

Community Colleges and Urban Development

In the search for solutions to persistent problems of poverty and corrosive joblessness in our urban centers, the potential of urban community colleges¹ as agents of social transformation and catalysts for economic revitalization has not yet been fully explored. Community colleges are hardly an untapped resource; there are about 1,200 of them. They are accessible, affordable institutions now working at the center of the best educational and training programs in this country to help youth, adult workers, and employers gain the technical skills and learning tools required for economic success. However, I believe that community colleges, especially in our large cities, can and must do still more. I welcome this opportunity to summarize a few ideas about how that might be accomplished. I argue here for appreciating more fully the massive impact of community colleges in America's cities and for bringing them to the front of economic and social strategies aimed at revitalizing our most depressed urban neighborhoods.

I am a strong advocate for community colleges. I learned early as mayor of San Antonio how important the community college was to my community and how critical it was that I support its growth and help strengthen its capacity. I have since had the opportunity to see the impact and learn of the challenges community colleges face in many other cities. There is, of course, wide diversity of direction, capacity, and impact among these institutions and, because of inadequate resources or lack of leadership, some community colleges are not measuring up to the challenges. Still, I am convinced that America's community colleges are among our most precious national assets. They are uniquely positioned to help all of us navigate the ebb and flow of economic changes and social transformations facing our communities.

Two central facts about community colleges engender my admiration and generate my concern that they receive help. First, of all postsecondary sectors, community colleges enroll by far the highest proportion of low-income youth, particularly from our urban centers; the highest proportion of legal immigrants seeking to develop their skills and expand their opportunities; and the highest proportion of minority groups who are underrepresented both at middle- and upper-income levels and in good jobs with career opportunities. Heading off the spread of poverty among these groups and reversing the growing disparity of wealth and income are among the most important tasks facing our Nation. Community colleges are one of the keys to meeting these challenges.

Second, community colleges are taking on the huge task of “reskilling” America’s work force by helping literally millions of working adults develop higher levels of basic and technical skills. Success in this unprecedented challenge is essential if America’s workers are to earn good wages and if their employers are to compete in demanding world markets.

Yet, although community colleges enroll about 43 percent of our Nation’s undergraduate students (about 30 percent of full-time students), they receive only about 19 percent of State funds for higher education and only about 10 percent of Federal higher education aid (Koltai, 1993). A quick look at urban America’s elementary and secondary school enrollments reveals large increases in children from poor families who lack preparedness in basic skills. The pressures on scarce community college resources will not abate. Community colleges will need more support.

This essay briefly traces the emergence of community colleges as major components of our national educational, economic, and social endowment. It reviews how the missions of these 2-year institutions have evolved over time and profiles some essential facts about community colleges now. Much of the argument put forward here holds for all community colleges; many community colleges serving smaller towns and rural communities can rightly claim successes and challenges similar to those in our large urban centers. But because of my work over the past several years, I have focused here on the special challenges and opportunities facing urban community colleges, those colleges that confront daily the daunting problems of America’s urban centers when work disappears. This essay suggests strategies through which businesses and governments can help these unique institutions play a more effective role in urban areas. It also outlines some ideas about how these colleges themselves can take measures that will deepen their impact on urban centers.

A Brief Profile of the Community College

Community colleges—2-year institutions primarily offering associate degrees as the highest degree conferred and as focused on job training and economic development as on formal education—are, in comparison to older 4-year colleges and universities, relatively new in the United States. The first ones were usually private institutions, many of which started as 4-year schools and were forced to drop the last 2 years because of resource constraints. The first public 2-year institutions were established early in this century in California, Texas, Michigan, and a few other States. The concept spread gradually, and by the 1930s most States had laid the foundation for statewide systems. Each State system of community colleges has evolved out of unique requirements; each college has been shaped by different educational philosophies, governance systems, and funding approaches. Therefore, each school is a product of its own community, and to measure them by the same yardstick is difficult.

Enrollment grew faster in these 2-year schools than in the 4-year institutions, especially in bigger cities and especially during the years of the Depression when additional schooling was an alternative to unemployment. But the massive enrollment of World War II veterans under the GI bill led to rapid growth of community

colleges throughout the Nation, and in the 1960s when record numbers of baby boomers—the children of those veterans—left high school looking for postsecondary education, community college enrollment soared again. Four-year colleges could not handle the large numbers of new students; it was easier and cheaper to build new 2-year schools and expand their enrollment. During the 1960s and 1970s, literally hundreds of new 2-year colleges were established to accommodate this flood of new students. Many were placed in urban areas in direct response to the growing problems of urban unemployment and poverty. Between 1970 and 1983, while 4-year college enrollment increased by 22 percent, community college enrollment increased by 113 percent. Steady enrollment gains continued into the mid-1980s when the demographic bulge began to abate, but community college enrollment is increasing again in the mid-1990s. It will increase rapidly as the children of the baby boomers graduate from high school; move into young adulthood; and seek affordable, accessible postsecondary study.

A Few Facts About Community Colleges in America

- There are about 1,100 public 2-year postsecondary institutions in the United States, serving about 6 million students in credit courses and 5 million students in noncredit programs.
- Public community colleges enroll more students than public 4-year institutions, but more than 60 percent of community college students are enrolled part time (fewer than 12 credit hours per semester).
- The average age of the community college student is 30 years. More than 50 percent of those enrolled as full-time students also work full time or part time. Of those who are part-time students, about 66 percent work.
- While community colleges enroll about one-third of all students in all postsecondary study (public and private, graduate and undergraduate), about one-half of all minorities enrolled in higher education institutions of any kind are in community colleges, up from 40 percent in 1980.
- Average annual tuition and fees for public community colleges are only about 40 percent of those of average public 4-year institutions. The total annual costs per full-time student are about one-third those of their 4-year counterparts.
- Only about 30 percent of community college students receive financial aid of any kind. Because they attend less costly institutions, because many are part-time students, and because most work part time or full time, community college students do not qualify for much of the aid available to those attending more expensive 4-year institutions.
- More than 45 percent of revenue comes from the State government; about 20 percent from student tuition and fees; and the balance from private contributions, the sale of training services to businesses, and Federal aid.
- About 65 percent of the faculty of community colleges are part time. Just 20 years ago, that number was about 40 percent.

A Diverse Mission

The mission of community colleges has undergone very important changes during these years. In the first few decades of this century, the schools were aimed chiefly at relieving the burden of the 4-year colleges and universities by providing the first 2 years of education to students who would then transfer to the 4-year schools to pursue their bachelor's degree. These schools were known as *junior colleges*, and they were viewed chiefly as a feeder system for their senior partners. In the decades of the 1930s and 1940s, the schools came to be recognized for a second mission—providing occupationally oriented, postsecondary programs for students not planning to pursue a 4-year degree. In the 1960s this vocational mission expanded as a changing economy began to place a stronger premium on postsecondary occupational and technical skills. At the same time, a small number of southern States began linking their colleges directly to economic development activities by establishing programs tailored to new and expanding industries.

Degrees began to reflect this duality of mission. Community colleges award 2-year associate degrees as their highest degree, but these degrees come in two broad categories. First there are associate in science or arts degrees that are awarded to students who see themselves as baccalaureate candidates and who are expected to transfer to a 4-year program. Sometimes these degrees suggest job readiness to employers, but most frequently they are organized around the requirements of 4-year institutions, not direct employment. Second, there are associate in applied sciences degrees, which most students see as terminal degrees. These credentials are intended for those entering the work force, not the university, and because many modules are not transferable to 4-year programs, this degree may not transfer as 2 full years.

Community colleges also offer certificate programs that generally require a year of study but sometimes less. They are designed very specifically to qualify a student for employment in a given field or to provide the basis of taking certification exams. Finally, large and growing numbers of community college students are not interested in an associate degree or a certificate of any kind. They have very specific and customized personal competencies in mind that might be achieved by just one or two courses, or they may be simply exploring possible employment paths and opportunities.

The last several years have witnessed still another major threshold in the evolving mission of urban community colleges. America's economy has undergone wrenching change as markets have become global and foreign competition has intensified. New information processing and communication technologies have altered jobs in very dramatic ways. Businesses have responded by decentralizing, downsizing, shedding layers of management, and increasing their expectations for worker skills and flexibility. This response has had two profound impacts on community colleges. First, they have taken on lead responsibility for producing the highly skilled and motivated "renaissance technicians" demanded by employers in all economic sectors (usually credentialed as associate in applied science degrees). This has significantly increased enrollments in sub-baccalaureate programs. The most recent congressionally mandated assessment of vocational

education indicates that while vocational enrollments on the secondary level are still shrinking, they are sharply up at the postsecondary level. Second, community colleges have become the chief institutions in this country for reskilling tens of millions of adults already in the work force. They are providing ever-increasing amounts of personally customized training, for much of which degrees of any sort have little relevancy.

Perhaps of even greater consequence is new evidence that these profound economic changes have begun to influence the education and learning behavior of adults. After years of being told repeatedly that employment security is vanishing and that they must take more personal responsibility for their employability, adult workers may be listening and taking action. According to the National Center for Education Statistics, the adult worker group aged 35 to 54, which will comprise about one-half of the work force by the year 2005, is the fastest growing consumer of continuing education. In 1995, nearly 50 percent of this group took some form of adult education—up from just 17 percent only 10 years ago—and almost one-half of the courses they took were directly job related. Most of these adult workers are going to community colleges to pursue their continuing education.²

These four major trends—the latest dramatic increase in the number of young people leaving high school for postsecondary education, the increased demand from private employers for more highly skilled professional technicians, the need for many companies to retrain virtually their entire work force, and the new willingness of adults to seek more learning on their own—represent huge tasks of enormous consequence for community colleges. There is nothing “junior” about these institutions any longer.

Unfortunately, the more traditional responsibilities did not go away when these new challenges emerged. Many people still measure urban community colleges by how well they channel youth into postsecondary study and prepare them for 4-year institutions. And their very rootedness in their cities means that residents and local public officials expect the urban community colleges to be involved in all aspects of the social, economic, and civic life of the community and to be a common, integrating force, often in very diverse and divisive communities. Most urban community college presidents would agree that their institutions play four principal roles today.

- Providing a lower cost and more accessible alternative to the 4-year institutions for the first 2 years of postsecondary education for students on their way to the baccalaureate and advanced degrees.
- Offering occupational-specific and technical training programs with terminal associate degrees and certification for students not intending to pursue 4-year degrees.
- Helping local employers train their incumbent workers and managers in the skills demanded by changing business environments.
- Providing a hub for human resource, economic, and community development in the region they serve. They support local residents who want to explore new economic opportunities, update their work-related skills, or

pursue avocational interests. They serve as a resource and information center for community and business services. They find and catalyze opportunities for collective action among area employers.

Resolving the Tension Between Academic and Vocational Missions

There is bound to be some tension among the different components of this mission. Indeed, there have long been different judgments about the relative importance of the academic role of community colleges as a point of entry and a stepping-stone to 4-year baccalaureate education and the more vocational role of providing employer-certified, short-term, job-readiness training and terminal degrees for 1- and 2-year technical programs. These two points of view about priorities are especially important to urban communities, where the diversity of the student population and local employers challenge the flexibility of the college.

For many years, the barriers to higher education were seen as distance, cost, and the inability to make a full-time commitment. But during the 1970s many 2-year institutions, especially those in urban communities, were urged to treat deficits of previous education as a barrier to access. This was then used, appropriately, to justify policies of nonrestrictive enrollment and remediation and vastly expanded, comprehensive curricula. Because urban community colleges have been asked to serve such a wide range of students in the cities, they have tended toward a very wide range of programs, especially those of a vocational nature for students who have little expectation of pursuing a baccalaureate. Many young students enroll to explore career alternatives and decide what they want to do next with their lives. Local businesses—many of which are small and have no formal hiring criteria—have even less concern for degrees and credits. They want experienced job entrants who can step right into a job and exercise good judgment and problemsolving skills, and they want to upgrade the skills of their incumbent workers.

However, some have criticized this as vocationalism and have seen it as a diversion from the mission of giving underserved students the best opportunity to transfer to a 4-year college. These critics argue that, especially in the 1970s, many urban community college leaders lost interest in the transfer function and swung the pendulum of institutional resources toward remedial education and terminal vocational and technical programs. Those who hold this particular view of the urban community college worry that the push toward wider accessibility is not necessarily an avenue to opportunity but rather another obstacle to the baccalaureate at a time when, for a growing number of positions of influence and leadership, a 4-year college degree is increasingly a prerequisite. All community colleges have been subjected to this criticism, but urban institutions have come under sharpest scrutiny.³

Measuring community colleges as though their highest goals were to help students acquire 4-year degrees no longer makes much sense. In fact, one of the more interesting developments in community colleges is enrollment among those who already have their baccalaureate but who now seek stronger occupational and technical skills. The certificates and associate degrees are rapidly gaining

credibility and value among businesses. A person with an associate degree, for example, has double the chance of becoming a manager or professional as someone with only a high school diploma (Grubb, 1996). In 1990 an engineering certificate (usually requiring 1 year to complete) was worth 20 percent more than a high school diploma, and an associate degree was worth 30 percent more. In fact, if work is the first goal, community college programs make a great deal of sense. Growing evidence suggests that mastering a demanding community college technical program significantly helps to penetrate the labor market quickly and successfully, and upward mobility will be enhanced by further work toward the baccalaureate when the individual has the income stream to pay tuition. At the same time, community colleges are able to serve both people who are not sure what they want to do and enroll in order to explore career opportunities and those already in the work force who want specific skills to enhance their careers.

The diversity of the urban community college mission needs to be understood as a source of strength, not weakness. Indeed, given the vast span of backgrounds among urban students, there needs to be many avenues for student success. It is wholly appropriate to challenge the colleges to better themselves in all aspects of their mission, but the way to do that is not to set one against the other. Rather, it is to find the synergies among them: to understand how, for example, the transfer objective is enhanced by the closer links to practical economic opportunity and how academic and vocational strategies can be used to reinforce each other. Taking on these different roles is the essence of community colleges; this is what sets them apart from other educational institutions and drives their flexibility. In many urban centers, the diversity of mission also undergirds the unique capacity of these special institutions to be an integrating force in otherwise fractured communities.

Good News and Bad News

Now for the good and the not-so-good news. The good news is that many community colleges are meeting these challenges with distinction. Some are stumbling, but many others are exemplars of agility, flexibility, technical competency, and organizational efficiency that any private sector firm would be proud to achieve and few public sector organizations see as within their reach. In this essay, a few examples of high-impact undertakings are highlighted; there are many more.

The bad news is that the challenges facing these institutions are growing daily. The colleges are under-appreciated and many are too inadequately funded to continue to shoulder the burdens. They need more public and private financing, freedom from cumbersome administrative procedures and regulatory constraints, tighter links to employers in their regions, closer ties to emerging technologies and organizational improvements in America's leading firms, better partnerships with other groups in their communities striving for economic and social change, and help learning from each partnership and building on complementary competencies.

The Special Challenges Facing Urban Community Colleges

Nowhere is this good news and bad news more apparent and nowhere is it more important than in America's large cities. This is an especially challenging time to be on the staff or faculty of an urban community college or system of colleges that serves predominantly poor and economically disadvantaged communities in an American city. Of course, it was never easy, but it is even harder now. Community colleges cannot have a significant impact on the economy in our big cities if they focus only on successfully educating and training the students who make it to their doors. Without the ability to connect to growth and opportunity in the regional economy, urban residents are unlikely to develop high aspirations for education and training. Without such aspirations they will not commit to the difficult road of work and study that most community college students must travel. Without some vitality in the urban economy, employers will not get involved in the design and delivery of the occupational and technical programs that offer a pathway out of poverty for the urban poor. These facts place urban community colleges squarely in the business of economic development at a time when it is widely recognized that many urban communities are being left behind in America's uneven economic growth and there is little consensus about how to revitalize economically depressed urban neighborhoods.

Although some might disagree about the catalytic role of government in re-energizing inner cities, the need for private sector-centered, market-driven strategies is apparent. And here the assets of community colleges seem especially important. First, they usually have tight linkages with the employment community in the regional economy. More than most community-based organizations, community colleges know who the employers are and how to engage with them. Second, they are flexible organizations. Certainly more than any other educational institutions, and frequently more than most other public sector entities, community colleges can change and reconfigure their programs quickly and relatively inexpensively. Third, they are institutions of respect, legitimacy, and endurance in depressed urban areas where few organizations can claim these attributes. Fourth, their skilled faculty and administrators and their capacity for acquiring new skills and specialized capabilities quickly and frequently through consultants and part-time faculty show that they are already active in economic development. Finally, these institutions have a vested interest in the economic vitality of urban communities. If urban community colleges operate within a growing or revitalizing area, they will be more successful at attracting students and acquiring more resources.

The Loss of Jobs and Economic Vitality in Inner Cities

The prospects and possibilities of the urban community college are set in sharp relief against a brief review of the challenges that face America's big cities. Between 1950 and 1990 the average big American city itself lost as much as half of its population. Although the metropolitan region as a whole grew slowly, most of that growth was probably in the outer suburbs, well outside the city. Even more dramatic than the population shift has been the shift in wealth, income, and economic opportunity. More affluent residents have moved out and left the very poor

behind. Per capita income in the suburbs is probably 40 to 50 percent higher than it is in the city. Unemployment in the average big city is likely to be twice or even three times as high as the rest of the region.

Three decades ago, most of the jobs in most metropolitan regions were in the hub city. But now just the reverse is true—most of the jobs and almost all of the net growth of new jobs are well outside the hub city. Many employers relocated with the growth of interstate highways; their jobs are scattered along the outer beltways that were designed to route traffic quickly around, rather than through, congested hub cities. Government urban renewal programs sometimes contributed to the destruction of functioning communities and thriving local economies. Public housing strategies have also resulted in concentrated poverty and distress. And governments at all levels have created huge administrative and bureaucratic barriers to business investment in inner cities (U.S. Department of Housing and Urban Development, 1995). For example, well-intentioned environmental safeguards aimed at controlling redevelopment on old industrial sites that may have been contaminated have had a devastating impact on the pattern of industrial investment. Redevelopment of brownfield sites is often too expensive compared with locations in subsidized greenfields on the outskirts of cities.

As a result of these factors, business development and job creation in many cities, especially in the older residential and industrial districts, have virtually ceased. The only new jobs have frequently been those directly serving the central business district, and productivity changes and technological advancements have reduced the jobs in those areas that can be filled by the poorly educated and inexperienced. In some cities the downtown services sector has generated some job increases, but such jobs are generally low-wage and poorly connected to better paying jobs that offer a dependable path out of poverty. Most of the good central-business-district jobs require high levels of educational preparation and are held by commuters who come into the city from more affluent outer suburbs with better educational systems. Almost all regional economic development is occurring on the expanding fringes of these metropolitan areas. Many older industrialized districts located closer to residential neighborhoods are now virtually deserted. The civil jurisdictions near the core of the region are losing population, employers, jobs, and the tax base that will support good schools and transportation systems. Most immediately and dramatically, they are losing their connections to the regional economy. Perhaps 30 to 40 percent of the households clustered close to the center of many metropolitan regions do not have automobiles, compared with only 5 to 10 percent for the rest of the region. Given the limited public transportation systems in many cities, this means that commuting from poorer neighborhoods at the urban core to the good jobs at the outer fringes can be very difficult.

These harsh changes have a racial dimension. African-Americans in the region are four times as likely as whites to live in the decaying core of metropolitan areas. The proportion of poor African-Americans living in central cities rose from 38 percent in 1959 to 80 percent in 1991 (Wilson, 1996). African-Americans and Hispanics are four times more likely to live in poverty, live in deficient housing, and be unemployed. Many live in unsafe neighborhoods; the crime rate in the hub

cities is three to four times higher than in the suburbs. Income for white persons is nearly twice as high as for people of color.

The Link Between Education and Urban Unemployment and Poverty

The strong economic rebound of the past few years has begun to make a difference in urban unemployment and poverty. However, a close look at the structure of employment in our major cities reveals dramatic evidence of the importance of postsecondary education and underscores the pivotal role of affordable, accessible community colleges. John Kasarda's recent study of economic restructuring in major American cities documents huge job losses in industries in which workers averaged less than a high school education. This finding was only partly offset by increases in those jobs where most workers had more than 13 years of education. Within inner cities, jobs for less-educated workers have declined dramatically; most of those that are available offer very low pay (Kasarda, 1995; U.S. Department of Housing and Urban Development, *op. cit.*).

The level and quality of education and training has always made a big difference in people's standards of living, but the current educational bias is huge and the economic consequence of poor skills is cruel. Good jobs are increasingly dependent on high skills; more than ever before, people with better education and higher skills do much better relative to unskilled workers. An overwhelming majority of recent efforts to explain this growing division in earnings and wealth has found that the relative differences in education and skill account for the largest share of that division. Some people do well and others do not, largely on the basis of their education and work skills (Murnane et al., 1995).

The problems endemic to public education in larger U.S. cities have been well documented and are depressingly familiar. With low levels of educational achievement and poor work skills, poor inner-city residents have access only to jobs that pay the minimum wage or slightly more. Moreover, those who hold low-wage jobs are increasingly detached by economic relationships, transportation systems, or social connections from the better paying jobs that might become available with enhanced experience and work skills.

It used to be that relatively inexperienced and unskilled individuals in big cities could start work at the lowest wage level with area employers, often urban manufacturers, with the expectation that they could gradually climb the rungs of a clearly defined job ladder toward higher paying jobs that came with more experience and skills. In fact, in the 1940s, 1950s, and even well into the 1960s, the chance to work for one of the firms offering these career ladders drove much of the migration to America's big cities. In today's economy, however, most firms have eliminated internal career ladders. Those few job ladders that remain have far fewer rungs, and they are more widely spaced. Moving up them requires a huge increment of skill and experience, often represented by credentials such as an associate degree.

If we had no community colleges today, the creation of flexible, affordable, and accessible institutions of learning and skills development that could reach out to

both businesses and poorly trained individuals in urban areas, integrate diverse cultural and economic pressures, and play an enormous role in stimulating inner-city business development would most assuredly be at the top of our list of national priorities. In fact, of course, these institutions are in place and at work. Community colleges are having a major impact on the problems of urban America. With more help, they could play an even more important role.

Hallmarks of Best Practices in Urban Community Colleges

Perhaps the best way to appreciate the potential of urban community colleges to help alleviate the problems of joblessness and economic stagnation in our big cities is to see what they do at their best, to review some of the best practices underway among them. Later in this essay I will balance this overview with an examination of some of the tough challenges they face.

Community College-Business Partnerships

Almost all business owners I have talked with in recent years have told me of serious problems they have encountered in recruiting high-skilled workers with the right technical qualifications and in finding entry-level workers with the foundation skills and work-related behaviors necessary for successful employment. To some extent this tight labor market results from smart economic policies that have promoted solid business growth and job creation. But it also reflects our inability up to now to tap the economic potential of all while leaving no one behind. We still have far too many unemployed and underemployed people in economically depressed urban neighborhoods; we must do a better job of pulling them into the economy.

Urban community colleges have the potential, especially in close partnership with employers, to meet this challenge. For example, in cooperation with employers the colleges can build training programs that link low-skilled jobs to higher skilled and higher wage ones, establishing pathways out of low-end jobs toward the higher wage opportunities that attract jobseekers trying to support families.

A good example of how these partnerships benefit the colleges, the corporations involved, and inner-city residents is the relationship between Johnson Controls and the Community College of Denver (CCD). In October 1995, they entered into a partnership under which Johnson Controls donated building systems control materials to CCD to build a new training facility at its downtown campus. This facility incorporates a state-of-the-art facility management and control system and an advanced controls laboratory. It now houses the Johnson Controls Institute. For 30 hours each week, Johnson Controls uses the facility to conduct customer and employee training. The lab also serves as a highly accessible sales demonstration center.

On its part, CCD is incorporating the Johnson Controls course curriculum into its environmental and refrigeration technologies program. It has created a certificate program in advanced control technologies and is awarding credit toward related associate degrees. Johnson Controls' customers and employees who take courses

from the Johnson Controls Institute receive credit for courses completed. CCD students have access to some of the most up-to-date environmental controls and management training facilities in the world. Because the program is located at the downtown campus, it is accessible to residents of inner-city neighborhoods who typically have limited access to high-technology, high-wage employers such as Johnson Controls. In Denver those residents now have an inside track toward employment with Johnson Controls and similar companies when they finish their course requirements.

Other corporations have partnered with community colleges to gain some measure of control and predictability over the skills of new workers and to gain access to training centers for upgrading the skills of current employees. For example, many of the large automobile and trucking companies, construction equipment manufacturers, and other major firms have created “schools” at particular community colleges to assure that new technicians have received specialized training and that existing workers can upgrade their skills.

A few years ago, several of America’s largest and most respected firms entered into a consortium to pool many of their supplier-focused training programs. The Consortium for Supplier Training (now consisting of Chrysler, Texas Instruments, Motorola, Xerox, Kodak, Texaco, SEMATECH, and Bayer) has entered into partnership arrangements with several community colleges around the country—such as Dallas County Community College—to deliver these training programs to suppliers located near the schools. This partnership has allowed the big firms to distribute supplier training much more widely than if they had used their own training resources. In addition, it gives the community colleges far tighter linkages and deeper familiarity with the strategic and technical issues deemed critical to these very successful firms. The partnership enhances the community colleges’ reputations and visibility as institutions of high-level training and allows their students to connect with potential employers and profit from the technologies and business strategies embedded in the training programs.

Firms in the services sector can also benefit from these community college partnerships. A new program at the Metropolitan Community College of Kansas City (MCKC) is aimed at the training of customer service representatives, one of the fastest growing service occupations in the Nation. These customer service representatives typically work out of call centers—large facilities in which the workers can handle hundreds of calls a day from around the country. Kansas City boasts 21 call centers, some of them very large employers, across its metropolitan area. To meet the needs of these centers and alleviate the high rate of unemployment in some urban neighborhoods, MCKC has started a call center training program to provide introductory training to entry-level workers and customized training to existing workers. The program has been funded by grants from several large companies, including AT&T, which provided the switching equipment. MCKC is confident that it can guarantee anyone who completes the training a job in one of the area’s call centers. In addition, the project will stimulate enhanced technical training for high-wage jobs in telecommunications technologies.

Portland (Oregon) Community College (PCC) has developed an especially creative partnership with Wacker Electronics to provide job training and employment to residents of a distressed area of the city. Wacker is a large micro-electronics manufacturer with about 1,500 employees located across the river from one of Portland's more distressed areas. Both the plant and the neighborhood are in a U.S. Department of Housing and Urban Development (HUD) Enterprise Zone. The manufacturer has had a serious problem recruiting and retaining employees and has suffered a huge and very expensive turnover rate among entry-level workers. Finding and keeping good employees during plans for a plant expansion has made new training strategies a top priority. As part of its Enterprise Zone location, Wacker is committed to hiring at least 50 percent of its new workers from the zone. In order to meet its training needs, Wacker and PCC developed a school- and job-based training program that concentrates on both industry-specific and general problem-solving skills. When a trainee commits to the program, he or she immediately becomes a Wacker employee. This means the student is paid during both the classroom and on-the-job training portions of the program prior to assuming full-time work. More than 500 individuals have begun the program and, to date, 400 have completed it and become full-time Wacker employees. The project began with an initial grant from the Oregon Department of Economic Development, but now Wacker funds the entire program. It seems to be a smart investment; the company estimates a 60-percent savings in training costs.

There are many other examples of these partnerships between businesses and community colleges. It is an obvious alliance with benefits for both. Industry needs a dependable source of training for current employees and new entrants with strong technical skills. Because the colleges are flexible institutions respected in the urban communities as a means to a good job and a pathway out of poverty, they are able to reach out to the underemployed in urban America in a way private firms alone cannot. Yet these partnerships in urban communities have not been tapped at anything resembling their potential. They have been very popular with community colleges already serving rapidly growing suburban areas where new business development and expansion are well underway. But fewer examples can be found of partnerships between major corporations and community colleges serving depressed inner-city neighborhoods with less business vitality.

In today's tight labor market, our urban centers are among the few places where potential workers still outnumber available jobs; in fact, our inner cities house hundreds of thousands of individuals who are still unemployed or underemployed. Enormous payoffs can be reaped from creative partnerships between companies willing to invest in the preparation of new workers and urban community colleges that have strong records of accomplishment in remediating basic skills and equipping students with technical and occupational proficiencies. Firms that have not examined the potential of these strategic alliances with urban community colleges are missing out on a very safe bet.

Work-Based Learning Opportunities

Work-study programs, internships, and cooperative job slots can make an enormous difference in the attractiveness and quality of education for those who need

income while working toward a degree. Imagine the positive signals that would emerge in a community where the area employers agreed to hire only those young people and adults who had, or were actively pursuing, a community college degree or certification. Imagine as well a community college system where jobs (most community college students have jobs) are directly tied to education and used to develop and reinforce educational competencies.

LaGuardia Community College in Queens, New York, requires all candidates for an associate degree to spend at least one semester in a cooperative job or internship with participating employers. For many of the students, these work-based learning experiences not only provide them with income and an opportunity to apply classroom learning and develop new skills, they often lead directly to a permanent job with the employer upon completion of the degree program. Employers, in turn, are able to recruit motivated new workers who are committed to further development of their skills.

The Community College of Philadelphia (CCP) has joined with the city's high schools, the Ogontz Avenue Revitalization Corporation, several other nonprofit organizations, and area manufacturers to create the Learning Enterprise Alliance (LEA). LEA consists of three educational centers working together in employer-driven education and training programs that help young people develop technical skills for specific industry clusters. Inspired by the highly regarded Project Focus Hope in Detroit, the program will begin with an effort to produce skilled workers for the precision manufacturing sector, where a critical shortage of skilled machinists threatens the competitiveness of several important employers. A 10-week Enterprise Prep School will bring students' basic mathematics, communication, and computer skills up to a basic level at which entry-level employment and further technical training become feasible. An Enterprise Technology Center will then help shape specific, industry-recognized technical competencies that will lead to career job opportunities. Graduates of these programs and other qualified workers can then move into the Enterprise University Center where they can pursue degree work at the associate, bachelor's, and master's levels.

Throughout LEA's three tiers, work assignments will form a critical element of the educational and training process. Community organizations assume the lead in recruiting students and providing support systems such as mentoring, counseling, financial aid, and daycare. CCP has the lead role both in designing the program of education and training and in ensuring that program participants receive the academic and industry competencies that will promote career mobility and progress toward high-wage jobs. As it builds toward success in precision manufacturing, the program will be expanded into other sectors of the regional economy.

Colleges Building Multi-Firm Cooperation

Community colleges also have the ability to knit together the discrete needs of small companies in pursuing joint solutions to common human resource problems. In Wisconsin, Madison Area Technical College has joined with other groups in the area to embark on an innovative program to create community career ladders—business- and community-recognized career transition steps for workers. These steps are governed by groups of related employers with

complementary occupational needs, facilitated by a system of credentialing for experience and skills, and supported by education and training institutions and public labor-market services. This strategy would create anew the job ladders that many larger employers once used and that provided a way for new, low-skilled job entrants to start near the bottom of the labor market and steadily work their way up to higher paying jobs that could support their families.

If successful, this strategy would enable a low-skilled worker in Madison to accept a low-wage job that represents not a dead end, but a start up the rungs of a career ladder supported by several firms. If these career ladders are supported by credentialing and training services, the firms at the first tier who employ people at lower wage jobs benefit from better recruitment opportunities, lower turnover, more committed employees, and help with training. Firms that can provide higher wage jobs in higher tiers would have both a system to guarantee the skills and job behaviors of their recruits and greater incentive to invest in developing the skills of these workers.

In today's decentralized, niche-oriented economy, many smaller, specialized firms cannot achieve appropriate economies of scale when training their workers. These small firms have been unsuccessful at finding similar firms and developing common solutions. Most firms, especially the smaller ones for which time is the most precious asset and associative skills are the most underdeveloped, have been unable to find opportunities for collective action. Community colleges can act as a catalyst for brokering joint training programs among regional firms with similar needs. Because they know and work with many of these firms individually, the colleges can pull them together to gain economies of scale and reduce the unit cost of training.

In San Francisco, City College (a 2-year institution) has joined forces with the garment contractors association, San Francisco fashion industries, and the needle trades union to establish Garment 2000—a consortium of apparel firms working together to modernize the industry. These firms have large numbers of employees from economically depressed communities throughout the San Francisco metropolitan area. They are under intense pressure to move rapidly to higher value and higher quality production through deploying new technologies, adopting advanced business strategies (such as “just-in-time” production systems), and building new relationships with retail outlets. Working with the firms, City College has developed a teaching factory to demonstrate new apparel technologies and business practices and to train workers and managers in their use. The college provides a central facility that has helped organize the firms to do together what they could not have done separately.

Sometimes community colleges form partnerships among themselves to work with business. In 1994 the Philadelphia Naval Base and Shipyards was faced with imminent closure, meaning the loss of 5,000 jobs held by long-term employees. No other big employers were ready to step into the gap, and a gigantic retraining effort was necessary to give the workers the chance for new jobs that they deserve. The community colleges of the region are trying to do just that. Community colleges in Philadelphia; Delaware County; and Camden, New Jersey, have entered into an alliance with Drexel University to create a central education and

training institution called Shipyard College. Backed by the city of Philadelphia, the National Science Foundation, the U.S. Department of Defense, and the Philadelphia Private Industry Council, the college provides a framework for a shared educational system: common registration, tuition, and accounting procedures; seamless transfer of credit among member colleges; articulation of courses on and off campus; shared resources and advisors; and very flexible, nontraditional class scheduling.

This strategy of working closely with area employers for customized training pays off in local support for the community colleges involved in such initiatives. Just a year ago, for example, Maricopa Community College, which serves the Phoenix metropolitan region, convinced county voters to approve a \$385 million bond issue for a capital expansion program that will increase the property taxes of the average homeowner by \$15 a year. The bond issue carried even in Sun City, the Nation's largest retirement community, and even though voters turned down bond proposals for new freeways and mass transit. According to many observers, the critical element was the overwhelming support from the business community, which successfully made the case for investments in technical education and job training to support the region's growth.

Community Colleges and Public Housing

Among the most exciting innovations in the past few years is HUD's Campus of Learners program—a special partnership between community colleges and public housing authorities. This program supports the reinvention of public housing, transforming it from a place where those too poor to afford independent housing are warehoused to a temporary community where families can live and learn while developing the skills for economic self-sufficiency. Each public housing complex can become a campus for learners, similar to the dormitories or family housing found on traditional college campuses. Families seeking to live in these communities would be subject to rigorous screening and high expectations for their commitment to work and learning. They would receive special help in developing work behaviors, skills, and educational competencies and would be expected to move on when they had attained their education and training objectives and found permanent housing.

This is not just a wishful vision of what public housing might be. In communities like Denver, Colorado, and Hartford, Connecticut, the vision is beginning to happen. The community college is at the core of this transformation. In Denver, for example, North Lincoln, a fully rehabilitated townhouse community operated by the Denver Public Housing Authority, is located just across the street from the downtown campus that CCD shares with other institutions of higher education. CCD offers residents of the North Lincoln Campus of Learners full access to a wide range of basic skills development, including general equivalency diploma (GED) programs, certified vocational training, and degree-oriented technical preparation and transfer programs. In family learning centers scattered throughout the residential campus, adults and their children have access to computer literacy programs and computer-supported training programs. Assessment, counseling, and tutoring services are available. Case managers and administrators in North Lincoln are treated as adjunct faculty at CCD.

At Charter Oak Terrace, Hartford's largest public housing community, each prospective resident is asked to join a family self-sufficiency program that establishes firm goals for training and education for each member of the family. Capital Community-Technical College, working in partnership with other area educational institutions, provides GED, basic skills, and job readiness training. Although the program has been underway for less than 1 year, several residents have already taken and passed certificate programs in such areas as lead and asbestos abatement and construction and have been placed in jobs.

Community Colleges and K–12 Education

Community colleges are rooted in the neighborhoods they serve. This means that they have special knowledge about these communities and have formed relationships with other institutions that serve them. For example, almost all community colleges are familiar with the local secondary public school systems. College presidents have regular meetings with superintendents of the K–12 systems and their high school principals and guidance counselors. In most of America's large cities this communication promises a far more seamless connection between high schools and community colleges with regard to career exploration and course offerings.

Some large urban community colleges actually operate high schools. In 1974 LaGuardia Community College created the first experimental high school within a community college, and its model has been widely replicated by other community colleges across the Nation. Known as *middle colleges*, these schools are as different as the colleges that house and administer them. But unlike most of the university-administered high schools that serve especially gifted students, these middle schools usually cater to the at-risk students who would seem among the least likely to be on a college campus. In some of the harshest inner-city neighborhoods of Chicago, New York, Boston, Dallas, Los Angeles, Memphis, Flint, Seattle, and several other cities, these middle colleges offer a second chance for youth who have not succeeded in conventional public high schools and provide a demonstration seedbed for educational innovation.

In east Los Angeles, the community college has developed special after-school and weekend programs for students from two high schools, two junior high schools, and an elementary school. The programs have had an impressive effect on the mathematics, science, and communication skills of the youth involved in the programs. Maricopa Community College, which serves the greater Phoenix metropolitan area, operates an alternative high school for youth who have already encountered the juvenile justice system, a vocational high school for youth with a special interest in technical careers, and a new charter high school that experiments with innovative approaches to public education. New articulation agreements in place with the traditional K–12 system mean that every high school student in Maricopa County will take at least one college-credit course before graduating.

Building Coalitions With Community Organizations

Community colleges also have developed strong partnerships with community-based organizations that pursue business development, housing development, and job development programs in severely distressed neighborhoods. The Community College of Allegheny County in Pittsburgh provides office space and facilities to an employment training and job placement program run by the Homewood-Brushton Revitalization and Development Corporation. The community organization in turn bolsters the efforts of the college to recruit students from nearby neighborhoods. In the West Oak Lane neighborhood of Philadelphia, CCP established satellite teaching programs at the Nia Center. Those programs help to anchor a multipurpose community center housed in what just a few years ago was a long-abandoned former school building, home only to junkies and crack dealers.

Urban Community Colleges Face Tough Challenges

The examples cited above are good stories of innovative practices and creative solutions to urban problems. Many urban community colleges, however, have important shortcomings and all face serious challenges. When I talk to the chancellors and presidents most respected by their peers, they offer remarkably similar diagnoses. Urban community colleges need:

- To acquire more money and new ideas about how to increase it.
- To gain flexibility by specializing and by learning to collaborate with other specialized institutions.
- To find better strategies and tools to measure success.
- To do a much better job in counseling their students.
- To become even more deeply involved with businesses and economic development strategies.
- To work together to develop stronger leadership and improve executive management.

Money

For some community college leaders, the best strategy to deal with these shortcomings and challenges is to acquire more money. And, in fact, most do need more public support. Although they are eligible recipients of both the vocational and higher education acts, no Federal legislation has ever been passed specifically for community colleges. Among the quick facts about community colleges summarized in the introduction to this essay is a reminder that while about 43 percent of undergraduates in the United States (about 30 percent of full-time students) are enrolled in community colleges, only about 19 percent of State funds and less than 10 percent of Federal funds for higher education go to community colleges. Students in urban community colleges are hardly homogenous in ability, cultural outlook, or aspirations. They are often uninformed about career choices and unsophisticated about course and program selections. Huge numbers of them are unprepared by their elementary and secondary education to do college-level work or to achieve the basic competencies expected by employers.

Remediation and counseling, integral parts of the community college's mission, are very costly.

Of course, community colleges are not supposed to be expensive, especially in comparison with research universities. If they become too expensive, high embedded costs will rob them of the flexibility that is the core of their competitive advantage. Still, their tasks are growing in scale and complexity, and an exploration of how—and how well—we finance them is necessary.

The mid- to late 1980s were a time of retrenchment for many community colleges, and State budget increases leveled off or, in some cases, actually declined. The relative economic prosperity of the past few years has loosened the purse strings only slightly. A few States, such as Missouri and North Carolina, have made sizable increases in their support for community colleges, but most community colleges will have to learn how to do more with less while retaining their historic responsibility for being accessible and affordable. This means diversifying their revenue sources by expanding business partnerships and aggressively exploring corporate and private philanthropy.

It does not seem either feasible or desirable to expect that most younger students will pay an increasing share of the cost to attend a community college. In fact, some States at the high end of the tuition cost spectrum may find it necessary actually to reduce their fees. Massachusetts, whose fees rank highest among all States for community colleges, is considering a second year of tuition reduction. Conversely, working adults seeking to return to college for new job-related skills may be able to pay a higher share of the cost of these courses than they have in the past. This raises the possibility of community colleges adopting a sliding scale for tuition and fees, charging less to lower income students than to those who can afford to pay more.

Specialization and Collaboration

In the private sector of the economy, tough international competition, increased demand for customized and high quality products, and the growth of segmented or niche markets and rapid advances in flexible technology, all coupled with the imperative to keep costs down (all trends that would resonate with community college presidents), have led many firms to pursue a business strategy that includes specialization and collaboration. These firms find they cannot be all things to all customers. They have to concentrate on improving their special core competencies and then, when a wider scope of product or service is required, they must learn to collaborate with other specializing firms. Firms that can combine their complementary competencies can do very well in today's demanding markets. Other organizations have learned from these lessons. Even government agencies are reinventing themselves through specialization and collaboration.

Unfortunately specialization and collaboration are strategies that most urban community colleges find difficult to pursue. They face limits to flexibility and disincentives to specialization, sometimes of their own making, but often imposed by State legislation or city regulations. Perversely, the absence of competition sometimes leads to a failure to cooperate. Some urban community colleges eschew

competition with schools in adjoining regions and enter into agreements to stay out of each other's territory. A consequence can be that there is little incentive to specialize, and therefore little reason to cooperate with other specializing institutions.

Many community colleges have defined areas of expertise and are unable to deliver programs outside that area. This means that these institutions are expected to meet all the needs from within their service area, but that they often do not see themselves as capable of specializing around a limited set of core competencies. They are frequently the only public postsecondary option for huge numbers of potential students and the only reasonably priced job-training source for small businesses. Unless the colleges are prepared to facilitate access to the specialized capability of other colleges for example, it is hard to inform a growing biotechnology cluster that the local community college has decided not to develop competencies in biotechnology training. It is even harder to tell students interested in a career in microelectronics, for example, that this discipline is absent from the core specialties of the community college.

Yet the college that seeks to be all things for all customers may find that it serves all of them poorly. The challenge facing community colleges and their governments is to figure out how specialization and collaboration can optimize their most important asset: their flexibility to respond with speed and agility to new problems and opportunities.

Measuring Success and Improving Retention

Most community colleges have done no better than their 4-year counterparts in developing hard data about student outcomes and successes. The real test of the community college impact is what happens to the earning power and employment opportunities of students who complete programs of various duration and intensity. Unfortunately, few schools have developed the capability to assess these outcomes. That fact makes it difficult for community colleges to argue for increased public funding. It makes it almost impossible for any particular school to claim that it does a better job in a particular program than any other school. The California legislature recently has required its community colleges to upgrade their student assessment effort by collecting and analyzing data that can document student success. The institutions must give higher priority to evaluation and impact analysis based on student success.

Combined with the issue of student success is the matter of student retention. In all community colleges, but especially in large urban ones, too many students leave before completing coherent programs of study. Just as at every other level of schooling, the students report that they leave because they do not see enough connection between their studies and their objectives. The tie between retention and context-based learning needs to be developed further; students need to have a clear view of employment at the end of their course of study and they need to see feasible and obtainable thresholds that assure them that they are on the right path. Anyone who has witnessed 40-year-old men and women taking biology and mathematics in preparation for a nursing program cannot fail to be impressed with the commitment with which these students work together to help each other when a clear goal is visible.

Counseling and Advising Students

Community colleges have failed to counsel and advise their students, which should be expected of institutions serving populations of low-income youth, underemployed adults, ethnic minorities, and immigrants. As noted above, many of these students have not had adequate preparation at the secondary level; many come from families with weak attachments to the world of work and underdeveloped connections to people and places where they might find good career advice. The 2-year colleges that reach out to these students must more effectively help them understand their career choices and make the education and employment decisions that will support those choices.

Community colleges should be encouraged to take the lead in their areas to develop communitywide clearinghouses for information about education, training, and jobs. The common term for this is the *one stop shop*, a single entry point for a business or individual who wants information about, or access to, education and training opportunities. But equally important, the college should serve as a clearinghouse for students to find jobs. Too many colleges have weak placement offices that devote more time to finding part-time work for students than finding full-time jobs for graduates. Compared with most universities or even with high schools, student counseling and placement services are quite weak in most community colleges. The students themselves at many community colleges acknowledge their need for more help to make decisions about courses, programs, careers, and jobs.

Economic Development

The potential of community colleges to provide aggressive leadership in urban economic development has not yet been fully explored. Most frequently, the role of the urban community college is seen as limited to the supply side of education and training strategies—helping prepare people for good jobs or for further postsecondary education at the baccalaureate level. However, strong evidence argues that community colleges can be powerful institutions for stimulating job growth by working on the demand side—helping entrepreneurs develop new business opportunities, helping existing businesses become competitive, serving as a hub for area firms to develop collective solutions to common problems, helping those businesses develop human resource policies that are more favorable toward less-advantaged local residents, and connecting urban dwellers to growth and vitality in the regional economy.

Two-year colleges that want to make a bigger difference in stimulating business growth and job demand in the urban economy have to become players in private sector-based collaboratives that pursue urban growth strategies. This means they need to work very hard across several dimensions to:

- Understand the structure and performance of the regional economy and the inner-city subeconomies.
- Identify key business clusters whose strengthened performance will drive the regional economy and improve conditions in the inner city.

- Help firms find ways to support collective action.
- Provide services to firms in these business clusters that will contribute to their business success, produce trusting relationships, and influence human resource strategies.

Leadership

When individuals most knowledgeable about urban community colleges are asked what single factor is most responsible for the fact that one college succeeds while another declines, they almost invariably respond that it is leadership. The personal qualities of the chancellor or president and the continuity and commitment of governing boards seem to be the most important attributes of this leadership. Over time, the quality of faculty and staff is directly related to the strength and consistency of community college leadership.

These are enormously responsible positions. Several urban community college chancellors run enterprises that educate more than 100,000 credit-seeking students annually and serve far more with noncredit programs on campus and in offices and factories. These large urban systems have several hundred faculty members and many employ more than 1,000 people. They have huge physical plants and millions of dollars worth of equipment and educational technology. The positions of chancellor and president demand managerial skills, strong vision, intellectual clout, and charismatic leadership.

Keep in mind that the administrative leadership and governance of community colleges is sharply different from that of 4-year colleges and universities. The formal authority of the community college rests in appointed or publicly elected boards that are seen almost as politicians and are held accountable to the individual needs of specific communities. In addition, community college leaders are less rooted in academic traditions and more likely to have skills similar to those of other urban administrators.

To their credit, community colleges have recognized the importance of leadership and responded with several professional development and leadership institutes. They have initiated special efforts to develop leadership skills in women and ethnic minorities, and it is paying off. The racial and gender diversities of community college chancellors, presidents, and high ranking staff are strikingly wider than those of similar officials in 4-year institutions and most other public organizations (to say nothing of private enterprise).

A national coalition of 2-year colleges serves the Nation's major urban centers. Twenty-one urban college systems have created Renewal and Change 2000 (RC 2000), a group that grew out of an Urban Colleges Commission created in 1994 by the American Association of Community Colleges. RC 2000 is a forum for presidents and chancellors to meet twice a year for discussion and joint consideration of the special challenges and opportunities that face major urban institutions.

Helping Community Colleges Convert Best Practices into Common Practice

What are the strategies that will help urban community colleges overcome these barriers to greater achievement? How can they convert the best practices programs and strategies of some colleges—many of which I have mentioned in this essay—into common practice in all the colleges? Although many colleges are making significant contributions to their local economies, too many innovative approaches are too new and small in scale to achieve their promise. What can we do to support and encourage improvement? Again, strong, knowledgeable administrators have reached a consensus.

Moving Shadow Colleges Out of the Shadows

At the same time that the status of the associate degree is rising among employers, demand for noncredit skill upgrading, technical consulting, and special services is increasing. If colleges are to respond quickly to industry, they cannot be hamstrung by bureaucratic red tape or administrative regulation. The most innovative noncredit programs are organized either at the periphery or just outside the traditional college, sometimes even as separate, nonprofit entities. These entities are sometimes called *shadow colleges* to signify their distinctive nature. Most community colleges have organized business and industry services programs outside the framework of the more traditional institutions.

These programs have grown up in the shadow of the formal institutions because many of the colleges themselves are subject to funding formulas, program and course approval procedures, labor agreements, and other requirements that deny the flexibility and agility necessary to respond quickly to the needs of firms and their employees. If, as I have argued here, flexibility is the most important asset of the community college, it is time to take a hard look at these restrictions.

Expand Technology Use

The growing applications of telecommunications and information processing technologies have already made major changes to the ways in which community colleges work. But compared to the technological changes that will occur during the next several years, these recent developments are still modest. To date, the major application of these technologies has been in distance learning, a subject of perhaps greater relevance to rural community colleges facing huge problems of geographic dispersion than to urban institutions whose market is more concentrated. But the newer applications of this technology are focusing around *asynchronous learning*.

Whereas traditional distance learning courses overcome physical distance by offering students classes away from campus, asynchronous learning overcomes both distance and time hurdles. It makes feasible the creation of a course structure that allows students in different locations to receive instruction at different times—so-called “anywhere, anytime” education. Combining interactive, computer-based hardware (such as CD-ROMs and Internet servers) with advanced

software, workers “attend” classes when and where their schedules allow. Electronic mail and news groups facilitate the creation of “classrooms” where students can communicate with each other and their instructors, eliminating the isolation and passivity usually associated with computer distance learning. Community colleges will need help to master this technology.

Target Clusters

Because community colleges are basic building blocks in local production systems, their curricula ought to reflect the needs of those systems. That means colleges ought to acknowledge and support regionally important clusters by ensuring a steady stream of skilled and motivated entry-level workers and providing skill upgrading and specialized technical services. Macomb and Wayne State community colleges in southeastern Michigan serve the automobile industry and have developed strong specialized competencies that reflect the special needs of that industry. Foothill-DeAnza Community College in Silicon Valley provides microelectronics engineers and specialized technological services that the computer industry needs. The Miami-Dade County community college system has encouraged its colleges to specialize around the needs of the several occupational clusters important to the regional economy. This is not to suggest that colleges should seek to serve only the dominant industries in their region. However, if they are not adept at anticipating and meeting the needs of those firms most important to the growth and vitality of their regional economy, they will not be able to develop the capacity to serve the needs of others.

Forge Alliances

Successful urban community colleges have formed a variety of alliances with other colleges, universities, and community organizations to rationalize and coordinate their programs and services for the students and businesses they serve. Milwaukee Area Technical College helped establish a teaching factory called Riverworks through formal working relationships with three community development centers and a group of businesses.

The community college is only one of a multitude of public and private providers of education and training. Many job-training programs offered by vocational centers, proprietary schools, and community-based organizations often duplicate or overlap community college programs. A recent General Accounting Office report identified 163 distinct Federal programs alone that support education and job training (U.S. General Accounting Office, 1995). This confuses those people seeking training and supports accusations of waste. Partnering with these other programs might mean relying on some of their special competencies while the college gradually evolves from being a vertically integrated producer of all education and training services to being a specialized broker of some services.

Balance Occupational and Academic Studies

To respond to the continuing criticism that occupational programs are too narrow in scope and neglect the full education of the student, community colleges ought to better integrate vocational studies with liberal arts. This can be done efficiently

and effectively by designing liberal arts courses within the context of a technical topic or by combining both technical and general courses into integrated curriculum clusters. For example, San Diego Community College uses clusters called City Blocks. One such cluster, on the history of technology in the workplace, combines history, English, and computer information science.

I noted earlier in this essay that community colleges have developed associate of arts or science degrees chiefly around the expectations of 4-year institutions and associate of applied science degrees and certificates chiefly around the expectations of employers. But many critics are beginning to question this fundamental division, wondering whether there is as much real difference here as some would suggest. Perhaps the skills needed to be successful in the kinds of careers for which community colleges are especially good are not that much different from those needed in careers that historically have required a bachelor's or advanced degree. In any case, few will deny that as the concept of lifelong learning takes further hold, the need to balance academic and vocational instruction gains importance. I believe this is especially significant for community colleges in America's big cities where many people depend on the affordability and accessibility of community colleges and where such wide diversity of needs and interests can be found.

Keep Taking Risks

One of the things I have learned from the administrators of urban community colleges is that no one program has everything right. Urban community colleges face huge challenges, and none of us knows the solutions to all of them. Some of the lessons beginning to emerge that might make a difference have evolved out of the willingness of some institutions to take risks. Community colleges must continue to be institutions that nurture risk takers. We cannot let a drive toward accountability reduce the willingness of urban community colleges to continue to experiment and take these risks.

Conclusion

I have argued here that urban community colleges hold the potential to help surmount the challenges of poverty and joblessness that sap the vitality and further economically depress neighborhoods in many of America's big cities. I have offered several examples of how, at their best, these flexible, affordable, and accessible 2-year colleges are making a huge difference by giving people the skills and the aspirations for economic success and by helping businesses improve their ability to compete. I have suggested a few strategies that might help more urban community colleges achieve the best practices of a few.

I think the Federal Government could do more to help, but the Federal role must be one that peripherally supports community colleges. Cabinet departments can rethink programs of education aid and job training—such as the public housing programs and Empowerment and Enterprise Zones at HUD—that might be failing to leverage the capacity of community colleges. Federal agencies can support demonstrations and pilot projects. President Clinton and other Federal officials

can continue to use their voices to sharpen public awareness and increase the visibility of community colleges.

In addition, President Clinton has proposed a series of important initiatives aimed at making postsecondary and continuing education more affordable for youth and adults. The Hope Scholarship Plan would provide a \$1,500 tax credit for students in their first 2 years of postsecondary education. In addition, the President has suggested that all taxpayers receive a deduction for the cost of college education up to \$10,000 and has recommended both an expansion of Federal aid for work-study programs and a major commitment to greater technological literacy for America's schoolchildren. If these proposals gain congressional support, they will have important beneficial impacts on community colleges.

Most of the responsibility for strengthening urban community colleges lies in the State capitols and the cities that fund and govern these institutions and with the business community whose access to skilled workers and technical support significantly depends on large, urban-based community colleges. I am especially intrigued by the possibilities for more and stronger partnerships between urban colleges and groups of employers. I believe in the power of employment to attract low-skilled people from economically depressed urban neighborhoods into education and training programs where they can begin to develop their economic potential. Urban community colleges represent our best hope for reaching that goal.

Notes

1. The Department wishes to acknowledge the contributions of Barry Bosworth and Stu Rosenfeld of Regional Technology Strategies, Inc., for making this essay possible.

The term *community college* is used here to represent all postsecondary institutions—including junior colleges, technical colleges, technical institutes, and technical branches of universities—that offer as their highest degrees sub-baccalaureate certificates and associate degrees.

2. The National Center for Education Statistics conducted the National Household Education Survey with an adult education component in 1991 and 1995 and plans to do so again in 1999. The 1995 survey interviewed nearly 20,000 people aged 16 and older about their participation in adult education. Information about the survey is available through the National University Continuing Education Association in Washington, D.C.
3. For a summary of this criticism, see Robert Pedersen's "Challenges Facing the Urban Community College: A Literature Review," in *A Handbook of Community Colleges in America* (Washington, D.C.: American Association of Community Colleges, 1992).

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