extraordinary value. Community colleges are subject to being outsmarted, outmaneuvered, and ousted from their rightful position in the local and regional educational services market. With careful planning and execution, institutional leaders have the opportunity to firmly establish themselves as the gatekeepers and context builders for the learning economy.

The e-learning and training sector of this market enjoys a 100 percent annual growth rate, according to International Data Corporation. With the advent of powerful Learning Content Management Systems (LCMS) and ASP models, education providers are attempting to go straight to the end customers. Technology changes the rules for learning content delivery because it allows distribution costs to drop to almost zero. Community colleges are positioned to aggressively plant the flag on the learning-markets territory and claim it as their own.

**Potential Revenue Centers:**
- High-demand specialized training
- Digital content creation for online learning repositories
- Demonstration centers for technology companies
- Incubation contracts for learning and training technologies
- Leasable high-end electronic classrooms and holoconferencing suites
- E-learning consulting and workshops
- Professional development and technology training for K-12 educators
- Regional educational ASPs

**Suggested Actions (Plan, Do, Check, Act)**
- Begin to explore best-practices organizational models and methods for establishing community college consortia to capitalize on the educational services market. Interconnected community colleges can pool resources and local market influence to invent and deliver exceptional value to the learning consumer. Initial consortium membership selection would be based on current leadership, corporate and consumer training potential, quality and reputation of instructors, technology and design infrastructure, and relationships with strategic business industry segments.
- Create a business plan that clearly details how the consortium will drive revenues and distribute profits. This strategic blueprint should serve as a compass toward reaching milestones and revenue targets while describing partnerships and revenue-sharing models. It will also serve as a capital-raising document to bring in corporate venture investment from publishers, technology providers, telecommunication firms, and venture capitalists. It should be anticipated that outside funds would be needed to build the management team and support the consortium's efforts until profitability occurs.
• Recruit a management team to organize the consortium, execute the plan, build partnerships, and drive revenues. Human talent is the key to successful execution, and experienced leaders should be sought to lead the consortium and organize the individual college project teams and contributions.

• Aggressively seek partnerships with leading publishers, content providers, technology and services firms, and any other entity that wants to deliver products and services to the educational services market.

• Continually monitor and tune the model for optimum results.

**Educational Entrepreneurs**
Community colleges are in a special position to reconfigure the way educational consumers get serviced because they already hold the ability to deliver a compelling new educational value experience focused on end-user needs. Institutional leaders are positioned to creatively organize a new set of value offerings and services as well as the supporting resources, structures, and processes. By building on their current infrastructure, offerings, credentials, and customer base, they can secure the learning market for years to come and bond customers to institutions.

Community colleges have the ability to combine learning technology with content and then wrap high value around this content through creative packaging and presentation, such as certificate programs, corporate seminars, e-learning modules, and real-time skill support systems. Community colleges should partner with each other to form consortia that transform today’s $735 billion fragmented and inefficient educational markets into a scalable business. The ability to partner and create effective relationships within a regional market will allow groups of community colleges to create a national brand. Suppliers of training, technology, services, and publishers will clamor to partner with this national consortium of community colleges that can give them direct access to the market.

The community college has the real potential to become the Community Learning Center, catering to the needs of training in all stages of life. Because community colleges can connect directly with the customer, they could threaten other learning providers. Community colleges are able to offer the key—*customer value of convenience*—to the end user. By facilitating the distribution of learning transactions and by maximizing the customer’s value through price, selection, quality, brand, delivery, and payment options, community colleges can become the regional and national centers of lifelong learning.

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Students' Perspectives on Juggling Work, Family, and College

Lisa Matus-Grossman and Susan Gooden

An important public policy challenge of the 21st century is how to increase opportunities for career mobility and wage progression among low-wage workers. Community colleges have the potential to play an important role in addressing this challenge, since receiving an associate's degree or vocational certificate is related to higher earnings.

All levels of government are grappling with how to provide low-wage workers, or the working poor, with opportunities for career advancement and wage progression. Since the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996, increasing numbers of current and former welfare recipients have been joining the low-wage workforce, so that career mobility is an important concern for welfare-to-work efforts as well. There is a strong correlation between college credentials and higher earnings, and community colleges offer low-wage workers opportunities to increase their earnings and improve their families' overall economic well-being by enhancing their marketable job skills with advanced education and training. Yet many low-wage workers do not capitalize on the opportunities offered by community colleges. Either they do not apply, or a high proportion of those who do apply and enroll drop out.

Through the Opening Doors to Earning Credentials initiative, the Manpower Demonstration Research Corporation (MDRC) is exploring ways to increase community college access and retention for nontraditional students, including low-wage workers. The first publication from the project, co-published with the National Governors Association, is titled Opening Doors: Expanding Educational Opportunities for Low-Income Workers. It presented promising state and local practices and policy changes that might improve postsecondary enrollments and completion rates.

This new report builds on this earlier work by sharing the educational and life experiences of current, former, and potential low-wage working students as they themselves described in focus groups.

The Opening Doors study uses information gathered in focus groups at six community colleges from current, former, and potential students—most of them single parents—to explore institutional and personal access and retention issues they face as they seek a workable balance of college, work, and family responsibilities. The focus group findings have important implications for the community colleges, employers, and policymakers who work with these nontraditional students.

Based on their demonstrated commitment and capacity to make college offerings more accessible to nontraditional students, including low-wage workers, the six community colleges across the nation selected for the Opening Doors study were LaGuardia Community College (NY), Cabrillo College (CA), Macomb Community College (MI), Portland Community College (OR), Sinclair Community College (OH), and Valencia Community College (FL), and their partners. Across these six colleges, 18 focus groups were conducted involving three groups of low-wage workers: (1) current students enrolled in community college credit-granting programs, (2) former students previously enrolled in community college who left
and have not since earned a credential, and (3) potential students who have never attended a credit-granting program at a community college. A total of 131 individuals participated in the focus groups, which consisted mostly of women between ages 21 and 40 who are parents.

The study provides insights about low-wage workers’ knowledge about and experiences with community college programs and services. The findings from the report have implications for the upcoming national debates over reauthorization of legislation affecting welfare and higher education. There will certainly be dialogue about whether or not to expand the current postsecondary education and training options under the federal welfare legislation. As the Opening Doors study indicates, these debates should also explore the barriers that welfare recipients and other low-wage workers face in accessing and completing college programs.

Principal Findings

- Focus group participants identified stable child care; personal support from family members, peers, and college faculty and staff; and accommodating employers as leading factors influencing their ability to stay in college, complete their programs of study within expected time frames, or enroll in the first place. Expanding on-campus support services and introducing new course formats that offer modularized or short-term training options with more flexible schedules may lower these barriers and enable students to complete courses more quickly.
- Although the direct costs of tuition and books are significant factors in the ability of low-wage students to attend community colleges, focus group participants emphasized that lost wages from having to reduce work hours strongly influenced their ability to afford college. College administrators and policymakers may want to consider offering new forms of financial aid that help low-wage working students meet direct education-related costs as well as replace lost income.
- With regard to community college institutional supports, focus group participants who were able to take advantage of academic and personal counseling and flexible on-campus child care (that offered extended hours of coverage and could accommodate both infants and older children) described these services as enormously valuable. Other students, however, either were not able to avail themselves of these services, were unaware that the services existed, or were unsure whether they would be eligible for them. In addition to expanding the availability of these supports, colleges may want to increase their outreach and marketing efforts.
- Students participating in the focus groups reported that they had difficulty accessing work-based safety-net programs such as food stamps, Medicaid, earned income credits, Section 8 housing vouchers, and child-care subsidies. Because these programs can provide fundamental supports for work and education, colleges could improve students’ access to them by developing partnerships with public agencies and community-based organizations.

Although community colleges do offer a range of financial, academic, and personal support services, the Opening Doors findings suggest that some of the issues raised by low-wage working students could be addressed by marketing existing services better and offering supplemental services by partnering with other public and private service providers. There are several options that college administrators and policymakers might consider:

- Making new or expanded forms of existing financial aid more accessible to working students
- Adopting more flexible and faster course delivery formats
• Expanding campus-based college and community support services and benefits (including child care)
• Creating bridges between noncredit and credit programs
• Designing lifelong learning opportunities and career pathways

While many low-wage working students are already succeeding in postsecondary education, thanks to the efforts of community colleges like those in the Opening Doors study, other current and former students in the study described barriers to completing their programs that colleges and public or private partners could address.

Likewise, some potential students among the low-wage labor force are interested in attending college but lack the basic information and financial resources to make that possible.

Although no single overriding barrier prevents low-wage workers from accessing and completing community college, the strategies to address multiple barriers based on educational, financial-aid, partnership, and student-support-service approaches may hold great promise for enrolling and graduating larger numbers of low-wage working parents.

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