



BUILDING A CAREER PATHWAYS SYSTEM

Promising Practices in Community College-Centered Workforce Development

WORKFORCE STRATEGY CENTER



Who We Are

The Workforce Strategy Center is a nonprofit management consulting group that works throughout the United States to help create public systems that promote career pathways leading people to high-wage, high-demand employment. Current projects include national research on how to put community colleges at the center of regional workforce development systems and partnerships with public and private sector leaders in California and New York to develop pathways to information technology careers for unemployed and underemployed individuals. For more information, visit our web site at www.workforcestrategy.org or contact us at 718-434-4790.

Building a Career Pathways System:

Promising Practices in Community College-Centered Workforce Development

August 2002

WORKFORCE STRATEGY CENTER
A NONPROFIT MANAGEMENT CONSULTING FIRM



ACKNOWLEDGEMENTS

The Workforce Strategy Center would like to thank The James Irvine Foundation, The Ford Foundation, The William and Flora Hewlett Foundation, and The Annie E. Casey Foundation for their support of our research into effective practices in developing career pathways in a number of states and regions around the country. This report, funded by the Irvine and Ford foundations, is the first in a series of three reports that are part of this project.

We are also grateful to the state policymakers in North Carolina, Washington, Florida and California, as well as the representatives of 19 community colleges and their partner community organizations, Workforce Investment Boards, and state and local welfare agencies who gave us their time and energies in making this work possible.

Co-Authors:

Julian L. Alssid
David Gruber
Davis Jenkins
Christopher Mazzeo
Brandon Roberts
Regina Stanback-Stroud

Researchers:

David Dearden
Sara Rab

Editors:

Suri Duitch
Carl Vogel

Designer:

Julia Reich

Cover:

photo by Sharon Hall Photography,
provided courtesy of Martha Lucey,
City College of San Francisco

TABLE OF CONTENTS

SECTION ONE:

The Career Pathways Model	1
Background	1
<i>sidebar</i> : Austin Community College	2
<i>chart</i> : Education and Training Pay	3
What are Career Pathways?	4
<i>sidebar</i> : The Elements of a Sector-Based Career Pathway	5
Building and Supporting Career Pathways	5
<i>chart</i> : San Francisco IT Career Ladder System	7
Issues	8
Resources	9
Our Research	10

SECTION TWO:

Career Pathways at Community Colleges	11
What Career Pathways Offer Community College Leaders	11
Background	11
Issues	12
• Separate and Conflicting Community College Programs	12
<i>sidebar</i> : Case Study: Guilford Technical Community College	13
• Lack of Resources	14
• Isolation from Employers	14
• Lack of Incentive to Serve the Disadvantaged	15
Promising Practices in Community Colleges	15
• Creating Bridges between Developmental and Credit Bearing Programs	15
• Creating Internal Pathways to Certification and College Degrees	17
• Integrating Academic and Vocational Education	17
• Expanding Support Services	18
• Integrating Administrative Structures	18
• Using Resources Effectively	19
<i>sidebar</i> : Case Study: Cabrillo College	20

SECTION THREE:

Building Strategic Partnerships for Career Pathways in the Community and the Region	22
Why Should Community and Regional Policymakers Be Interested in Career Pathways?	22
Background	23
Issues	23

- Inertia/Lack of Incentive 23
- Lack of Framework for Collaboration 24
- Lack of Resources for Operation 24
- System and Regulatory Barriers 24
- Strategic Partnerships: Promising Practices 24**
 - Partnerships with the Workforce and Social Service Systems 24
 - Partnerships with Community-Based Organizations 25
 - Partnerships with Adult Basic Education Providers 27
 - Partnerships with Employers 27
 - Instituting Regional Partnerships 28
 - sidebar: Regional Opportunities 29*

SECTION FOUR:

How State Involvement Can Assure Long-Term Success 30

Why Should State Policymakers Be Interested in the Career Pathways Approach? 30

Background 30

Case Studies: Two States Pursuing a Career Pathways Strategy 31

- Washington State 31
- North Carolina 32

Issues 33

State Workforce Policy 33

- Lack of Constituency to Motivate Change 33
- Insufficient Integration of Workforce and Economic Development Systems 33
- Failure to Utilize the Workforce and Community College Systems 34
- Lack of Resources to Sustain and Institutionalize Career Pathway Efforts 34

Community College Systems 34

- Limited Resources for Career Programs and Training 34
- Reluctance to Establish Career Programs for Academic Degree Credit 34
- Insufficient Access and Support Policies 35
- Insufficient Accountability Measures and Weak Incentives 35

Promising Practices at the State Level 36

- Innovative Partnerships and Strong Leadership 36
- Creative Use of Resources 37
- Commitment to Skills Training, Increased Earnings and Economic Competitiveness 37
- Supportive State Community College Policies 38

RECOMMENDATIONS 39

For Community College Level Administrators 39

For Community and Regional Level Policymakers 41

For State Administrators 41

For Community College System Policymakers 42

California-Specific Recommendations 44

SECTION ONE: The Career Pathways Model

Education has always been one way out of poverty for the unemployed and working poor. Today, it is almost the only way. In order to support a family move from a low-paying job into a long-term career and become truly self-sufficient, economically disadvantaged citizens need to be prepared for the new economy—and that means acquiring the education and skills to succeed in high-wage jobs.

The nation's experiment with welfare reform has underlined the importance of this lesson. While welfare reform's "work-first" philosophy has helped move participants into jobs, it has not led nearly as often to economic self-sufficiency. As experience throughout the country has demonstrated, many welfare recipients have entered the workforce but remain in poverty.

There is a clear need—and opportunity—to develop a large scale, flexible and open system that can offer the education and training required for high-wage, high-demand jobs to all who need them: welfare recipients, unemployed and underemployed workers, at-risk youth, and anyone else with little skills or education who wants to better his or her job prospects.

The nation's 1,132 community colleges provide the most logical—and, for all practical purposes, the only—foundation for this kind of broad-based workforce development system. Colleges combine accessibility to the community, low tuition, an open-door admissions policy, a wide range of education and training offerings, and a continuing funding base. No other institution can match the ability of community colleges to educate and train large numbers of people.

Community colleges can provide a bridge to high-wage, high-demand employment for undereducated workers by serving as the focal point of regional partnerships that bring together all the key actors in the workforce development system—workforce agencies, community-based organizations, social service agencies and employers. Working together, these partners can create new "career pathways" that meet the needs of both employers and workers.

This report highlights the potential of community

colleges to take the initiative in establishing career pathways on a local and regional basis. Recognizing the breadth of this mission, it looks at promising policies and programs at the state, regional and institutional levels and outlines strategies that help advance the role of community colleges as the catalyst for career pathways. In order to promote more effective practice, the report highlights specific examples at each of these levels that may be replicable nationally.

BACKGROUND

This report, funded by The James Irvine Foundation and The Ford Foundation, follows an initial study conducted for the Irvine Foundation that identified evolving best practices in workforce development.¹ That analysis defined three themes that, we believe, both reflect a developing consensus among policy-makers and researchers and point to the opportunities for a career pathways model.

1) Individuals need some form of post-secondary education and training in order to become financially self-sufficient for the long-term.

Labor market research has increasingly demonstrated the importance of continuing skill development to success in high-wage, high-demand employment, and national data shows a strong correlation between education and earnings (see "Education and Training Pay" chart, page 3). This is especially important today, as millions of Americans are moving from welfare to work, a critical juncture that may determine how well they fare for decades of employment.

Training programs that emphasize "work first" do little to promote career progression. For example, a 2001 report by the Public Policy Institute of California found that even in an expanding economy, a large percentage of people placed in entry-level jobs earn wages at or below the poverty level.² In Florida, a state-sponsored study found that individuals placed in jobs shortly after welfare reform implementation in 1996 were earning an average of only \$13,812 a year in 2001, well below the poverty line for a family of four.³ And a recent report from the Center for Law and Social Policy that looked at earnings in ten other states concluded that after leaving assistance, TANF

(Temporary Assistance to Needy Families) recipients “face significant financial instability, and that employment alone will not lead to financial security.”⁴

2) The nation's community colleges are in a position to help provide disadvantaged individuals with the skills and education they need to get out of poverty.

Community colleges are the core public institution for education and skills training in the United States, with a total student population of 10.4 million. In California alone, 108 community colleges serve 1.5 million students a year, a number that continues to grow. No other entity matches these schools' combination of scope and scale, typically a broad offering of basic skills, technical training, and traditional post-

AUSTIN COMMUNITY COLLEGE

Each semester, Austin Community College helps hundreds of low-income students move from unemployment or a dead-end job into the start of a well-paying career through career pathways in 13 different industries, including health care, public safety, construction and semiconductor technician training. But the school doesn't do it alone. ACC works hand-in-hand with the city and local employers, high schools and community-based organizations—and has changed how the college operates in some key ways.

For example, the Construction Gateway Program—a six-week, hands-on curriculum for unemployed, underemployed or incarcerated men and women—was designed in conjunction with the Capital Area Training Foundation (CATF), an industry-led nonprofit created by the City of Austin and the local Chamber of Commerce. Graduates earn Occupational Safety and Health Administration certification and eight college credits towards an Associate's Degree in the building trades. The program has graduated more than 350 participants and has enjoyed an 85 percent placement rate during its four years of operation. Other career pathways teach participants the basic education, life and technical skills they need for careers such as an electronics technician or nurse. Funding comes from city general revenue funds and specially directed funds from companies new to the region, as well as student training money from the federal Workforce Investment Act.

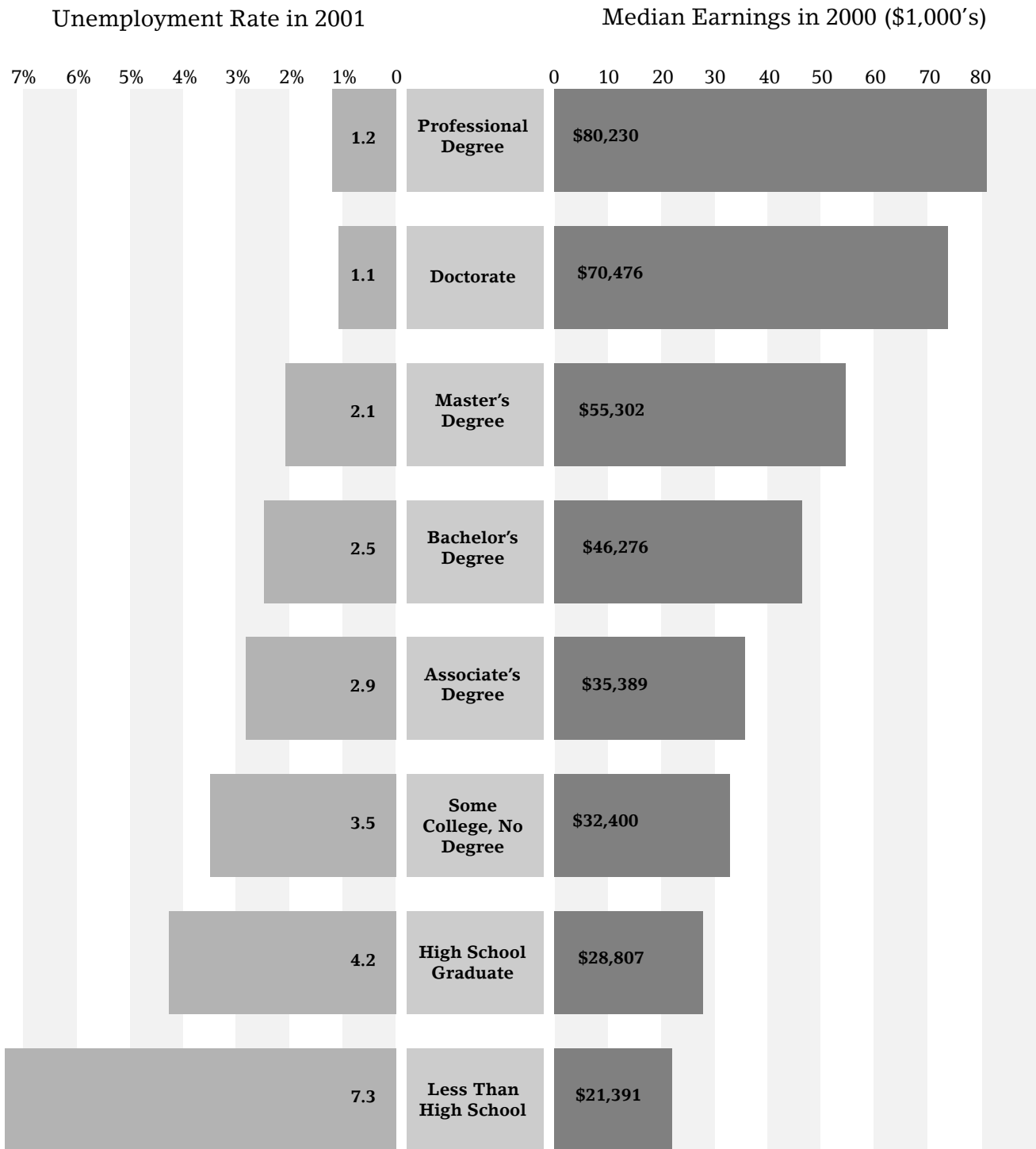
Austin Community College was able to create such successful programs because of several crucial elements:

Vision: ACC's president, a long-time proponent of creating career pathways in the school, had the foresight to make necessary internal changes to support these systems. For instance, to help persuade continuing education students to enter degree programs, those courses provide both continuing education and college credit work. The school encourages academic faculty members to teach in customized training and continuing education programs. And the continuing education curriculum was altered to be in line with the academic skills standards required for degree programs.

Industry Guidance: With unprecedented economic growth boosting demand for skilled workers, Austin's government wanted to make certain that local businesses had some say in the shape of worker training in the city. Now, through CATF, the community college has an ongoing relationship with businesses that help shape components of career pathways so that workers learn the skills local companies need.

Community Connections: In addition to a working relationship with the city, the Chamber of Commerce and local businesses, Austin Community College works with several other local entities, including other training institutions, local high schools and a religious coalition, Austin Interfaith. Not only do these partnerships provide outreach to attract new students to ACC, they provide other services and training resources—so the career pathways extend beyond the campus.

Education and Training Pay



Note: Earnings for year-round full-time workers 25 years and over; unemployment rate for those 25 and over

Source: Bureau of the Census; Bureau of Labor Statistics

Data provided by: Postsecondary Education OPPORTUNITY, Oskaloosa, Iowa (www.postsecondary.org)

secondary education. Community colleges, moreover, are a long-term, stable presence in the community, open to all. Despite a failure in many instances to realize their potential as a bridge to higher-wage jobs, community colleges are a gateway to continuing and higher education, especially for economically disadvantaged individuals. Nearly 50 percent of all college students begin their education at community colleges.

3) A workforce development system can help individuals move from unemployment by becoming the skilled workers that employers demand.

The gap between well-paying jobs and unemployed, undereducated workers looms large. Employers in many fields have a critical need for applicants for job openings that are increasingly complex and demanding. But individuals with little education and work experience are not currently qualified to fill these positions. To prepare the supply of unemployed to meet industry's demand, this country's workforce and education systems need to be organized around long-term, comprehensive career pathways that integrate education, training and work and that are targeted to high-wage, high-demand employment.

It should be noted that pathways do not only benefit individuals. For employers, the strategy can offer a means for recruitment and training of new employees, skills upgrade for existing employees, and improved retention. And for economic development agencies and other government officials, career pathways help ensure the vitality and growth of the local and regional economy by helping employers and key economic sectors.

WHAT ARE CAREER PATHWAYS?

Literature and research in employment education and policy have increasingly focused on career ladders or pathways.⁵ Typically these pathways focus on high-demand, well-paying employment sectors, such as manufacturing, healthcare or information technology, and have incorporated into one seamless system all the steps—skills training, work experience and upgrade training—needed to prepare an economically and educationally disadvantaged worker for employment in the field and advancement in a career.

While there are many career pathways models, the

most compelling builds a bridge for disadvantaged adults to economic self-sufficiency. In many ways, this vision of the pathway is just another version of what many middle-class Americans take for granted: a way to identify a promising field and build the necessary competencies to be prepared for a well-paying, long-term career.

To move from poverty and a poor education to a promising career, the best route is a path that ensures the participant is prepared for the labor market. To successfully advance individuals, a pathway should include:

- An introduction to career opportunities in a region's high-wage, high-demand employment sectors
- The basic skills needed to succeed in postsecondary education and training
- A transition to entry-level skills training
- Internships and employment
- Continuing upgrade training
- Social supports throughout as necessary

For example, five cities around the country are now developing an information technology career pathways initiative. In these locations—San Francisco, the East Bay, San Jose, Los Angeles and New York—the pathway includes six basic steps: (1) community outreach to economically and educationally disadvantaged adults; (2) basic skills coursework at community-based organizations that serve as “branch campuses” of local community colleges; (3) entry-level training for computer technicians and office workers; (4) internship placement; (5) entry-level employment as a computer technician or officer worker; (6) upgrade training in programming, database applications and computer networking. (See “San Francisco IT Career Ladder” chart, page 7).

Not every participant will necessarily take advantage of each component of a pathway like this. One student may be able to go directly to the entry-level training without any basic skills coursework, for example, while another may never use the upgrade training. By providing a comprehensive set of training and education,

however, the system ensures that all students are prepared for their new career, no matter what level they enter the pathway. And since the system is linked from stage to stage, participants do not have to search for the appropriate next step—just as a high school moves students through early classes to more advanced coursework as part of a comprehensive system.

BUILDING AND SUPPORTING CAREER PATHWAYS

Career pathways provide a framework to structure the employment and training offered by community colleges, employment and training agencies, social service providers, and the government agencies

THE ELEMENTS OF A SECTOR-BASED CAREER PATHWAY

There is a growing national consensus for organizing workforce development around sectors of employers such as health, information technology, manufacturing and finance. Under this approach, employers, workforce agencies, training providers and community-based organizations jointly develop training and education to meet a sector's workforce needs.

Implementing sectoral training at any scale requires a workforce system that is organized to meet both the needs of employers for skilled workers and the needs of individuals for training in the career field. A successful system must serve the full spectrum of individuals seeking training—those with few skills and no experience in the workplace, those currently employed in minimum wage jobs and those in need of upgrade training to advance in their careers.

To fully meet these needs, a regional system must provide a long-term and focused combination of preparation, training, work experience and upgrade training that helps individuals enter and advance in the workplace. These *career pathways* should ideally include three distinct and connected levels of training:

- **Basic skills training.** For those with little in the way of skills and/or work experience, such as many welfare recipients, a first level of training should offer orientation to career and educational opportunities, basic literacy, numeracy and computer skills. This training should lead directly to college-level skills training for higher wage entry-level jobs.

To reach all those in need, basic skills training should be offered both at community colleges and in the community itself, through branch campuses at community-based organizations (CBOs) and adult basic education (ABE) providers.

- **Entry-Level Training.** For those ready to enter into high-wage, high-demand career pathways, college-level skills training is the critical transition step. This training requires basic literacy, math and computer skills as a prerequisite. In an ideal career pathway, entry-level training for those who have gained basic skills is relatively quick (up to six months) and offers a direct transition to higher-wage entry-level jobs in the region. Internships and work experience are often a key element of this training. As with basic skills training, to reach all who can potentially benefit, entry-level training should be offered both at community college campuses and in the community itself.
- **Upgrade Training and Education.** This training, targeted to workers with demonstrated skills and work experience, provides additional skills and education needed to advance on a career pathway and meet evolving employer and labor market needs. For maximum impact, this training should be offered at the workplace, at community colleges and in the community.

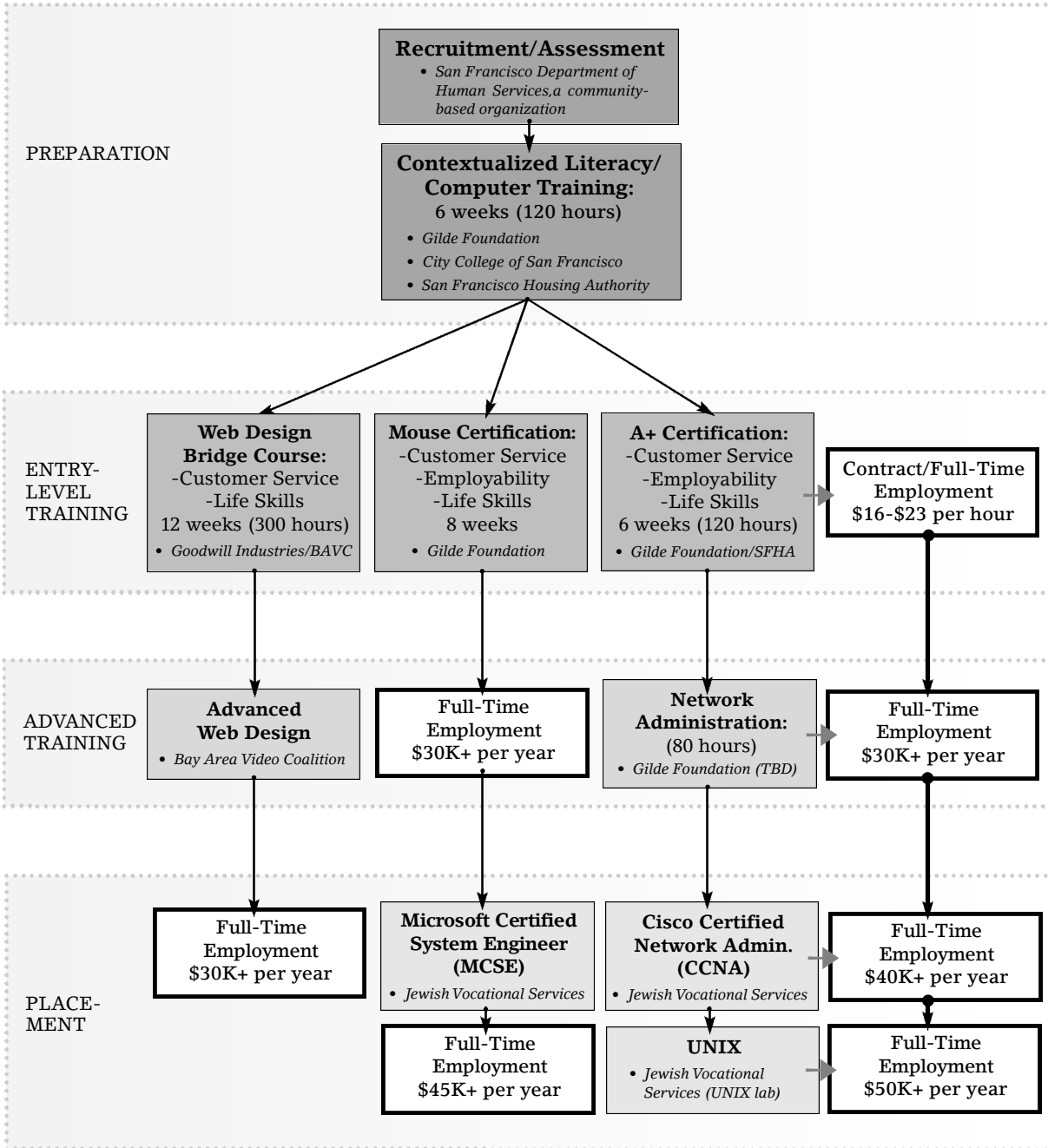
responsible for training and supporting welfare recipients, the unemployed, and working poor. Individually, no one of these entities can offer the comprehensive services and support needed to assist low-income individuals in gaining long-term economic self-sufficiency. Together, however, these entities have the capacity and resources to provide comprehensive career pathways.

Community Colleges

While state and national policies are important to the success of career pathways, the ultimate responsibility for planning and implementation resides at the local level in the community college itself.

A typical community college already encompasses most of the key components of the career pathways

San Francisco IT Career Ladder System



Note:

Case Management: community-based organization

Job Retention: community-based organization

Curriculum Development: City College of San Francisco

Instruction: City College of San Francisco

model. The nation's 1,132 community colleges are expected to fulfill a wide variety of roles: providing a gateway to higher education, remediating the large numbers of students who need help to be ready for post-secondary education, training the nation's workforce, and serving as an economic development engine for business growth.

To meet their various obligations, colleges have built a number of separate and distinct structures and programs, each focused on meeting a specific objective: academic preparation and transfer to four-year colleges, contract training for employers, remediation for low-skilled adults, and vocational training. In most schools, however, these departments rarely work together. Linking the programs and the departments by establishing a formal "bridge" between basic skills, academic preparation and entry-level training is the foundation for career pathways.

Community and Regional Partnerships

While community colleges are the center of the career pathways model, other entities are crucial to its success. In partnership, community-based organizations (CBOs), adult basic education (ABE) providers, and workforce and social service agencies complement and extend pathways:

- *CBOs and social service agencies* can recruit individuals isolated from post-secondary education and career opportunities, as well as provide needed social support services during their tenure in the program.
- *Workforce agencies* can direct resources toward community colleges to provide financial and operational support in a city or region.
- *ABE providers* can offer preparatory services and provide a bridge to community college programs.
- *Local employers* can help define needed worker skills and provide internships and work sites to deliver upgrade training to workers at all skill levels.

States

As the primary authority for education, workforce training and economic development initiatives, states

have the potential to encourage and support career pathways. Governors, education and workforce officials can:

- *Adopt career pathways* as the model for training and education for the state workforce development system.
- *Encourage pathway development* within individual colleges.
- *Stimulate strategic partnerships* in the surrounding communities.
- *Commit resources* from welfare, workforce, economic development and the community college systems to career pathways.

Currently, career pathways are by-and-large separate and limited programs, despite their successes. In order to build a system that is larger and more comprehensive in scope, all three levels of participants—community colleges, local and regional partners, and state government—must become involved. When we have found instances where the state makes the resources available and local entities work with the community colleges, career pathways provide a real and powerful opportunity to move economically disadvantaged individuals into well-paying careers.

ISSUES

While there is a strong rationale for establishing career pathways, there are relatively few of these systems in place or under development on a large scale. No report on the advancement of career pathways would be complete without a frank assessment of the barriers to implementation.

Lack of Coordination at the Community College Level

Within individual community colleges, basic skills, academic and vocational education are frequently perceived and organized as separate divisions with distinct missions, programming and, in some cases, funding sources. This hinders development of career

pathways, which have at their core a well-developed bridge between basic skills courses and career education and training programs that lead to higher wage jobs. Without this bridge, it is difficult to convince significant numbers of students in basic skills classes to further their education—because they see no clearly defined route to higher wages and better jobs. Many other low-income students are not even aware of the further opportunities for education or training at their school. Furthermore, the separation between academic, vocational, and contract or customized business training courses (and faculty) makes it difficult to create training that is robust, far-reaching and responsive to the labor market.

Lack of Coordination Among Other Parties

A similar lack of coherence characterizes workforce development outside the college. Education, workforce and social service entities are typically separate and distinct, even though the clients at each door are often one and the same. Since people and programs in each sphere have nothing to do with each other formally and usually even informally, it has been very difficult to develop strategic partnerships between community colleges and outside agencies. These divisions are often a reflection of similar distinctions at the state level.

Lack of Interest

Differing philosophies among state policymakers on how to handle welfare reform also pose a notable problem. Many state and local agencies continue to focus on “work first,” moving economically disadvantaged individuals quickly into a job rather than a career opportunity. If anything, federal policies seem to be moving even further in this direction.

Inertia

Many factors work against the creation of large-scale career pathways: the day-to-day challenge of delivering services, competition between agencies for funding, regulatory issues (both perceived and real), and the additional time, effort and money necessary to develop partnerships. Unlike in some other areas of public concern, there is little incentive for change or integration of any of the relevant systems. Workforce development and career progression are

priorities in only a few states, a situation that is, unfortunately, often reflected at the regional and community level as well.

Funding

While there are efficiencies gained from combining funding among different agencies, career pathways are an expensive departure from current short-term, limited training models. For large-scale efforts, additional resources will likely be required. This is particularly an issue in a budget environment where the focus of policymakers is on cutting rather than expanding budgets.

RESOURCES

To create career pathways, community colleges must restructure how they deliver education and career training, and a new system must be built to connect with other key institutions in economic and workforce development. While that will take effort, it must be noted that most of the elements required to build career pathways already exist. Community college campuses—complete with classrooms, faculty and appropriate courses—are part of most, if not all, American communities. Local and state economic development and workforce agencies are hard at work trying to build stronger local economies. Social service agencies and community-based organizations in low-income neighborhoods are trusted liaisons with local residents.

What’s more, existing funding resources can be used to support career pathways. Community colleges can draw down state per capita education funds (FTE) to create new programs for key employment sectors and new bridge or preparatory courses. Funding from the Workforce Investment Act (WIA)—the country’s current job training legislation—is now often used for separate and discreet programs, but these funds can be redirected to develop career pathways at community colleges. Welfare funding (TANF), though a declining resource, can also underwrite the training and support services needed to assist low-income individuals in pursuing career pathways. And economic development resources can be used to provide upgrade training.

There is now an opportunity for local, regional and state policymakers to offer disadvantaged individuals career pathways that provides all the necessary steps

to economic self-sufficiency. The building blocks—community colleges, Workforce Investment Boards, economic development agencies, local employers, social service agencies, etc.—and the funding resources already exist. To grasp this historic opportunity, decision makers at all three levels must be willing to reallocate resources and build a new system that connects these vital functions.

It is worth noting that, while this research focuses on the college, local and regional, and state levels, the federal government plays an important role by providing an array of funding that can be used to support this strategy.

OUR RESEARCH

With support from The James Irvine Foundation, The Ford Foundation, The William and Flora Hewlett Foundation, and The Annie E. Casey Foundation, we have conducted research into effective practices in developing career pathways in a number of states and regions around the country. We looked closely at the three key policy and program levels where decisions to implement career pathways are made:

- Community colleges, the focal point of a career pathways service delivery system
- Communities and regions, which provide the employment base, resources and a recruitment and referral network
- States, where principal decisions are made regarding policy and resource allocation

To structure our research, we identified three states with noteworthy career pathways systems based on a literature search and interviews with policymakers and

practitioners—North Carolina, Florida and Washington. We conducted site visits and interviews with state policymakers in each state. We also paid particular attention to California because of the state system's size and influence in the field, encompassing 10 percent of all community college students, and to reflect the policy interests of the Irvine and Hewlett foundations. We visited 19 community colleges and related programs, many in the above-mentioned states, and interviewed staff at CBOs, Workforce Investment Boards (WIBs), and state and local welfare providers.

This report on findings from these site visits and interviews is organized primarily to reach policy and decision makers at each of the three levels: colleges, community and regional, and state. Individual chapters focus on each of these three levels and include the following sections:

- A summary of why career pathways should be of interest to targeted decision makers
- A brief discussion of opportunities and issues
- A focus on effective policy and practice drawn from our research and site visits

A final chapter presents recommendations for policymakers.

Additional reports based on this research will focus on promising practices in specific aspects of career pathways:

- Contextualized learning and bridge programs that function as key elements of a career pathways model
- Community college partnerships with CBOs that engage disadvantaged individuals outside the college in career pathways

SECTION TWO: Career Pathways at Community Colleges

This section focuses on how community colleges can implement a career pathways model. It is based on the assumption that these schools, as the country's primary infrastructure for workforce education and training, are the natural focal point of any career pathways system.

Implementing career pathways can help fulfill the most fundamental mission of community colleges: to be an institution that serves all parts of the community. By creating a bridge out of poverty and into well-paying jobs, the school serves low-income, poorly educated constituents in a way that can make a real difference in their lives over the long term.

To build career pathways, colleges need to reconcile their many and sometimes conflicting missions and goals by creating new bridges and transitions for students, bringing together traditionally separate faculty, divisions and resources. By doing so, they allow students in the career pathway to become fully prepared for the workforce.

As the examples in this section show, individual community colleges can make significant progress towards this goal. However, creating the much needed large-scale career pathways system will require supportive policies from government and state community college systems. We will go into more detail on these policies in the following chapters.

WHAT CAREER PATHWAYS OFFER COMMUNITY COLLEGE LEADERS

For college administrators, a career pathways model can serve to:

- *Improve student recruitment and increase enrollment*, both by offering a new program directly aimed at providing good employment and by raising the profile of the college in the community.

- *Improve student retention and success*. Career pathways offer a bridge between the large number of students (many of them economically disadvantaged) enrolled in remedial programs and the higher-level, credit-bearing courses that lead to certification, academic degrees and career employment.
- *Raise the stature of the institution*, because the college becomes the natural place for business, government and community leaders to come together to increase the economic viability of the community or region.
- *Provide access to new funding* by expanding the college's ability to attract students and by building new relationships with employers and funding sources in the broader community and at the state level.
- *Improve the quality of education* by connecting programs and faculty from workforce, academic and remedial divisions. The pathways approach can promote learning communities that bring together academic and vocational educators, offer new models for teaching, and help attract and retain talented, energetic and dedicated faculty members.

BACKGROUND

The nation's 1,132 community colleges are expected to fulfill a wide variety of roles: remediating the large numbers of students who did not succeed in secondary education, training the nation's workforce, providing a gateway to higher education, and serving as an economic development engine for business growth.⁶

Many community colleges find it difficult to reconcile these divergent missions. In attempting to fulfill all of them, colleges often have created what are, in effect, a group of separate institutions: a remedial training college, a transfer preparation college, a vocational training college, a contract training college for employers. Each of these "colleges," with its own faculty, resources, contacts, funders and students, often operates in its own sphere, with little integration with the rest of the campus.

This gap between different divisions requires a new structure within each community college. In a recent

survey by the American Association of Community Colleges, respondents reported that more than 36 percent of students new to college are enrolled in remedial courses.⁷ For students in these classes, as well as vocational training programs, adult basic education (ABE), GED instruction and English-as-a-Second-Language (ESL) programs, there are no clear and defined transitions to mainstream offerings. Without defined career pathways bridge programs in place, disadvantaged students—who may be less informed about continuing career and educational opportunities and may lack social and financial supports needed to succeed in the college environment—can have a difficult time moving into academic courses.

The career pathways model provides colleges an opportunity to align separate divisions in a way that better serves all students, especially those from disadvantaged backgrounds. By building bridges between basic skills and higher-level academic and vocational courses, creating clear connections between college and career, and providing needed social support, community colleges can improve the likelihood that low-income adults will realize the full benefits of postsecondary education.

Adopting a career pathways model as its governing framework can position a college to:

- *Engage employers* in developing training that meets labor market demand.
- *Provide individuals* with needed skills.
- *Engage a wide variety* of state and community resources.
- *Create a much needed link* between poorer communities and the regional employment market.

ISSUES

Community colleges face a number of barriers in implementing career pathways for disadvantaged students. Overall, community colleges that successfully reconcile their various missions to expand educational and career opportunities for disadvantaged students often do so in spite of prevailing public policies and institutional traditions.

Separate and Conflicting Community College Programs

The single largest barrier to creating successful career pathways is reconciling community colleges' various distinct missions, departments and programs.

Divisions are sometimes fueled by perceptions that integration with other departments will compromise or water down the department's core mission.

It is hard to overstate the effects of separate and distinct missions on college structure, course offerings, and faculty hiring, teaching and career paths. For example, typically contract—and sometimes vocational—education divisions work closely with industry to understand and respond to labor market needs. Frequently, however, the connections to local employers do not extend beyond the department, limiting the opportunity to shape college career programs with both academic and vocational offerings. Longstanding entrenched divisions between departments are difficult to overcome, particularly for institutions struggling with simply maintaining student enrollment and college operations in a time of considerable budget pressures.

In general, community colleges seldom view non-credit remedial and vocational coursework as feeders for degree programs, even though many students in adult literacy programs and vocational training programs might well be interested in pursuing this route. The result of this separation is that students can be forced to choose between a track that leads to a degree and one that leads to employment.

Furthermore, without defined career pathways, students are given little information on their educational options in other departments and programs and face bureaucratic barriers to advancement. Disadvantaged students are the least likely to be able to negotiate an educational system that fails to provide clear guidance and support to help them advance.

Some of the ways in which conflicting missions in community colleges manifest themselves include:

- Vocational training programs often do not carry credit toward a degree, even when their content is similar to courses taken for a degree. This issue is even more difficult to remedy where vocational programs for adults are offered by local school districts.
- “Workplace literacy” programs designed to improve the literacy skills of incumbent workers

GUILFORD TECHNICAL COMMUNITY COLLEGE

Located in the heart of North Carolina's manufacturing belt, Guilford Technical Community College (GTCC) serves a largely low-income, minority and, increasingly, immigrant population. Nationally known for its school-to-work efforts, GTCC has taken significant steps in recent years to develop new ways to help disadvantaged adults gain the workplace and occupational skills required by local businesses.⁸

Key elements of GTCC efforts include:

- *Establishing programs specifically designed* to serve economically disadvantaged students who are at or above a ninth grade skill level, including TANF recipients.
- *Integrating life skills training* with instruction in basic and occupational skills.
- *Using contextual instructional materials* tied to specific economic sectors or occupations.
- *Developing links with local government and non-profit organizations* that deal with welfare, workforce issues, housing, and the criminal justice systems to both recruit participants and provide support services.
- *Tailoring programs* to the labor market needs of local businesses
- *Working with local businesses* to offer students internships and permanent placements

Guilford started its career pathway program, Highways to Success, several years ago. Focusing on preparing former welfare recipients for a career as a medical office specialist or a computer office specialist, the 12-week, 240-contact-hour program combines job readiness and basic skills instruction with occupational skills training, culminating with an internship in a local business. In the past two years, it has graduated a total of 194 participants out of the 218 enrolled, a completion rate of 89 percent. More than 96 percent of all graduates found work, and most started their new jobs earning more than \$20,000 a year. Ten graduates have also gone on to advanced training in their respective fields.

Building on this model, GTCC established a similar program in 2001 for a manufacturing certificate based on a career pathways model developed by the state's community college system that includes instructional materials—many of which are contextualized—to be used by local colleges. The full-time, 10-week program is broken into two components, Level I: Fundamental Manufacturing Skills (manufacturing concepts, basics of measurement, statistical process controls, blueprint reading, and teamwork and problem solving), and Level II: Industry-Specific Skills (in metals, plastics, textiles or electronics).

Although the state model was not designed specifically to serve economically or educationally disadvantaged students, GTCC has expanded the Level I program to include Adult Basic Education and job readiness components. The program, which offers degree credit, started in the fall of 2001 with 42 participants enrolling and 34 attending class. By the end of the year, 30 students had completed all classroom requirements associated with the Level I training and were preparing to enter their required internship. As with Highways to Success, the college funds this program through state grants from a variety of sources.

GTCC's main challenges at this point are sustaining and expanding its career pathways beyond the manufacturing field without grant funds, and developing effective linkages with higher-level educational programs at the college.

are not offered through the academic divisions of the college, and they do not typically encourage students to pursue degrees with the college.

- Academic faculty members see their role as providing the first two years of general education toward a bachelor's degree, not preparing students for employment. This occurs despite the fact that most community college students are employed at least part-time and want both a better job and a college degree.
- While programs that offer an applied or contextual approach to teaching are typically most effective at preparing students for employment in technical fields, four-year institutions are often reluctant to accept transfer credit for such courses, even when statewide articulation agreements are in place to facilitate these transfers.

Lack of Resources

The enhanced education called for in a pathways model is more expensive than traditional remedial programming, requiring additional resources for curriculum development, lab facilities, employer and student outreach, and faculty development. Funding for all these objectives is scarce and frequently restricted by regulations and guidelines that can limit the far-reaching changes called for by career pathways.

Because most community college budgets are tied up in salaries for instruction, administrators have limited discretionary money and rely on grant funding to develop new programs or explore new ways of teaching. And once funding from a grant ends, the school may find it difficult to sustain the resulting program. For their part, faculty members are pressed by high teaching loads and generally have little time to develop new programs without extra support.

Paying for the discrete parts of a pathway can be difficult as well, especially for the individual, contextualized instruction that research shows is effective with academically unprepared adults. Policymakers may disdain funding remedial programs because they think it means "paying twice" for what high schools should have taught students. A study by the Education Commission of the States found that in Georgia, Illinois and several other states, college remedial pro-

grams receive less funding than college-credit courses. It also found at least ten states that either provide no funding for adult basic education (ABE) at community colleges or fund it at a level below that of college-credit programs.⁹ Colleges that make serving disadvantaged students a priority continually have to scramble to piece together funding from whatever sources they can find. Such funding is usually of limited duration. And, unlike lecture-based academic classes, technical training requires extra equipment, lab time and relatively low class sizes, all of which are expenses for which the school receives no extra compensation.

Disadvantaged students also tend to need more support than other students, and this attention is expensive as well. When community colleges do receive direct funding for student support services, it is allocated on a full-time equivalent (FTE) enrollment basis. However, three part-time students may require three times as many support services as one full-time student, so colleges with many part-time students struggle to offer adequate support. With insufficient funding, staff members often have high caseloads, making it particularly difficult to serve disadvantaged students with greater needs.

Unfortunately, it will be difficult to change these dynamics. In general, working poor adults lack a strong political voice. Unlike the public schools, the role of community colleges is often not well understood or appreciated by the public. And unlike public four-year institutions, community colleges tend to lack strong political influence with policymakers. For example, two years ago, voters in Arizona passed Proposition 301, which channeled almost \$500 million a year to improving education enhance the state's economic competitiveness. Even though they helped to draft the legislation, community colleges only receive 3 percent of these funds. The lion's share goes to the K-12 system (85 percent) and the state universities (12 percent).

Isolation from Employers

Due in part to a longtime focus on facilitating academic transfer to four-year institutions, many community colleges have limited connections to job opportunities for students. Schools may have "industry advisory boards" that offer excellent business contacts for fundraising, curriculum development and academic standards. But

such boards usually have only superficial involvement with student placement.

When there is a connection on campus to employers, it tends to be isolated from the rest of the school. For example, contract training departments, which are hired by local firms to teach specific skills to their workforce, are typically self-supporting and independent of college-credit divisions. They generally do not work with full-time faculty, relying on adjunct instructors with industry experience.

Lack of Incentive to Serve the Disadvantaged

For several reasons, community colleges may place less emphasis on serving disadvantaged students than on other priorities. For example, college-entry proficiency exams in states such as Texas and North Carolina are required for all students who would be eligible to gain college credit. The need to ensure that educationally disadvantaged applicants are prepared to pass these exams may be a disincentive for colleges to reach out to these students.

The relatively high cost of serving this population, as outlined above, is another disincentive, especially for schools that are facing budget cuts in these lean times. Further exacerbating the issue is the question of financial aid. Most community college students work at least part-time in addition to attending school and caring for their families. Even when working, adult students barely make enough to sustain themselves or their families; they often do not qualify for federal or state financial aid, which tends to be designed for full-time students. Furthermore, few states provide financial aid for students in non-credit programs (although in some states adult basic skills and other non-credit programs are offered free of charge).

Power and prestige in many community colleges is concentrated in the academic faculty, which tend to see their role as teaching college-level subject matter and, as such, are sometimes resentful of having to deal with students who are not prepared for college. To be fair, the problem does not lie solely within the community colleges themselves. Without clear state policy and guidance, a focus on transfers to baccalaureate programs remains the primary measure of success in colleges, giving little incentive to develop other capacities.

At the same time, circumstances have required colleges to address the gap between remedial and

college-level courses. It is not uncommon for community college English and math faculty to spend a majority of their time teaching developmental classes to prepare students for the school's academic coursework. A National Science Foundation-funded study of community college occupational programs in science and technology fields found that the most common problem facing these programs is the inadequate academic preparation of entering students.¹⁰

PROMISING PRACTICES IN COMMUNITY COLLEGES

Developing career pathways requires changing how community colleges structure and deliver education and career training to the community as a whole and to economically disadvantaged adults in particular. As outlined above, there are notable problems that must be addressed before that can happen. Our research has shown, however, that colleges can successfully begin to develop career pathways through these promising practices:

- Creating bridge programs between developmental and credit bearing programs
- Developing internal career pathways leading to certification and college degrees
- Expanding support services
- Integrating academic and vocational education
- Integrating administrative structures
- Using college resources effectively

Creating Bridges between Developmental and Credit Bearing Programs

Creating connections between remedial and credit bearing courses and, in a larger sense, between remedial programs and career pathways, is perhaps the most critical policy and program change at community colleges.

In particular, colleges need to develop formal bridge programs that 1) make remedial education more relevant to adults seeking career training and economic advancement, and 2) provide a direct transition to credit-bearing courses and career training.

Courses that develop both basic academic and workplace skills help make developmental education more relevant to the job market and to the student. Under this approach, courses such as remedial English, reading and math incorporate materials from a specific field into the actual course content. Programs that promote contextualized learning make heavy use of projects, laboratories, simulations and other experiences that enable students to learn by doing. By integrating instruction in basic skills with instruction in technical content, contextual learning enables academically unprepared students to participate in career training as they enroll in basic education.

EXAMPLES

Through its **West Side Technical Institute**, Richard J. Daley College, one of the City Colleges of Chicago, has developed a series of bridge programs that provide stepping stones to the Institute's college-level technical training programs. Each semester, hundreds of students, many of them native Spanish speakers, come to the Institute seeking training for job advancement in manufacturing but cannot meet the basic skills requirements for the coursework. The bridge programs, which can accommodate students whose reading and math skills are at the 4th to 6th grade levels, are taught so that students improve their basic skills in the context of exploring career options and improving job readiness skills. At the higher bridge levels, basic technical training is incorporated. During 2001, 90 percent of the students in the Career Bridge program who took the test to enroll in the school's vocational program showed improvements, and 43 percent passed.

Portland Community College in Oregon is in the process of restructuring its ABE and ESL offerings to connect the students with college-level occupational programs, initially in computer applications and office systems. The effort will target students who meet minimum thresholds on the college's reading and writing placement tests, placing them in field-specific learning communities, where they will spend three terms in a cohort taking read-

ing and writing, mathematics, and content courses, as well as a sequence of college survival and career guidance courses. Upon completion, students will be ready for regular departmental offerings.

At **Gateway Community College** in Phoenix's Maricopa system, faculty from multiple disciplines teamed up to develop courses that prepare students for success in the college's industrial technology degree programs. Students, including those who are academically unprepared, learn problem solving, mathematics and communication in the context of instruction in the basics of industrial technology.

At **Henry Ford Community College** in Dearborn, Michigan, faculty from both the career and liberal arts divisions (including specialists in developmental education) developed a 16-week "Bridge to Technology Education" program that prepares adults recruited from inner-city Detroit for entry-level skilled jobs and post-secondary training in manufacturing and other technology fields. The curriculum integrates competencies from technology, mathematics, communication and "career entrepreneurship" into modules that are team-taught by faculty from both divisions.

Shoreline Community College in Shoreline, Washington, is developing a four- or five-quarter, full-time bridge program intended to assist students with low levels of essential technical skills but a keen interest in the Information Technology (IT) field to access college level IT training and employment. The program will incorporate ESL, basic math, analytical reading and writing, an introduction to information technology, basic computer system operations, customer service and employability preparation, possibly a related internship, and student support services.

Mission College in Santa Clara, California, has developed associate's degree programs for employees at Intel, Cisco Systems, and National Semiconductor in response to the companies' interest in improving employees' basic literacy and technical skills. These full-degree programs are located at the companies' work sites and are customized to meet the needs of both the client company and its employees. To develop these programs, Mission profiled the skill requirements of jobs at the client firms and assessed employees to identify gaps between what

was required on the job and employees' level of skills. Mission also used this information to help develop customized education plans for participating employees.

Creating Internal Pathways to Certification and College Degrees

Students in career pathways programs tend to have as their most immediate priority a decent-paying job with opportunities for advancement. In the long run, however, they need the option of pursuing a college degree, which, in most fields, is necessary to advance beyond a certain level in a career.

Career pathways programs, which enable students both to move up the job ladder and advance toward a college degree, offer instruction that can be applied toward college credit. A growing number of colleges offer college credit for training that leads to industry or professional certifications in fields such as information technology. And students are much more likely to sign up for credit classes when well-established connections between associate degree and bachelor's degree programs allow them to continue for a four-year degree.

EXAMPLES

Together with **Phoenix College** and other institutions in Phoenix's Maricopa Community College system, **Arizona State University** has established "Bridges to Biomedical Careers." The program prepares and motivates minority students who are enrolled in associate's degree biomedical programs to continue their education and earn a bachelor's degree. The program offers students an intensive five-week summer session that includes lectures on the history and methods of science and mathematical reasoning, seminars on current topics in medical research, opportunities for independent study with ASU faculty, and a weekly science night. Students who complete the summer program receive a stipend and upper division credit toward a bachelor's degree. They also receive academic support throughout the year and can continue to participate in independent study and research with the ASU faculty.

Portland Community College, in partnership with **Mount Hood Community College** and Worksystems, the local

Workforce Industry Board, have created a Regional Workforce Training Team to provide short-term training (three to six months) for dislocated workers with limited English proficiency and low basic skills. Existing curriculum at the schools have been reorganized into shorter modules in four fields: Accounting/Bookkeeping, Criminal Justice, Metals Manufacturing and Phlebotomy. By offering full-time training for one term, the school allows students to earn preliminary certificates and enter jobs in these fields. But because these short-term modules are part of existing college programs, students are eligible for both federal financial aid and WIA funding. For English language learners, the program offers ESL training in three career clusters: Health Care, Food Services and Office Skills. Students are taught in a vocational ESL (VESL) format enhanced by strong links with employers and a required internship—all leading to academic programs.

Guilford Technical Community College in Greensboro, North Carolina, has developed a manufacturing skills training program designed for low-income adults. Combining literacy, job readiness and occupational skills training, the full-time, 10-week program prepares students for employment in entry-level skilled operator positions, and graduates can go on to a second-level program to earn initial certification from the National Institute for Metalworking Standards. Guilford offers similar sequences in medical, legal and financial office systems (For more on Guilford, see page 13).

Integrating Academic and Vocational Education

Successful integration of faculty from different divisions can be approached in a number of ways. Colleges can involve full-time faculty in contract training for industry. A school can integrate the contract staff and faculty members in other departments to create programs and instruction that are responsive to industry. Some colleges create opportunities for interdisciplinary development of career pathways through joint committees, formal inter-departmental agreements, or stipends or "buy-outs" of time for participating faculty. For some schools, this can even be an explicit strategy for retaining talented faculty members by providing interesting, creative opportunities to expand their professional experience.

EXAMPLES

At **Mission College**, in Santa Clara, California, the Contract and Corporate Education staff works closely with department faculty. Three of the program's four managers are also part-time faculty at the college, and most of the faculty who teach contract courses for credit are full-time faculty members. Academic departments have the right of first refusal to provide instructors for every training contract with employers. And full-time faculty members are released a portion of time to liaise between Contract Education and academic departments. The college has also convened teams of faculty from liberal arts and occupational programs to develop vocational ESL programs where English and other basic skills are taught in the context of instruction in basic technical skills.

Las Positas College, in Livermore, California, has developed a prevailing culture that encourages joint education and faculty development of all new career programs. Joint staff committees, composed of academic and vocational faculty, meet with employers to determine industry needs and develop curricula that draws from all divisions of the college and, in particular, encourage strong English, literacy and writing skills. The college also attempts to provide opportunities for the faculty to visit employers to gain a first-hand understanding of company needs.

Expanding Support Services

Low-income community college students need support services to successfully balance family, financial and life issues along with going to school, according to recent findings by the Manpower Demonstration Research Corporation (MDRC).¹¹ Ideally, the various services (assessment, financial aid, counseling, referrals) should be coordinated to provide the full range of support that many students need and to assist struggling students before they drop out. In addition, many individuals may need services that community colleges are generally not well equipped to provide, such as child care, drug treatment, health care, family counseling and transportation. Partnerships with community-based organizations, discussed in greater detail in the next chapter, can provide these services while also giving colleges a fruitful recruiting ground for career pathways programs.

EXAMPLES

Phoenix College and **South Mountain College** in Phoenix's Maricopa system are redesigning their student support systems to improve college success rates for Latino and disadvantaged students. Through strong teamwork among the student services and academic support departments, Phoenix College provides a broad range of services that go beyond the typical supports, including help filling out financial aid forms, training in college survival skills, job search workshops and university tours. By strengthening its student information systems, Phoenix tracks student progress and provides "early warning" to identify students who are struggling before they drop out. South Mountain has centralized its student services in a single location on campus to facilitate cooperation among the various service departments and make them more accessible to students. The school is also training faculty to become more effective teachers and advisors for disadvantaged students, providing this population an even broader support network.

To help ensure the success of students in **Portland Community College's** Professional Technical programs, all students are assigned a "Technical Skills Learning Specialist," who monitors student progress and provides general career guidance and support. The goal is to meet the new Carl D. Perkins Vocational and Technical Act benchmark of half of all students in professional and technical programs successfully completing the coursework. The Perkins Act provides federal funding for secondary and post-secondary vocational education programs.

Integrating Administrative Structures

In colleges, as in other institutions, operation often follows organization. Our research found that colleges that bring together traditionally separate departments under a single administrator gain a significant advantage in their efforts to integrate learning, access new resources and develop career pathways.

EXAMPLES

Student enrollment at **Edmonds Community College**, located in suburban Seattle, is split almost evenly among

academic transfer, professional-technical and adult literacy programs. To break down some of the “silos” that developed between these divisions and to improve coordination and flow of students, the college has appointed a Vice President for Workforce Development, who is responsible for both contract training and professional-technical degree programs. This integrated system has also allowed the college to form a strong partnership with the local workforce development system. Edmonds helps fund the local One-Stop Center, where rooms are dedicated for ABE and computer literacy classes. The vice president has also sought to involve professional-technical faculty members in contract training to increase faculty knowledge of regional career opportunities and to promote integration of learning.

Mission College in Santa Clara, California, formed a Workforce and Economic Development division that encompasses a broad range of programs and services, including contract and corporate education, a regional business assistance center, vocational education, tech prep, welfare-to-work (CalWORKS), career placement, work experience and student internships, faculty industry internships, child development services, and a middle college program that teaches high school students on the campus to introduce them to post-secondary education. This structure has allowed the college to build connections across traditional internal boundaries and has spurred development of career pathway partnerships with CBOs and major companies in the Silicon Valley region.

At **Las Positas Community College** in Livermore, California, each academic dean is responsible for both academic and vocational programs. Occupational programs and faculty in the college enjoy status equal to their academic counterparts, and academic faculty members help design and deliver occupational programs. Academic Services and Student Services also operate under the same administrative unit, allowing student services counselors to better work with faculty members to address students’ needs.

Using Resources Effectively

Community college instructional funds are the core resource for career pathways. Several states provide funding for non-credit programs and for programs for students whose basic skills fall below what is generally

required of college credit courses. Typically based on full-time equivalent (FTE) enrollments, this funding provides an opportunity to create programs that will bridge to college-level programs. California, for example, provides state resources to support both credit and noncredit basic skills instruction. Colleges in California can combine traditional FTEs and separate basic skills and non-credit instructional resources to create a pathway model.

In some instances, the Carl D. Perkins Vocational and Applied Technology Education Act (VATEA) has been used to develop career pathways programs and support faculty development to make them effective. While VATEA is typically thought of as a source of funding for equipment, the program’s guidelines encourage efforts to increase student access, retention and success in vocational programs that lead students to positions in well-paying, high-demand fields by:

- Increasing retention of disadvantaged students in occupational programs
- Integrating academic and vocational education
- Facilitating faculty development
- Creating business partnerships

All of these goals are essential to the creation of career pathways programs.

Another option is to use Adult Basic Education (ABE) funding for vocational adult basic education and ESL programs (VABE and VESL). As part of Title II of the Workforce Investment Act (WIA), ABE explicitly encourages the development of programs that integrate basic skills instruction with training for employment. In addition, as described in the next chapter, welfare and economic development funding can also be used to support elements of career pathways.

EXAMPLES

Guilford Technical Community College’s program to prepare adults with a poor education for entry-level skilled jobs in manufacturing combines literacy, job readiness and occupational skills training into a full-time, compressed 10-week program. By combining three types of

CABRILLO COLLEGE

Cabrillo College in Santa Cruz, California, has worked hard in recent years to connect low-income individuals with limited English skills to local jobs and career opportunities at its two campuses. In Watsonville, which is 70 percent Latino and heavily agricultural, Cabrillo has successfully implemented a career pathways model within a few key programs and is attempting to integrate it into the overall institution.

Each year, several hundred students attend the campus' "Fast Track to Work" pathway, which provides support services and classes designed to speed their transition from short-term (18 to 24 month) educational programs into the local workforce. Currently there are 274 students in the Fast Track program: 115 are on welfare, 65 are Workforce Investment Act clients, and 94 are other low-income students (some are former welfare participants). These students are pursuing certificates or degrees in medical assisting, office administration, Early Childhood Education, culinary arts, digital media, computer information systems, criminal justice or human services. Of those who complete their training, 90 percent get jobs, with an average hourly salary of \$14.75. Fast Track is largely funded with CalWORKS (welfare-to-work) money from the California Community Colleges Chancellor's Office with the balance of funding coming from the local agency that administers TANF and WIA funds.

The school's "Ladders Project" is a Packard Foundation-funded pilot project designed to strengthen the local workforce development system. Distinguished by strong partnerships between Cabrillo, community groups, state and county workforce and human services agencies, and schools, the project has several components:

- **A career ladder strategy** currently focused on the health care industry. The "Health Careers Partnership" involves major healthcare employers and training providers in efforts to increase the region's supply of health care workers and ensures that low-income and under-represented populations have access to health careers. The partnership includes employer cash support to expand the nursing program, on-site credit and contract education for incumbent employees, and linkage with the One-Stop system.
- **A vocational ESL pilot program** designed to teach English in the context of workplace skills and start students on several different career ladders. Early results of this program are promising. In less than two years, the program has served approximately 400 of the partners' most limited English proficient students with great student demand and better rates of student retention. The college reports that many students are advancing and succeeding in the next level of training. Plans are in the works to quantify this success.
- **A computer proficiency certificate** that provides employers with a tool to verify basic computer skills. This test is offered free of charge at locations throughout the county, and each of the Ladders Partners has developed their own courses to prepare students to pass the test. To date, 600 individuals have taken the test, and 114 have successfully obtained the certificate of competency.

Participants in Cabrillo's program say the successes are due in a large part to the strong leadership provided by the school's Dean for Career Education, financial support from The Packard Foundation, mutually beneficial partnerships with local training and adult education providers, the county welfare agency and the WIB, and the work of committed and experienced faculty from both the college and the local Adult School.

Cabrillo's next challenge is to bring these career pathways to a larger scale within the colleges. That will require funding the pathways without grant money and engaging additional faculty members.

services into one program, the college has made innovative use of FTEs from three state funding sources: ABE, "Human Resource Development" (for job readiness training), and non-credit, continuing education.

Mission College in Santa Clara, California, has used VATEA and CalWORKS (welfare-to-work) funding to develop programs that teach both basic skills and technical skills at the same time. Faculty has offered courses such as ESL for Child Development, ESL for Computer Electronics Technology, English and History for Semiconductor Manufacturing Technology, and Math for Graphics Arts. **Portland Community College** uses VATEA funds to support the development of its bridge programs, which qualify by enhancing enrollment and

retention of disadvantaged students in occupational degree programs.

Some community colleges use the career pathways model as a framework for securing and implementing Strengthening Hispanic Institutions (Title V of the U.S. Department of Education), Strengthening Developing Institutions (Title III) and other funding programs intended to support educational and career advancement for disadvantaged students. **Phoenix College** and **South Mountain College**, in Phoenix's Maricopa system, are using Title V grants to integrate student services and to support faculty development as needed to improve retention and academic success of Latino students and others who face barriers to success in college.

SECTION THREE: Building Strategic Partnerships for Career Pathways in the Community and the Region

As the prior section makes clear, individual community colleges, even if they have the necessary vision, often lack the resources and capacity to implement pathways successfully without assistance. And on a large scale, effective career pathways require strategic partnerships with the key local and regional institutions: employers, workforce agencies, social service agencies, adult education provider and community-based organizations.

This chapter examines opportunities, barriers and best practices for building such community college-centered career pathways. By working together, local and regional institutions can build on each organization's strengths to provide a sum greater than its parts. Businesses routinely use similar alliances, forming a partnership with another firm to acquire new competencies. We have found that effective community and regional career pathways are a benefit to both the system itself and to the participating institutions.

WHY SHOULD COMMUNITY AND REGIONAL POLICYMAKERS BE INTERESTED IN CAREER PATHWAYS?

A wide range of local and regional institutions can all benefit from supporting career pathways:

For community college administrators, participation in strategic partnerships in the community and region can serve to:

- *Expand recruitment and enrollment* through outreach to community residents currently unaware

of possible post-secondary opportunities.

- *Access new funding resources* from workforce and welfare programs and government and philanthropic grants.
- *Expand needed support services*, particularly for economically and educationally disadvantaged students, by forming partnerships with CBOs and adult education providers.
- *Increase visibility* with employers and within the community and region.

For local workforce agency administrators, partnerships with community colleges around career pathways can serve to:

- *Provide access* to an established training and education infrastructure that offers a broad range of options to workers at all skill and education levels.
- *Leverage scarce workforce dollars* with state education funding to support the instructional cost of training.
- *Provide a range* of supplementary remedial and supportive services for little or no additional cost.

For CBO administrators, partnerships with community colleges can serve to:

- *Provide clients* with an array of new education and career opportunities.
- *Expand the range* of on-site educational and training offerings by establishing the CBO as a branch campus of the college.
- *Leverage state education funding* to pay the salaries of instructors housed at the organization's offices.
- *Raise the organization's profile* and visibility in the community.

For employers, partnerships with community colleges can serve to:

- *Provide a wide range* of customized training for employees, extending from basic skills to advanced upgrade programs.
- *Meet labor market needs* for employees at all skill and education levels.
- *Provide a source*, in cooperation with the workforce system, for subsidized training for employees, as well as subsidies for new employee wages.

BACKGROUND

To fully serve the community, a career pathway should extend beyond the community college campus. For example, a neighborhood organization, through partnership with a local community college, can become a branch campus of the college, reaching neighborhood residents who might otherwise have no access to post-secondary education.

It is clear that by working with other local and regional institutions, community colleges can greatly enhance both the experience for students and the school's ability to provide a fully realized career pathway. And given the decentralized nature of workforce development in this country (especially in certain states, like California), these alliances allow the community college to provide a wide array of services, as these agencies are often the key decision makers in creating new programs and allocating workforce, education and social service resources.

However, these partnerships offer more than just an opportunity to provide resources to the local community college, as important as that can be. Often sharing common goals of career progression, an array of local institutions in most cities and counties—from social service agencies to Workforce Investment Boards—work independently of each other. By joining a career pathway, they can expand their funding base, broaden their reach and scope, and provide students and clients with new opportunities. Employers can count on better prepared workers, for example, and social service agencies can help their clients move out of poverty.

The opportunities go beyond each community. Citywide or regional partnerships have even more potential for success, given their reach and ability to attract and leverage stable, long-term funding. In

researching regional partnerships aimed at building career pathways, we particularly sought to identify partnerships that had the capacity to act as a unified entity, with administrative and operational support to perform functions such as labor market research, marketing, and employer and participant recruitment.

We recognize that substantial barriers exist in having any group of such disparate agencies work together toward a common goal—differing missions, difficulties in bringing together separate bureaucracies and simple inertia are powerful issues to contend with. And because of some of these same factors, community colleges frequently play only a limited role in regional workforce development. This chapter outlines both the real and perceived obstacles to creating partnerships. However, we also show that programs and initiatives around the country have overcome these hurdles.

ISSUES

Institutions that want to approach career pathways from a regional perspective must contend with a variety of obstacles that stand in the way of breaking down divisions between different organizations. In many ways, these are similar to obstacles found at both the college and state levels.

Inertia/Lack of Incentive

The greatest obstacle to development of most regional career pathways is simply that the key potential constituents—community colleges, WIBs, welfare agencies and economic development agencies—have always operated as separate entities with independent (although clearly overlapping) missions.

Absent a firm mandate to collaborate, agencies will naturally continue to pursue their primary mission: delivering services as dictated by funding sources and regulations. Although there is clear potential for joint development of a career pathway approach, in most regions there is no compelling incentive to organize. It is notable that two of the most fully developed regional career pathways we have seen were created in large part with a new funding source—a state initiative in the case of Puget Sound and the encouragement and support of the James Irvine Foundation and David and

Lucille Packard foundations in the California collaborations. Without these inducements and financial support for change, it is unlikely these programs would have become so successful.

Lack of Framework for Collaboration

Even where agencies have the political will or other incentive to collaborate in developing career pathways, groups must facilitate the difficult task of planning and then maintaining these new partnerships. Creation of a single joint program between a college and a CBO, for example, requires dedicated staff at both entities. And it is a rare workforce or community agency that has someone on staff whose sole job is to plan for regional collaborations. Assistance outside of the participating institutions is also hard to find.

Developing an even broader collaboration that includes multiple entities and employers requires not only additional staff, but a regional body that offers a place where separate players can meet, plan, negotiate operational and funding agreements, and create the kind of joint marketing, recruitment and fund-raising needed to sustain an initiative of any scale. Although this role can, and perhaps should, be undertaken by WIBs, few of these regional boards have taken this level of responsibility.

Lack of Resources for Operation

While there are clearly opportunities to make more effective use of current workforce, WIA, welfare and community college funding in underwriting community and regional career pathways, these resources alone are probably not sufficient to support a large-scale system. Recent budget deficits, fiscal pressure on remaining welfare surpluses, and proposed federal funding cuts will all diminish the ability of communities to support new, resource-intensive programs. (However, some communities, particularly some of the nation's largest cities, do retain significant surplus and unexpended funds that could be used for this purpose).

System and Regulatory Barriers

Federal statutes encourage virtually every program and funding source we have mentioned to coordinate

or collaborate with other agencies and to make effective use of existing funding. And despite some widely held perceptions that cooperation is almost impossible, we have found a number of examples that prove otherwise.

Nevertheless, it is undeniably true that integrated career pathways can be hobbled by each agencies' distinct target populations, reporting requirements, funding cycle and so on. And community colleges may be discouraged from working with outside agencies governed by workforce program's short-term objectives, which many schools may view as conflicting with their broader educational mission.

STRATEGIC PARTNERSHIPS: PROMISING PRACTICES

Our research for this report and experience in providing technical assistance to institutions involved with career pathways have uncovered a number of places where community colleges and workforce development programs are working together:

- Partnerships with the Workforce and Social Service Systems
- Partnerships with Community-Based Organizations
- Partnerships with Adult Basic Education Providers
- Partnerships with Employers
- From Strategic Partnerships to a Regional Approach

Partnerships with the Workforce and Social Service Systems

The workforce and social service system includes One-Stop Centers, welfare agencies and organizations that provide training and support services. These government and nonprofit agencies are the main contact point with a community's poorest residents and therefore a source of

potential students, many of whom would never otherwise step onto a college campus. Workforce and social service agencies also provide some of the support services needed to help individuals succeed in a college setting, such as counseling, daycare, transportation, employability preparation and substance abuse counseling. For any collaboration, outside resources and encouragement—such as a state mandate, new public or private funding, or a regional vision held by influential leaders—is very useful to encourage a career pathways framework.

Workforce agencies are also an important source of funding, particularly in large cities. Los Angeles and New York City both receive more than \$70 million in WIA funding, resources that can be used to support services including counseling and outreach, training, and employer subsidies. WIA individual training vouchers, which can vary from \$2,000 per person to \$5,000 or more, can be spent on training provided by community colleges.

TANF funding is also a significant, although declining, source of funding. Under welfare reform, many states accumulated significant surpluses by meeting their federal targets to reduce the number of people on the rolls. Under federal regulation, this funding need not be employed only for welfare recipients but can serve anyone under 200 percent of the federal poverty level. With a year of state budget deficits throughout the country, the TANF surplus has shrunk considerably. Nevertheless, states such as Washington and North Carolina have used some of this funding to support a statewide career pathways initiative (see “Two States Pursuing a Career Pathways Strategy” on page 31), and cities including Denver and San Francisco have designated a portion of TANF funding to support career progression.

EXAMPLES

Under Washington State’s initiative, **Edmonds Community College** is creating a career pathway that has served as a catalyst to a broad new set of relationships with welfare agencies and WIA One-Stop Centers. Edmonds helps finance its local One-Stop Center and maintains staff at the site to assess interested clients for college readiness and to refer them to training at the college. The school also provides basic skills and literacy instruction at the site. Participants in the career ladder program are enrolled in WIA, which helps pay for training and case management services.

The Santa Cruz County Coalition for Workforce Preparation has brought together local leaders from **Cabrillo College**, the **Santa Cruz County Human Resources Agency** (HRA) and other groups to address the region’s welfare reform and workforce development issues. Cabrillo worked with HRA to develop Fast Track to Work, a program that helps people move from education into employment within 18 to 24 months, a timeframe that accommodates the needs of welfare recipients faced with benefits that can “time out.” The program provides support services at the main Cabrillo campus, including assessment, orientation, registration, assistance with financial aid, tutoring and the development of academic plans. Students enrolled in CalWORKs—the state welfare program—can also receive money for childcare, book vouchers and work-study funds. And an eligibility worker from HRA works in the campus office to assist with all questions or problems with the county program. Fast Track receives WIA and CalWORKs funds through HRA to support the services that it offers.

The Los Angeles City Workforce Investment Board will match employer wages for entry-level employment for participants in an IT career pathway developed by Los Angeles City College and three CBOs. The WIA customized job training funds will support the third step in the pathway, paid work experience, paying 50 percent of initial employment costs for three months. Given the importance employers attach to work experience as a prerequisite for employment, particularly in this economy, building work opportunities into a career pathway is critical.

The County of Los Angeles has allocated \$12.5 million in surplus TANF funds over the next five years to support career progression for the working poor—those under 200 percent of the poverty level. As planned, the county will use this pool of funds to pay for the costs of individuals in the Los Angeles IT career pathway initiative, including case management, social support, administrative and pre-employment preparation services.

Partnerships with Community-Based Organizations

Community colleges and community-based organizations (CBOs) are ideally situated to work together. CBOs, as the institutions closest to the neighborhood, are both

accessible and credible to adults who are isolated from educational institutions and training programs. In many communities, CBOs have evolved to comprise a self-contained workforce and social service system, offering a full spectrum of services including counseling, case management, social support, rehabilitative services, and, frequently, education and training. According to a recent study by the National Congress for Community Economic Development, 30 percent of community development corporations now offer employment and training programs, and nearly half offer some kind of education and training programs.¹² At the same time, however, CBOs are often limited by a lack of resources and few connections to employers. And they are generally unable to offer the quality and depth of education and skills training clients need to attain self-sufficiency.

Community colleges have the resources and capacity to provide a full spectrum of education and skills training. Yet colleges often have difficulty effectively serving individuals who need additional support to succeed in a challenging and unfamiliar environment, a reality underlined by high dropout rates in many institutions. Moreover, as a recent Manpower Demonstration Research Corporation study suggests, many low-income individuals may not even reach community college due to lack of awareness of the available services that help ensure success in post-secondary education.¹³

Community college/CBO partnerships link college educational resources with CBO accessibility and support services. Basic skills and entry-level instruction offered to clients at the CBO can become the first step of an integrated career pathway that leads to more advanced training and courses offered on the college campus. In a number of instances, colleges have made that step easier by establishing satellite “branch campuses,” teaching credit-bearing courses at the community group’s site.

These partnerships offer all parties clear advantages. Colleges obtain an additional recruitment source for students and can use the additional resources generated by new enrollments to subsidize instruction at the CBO site. CBOs focus on areas of strength, such as case management and social support, and expand the quality and range of their educational offerings. And CBO clients are able to start on a post-secondary career pathway in an accessible and non-intimidating setting.

EXAMPLES

Five community colleges have recently established branch campuses at seven CBOs as part of regional IT career pathways in **The East Bay, Los Angeles** and **San Francisco, California**. The schools provide college-level instruction at the sites and offer college credit for entry-level and upgrade training courses, including technician training in computer hardware and software, Cisco networking, and Unix. The CBOs recruit participants and provide case management and social support. (In some cases, CBO instructors have qualified for certification as community college faculty members. They continue to teach at the CBO, but on the college payroll.) The next step is development of a preparatory basic skills class, to be taught at partner CBOs, that uses IT as the context for teaching literacy and numeracy. These fledgling partnerships are formalized through a memorandum of understanding that lays out roles and responsibilities of both parties and is funded through a combination of community college, workforce and government grants and funding from the Irvine Foundation.

Modesto, California, has established a partnership between **Modesto Junior College (MJC)** and the **Central Valley Opportunities Center (CVOC)**. The first step in this pathway is a contextualized basic skills program CVOC offers for college credit on an open entry and exit basis, preparing students for the community college’s 15-week, 12-credit construction trades skills training program. Working closely with the college, CVOC recruits students, works with participants on their basic and English skills, and provides support services while they attend MJC’s program.

Capital IDEA in Austin, Texas, prepares unemployed and underemployed adults in Central Texas for high-growth, high-demand jobs using long-term training and support services. Modeled on Project QUEST in San Antonio, the program is run by members of the Central Texas business community and Austin Interfaith, a broad-based organization of congregations and schools affiliated with the Southwest Industrial Areas Foundation. Capital IDEA partners with Austin Community College and other training institutions to provide participants with the basic education, life and technical skills they need for jobs such as electronics technicians and nurses. The program also prepares them to take the Texas Academic Skills Program

Test, which all students in Texas must pass before beginning college-level classes. The City of Austin and Travis County use an innovative funding strategy that combines general revenue funds with specially directed funds related to newly locating companies.

Partnerships with Adult Basic Education Providers

The Adult Basic Education (ABE) system, whether operated by community colleges, the local school districts or community based organizations, is a primary vehicle for reaching low-wage, low-skill adults. Typically, ABE providers offer reading and basic math, with the goal of grade level improvement and, ultimately, General Education Diploma (GED) attainment. Few focus on career progression and transition to post-secondary education and training as a primary goal. Even ABE programs operated by community colleges frequently lack any formal connection to credit-bearing post-secondary training that leads to higher-skill, higher-wage jobs.

However, ABE is potentially an ideal foundation for the first phase of career pathways, providing basic education skills to a broad population who are otherwise disconnected from the post-secondary system. ABE programs can be sites for bridge programs that offer career orientation, work readiness and contextualized basic skills, with a direct transition to partner community colleges. Like CBOs, ABE programs are an untapped institutional resource that can play a significant role in developing career pathways throughout the country.

EXAMPLES

Though not officially the home of a career pathway, **Orange County, California**, has developed a network of colleges and CBOs that work together. For example, **Orange County Community College** offers non-credit ABE courses on-site at 12 area CBOs. In addition to creating a link between the organizations and the college, these partnerships allow the college to draw down state funding, which is then shared with community organizations. While Orange County providers currently offer traditional ABE instruction, the structure can be translated relatively easily into a career pathway program.

In collaboration with two ABE providers, **Cabrillo College** has developed an ESL pilot program as one component of its Ladders Project. As each student enters the program, they are subject to an initial assessment and intake period, during which they learn about career ladder opportunities and take a “world of work” class to improve their basic skills. They then go into one of three career module courses: Construction, Medical Careers or Careers with Children. The ESL Pilot has served approximately 350 students thus far, and about fifty have advanced to the next level of training. Classroom instruction is provided by faculty from all three collaborators, which collect state funds based on Average Daily Attendance (ADA) or Full-Time Equivalent Student (FTES) in order to cover the cost of the training. Administrative costs for development of the program, including a full-time director, curriculum development and faculty stipends for in-service training, are paid for by a grant from the Packard Foundation. As with all of the Ladders Project efforts, this program has been designed to be self-sustaining, utilizing ADA/FTES generated funding to cover instructional costs and WIA/TANF funds to cover student support costs.

Partnerships with Employers

Employers obviously are a valuable partner for community colleges in developing career pathways. In addition to offering job and internship placements, local businesses can define worker skills and competencies that are in demand, as well as help pathway partners discern labor market demand. Employer work sites also offer an additional venue for colleges to deliver upgrade training to workers at all skill levels.

State and local agencies have resources at their disposal that can provide incentives for employers to participate in career pathway programs. WIA customized job training money and state economic development funding can be spent for upgrade training. California’s Employment Training Panel (ETP), for example, sets aside \$50 million for training for incumbent workers. Typically, the money is employed in limited programs rather than as a component of career pathways, but there is clear potential to combine economic development funding with workforce dollars and other resources.

EXAMPLES

The East Bay and Los Angeles, California, collaboratives described on page 4 plan to employ state ETP funding to encourage employers to participate in the information technology career pathways. The funds will be used primarily to support upgrade training for current workers as part of a broader package incorporating customized entry-level training and subsidized work experience. Employers are presented with the entire career pathways model and shown how they can benefit from each component. The East Bay has been granted \$300,000, and Los Angeles has an application for more than \$250,000 pending.

Instituting Regional Partnerships

Most of our examples in this section are strategic partnerships between colleges and other local institutions. But in accordance with the broader goals of workforce development, these partnerships are most effective when part of a citywide or regional strategy that includes:

- A regional pathway vision
- A network of strategic partnerships
- Regional integration of resources
- A focus on critical industries or sectors

A regional approach provides a number of advantages of scale and scope over more limited program efforts. Perhaps most significantly, employers frequently view labor markets as regional. A regional framework can identify a number of career sectors and aggregate programs and training to meet larger-scale needs. In addition, public systems, including Workforce Investment Boards and welfare agencies, frequently have—or at least are seeking—a regional impact. Linking agencies to a regional framework can promote collaboration and encourage a more effective use of resources. Finally, a regional approach is a way to mitigate competition between multiple institutions, such as community colleges. As the Washington State example shows, a regional perspective can provide otherwise competing colleges the scope to develop complementary areas of specialization.

Partnerships aimed at building career pathways in key

economic sectors such as IT or manufacturing benefit from a multi-jurisdictional focus and the involvement of a number of regional and local institutions such as community colleges, WIBs, local welfare and social service agencies, CBOs, other training providers such as ABE agencies, and industry associations and employers from target sectors.

EXAMPLES

The Puget Sound Partnership is a collaboration of six community colleges and regional social service agencies in the Seattle area, formed in response to Washington State's Career Pathways initiative. Its members agreed to develop regional career pathways around high-wage, high-demand sectors, including information technology, manufacturing and health. Each college worked to individually engage employers and put an employment strategy for graduates in place. The partners also developed a common model for a career pathway, which includes short-term (11 week) entry-level training, internship and/or paid work experience opportunities, and access to and support for continuing upgrade training leading to further certification or a degree.

Community College of Denver (CCD) has developed a partnership with the city Mayor's Office of Workforce Development (MOWD) to promote a model of wage progression and career advancement for low-income adults. One effort is "Quick Start", a program designed to support a set of high-wage, shorter-term training opportunities at the college for dislocated workers and former welfare recipients. A MOWD analysis of the Denver regional economy found both low unemployment and skilled worker shortages in sectors such as information technology, health care and business services—estimating that between 30,000 and 40,000 people in the Denver area, most of whom are working in low-wage jobs, could benefit from training in these high-growth, high-demand fields. CCD and MOWD jointly created a small brochure and newspaper ads to market the college's programs in these fields, highlighting job opportunities and available training in five industry clusters: business services, health care, multimedia and printing, trades and industry, and information technology. Tuition and other supports for some students will be paid with WIA vouchers of between \$2,500 to \$5,000 per student. Other students are eligible for Wage and Family Assistance (WFAA) funding which

uses TANF “non-assistance” dollars for training and services to support career advancement for former welfare recipients and other working poor adults. A Quick Start office at the college—staffed with representatives who, in a unique arrangement, work for both the school and MOWD—allows students to enroll at the school, receive career counseling and apply for tuition assistance.

The Capital Area Training Foundation (CATF) in Austin, Texas, is an industry-led nonprofit organization that brings employers and schools together in an effort to cre-

ate a quality workforce for the region and prepare all students for lifelong learning and career success. Founded in 1994 by the Greater Austin Chamber of Commerce and the City of Austin, CATF works through sectoral focused steering committees to broker relationships between local employers, professional associations, and educators. These committees design and update training and educational curricula in the high technology, consumer service, construction, automotive technology and criminal justice fields. CATF programming serves high school students, the transitional workforce and incumbent workers.

REGIONAL OPPORTUNITIES

Regional career pathways are only one kind of regional collaboration built around the idea of connecting low-income citizens with training and economic opportunities. The idea of focusing attention at the regional level has gained currency in recent years. These parallel structures are another fertile field in which to build career pathways because the various stakeholders have already begun to work together. Their focus on workforce development at the regional level, as well as industry- or sector-targeted skills training and the engagement of multiple partners, reflects what can be done.

The Annie E. Casey Foundation “Jobs Initiative” has helped community-based initiatives in five cities—New Orleans, St. Louis, Philadelphia, Seattle and Milwaukee—pursue regional workforce development strategies designed to connect low-income individuals with better employment opportunities. In several places, these efforts have developed and enhanced local skill training and career ladder initiatives, resulting in strong partnerships with training institutions such as community colleges.

Milwaukee’s Wisconsin Regional Training Partnership is an example of a regional intermediary working with multiple training providers—the local community college as well as a graphics industry consortium composed of employers and unions—to develop sector-based training programs to better serve low-income workers.¹⁴

Both the **National Center on Education and the Economy** and **FutureWorks** (a private consulting firm in Massachusetts) operate workforce development consortia with the primary purpose of promoting and strengthening local systems. In 2000-2001, FutureWorks undertook a project to help six metro areas develop new strategies for helping low-income people get good career-oriented jobs in information and telecommunications technology occupations.

In addition, the **U.S. Department of Labor** has provided millions of dollars in recent years to support the development of regional skills alliances and has set aside resources to finance technical skills training programs generated by local consortia of business, labor, community-based organizations and local WIBs.

Each of these efforts also has a common goal of addressing the need of a dual customer base: businesses and low-income workers. Each also stresses the importance of skills training to economic success. A new report from the National Association of Manufacturers’ Center for Workforce Solutions stresses the importance of strengthening local and regional workforce development systems so that businesses can access a qualified pool of entry-level workers, particularly those coming from non-traditional populations. The report also notes the importance of each worker knowing about “career opportunities and pathways.”¹⁵

SECTION FOUR: How State Involvement Can Assure Long-Term Success

In the last two sections, we've mentioned the importance of state support for large-scale career pathway success, especially from the perspective of local workforce development and community college systems. This chapter examines how states can initiate and support a career pathways model. Our conclusions are based on research into several states, particularly North Carolina and Washington, which have taken steps to incorporate a regional career pathway system statewide.

WHY SHOULD STATE POLICYMAKERS BE INTERESTED IN THE CAREER PATHWAYS APPROACH?

From a workforce and economic development perspective, a career pathways model can serve to:

- *Better address the workforce needs* of employers, particularly those in high-skill sectors.
- *Enhance the long-term earnings* and economic self-sufficiency of low-income workers.
- *Retrain and find employment for workers* dislocated by economic change.
- *Lead to a more efficient and effective use* of publicly allocated education and workforce development resources.
- *Strategically link* education, workforce and economic development policy efforts to strengthen the competitiveness of local economies and business.
- *Erase current perceptions* that the state supported workforce development system is ineffective or even irrelevant.

For a state's community college system, implementing career pathways can serve to:

- *Better address labor market needs* and raise college visibility in the business community.
- *Bring new resources* to support system programs and goals.
- *Better prepare individuals* to achieve economic self-sufficiency.
- *Provide a greater role* in state and local economic and workforce development efforts.
- *Make clear* to government officials and employers that community college education and training can lead to economically viable employment.
- *Generate greater support* for the community college system among state policymakers, employers, advocacy organizations and the public in general.

BACKGROUND

As discussed in previous sections, much can be accomplished with career pathways at the community college, local and regional levels. However, state support greatly facilitates building career pathways. And it is essential to create a more comprehensive system—and one that will last for the long term.

Explicit in this discussion is the notion that states have an opportunity—some might argue an obligation—to create an education and training environment that facilitates skills development, employment and life-long learning. Every state has both the institutions and resources necessary. To be effective, states will need to stimulate innovative partnerships and leadership among varying institutions, foster the creative use of existing resources and institute supportive state-level policies.

Creating a state policy environment that promotes career pathways usually requires policy makers to think and act in different ways. Necessary changes include:

- *Use workforce and human resource programs* to promote labor market advancement of low-wage workers in place of “work-first” policies.

- *Look toward community colleges*—working in conjunction with social service agencies and other partners—as the key infrastructure for expanding the pool of qualified skilled workers in demand from employers.
- *Provide incentives and flexibility* for educational and social service institutions to work together on career pathways.

State-level community college systems are worth a special mention because they profoundly affect the ability of individual colleges to develop and operate career pathways. Policies at the state level can control and/or influence a number of factors:

- Who can access community colleges
- The cost of community college tuition and training services
- How much state funding supports career and vocational training programs
- Whether college credit is awarded for vocational training courses
- Which indicators or measures of success are reflected in accountability systems

Since our understanding of what works at the state level is predicated to a large degree by our research into the two states that have done significant work with career pathways—Washington and North Carolina—we begin with a case study of each system.

CASE STUDIES: TWO STATES PURSUING A CAREER PATHWAYS STRATEGY

Washington State

When federal welfare reform was instituted in 1996, each state was given a large degree of latitude to

determine its own policies about changing the welfare system. In Washington State, Governor Gary Locke's vision of welfare reform went far beyond a "work first" philosophy.

"The real aim of this state's welfare reform law wasn't just to get people off welfare. It was to help people liberate themselves from dependency and poverty. That means more than getting off welfare, and it means more than getting a job. That is why the motto of WorkFirst is 'a job, a better job, a career.' Moving up the career ladder to better paying jobs is essential to ensuring people who leave public assistance stay off permanently. That's the toughest and truest test of welfare reform."

—Governor Gary Locke, December 1998¹⁶

As part of that plan, Washington expanded its welfare reform program in 1998 to develop a skills training initiative targeted at the community college system that could help low-income families move up the wage ladder. Working together, community colleges across the state helped translate the idea into a statewide career pathways initiative. From July 1998 through June 2002, Washington invested approximately \$75 million in state TANF surplus funds to support the development of career pathways programs in community colleges. The effort, operated by the Governor's Office, works as a partnership with key players at the state level, including the community college system, the TANF system, the Employment Security system, and the economic and community development systems. The career pathways are open to TANF recipients and all households with family income below 175 percent of the federal poverty level. In this instance, the state is using a portion of its TANF resources to serve the working poor.

The initiative has financed a number of noteworthy components of a career pathways system, including:

- **Pre-Employment Training** in short-term courses of 12 to 22 weeks, geared to hiring needs of local employers
- **Financial Assistance** to pay for tuition and books for TANF recipients who are currently working

and other low-wage workers with families

- **Workplace Basic Skills** that provide literacy training for low-wage workers in entry-level jobs—customized to their jobs and provided at their worksites
- **Families That Work**, a program that trains public assistance recipients and other low-income parents with young children in literacy skills, along with parenting and family management skills, to help them prepare for work
- **Program Re-design funds** allocated to colleges based upon local plans developed with their WorkFirst agency partners to re-design programs and services to better meet the needs of WorkFirst participants and low-income working adults attending college

After two years of this effort, the community colleges have trained more than 1,500 welfare recipients and other low-income adults, and the results illustrate the difference that training can make. For example, 66 percent of welfare recipients who completed a pre-employment training program started a job earning more than \$7.50 an hour, compared to 28 percent of all other welfare recipients placed in employment. And 68 percent of welfare recipients completing training in 1998-1999 stayed employed for one year, while only 51 percent of the overall caseload achieved this milestone.

With the encouragement of the state, Washington community colleges have begun to build career pathways focusing on important sectors of the Washington economy, including information technology, health care, construction, and aviation manufacturing and machining. The colleges report their enrollment and performance outcomes, and state policymakers monitor that data, giving insight into the strengths and weaknesses of the current strategy. This information also provides a solid foundation for making improvements as the strategy matures. The emphasis on performance starts at the top: the Governor receives a bi-weekly WorkFirst Performance Report that includes overall performance measures for caseload reduction and individual agency management targets.

Washington, like many states, has experienced budget problems, but it has maintained a commitment

to the career pathways initiative. In 2002-2003 the state will allocate \$25 million to support the initiative. Program delivery will change to a block grant with colleges deciding which of the components to support. Performance measures will be based on placement and wage rates and the number of TANF recipients served.

North Carolina

North Carolina's community college system is recognized worldwide for its success in addressing the customized training needs of local industry and businesses. But for the past five years, its colleges have also been developing a more systemic approach to providing career pathways training in key sectors of the state's economy.

In 1998, state policymakers recognized that welfare reform must include opportunities for recipients to access both short-term and ongoing career training if they were to have a chance of moving from dependence on public assistance to economic self-sufficiency. The state allocated \$500,000 of TANF funds to 12 community colleges for short-term career training programs, referred to as The Pathways Program. This initiative combined basic skills remediation with job readiness and occupational skills training. In some places, these efforts have resulted in basic skills and job readiness curricula being redesigned or contextualized to reflect the occupational or career subject.

In addition to the state's TANF funds, the state community college system redeployed some of its adult literacy funds (12.5 percent state leadership dollars under Title II of WIA) to provide ongoing support to six community colleges pursuing career pathways strategies. These community colleges have instituted short-term career training programs accessible to economically and educationally disadvantaged adults. These programs are being connected with other class and program offerings in the community colleges to create a pathway of continuous training within an industry sector.

In looking at North Carolina's effort, three important features of the system's community colleges set them apart from those of many other states.

- Community colleges are the training provider of choice because the state identifies the system "as the primary lead agency for delivering job training, literacy and adult education programs in the state."

- As suggested in the law, North Carolina’s community colleges also have responsibility for adult literacy training—one of only a handful of states where adult literacy is delivered primarily through community colleges.
- The state has a history of funding community colleges for human resource development and job readiness training to adults with little or no work experience, providing a foundation to develop short-term career training programs using state community college funds.

The North Carolina community college system is continuing to expand its career pathways, recently developing frameworks in four sectors—manufacturing, biotech-pharmaceuticals, boat building and industrial maintenance—that provide a template for module-based training that awards certificates to participants. For example, the manufacturing certificate program offers two levels of training: In Level 1, students are trained for 96 hours in general concepts of manufacturing, including some specific skills such as blueprint reading. Graduates can gain employment or go to Level 2, which provides very specialized workplace skills in metals, plastics, textiles and electronics. Level 2 is designed to lead to the degree-based vocational programs of the community college. Although these efforts were not designed to target low-income individuals, at least one community college, Guilford Technical Community College, is doing so (see sidebar on page 13).

ISSUES

Washington and North Carolina illustrate that states can pursue a career pathways strategy. Their experiences also show the challenges facing state policymakers. Making required changes within the workforce development and the community college systems is not easy nor is the task of bringing the two systems together in a common policy, resource and program strategy. This section discusses the issues in developing and implementing a career pathways strategy within the workforce agencies and a state’s community college system.

State Workforce Policy

Career pathways are rarely a prime consideration in workforce and economic development strategies at the state level. And even in states that do consider pathways a priority, several common problems often arise.

Lack of Constituency to Motivate Change

It can be difficult to change the perceptions of the value of skills training, the importance of community colleges and the overall need to pursue a career pathways strategy. Even if state policymakers have a vision and a desire to act on a career pathways strategy, they need support from businesses and/or low-income advocacy groups if they are going to change the direction of major institutions and systems.¹⁷ In too many states, neither business leaders nor advocates are focused on state workforce development issues. As illustrated above, both North Carolina and Washington had interested constituencies that contributed to the state’s focus on career pathways.

Insufficient Integration of Workforce and Economic Development Systems

TANF funds have proven to be an effective resource for catalyzing and supporting state-level career pathway initiatives in Washington and North Carolina. The WIA system has been less involved, denying a source of training funds, intensive services (i.e. case management support), and a ready source of participant referrals for college programs. WIA was not included in Washington’s career pathways partnership, and in North Carolina—where the WIA state plan effectively endorses a career pathways model—the state has not developed mechanisms or incentives to link workforce resources to the state-sponsored career pathways initiative. While some colleges develop their own connections with local WIBs, the efforts are ad hoc and not necessarily long lasting. At this point, we see no significant examples of states linking their WIA efforts to support career pathways.

At the heart of the problem is the fact that state workforce efforts are often directed to address the needs of an individual business rather than a key industry sector. Furthermore, many states do not encourage businesses to invest in upgrading the skills of their current workers. In Washington and Florida,

for example, state policymakers finance the training of entry-level workers who choose to seek additional educational and upgrade training. But these resources are targeted to the workers (former welfare recipients), not the businesses, and are rarely used. State policymakers should not assume that if they make training resources available to workers, particularly low-income workers, those individuals will automatically avail themselves of upgrade training on their own, because, in these states at least, there is little evidence to show that such strategies work.

Failure to Utilize the Workforce and Community College Systems

Although the community college system is a formidable source of skills training in almost every state, only a few, such as North Carolina and Washington, have recognized the system's value for career pathways. Without building around the community college system, which has the resources, faculty and organizational framework necessary to implement a career pathways model, piecing together a viable framework is next to impossible. Community colleges are rarely valued for their flexibility in skills training, particularly in providing short-term training and serving economically and educationally disadvantaged populations. In fact, the workforce system in some places relies more on private and proprietary training organizations, even though their cost may be higher.

Lack of Resources to Sustain and Institutionalize Career Pathway Efforts

Sustaining a career pathways initiative over time will take more than TANF and WIA funds, as important as they are. In both Washington and North Carolina, state budget pressures have reduced the amount of TANF funds available for special initiatives. Since skills training and career pathways efforts are still considered special initiatives, they are a logical target for reductions.

Over the long term, career pathways initiatives must become an integral part of workforce development. This is best done through the community college system, despite significant challenges (detailed in the next section). North Carolina's development of career pathway structures in four key economic sectors is a

start in this direction. This and similar efforts, however, must be followed with financial resources that can support program development and instructional costs. Because North Carolina officials understand this need, state policymakers are seeking to increase payments for FTEs generated from career training programs that address state economic development sector priorities.

Community College Systems

In most states, community college system policies and practices act as significant obstacles to the implementation of the pathways vision. Four specific issues emerged over the course of our research.

Limited Resources for Career Programs and Training

Funding can be a powerful source of leverage for system policymakers to engage community colleges in career pathways. Unfortunately, too often states allocate core FTE and other supplemental dollars in a way that actually discourages colleges to move in this direction. Career pathways, at least in the short-term, are relatively expensive to create and sustain. Yet in many states, no FTE funding goes to non-credit vocational and continuing education courses, foreclosing a significant source of funding for career pathways. In other states, such courses do receive FTE reimbursement, but at a fraction of the rate for credit-bearing courses.

For example, North Carolina provides state FTE reimbursement for non-credit programs at only two-thirds the value of an FTE generated by degree-credit programs. Washington provides no funds for such programs, forcing colleges to finance career programs through funding sources such as TANF, which are useful but not sustainable.

Reluctance to Establish Career Programs for Academic Degree Credit

State system policymakers can encourage colleges to offer career pathways programming for academic degree credit, which generates more revenue for the college, allows students to more easily transfer to two- and four-year degree programs, and can facilitate collaboration between academic and vocational facul-

ty and the instructors in workforce development and corporate training. However, states often have onerous and unwieldy approval procedures for credit classes, which are not responsive to evolving employer needs. For example, North Carolina's community college system, which recently created a pathways program in manufacturing, failed to develop and provide a training curriculum that was sanctioned for academic credit, effectively blocking schools from pursuing this option. Many faculty and administrators are also resistant to shifting the emphasis from academic program to courses they consider less academically rigorous. For many professors, such a shift would also raise concerns about continued funding and career tenure, in itself a reflection of the strongly perceived separation between academic and vocational programs.

Insufficient Access and Support Policies

State tuition and financial aid policies can make community college unaffordable for many students, especially part-time adult students. System regulations and policies often provide little incentive for individual colleges to focus on the financial aid and support needs of disadvantaged students.

The career pathways vision is universal access to basic skills and entry-level training for those outside or entering the workforce and upgrade training for those seeking career advancement. But providing access to students with low basic skills and/or limited proficiency in English is frequently a challenge.¹⁸ As they currently stand, policies and programs for students in adult education and ESL programs create significant barriers to achieving this goal. In most states, adult education and ESL services are offered not in community colleges but in school districts and other settings.

These programs are not designed to prepare students for college-level work and rarely articulate into entry-level programs at college campuses. We have found that even in states where community colleges are the main providers of these services, links to advanced certificate and degree-based career and vocational programs are weak at best. As such, adult literacy students are generally not well informed about their options for further education or career advancement.

College system policies exacerbate the problem by limiting access for students who score below basic skills thresholds on placement examinations, relegating them to ABE and ESL divisions either off-campus or within an entirely different division of the college. While colleges cannot serve all students with basic skills deficiencies, they can serve many more than they currently do.

Insufficient Accountability Measures and Weak Incentives

Incentives and performance accountability can be a centerpiece of efforts to align college behavior with the career pathways visions. Contrary to some perceptions, performance accountability can change behavior. For example, because of Florida's performance system, the state's post-secondary system now focuses on producing graduates for high-skilled and high-wage occupations. Unfortunately, performance systems rarely emphasize outcomes for the hardest to serve—students with low basic skills or from low-income communities.

At one time, Florida's community college system focused on outcomes for disadvantaged students by offering bonus points for their successful program completion and placement in high-wage jobs. When the system recently eliminated the bonus for placements, few spoke out about how the change removed an important factor for encouraging schools to provide additional services for this population. Where performance measures do focus on the educationally and economically disadvantaged, the guidelines tend to come from outside the college system via WIA, VATEA and other categorical programs and so are poorly aligned with the system's core measures.

In several states, performance systems have been put into place with the idea that supplemental incentive funds beyond a college's base allocation could be used to foster new behavior and innovation (e.g. California, Florida and North Carolina). Unfortunately, as state budgets have tightened, these supplemental funds have generally disappeared or have become too small to affect significant change. Base funding for colleges is still allocated mostly on per-student (FTE) basis. As such, performance and funding is still driven by degree attainment indicators that are tied to the colleges' traditional academic transfer mission.

PROMISING PRACTICES AT THE STATE LEVEL

States have the opportunity and resources to advance a career pathways strategy. Successful state practices include:

- Stimulating innovative partnerships among workforce and educational institutions and other key interests
- Instituting supportive state economic and workforce policies
- Fostering the creative use of existing resources
- Instituting supportive state community college policies

Innovative Partnerships and Strong Leadership

An ideal career pathways initiative advances a broad array of state-level interests. Neither a state's community college system nor its workforce development agency alone has the power or resources necessary to create and support a career pathways strategy. Other key stakeholders include economic development, social services, state-level business and low-income advocacy groups, as well as local philanthropic organizations. Recent experience in a few states suggests that the interest of key constituencies is an important driver of this change. Leadership can come from any of these stakeholders, but somebody must push for change.

EXAMPLES

Washington State's career pathways initiative brings together senior level leaders from the state's community college system, the TANF system, the Employment Security department, and the economic and community development department into an executive task force, chaired by an official of the Governor's Office. This group meets regularly to review its progress and assess individual participant outcomes. Washington's low-income advocacy community played an important role in promoting a career pathways agenda. A group of advocates, pressing for increased provision of education and skills training for welfare recipients as part of welfare reform,

worked with Seattle's mayor to craft an agreement with the state allowing local residents who participated in the Annie E. Casey Foundation's national Jobs Initiative to access education and training prior to work placement. From that agreement, the opportunity to receive training became an advocacy issue at the state level and contributed to the development of the career pathways model.

In **North Carolina**, the business community is an important proponent of skills training and the role of community colleges. The most influential business association, **North Carolina Citizens for Business and Industry**, supports an economic development agenda that gives priority to strengthening community colleges and skills training programs that meet industry needs, particularly in high-tech. These influences are felt across state government and can be seen in the strategic plan of the State WIB (referred to as the Commission on Workforce Development), which calls for the state to "expand flexible, non-degree based training program to support workers and employers." Focusing on the need for short-term, industry-driven training and raising the non-degree FTE to parity with the academic FTE, the plan also articulates an explicit goal to "ensure that the work-first welfare reform initiative improves skills and employment of the public assistance population." To do so, the plan references the Pathways program and the need to connect short-term training to additional training and advancement.

In **California**, the **Board of Governors** of the community colleges recently released a paper defining a career pathways approach as a framework for workforce development in the community college system. The report recommends:

- Allocating and integrating current resources based on the career ladders approach
- Creating an "innovation fund" to support college development of career pathways
- Developing career pathways performance measures for community colleges
- Providing needed technical assistance to implement career pathways

At this point, however, the initiative is still in the developmental stage within the community college system

and has not been reflected in state workforce or economic development policy.

Creative Use of Resources

All states have the authority to utilize existing resources to support a career pathways strategy, including money from federal funding streams such as TANF, WIA Titles I and II (adult literacy), and VATEA. For example, both titles I and II of WIA allow states to use 12.5 to 15 percent of their total funds for discretionary activities. In California, the total pool of funds approximates \$90 million. (California also provides \$65 million in welfare funds to the community colleges to train welfare recipients.) All of these resources can be used to support skills-training initiatives and thus promote career pathways by financing tuition, support services, case management, curriculum development, stipends and internships. Of course, using funds in this way is largely dependent upon state policy makers' understanding of the value of skills training.

EXAMPLES

Our research determined that **Washington State** illustrates creative use of resources. The Governor's career pathways initiative is largely funded with surplus TANF funds—since the summer of 1998, the state has invested approximately \$75 million from TANF to build career pathways programs in community colleges. Washington also invested staff time—Employment Security Department employees work with career pathways participants who have completed their first level of training, helping them secure upgrade training.

North Carolina has also used TANF funds to support its initial foray into career pathways and now uses part of the WIA Title II (adult literacy funds) to support current efforts. Allocating resources at the state level can also encourage localities to take common approaches to a career pathways strategy. Both Washington and North Carolina allow colleges to use these funds in ways consistent with local needs and circumstances, but both also provide a general framework. For example, North Carolina specifically supports initiatives that integrate job readiness preparation with adult literacy and occupational skills training.

Commitment to Skills Training, Increased Earnings and Economic Competitiveness

For statewide support of the career pathways model to become a reality, policymakers need to reexamine long-standing assumptions about welfare, economic development and education policies. A career pathways system is predicated upon valuing skills training and job advancement for low-wage workers and meeting the workforce needs of key economic sectors. More than any time in the past, business competitiveness is dependent on a well-trained workforce.

For states, this means abandoning strict state level “work first” policies—both the WIA and TANF programs are good starting points—and recognizing the community college system as the primary deliverer of training services within a state. It also means measuring success based on participants achieving some level of economic success rather than the more common measures of job placement and program completion.¹⁹ States must invest in skills training for the unemployed and current workers and hold the system accountable for helping workers obtain higher-wage jobs. Finally, this means targeting efforts to prepare workers for positions within key economic sectors and doing so in ways that help strengthen the competitive position of business.

EXAMPLES

In **North Carolina**, the community college system is valued by the business community as the key provider of skills training for workers. As such, community colleges are a critical player in economic development and have been designated by state legislation “as the primary lead agency for delivering job training, literacy and adult education programs in the state.” The state community college system undertakes a number of initiatives in support of this role, such as recently developing career pathways programs in key growth sectors of the North Carolina economy. The fact that community colleges are the primary deliverer of adult education and literacy programs creates an opportunity to better connect educationally disadvantaged students to career pathways and better address the entry-level workforce needs of business.

Washington recognized the importance of skills training in the state's welfare reform program. The state's goal for welfare reform was not limited to getting people off of pub-

lic assistance or simply finding them employment, but to “help people liberate themselves from dependency and poverty.” Washington created a career pathways program that relied on the community colleges for skills training and was targeted at key economic sectors. The initiative's success is measured against the goal of participants achieving earnings gains that lead them out of poverty.

Supportive State Community College Policies

State level community college policies profoundly affect the ability of individual colleges to develop and operate career pathways. Following are suggestions for developing supportive state policies:

- *Streamline curriculum review* and approval processes for credit-based career programs.
- *Institute accountability measures* that emphasize outcomes such as the percentage of remedial students enrolling in career programs and how much career pathways participants earn upon leaving the program.
- *Increase state funds* (e.g., FTE reimbursement rates) for vocational and career pathways programs to encourage colleges to give as much, or even more, attention to career programs as they give to general transfer classes.
- *Subsidize the tuition and fees* of low-income students to make it easier to attract participants to a career pathway.

EXAMPLES

Like in many states, **North Carolina's** non-credit classes only garner two-thirds of the FTE funds available for an academic course—making it difficult to pay for many of the career pathways offerings. However, state policy also precludes charging tuition for adult literacy and human resource programs and limits the amount charged for non-credit career programs to \$65 a class. And grant funds from the state allow the colleges to offer participants intensive case management support. With these low prices and other financial support, students are able to participate in the career pathway, despite the fact that the college is not able to recoup all of the costs from the state.

The community college system in **Texas** provides FTE funding for any students engaged in non-credit, career focused continuing education classes. This provides needed funding to develop a career pathways program, because the schools know that they will be supported in admitting disadvantaged students who are not necessarily candidates for a degree-based program when they enter the community college. The system also encourages its colleges to adopt an educational framework that includes enhanced skills training, certificate programs and training leading to degrees, and it does not cap the number of students that an individual college can enroll, allowing career pathways to grow without impeding the number of students enrolled in traditional programs.

Recommendations

Throughout our research, we were struck by the consistent presence of three themes that emerged at the college, community and state levels. These overarching ideas were in evidence at virtually all of the institutions or agencies we visited that had successfully implemented career pathways: a vision of career pathways as a framework for workforce development; integration of traditionally separate departments, programs and agencies; and links to current funding sources and, where feasible, development of new funding opportunities.

The following specific recommendations are built from our experience and research, distilling lessons learned by community colleges, local and regional government agencies, community groups, employers, and state policymakers from around the country. It is important to note that the work required to implement these ideas is not a part of anyone's job. It is easy to recommend collaboration, new systems and changes in funding. To move beyond the rhetoric, however, requires a catalyst of dollars and high-level leadership, a continuing and sustaining resource base, and technical assistance. Without this kind of support, even promising start-ups may die on the vine.

We have organized the recommendations in the same manner as our findings—at the community college, local and regional, and state levels. In each of these levels, there are compelling opportunities that can be realized:

- Individual colleges can make immediate changes to programs, policies, structure and administration to begin career pathways initiatives.
- Local and regional policymakers can integrate current workforce development and training into a more unified system that is centered on community colleges and career pathways.
- States have the ability to change policies on funding, education, workforce and economic development that allow—and even promote—thriving career pathways.

For any long-term success for career pathways, however, we cannot emphasize enough the impor-

tance of coordination of efforts, funding and leadership in all three spheres.

While most of our attention is focused on these three levels we would be remiss if we did not reference the important role of the federal government, which provides funding via a number of programs (including TANF, WIA, Perkins, ABE and Pell). Within the next 18 months all of these programs will be coming up for reauthorization, providing federal lawmakers an opportunity to incorporate and encourage the use of career pathways throughout the states.

FOR COMMUNITY COLLEGE LEVEL ADMINISTRATORS

(1) Develop bridge programs to augment traditional remedial and noncredit courses.

Bridge programs offer a direct transition from adult literacy, vocational and customized workplace literacy training to credit-bearing career preparation courses. As seen at **Guilford** and **Shoreline Community Colleges**, these programs provide orientation and exposure to college-level career courses and integrate instruction in basic skills with job training and workplace readiness through contextual learning.

To avoid a typical pattern in open-entry, open-exit programs, where low-income students can be overwhelmed by a lack of structure, community colleges should also consider structuring programs for cohorts of students. This helps to create the supportive learning environment that disadvantaged students need and promotes peer support.

(2) Promote learning communities that bring together academic, vocational and contract faculty.

To be truly successful, career pathways must overcome traditional divisions between programs and disciplines. Following the examples of **Mission** and **Las Positas Colleges**, community colleges should:

- *Require academic and vocational faculty* to plan and manage sector-based career pathways programs through a joint committee structure.
- *Provide resources* for stipends to support academ-

ic faculty in career pathways curriculum and professional development.

- *Promote learning, research and off-campus “internships”* for academic faculty with regional employers.
- *Offer the expertise of contract training staff* for technical assistance throughout the college on creating programs and instruction that are responsive to industry.

(3) Create administrative structures that foster collaboration across traditional divisions.

The college administration must support a cross-program system with structural changes. One route is illustrated by **Shoreline** and **Mission Colleges**, where each college created a workforce and economic development division that encompasses a range of programs and services, including contract education, workforce development, Tech Prep, career placement, work experience, and student and faculty internships. Leadership of the division reports directly to high-level college officials. Alternatively, as at **Las Positas College**, colleges can implement a structure where each academic dean is responsible for both academic and vocational programs.

(4) Employ internal resources to creatively build bridge programs.

Following the examples of **Guilford College** and the proposed programs of California colleges participating in the IT career pathways initiatives, colleges may do the following:

- *Employ resources for both credit and non-credit FTE* to support new basic skills training that is contextualized to specific career pathways.
- *Allocate adult education and ESL funding* (where under the school’s control) to support bridge programs targeted to those particular populations.
- *Employ support services funding* to provide pathways-related career counseling, internships, day care and transportation. In **California**, for example, college-controlled CalWORKS funding can be used to support

welfare recipients in career pathways programs.

- *Use VATEA funds* to support faculty development, business partnership creation, and retention of disadvantaged students in career pathways programs, as illustrated by **Portland Community College**.

(5) Seek and implement new federal and state grant opportunities.

The breadth of a career pathways model makes it a good framework for using grant funding from a wide range of federal and state sources. For example, for its career pathway programs, the Maricopa Community College system in Phoenix has employed federal Title V funds for “strengthening Hispanic institutions” and Title III funds for “strengthening developing institutions,” as well as other funding to support educational and career advancement for disadvantaged students. Other opportunities include federal and state economic development and workforce development discretionary grants.

(6) Develop links to the workforce, education and social services systems.

To fully develop career pathways, colleges should take advantage of the networks and resources offered within the surrounding community:

- *Work with CBOs* to create bridge programs to career pathways and to access CBO resources for social service and support for economically disadvantaged college students. Following the example of **Los Angeles City College**, **Peralta**, **Contra Costa**, and **City College of San Francisco**, colleges can develop branch campuses that integrate college and community resources.
- *Develop partnerships with ABE providers* to collaborate on development of contextualized basic skills curricula that lead directly into college career pathways. Examples include projects at **Portland Community College**, **Cabrillo Community College** and in **Orange County, California**.
- *Engage WIBs and welfare agencies* in development of training programs that integrate WIA, college

and welfare funds to best utilize existing regional resources. For example, the Fast Track program at **Cabrillo Community College** is funded in part by WIA and CalWORKs, and the local WIB and CalWORKs have been very involved in the design of the program. Partnerships can include direct recruitment and referral relationships with One-Stop and welfare intake centers, perhaps even stationing college counselors in these centers, as does **Edmonds Community College**.

FOR COMMUNITY AND REGIONAL LEVEL POLICYMAKERS

(1) To effectively leverage resources, WIBs should seek community colleges as training partners.

Promoting partnerships with community colleges greatly expands the range of training available to participants in the workforce training system and allows funders (such as WIBs, TANF systems, private funders and government) to make scarce training dollars go further by accessing established community college programs, faculty expertise, and state and local instructional resources.

(2) Develop a targeted sectoral approach that brings together colleges, the workforce system and employers.

Following the examples of **Austin** and the **Puget Sound region**, policymakers should develop programs based on local labor market demand, a strategy that incorporates these actions:

- *Assess high-skill, high-demand* labor market sectors.
- *Develop relevant career pathways* led by community colleges.
- *Build regional partnerships* with explicit roles and responsibilities.
- *Integrate* community college, workforce and economic development resources.

(3) Funders should support community and regional pathway initiatives.

An outside catalyst is often needed to overcome the obstacles and inertia that frequently prevent or curtail development of career pathways initiatives. The experience of the **James Irvine Foundation** and **David and Lucille Packard Foundation** shows that carefully tailored grants and technical assistance programs by funders can stimulate community and regional partnerships with a relatively small investment. Opportunities include:

- *Convene key regional* and community partners around development of a career pathways framework.
- *Provide funding* and technical assistance for initial planning and development.
- *Disseminate successful models* and network with communities and regions engaged in career pathways initiatives.
- *Support development* of statewide or national intermediaries that have the expertise and capacity to assist regional career pathways development.
- *Fund demonstration programs* with start-up dollars that leverage larger pools of public funding.

FOR STATE ADMINISTRATORS

(1) Develop a career pathways vision and model for the state.

State-directed policy can influence the community college system, as illustrated by **Washington's** experience. By following these guidelines, state policymakers can create the best atmosphere for career pathways to prosper at the local level:

- *Adopt a career pathways vision* as a direction for continuing workforce development.
- *Designate a high-level executive* to develop and administer a career pathways initiative.
- *Create a state level partnership* with welfare,

workforce, economic development and community college officials to develop a framework for career pathways, which should call for key components such as basic skills, entry-level and upgrade training.

(2) Allocate resources to stimulate and sustain a career pathways strategy.

State leaders have the authority to utilize existing funds from WIA, TANF, VATEA and other sources to finance a career pathways strategy. Pooling resources from these various programs can create a sizeable pot of funds. Two notable specific available sources are the Governors' WIA 15 percent funding pool and TANF surplus, which can help finance the development and operation of local programs (e.g., program design, tuition, support services, etc.), as well as support technical assistance to help develop career pathways.

(3) States should explicitly designate community colleges as the primary deliverer of workforce training.

Community colleges can be placed at the center of workforce development if they are given responsibility for administering all adult education programs, or if they are recognized by the WIA system as a preferred training provider. **North Carolina's** designation of the community college system "as the primary lead agency for delivering job training, literacy, and adult education programs in the State," was key to its success in promoting the development of career pathways.

(4) Seek new strategies and approaches for helping incumbent entry-level workers access upgrade skill training.

The state workforce system must identify and implement more effective ways of engaging both workers and businesses in skills upgrading for large and small employers. It also requires looking at human and social service programs to identify policies and resources that can encourage and support low-wage workers who want to pursue additional education and training.

FOR COMMUNITY COLLEGE SYSTEM POLICYMAKERS

(1) Develop and disseminate a vision for career pathways programming focused on the state's key employment sectors.

Experience in **Washington** and **California** shows that when policymakers for the state community college system are clear on their support and vision for career pathways, local administrators are more likely to build these programs. Ideas include:

- *Promote a program model* that incorporates basic skills, entry level training and upgrade training, as well as social services when necessary.
- *Encourage colleges to integrate* academic, vocational and contract education.
- *Encourage* regional partnerships and collaborations.
- *Incorporate* capacity building and technical assistance.

(2) Provide start-up resources.

As the **California Board of Governors Framing Document** suggests, colleges have few discretionary dollars to develop new programs or reorganize existing ones. State system offices can address this barrier by providing resources (financial and other) to colleges for program and curriculum development.

(3) Increase financial support available for career pathways programming.

Colleges can use existing resources to develop career pathways programs, but the statewide community college system can and should expand the total funding pool for career pathways.

- In states such as **California**, the state can offer "growth funding" to avoid rules that cap money for colleges that have reached their enrollment goals.
- Additional funding can be earmarked specifically for career pathways programs, recognizing the higher costs for start-up, labs and equipment, student counseling, and employer outreach.

- The state can offer a higher FTE for career pathways programs that serve low-income and low-skilled adults.
- Community college system policymakers can collaborate with other state agencies to target additional discretionary resources (TANF, WIA, VATEA) that fund education and training for targeted groups of students. **Washington, North Carolina, California** and **Oregon** have used some or all of these funding sources to support community college career pathways programming.

(4) Develop bridge programs as a first step in career pathways.

To enable students to access college-level career preparation programs, states need to develop preliminary bridge programs that combine needed basic skills such as literacy and numeracy with work readiness and career-specific skills training. For students lacking basic skills, these bridge programs are the first step on the career pathway. **Washington** and **North Carolina** both provide models of how to do this.

To support bridge programs, states should remove restrictions on community college attendance for students with low basic skills. California, for example, requires its colleges to serve all students who wish to enroll. Such a policy places greater demands on placement and articulation across programs, but it has the advantage of attracting more students to the state college system.

In many states, low-skilled adults and second language learners are served outside the college system, in school districts and other adult education programs. In these instances, college systems can aggressively develop collaborations and articulation agreements with the state agency responsible for ABE and ESL in their states. These feeder agreements can also be used to reinforce the pathways model and ensure that non-college programs are successfully preparing students to meet the challenge of college vocational classes. Where colleges have primary responsibility for adult education and ESL, state system offices can assist colleges to reorganize their ABE and ESL programs so they provide students with a stronger orientation to college and careers.

(5) Provide technical assistance to community colleges.

Community college systems can invest strategically in technical assistance to individual schools. Possible assistance can include:

- Faculty professional development around industry practices, teaching contextualized basic skills and other key elements of the pathways strategy
- Professional development for adult literacy and remedial instructors, many of whom are low paid adjuncts with little professional support for their teaching
- Tools to integrate adult education and ESL students into the college mainstream, including help with program redesign, collaborative teaching, and integrating basic skills and English language learning into vocational classes

(6) Enhance financial aid/support for students enrolled in career pathways.

Students will not attend programs they cannot afford. State systems must therefore ensure that tuition and fee structures are affordable for all students.

- **California** waives tuition and fees for low-income students, and **North Carolina** caps the cost of non-credit programs at \$65.
- States can also provide tuition waivers and financial supplements to low-income students to make up for gaps in the availability of Pell funding, which particularly affect part-time students and those in non-credit programs. **Washington, California, Wyoming, Illinois, Pennsylvania, Massachusetts** and **Maine** have all begun to offer this kind of financial support for part-time students.
- States should aggressively market scholarships, living stipends and work study resources that are currently available to students through state programs and federal sources such as WIA and TANF. System offices should also train community college staff regarding these programs and their eligibility criteria.

(7) Build a statewide structure to provide support services.

States should enhance guidance and academic support services. That starts with freeing state resources from existing student services budgets for career pathways programs and encouraging colleges to use available discretion and funding to place greater emphasis on support services. Given limited resources, state policymakers should seek to tap other available funding, such as federal VATEA dollars, which can be used for students in career and vocational programs. **Oregon** is using VATEA to increase retention and degree completion rates of career and vocational students.

(8) Develop performance standards to reward colleges that develop effective career pathways programs.

To reward colleges' success in implementing career pathways, states can tie some portion of base or incentive funding for campuses to meaningful performance measures for career and vocational programs. **Colorado**, for example, counts the percentage of career and technical graduates employed or continuing their education in its accountability system. States should adopt performance measures that track program completion, degree attainment, earnings and educational advancement for all students in the college system. States might also provide small bonuses and rewards to colleges that show exemplary performance in serving low-skilled adults and other educationally and economically disadvantaged groups of students.

CALIFORNIA-SPECIFIC RECOMMENDATIONS

The general recommendations provide a guide to policymakers in California. However, due to the size and importance of the state's community college system, we have identified specific recommendations that are relevant to California.

(1) Develop a career pathways vision and model for the state.

Like many other states, California currently lacks a

career pathways strategy that can serve as an overarching framework for state workforce development policies, programs and resources. The state's community college system, in its **Board of Governors Career Ladders Framing** document, has taken an important step in this direction, offering a guiding set of principles for California's 108 community colleges. To encourage development of statewide career ladders programs, other key state agencies should take similar steps. Key actions include:

- The state Workforce Investment Board should adopt a career ladders framework as a model for California's 52 local Workforce Investment Boards.
- The state Workforce Investment Board should recommend that local WIBs adopt policies that leverage WIB and community college system funding through joint support of training programs.
- The state legislature should follow the North Carolina model in designating community colleges as the preferred workforce development training partner.

(2) Allocate resources to stimulate and sustain a career pathways strategy.

California policymakers should look to the following resource pools to support career pathways:

- **Governor's WIA 15 percent dollars.** The state has set up a process to allocate about \$20 million of the possible \$90 million of WIA funds that are available for innovative local projects. The state should expand the \$20 million allocation to explicitly support regional career pathways. Proposals should require a high-growth, high-wage sectoral career pathways framework; a partnership of workforce investment boards, workforce and economic development agencies, and community colleges; and integration of local resources.
- **TANF funding.** To the extent that these funds are still available, the state should encourage county welfare offices to follow the example of **Los Angeles County** in designating performance incentive funding to support career pathways for the working poor.

- **Employment Training Panel funds (ETP).** California should continue and expand efforts to promote the use of ETP funds to support regional career pathways, particularly to encourage community colleges to seek and support regional partnerships with employers.

(3) The California Community College System should encourage career pathways.

The community college system should move forward with proposals to use discretionary economic development grant funding to encourage regional, sector-specific career ladders. Expanding on the current focus on employer-driven partnerships, the community college system should use its current \$40 million in economic development funding. Projects include:

- *Develop sectoral career pathways* incorporating basic skills, entry-level training and upgrade training.
- *Partner* with local Workforce Investment Boards and other public funding sources.
- *Develop branch campus models* in partnership with community providers.

(4) California should encourage colleges to develop preparatory basic skills programs linked to career pathways.

To the extent feasible, the state should encourage colleges to use the funding pool designated for basic

skills to support development of bridge programs, which should incorporate career orientation, literacy, numeracy and computer skills. The state should also encourage colleges, Workforce Investment Boards and county welfare agencies to partner in development and support of these programs, which can be delivered on college campuses or through community-based branch campuses. California's community college system should work with private foundations to provide outside assistance to community colleges in developing career pathways.

(5) Foundations should add their resources at this critical initial juncture.

A number of California foundations have made substantial investments in career pathways initiatives in the state. To help institutionalize these efforts, foundations should assist the community colleges system, as well as individual colleges, in implementing the best practices identified here. Specific opportunities include:

- *Provide seed funding* to regional, community college-centered career pathways initiatives.
- *Support technical assistance efforts* focused on both the college system and individual institutions.
- *Support research* on the impact and effectiveness of career pathway programs.
- *Develop and support networks* to link California community colleges and partners engaged in development of career pathways.

ENDNOTES

¹ David Gruber and Brandon Roberts. *Workforce Development: Issues and Opportunities*. James Irvine Foundation, San Francisco, CA. July 2001.

² Harry J. Holzer and Michael A. Stoll. *Employers and Welfare Recipients: The Effects of Welfare Reform in the Workplace*. Public Policy Institute of California, San Francisco, CA. 2001. pp.50-54.

³ Workforce Florida, Inc. *Weekly Workforce Bulletin: Welfare Transition Reports for First Quarter 2001*. Tallahassee, FL, October 25-November 2, 2001. p. 3

⁴ Elise Richer, Steve Savner and Mark Greenberg. *Frequently Asked Questions About Working Welfare Leavers*. Center for Law and Social Policy, Washington, DC. November 2001. p. 21.

⁵ Joan Fitzgerald, *Community Colleges as Labor Market Intermediaries: Building Career Ladders for Low-Wage Workers*. Center for Urban and Regional Policy. Northeastern University, Boston, MA. 2000; Davis Jenkins. *Realizing the Potential of Community Colleges as Bridges to Opportunity for the Disadvantaged*. Unpublished Briefing Paper for the Charles Stuart Mott Foundation. 2001; W. Norton Grubb, "Second Chances in Changing Times: The Role of Community Colleges in Advancing Low-Skilled Workers." In Richard Kazis and Mark Miller (Eds.) *Low-Wage Workers in the New Economy: Strategies for Productivity and Opportunity*, 2001.

⁶ Thomas Bailey and Irina Averianaova. *Multiple Missions of Community Colleges: Conflicting or Complementary?* Community College Research Center, Teachers College, Columbia University, New York, NY. 1998.

⁷ Christopher Shults. *Remedial Education: Practices and Policies in Community Colleges*. American Association of Community Colleges, Washington, DC. April 1, 2000. p. 3.

⁸ *The Wall Street Journal*. Nov. 26, 1996. p. 1.

⁹ Education Commission of the States. *State Funding for Community Colleges: A 50-State Survey*. Center for Community College Policy, Education Commission of the States, Denver CO. 2000.

¹⁰ Lawrence Burton and Carin Celebuski. *Technical Education in 2-Year Colleges; HES 17*. National Science Foundation, U.S. Dept. of Education, National Endowment for the Humanities, Washington, DC. March 1995.

¹¹ Lisa Matus-Grossman and Gooden. *Opening Doors: Students' Perspectives on Juggling Work, Family and College*. MDRC, New York, NY. June, 2002.

¹² Local Initiatives Support Corporation, "The Whole Agenda: The Past and Future of Community Development." March, 2002. p. 7.

¹³ Lisa Matus-Grossman and Gooden. *Opening Doors: Students' Perspectives on Juggling Work, Family and College*. MDRC, New York, NY. June, 2002.

¹⁴ Wendy Fleischer. *Extending Ladders: Findings From the Annie E. Casey Foundation's Jobs Initiative*. Annie E. Casey Foundation, Baltimore, MD. September, 2001.

¹⁵ Center for Workforce Success. *Making the Connections: The Role of Employer Associations in Workforce Development*. National Association of Manufacturing, Washington, DC. 2002. p. 11.

¹⁶ Washington State Governor's Office. *Building Better Lives: Results of the First Year of the Washington WorkFirst Program*. Olympia, WA. December, 1998. p. 1; Washington State Board of Community and Technical Colleges. *WorkFirst: Second Year Accountability Report for Workforce Training Programs*. September, 2001. pp. 11-13.

¹⁷ Marty Liebowitz, Leslie Haynes and Jane Milley. *Driving Change in Community Colleges*. Jobs For the Future, Boston, MA. July, 2001.

¹⁸ Christopher Mazzeo and Sara Rab. *Developing Career Pathways for Basic Skills Students: A Review of the Literature*. Annie Casey Foundation, Baltimore, MD. 2001.

¹⁹ Carol Clymer, Brandon Roberts and Julie Strawn. *States of Change: Policies and Programs to Promote Low-Wage Workers' Steady Employment and Advancement*. Public/Private Ventures, New York, NY. May, 2001. p. 15.