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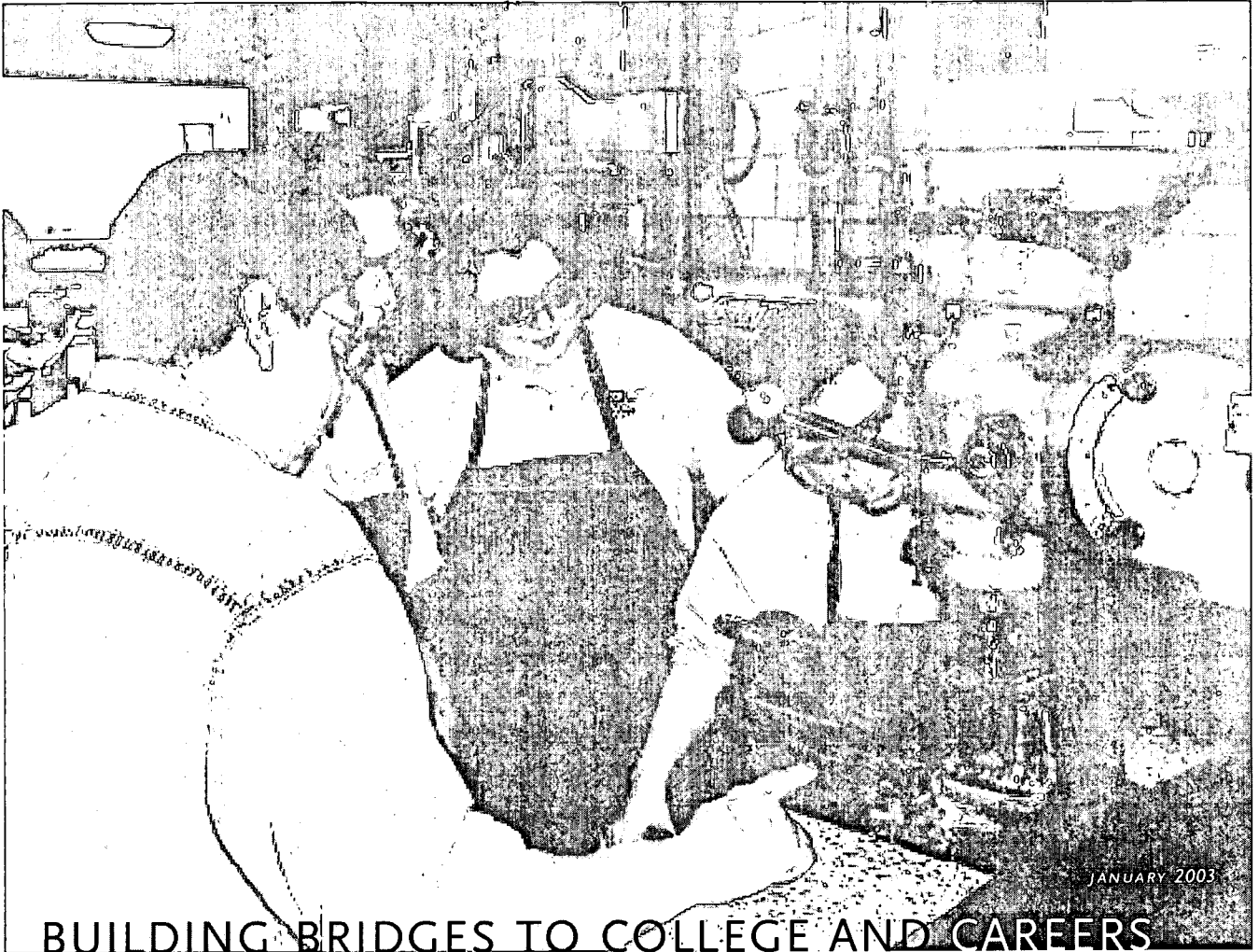
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## ABSTRACT

State and local policymakers increasingly see the need to adapt workforce and education policies to the economic changes in their states and communities. The new economy is organized around skills, flexibility, and the willingness of all workers and employees to adapt to changing circumstances. For workers, this demands an increased investment in education; for policymakers, these economic realities have put in stark relief the limitations of current workforce, welfare, and education policies. This study identifies and draws lessons from several community colleges and community college programs that have reconsidered their developmental and/or adult education offerings and are actively creating bridges to college and careers for disadvantaged students. This paper presents case studies of programs at Cabrillo College, Santa Cruz, California; Westside Technical Institute at Daley Community College, Chicago, Illinois; Henry Ford Community College, Dearborn, Michigan; Portland Community College, Portland, Oregon; and Community College of Denver, Denver, Colorado. For each case study, the paper presents the key initiative of the program(s), and analyzes sustainability, facilitating factors, and continuing challenges. Each of the programs presented here has moved beyond the traditional model of adult basic education, while focusing on teaching and learning as well as outcomes. (Contains 44 references.) (NB)

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JANUARY 2003

# BUILDING BRIDGES TO COLLEGE AND CAREERS

Contextualized Basic Skills Programs at Community Colleges

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WORKFORCE STRATEGY CENTER

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## WHO WE ARE

WORKFORCE STRATEGY CENTER  
A NONPROFIT MANAGEMENT CONSULTING FIRM



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 and consulting 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](http://www.workforcestrategy.org) or contact us at 718-434-4790.

# **Building Bridges to College and Careers:**

## **Contextualized Basic Skills Programs at Community Colleges**

JANUARY 2003

### **ACKNOWLEDGEMENTS**

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# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b> .....	1
<b>INTRODUCTION</b> .....	2
<b>CASE STUDIES</b> .....	5
Cabrillo College, Santa Cruz, California.....	5
Westside Technical Institute at Daley Community College, Chicago, Illinois .....	7
Henry Ford Community College, Dearborn, Michigan.....	9
Portland Community College, Portland, Oregon .....	11
Community College of Denver, Denver, Colorado .....	13
<b>SUMMARY OF KEY FINDINGS</b> .....	15
<b>REFERENCES</b> .....	20

## EXECUTIVE SUMMARY

New economic realities have created a need for workforce and education policies that better meet employer demands for skilled workers and the needs of workers for economic self-sufficiency. To address these demands, there is growing evidence that workforce and education systems should be reorganized around "career pathways" that integrate education, training and work and are targeted to high wage, high demand employment. Central to the career pathways model is the development of clear connections, or bridges, between basic skills development and entry-level work or training in high wage, high demand career sectors.

In this study, we examine and draw lessons from five community colleges that have created such bridges in an effort to teach basic skills to disadvantaged adults: Cabrillo College, Aptos, California; West Side Technical Institute at Richard Daley College, Chicago, Illinois; Henry Ford College, Dearborn, Michigan; Portland Community College, Portland, Oregon; and Community College of Denver, Denver, Colorado.

These colleges are committed to contextualized teaching and learning strategies as part of basic skills instruction and career pathways programming. Research suggests that contextualized basic skills instruction is often more successful than traditional models of adult education in engaging disadvantaged individuals and linking them to work. In developing their bridge programs, these five colleges went beyond existing adult education programs by:

- Integrating developmental and academic content
- Developing new curricular materials and providing instructional support and professional development to help faculty learn to teach in a new way
- Maintaining active links with employers and industry associations
- Finding resources to fund these programs, at least in the short-term

- Producing promising program outcomes, especially in terms of job placement and earnings

The five colleges also face a number of challenges in sustaining and expanding these innovative program efforts, including:

- Balancing relevance and content in classroom instruction
- Promoting effective instructional leadership
- Enrolling and engaging lower-skilled students
- Providing evidence of long-term program impact
- Serving more than a small portion of the potential student population

Community colleges around the country are making significant strides in rethinking their approach to basic skills education in the context of a larger effort to better connect students to college credentials and rewarding careers. While none of the colleges profiled in this study have been able to serve more than 20% of their developmental, English as a Second Language (ESL) and adult education population, they all seek the resources and capacity to go to scale. The goal for funders and policy makers is to develop strategies for moving these efforts to scale and helping to catalyze similar changes in other community colleges. Reaching such a goal will require changes in institutional practice and public policy. In particular, policy makers and foundations should consider the following three steps to support the expansion of bridge programming:

- Provide resources for professional development
- Cultivate instructional leadership
- Fund evaluations and additional research

Taking these steps can help states and institutions improve the relevance of adult and developmental education to adults seeking career training and economic advancement, and facilitate more direct links between student and high wage jobs and employers.



## INTRODUCTION

State and local policymakers increasingly recognize the need to adapt workforce and education policies to the reality of economic change in their states and communities. The “new economy” is organized around skills, flexibility and the willingness of all workers and employers to adapt to changing circumstances. For workers, the new economy demands increased investment in education with higher wages increasingly linked to some form of post-secondary education. For employers, the new economy demands, among other things, workers with a wider array of basic skills, including reading and writing oral communications, mathematical reasoning, critical thinking and reasoning, problem solving, teamwork, interpersonal skills and an ability to learn continuously (Murnane & Levy, 1996; Comings, Reder & Sum, 2001).

For policymakers, these economic realities have put in stark relief the limitations of current workforce, welfare and education policies. While “work-first” policy efforts have brought more people into the labor market, they have not helped most of them escape poverty. Nor have employers been especially helped by the current workforce development system. In many high-skill sectors, such as information technology, nursing, and allied health, employers report continuing difficulty in finding and keeping entry-level and skilled workers.

In a recent report to the James Irvine and Ford Foundation, the Workforce Strategy Center called for a reorganization of this workforce development system to better meet employer demands for skilled workers and the needs of the workforce for economic self-sufficiency. To address these needs, the report recommended our workforce and education systems be organized around long-term, comprehensive “career pathways” integrating education, training and work and targeted to high-wage high-demand employment. For individuals lacking skills and resources, career pathways can provide an introduction to education and career opportunities and the basic skills needed to succeed in post-secondary career training. Indeed, there is growing evidence that community college-centered career pathway programs are a successful way to bridge disadvantaged individuals out of poverty and into self-sufficiency (Alssid et al, 2002).

Central to the career pathways model is the development of clear connections, or bridges, between basic skills development and entry-level work or training in high-wage, high-demand career sectors. In practice, however, these connections are often rarely realized locally, regionally or nationally. Even within individual community colleges, the critical elements of career pathways—basic skills, academic, and vocational education—are frequently perceived and organized as separate divisions with distinct missions, programming, faculty and students (Bailey & Averianova, 1999; Jenkins, 2002). While colleges that serve a largely economically disadvantaged population report that a majority of their students lack the basic skills necessary to do college level work, few have made conscious efforts to link developmental, adult education and English as a Second Language (ESL) offerings to career specific vocational training and advanced education. Yet many of these traditional developmental and adult education offerings have high dropout rates and show limited evidence of success (McCabe, 2000; Abell Foundation, 2002).

### The Purpose of this Study

In this study we identify and draw lessons from several community colleges and community college programs that have rethought their developmental and/or adult education offerings and are actively creating bridges to college and careers for disadvantaged students. Developing these connections requires making remedial education more relevant to adults seeking career training and economic advancement as well as facilitating direct links to higher-level community college courses. Thus, we searched for programs and colleges that:

- Serve welfare recipients, dislocated workers or other adults with identified basic skills deficiencies
- Teach developmental, adult education or ESL classes in the context of students’ lives and the work-specific skills they need for employment in particular industries and sectors
- Seek to “bridge” these students to work or advanced training in high-wage, high-growth employment sectors with clear opportunities for career advancement

**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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In particular, we were interested in those colleges and programs committed to contextualized teaching and learning strategies as part of basic skills instruction. In this type of approach, courses such as remedial English, reading and math are modified to incorporate materials from specific fields into the actual course content. Programs that promote contextual teaching and learning make heavy use of projects, laboratories, simulations and other experiences that enable students to learn by doing (Jenkins, 2002). By integrating instruction in basic skills with instruction in technical content, contextualized teaching and learning also enables academically unprepared students to obtain career training at the same time as they enroll in basic education.

In our review of the literature and informal discussions with workforce development professionals and community college experts, we identified eight community colleges that had programs and college-wide initiatives that fit our three criteria. The eight colleges are: Cabrillo College, Aptos, California; West Side Technical Institute at Richard Daley College, Chicago, Illinois; Henry Ford College, Dearborn, Michigan; Portland Community College, Portland, Oregon; Community College of Denver, Denver, Colorado; Shoreline Community College, Shoreline, Washington; Guilford Technical Community College, Greensboro, North Carolina; and Mission College, Santa Clara, California.

Documents and electronic materials were reviewed from each of the colleges and followed up by phone and email. Site visits and interviews were also conducted at five of the eight colleges. For each of the site visits, we interviewed senior college administrators and key faculty and staff involved in basic skills and contextualized learning initiatives. We also observed classes whenever possible. This report summarizes our findings from all eight colleges, with a particular focus on the five we intensively studied: Henry Ford, Westside Technical, Cabrillo, Portland and Community College of Denver. Case studies of these five colleges are included in this report.

#### **Beyond Traditional Adult Basic Education**

Despite evidence of the growing need for adult literacy and skills remediation and the strong links between literacy and earnings (Comings, Reder &

Sum, 2001), adult basic education (ABE) and other skill-building strategies have been de-emphasized in recent years by welfare and workforce policymakers in favor of immediate workforce attachment strategies (Strawn, 1998; Savner, 1999). This shift was precipitated by a generation of research and evaluation findings showing that adult basic education programs were often of low quality and had little economic or educational impact (see Pauly & DeMeo, 1996; D'Amico, 1997). In her summary of this literature, Strawn (1998) found that fewer than half of the adult education programs for welfare recipients she surveyed either increased employment or average yearly earnings. The majority of enrollees did not even earn a GED, and few of the programs raised student test scores (see also Beder, 1999).

Researchers and others have sought to explain these findings by invoking student characteristics such as low motivation or learning disabilities. Student factors might also account for the high dropout levels and low levels of attendance that are generally the norm in ABE programs. Yet there is also evidence that program-specific factors matter as well. A study of Greater Avenues to Independence (GAIN) programs in two California counties showed that adult basic education programs that paid attention to program quality produced small but statistically significant test score increases (Martinson & Friedlander, 1994). Fein et al (2000) report similar results in an initial evaluation of the New Visions program at Riverside Community College.

These findings have led researchers to more closely examine the nature of "program quality" in adult education. What works in teaching basic skills? To answer this question, we conducted a thorough review of the literature as part of this project. Based on this review, we found that successful basic skills programs:

- Link students to advanced educational opportunities
- Link students to specific employers and work opportunities
- Have a strong focus on curriculum, instruction and student learning

#### **Links to Advanced Education**

Traditionally, adult basic education and ESL pro-



grams have weak or non-existent links with advanced certificate and degree programs. Yet these links are crucial to producing positive student outcomes. In the two aforementioned GAIN programs, clients who successfully completed basic education went on to job search rather than further education. For this reason, test score increases did not translate into any significant earnings increases in the San Diego GAIN program (Martinson & Friedlander, 1994). Similar findings were reported in the evaluation of New Chance, a MDRC national demonstration project that combined education, vocational training and college classes. While there were no positive earnings effects of the program for women receiving a GED alone, women who earned a post-secondary training certificate increased their average monthly earnings. Evaluators concluded that "participants should be made aware that basic education has little value by itself and should be strongly induced to pursue post-GED training and credentials." (Bos, 1996:16)<sup>1</sup>

#### **Links to Employment and Work**

Research also suggests that a strong connection between adult basic education and employment increases earnings, at least in the short term. Programs with stronger links to employers have higher placement rates, thus increasing the average earnings of students. When tied to an explicit strategy of retention and wage progression, such employer links have shown potential to increase earnings over the long term (Grubb, 1996; Jenkins & Fitzgerald, 1998).

A lesser-known virtue of strong links with employers and work is that they enhance student learning of basic skills. Both Grubb et al (1999) and Murphy & Johnson (1998) found that one essential characteristic of effective programs is "a focus on employment-related goals through instruction that integrated basic and occupational skills training with work-based learning." (Imel, 2000:2) There is also an extensive literature in education and cognitive science showing the important role context plays in shaping student learning (Rogoff, 1990; Lave, 1991; Wenger, 1998). One important "context" for adult learning is the world of work itself and

the specific tools, practices and social relations embedded in the work setting (Greeno et al, 1999). Basic skills programs that link skill development to these real-world contexts enable learning by clarifying the relevance of skills to the setting they are applied in. Basic skills education that is contextualized also enhances student motivation to learn and can reduce high levels of attrition in these programs (Hull, 1997; Strawn & Martinson, 2000).

#### **Focus on Curriculum and Instruction**

One of the major ongoing studies in this area is the Evaluation of Effective Adult Education Programs and Practices being conducted by Abt Associates for the U.S. Department of Education (see Alamprese, 1998; Alamprese, Labaree & Voight, 1998; Alamprese, 2001). This study is among the first that attempts to detail program-level factors in adult education and their relation to student outcomes. As part of this study, case studies were conducted of nine exemplary ABE programs to identify key dimensions of program quality. According to their review, exemplary ABE instructional programs possess the following five features:

- Effective program management and instructional leadership
- A commitment to staff development
- Conscious attention to appropriate instructional strategies
- A focus on learner assessment
- Extensive supports for learning, especially for students with low levels of literacy proficiency (Alamprese, 1998: 5-8)

Alamprese and associates have yet to report on the interaction of these five components and how they specifically work together to produce better student outcomes. However, research on elementary and secondary school reform suggests that a combination of

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<sup>1</sup> More recently, Comings, Reder and Sum (2001) have shown that earnings rise with increases in literacy levels, even for individuals holding the same credentials.

effective leadership, sustained staff development, and a strong professional community focused on teaching and learning are essential features of efforts to improve student academic achievement (Louis & Kruse, 1995; Newmann, King & Youngs, 2000; Sebring & Bryk, 2000; Elmore, 2002).

### **How This Report is Organized**

We use these three features of effective basic skills programs as an organizing principle for the five community college case studies to follow. For each college, we describe the history and current status of their efforts to “bridge” basic skill students to advanced education opportunities and career path employment. We discuss the organization of teaching and learning (instructional leadership, staff development, classroom instruction) at each of the programs/colleges profiled. We also focus on the sustainability of community college bridge efforts and the potential for “scaling up” promising programs and practices to serve a greater majority of the developmental and adult education populations at each of the colleges. After the case studies, we conclude with a summary of our overall findings and recommendations for policy makers and funders.

## **CASE STUDIES**

### **Cabrillo College, Santa Cruz, California**

Cabrillo College is actively working to promote career pathways that link low-income individuals to job ladders, partly through the use of contextualized learning in several key initiatives. In addition, the college has several programs, including the Fast Track to Work (see Alssid et al, 2002 for details) and Ladders projects, whose explicit mission it is to move students into work and to provide opportunities for career advancement to employment that pay a living wage. This is a difficult task in part because the cost of living is exceptionally

high in Santa Cruz and because Cabrillo serves multiple communities, including Watsonville, an agricultural area with a population that is 70% Latino.

**Key Initiative: Ladders Project.** The Ladders project, a creation of the Santa Cruz County Coalition for Workforce Preparation (in which Cabrillo is a partner), strives to “build a comprehensive, integrated workforce development system that is responsive to the needs of underrepresented and low-income populations, to provide the ability to move through these institutions and move into the workforce,” according to the Dean of Career Education. Ladders is funded in large part by the Packard Foundation, with the rest provided by Cabrillo College and the Human Resources Agency (HRA).

In 1998-99, the Ladders project staff identified six career ladders to focus the program around (allied health, public safety, office systems, computer technology, childcare and retail), based on local labor market information and local employers’ needs, which specified occupational paths and training for local jobs. Together, these six ladders include 42 occupational tracks encompassing over 150 job titles. The ladders start quite low, such as a childcare aide, and top out around management levels. “One of the things we learned is not to try and map out every way that someone can advance up a career ladder. That’s a trap we fell into,” said the Ladders director. “You have to keep it simple.”<sup>2</sup> Staff identified three critical aspects that crosscut all six ladders—computer proficiency, work-based learning, and English proficiency—and developed projects in each of these areas. The computer proficiency pilot involves working with local training partners to improve computer courses to better match the needs of local employers. In addition, a Work-Based Learning Resource Center was developed at Cabrillo to connect classroom learning to work through internships, mock interviewing, job shadowing, and other similar activities.

The Ladders project includes an ESL pilot program, the Partnership for Integrated Language and Occupational Training, designed to ensure access to

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<sup>2</sup> Details about the Ladders project can be found at [www.careerladders.net](http://www.careerladders.net).

**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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the career ladder model for economically disadvantaged adults with limited English proficiency. The program is vocational ESL (VESL), which means that English is taught in the context of work. After the students participate in an initial assessment, they begin by learning English associated with work in a "world of work" class that focuses on hands-on, work-based learning. After passing a series of competencies, they move on to one of three career module courses: Medical Careers, Careers with Children, or Construction. In these courses, English is taught in the context of a specific occupational category.

This ESL pilot has served approximately 350 students thus far in the "world of work" curriculum and three next-step modules. About fifty have advanced to a higher-level training program, and about 10% are working in entry-level jobs.

**Key Initiative: Early Childhood Education Program:** Spanish-to-English. One goal of the Early Childhood Education (ECE) program at Cabrillo is to bring low-income individuals into the field as both teachers and advocates, and to help them advance along a career path to higher earnings (usually available when directing or owning a day care center). The majority of the students in this program are women, most are Mexican or Mexican-American, and about a third have very limited reading and writing skills (far below 9th grade). In an effort to reach this large population of Spanish-speaking women working in the agricultural fields in the southern part of the county, the ECE Spanish-to-English Program was developed at the Watsonville Center. The program's goal is to move students along a specific career path (an associate's degree in Early Childhood Education) while at the same time teaching them English.

The students enrolled in the program have a wide range of proficiencies in English, and thus they are encouraged to take courses in a sequence that best suits their needs and is appropriate for them. The core curriculum is provided in Spanish. According to a program instructor:

The decision to offer the four core courses in Spanish was natural, because of the effort to get people to the first significant step in the ladder. If we did not do that, did not provide that in Spanish, if we were going to wait until

people had enough English to be able to take these classes, we wouldn't have three-fourths of the enrollment that we have.

As students advance to higher-level courses, less Spanish and more English is used in the classroom as students learn English in the context of Early Childhood Education. This approach to contextual language learning focuses on reading to learn and involves a great deal of hands-on learning. Materials are related to the course goals, and advancement is based on competence. Students are also taught basic study skills such as note taking.

**Sustainability: Promising Practices and Continuing Challenges.** The issue of how to sustain these innovative programs at Cabrillo is potentially a significant one, and this is recognized by the administrators. However, one of the core design principles for the Ladders Project has been to use the college's resources for capacity development. Cabrillo does not fund training programs, but rather funds the development of training programs that can be sustained using the collective resources of Cabrillo and its partners. All of the classes taught in Ladders are supported by ADA and FTEs, and Ladders' resources are used for curriculum development, staff development, recruitment of students, coordination and articulation between agencies and evaluation.

In addition, the Dean of Career Education has been fairly successful in his grant-writing efforts—the Ladders program has received a great deal of support from the Packard Foundation since its inception. Cabrillo's partnerships with agencies such as HRA have also generated additional funds. Indeed, the Dean reports that Cabrillo is confident that Ladders will continue to be funded, whether additional soft money is received or not. He believes that "the challenge for us isn't sustaining what we develop, but finding the resources to continue improving the curriculum, broadening the scope to include more career paths, and doing further staff development."

**Going to Scale: Facilitating Factors and Continuing Challenges.** Cabrillo is far ahead of many community colleges in its efforts to create career pathways and introduce contextualized learning into the curriculum.

**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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Numerous programs and pilots are in place, and it is quite possible that more than a thousand individuals have already benefited from the work of Cabrillo's innovative programs.

Cabrillo administrators developed extensive and remarkably successful partnerships with a variety of other agencies and institutions in Santa Cruz County. Collaboration with other educational providers in the area is essential to the success of the Ladders program. Faculty from both the Adult School and the Regional Occupational Program (ROP) do most of the teaching in the vocational ESL component of Ladders. Perhaps the most unusual partnership Cabrillo has is with the local welfare agency, the Human Resources Agency, which has given a great deal of support to Cabrillo's efforts to educate and train disadvantaged individuals. Strong leadership by the Dean of Career Education, along with the support of the administrators who oversee him, has enabled these programs to grow. Increasingly, faculty from Cabrillo, as well as from the Adult School and ROP have become involved in teaching in a contextualized manner. And the attention paid by the media and researchers to these efforts have enhanced visibility throughout the college and the community.

The Vice President of Instruction notes that in spite of the existence of these programs, Cabrillo "isn't very far along" in its efforts. In order to further integrate career ladders and contextualized learning into the curriculum at the college, it will be necessary to involve more faculty members and administrators and hire qualified bilingual instructors. Cabrillo is led by a faculty Senate, which needs to be brought on board and educated about these programs and about contextualized learning. In addition, those faculty members currently involved in the workforce development programs need further professional development opportunities to discuss and think about curriculum development and how to best assist students.

Recruitment and assessment issues also need to be carefully considered in order to ensure the success and stability of these programs. Students will be most likely to succeed when they are able to participate fully in curricula that they are capable of taking. And efforts to recruit students of all backgrounds should be expanded. The VESL program is fortunate to have a staff member who actively

recruits students from the nearby Kmart parking lot. Such techniques need to be discussed and put into use more widely.

**Westside Technical Institute at Daley  
Community College, Chicago, Illinois**

Westside Technical Institute (WSTI), a satellite campus of Richard J. Daley College, is located in the Pilsen/Little Village neighborhood on Chicago's Southside, a heavily Latino community. WSTI, along with Instituto del Progreso Latino (Instituto), has built contextualized learning into a career pathways model known as the Manufacturing Bridge, a training program designed to prepare low-income community residents for careers in manufacturing. To serve students with weaker entry-level skills than required by the Manufacturing Bridge, Instituto has developed a "pre-bridge" two-semester VESL sequence and begun offering a Bilingual Manufacturing Bridge program (Bilingual Bridge) for students with weaker English skills who can meet the other demands of the manufacturing curriculum. Similarly, WSTI has developed the Career Bridge Program for students who cannot meet minimum skill requirements for the Manufacturing Bridge or the school's college-level technical programs. These innovative efforts are animated by a strong belief in the power of contextualized teaching and learning and a resolute focus on skills development, preparing students for the workplace and advanced educational pathways.

**Key Initiative: Manufacturing Technology Bridge Program.** The goal of the Manufacturing Bridge is to prepare students without a high school diploma or GED for entry-level skilled jobs in area manufacturing companies and possible advanced career path training at WSTI and Daley College. The Bridge does this by "integrating communication and math fundamentals with hands-on introductions to technical manufacturing skills," according to one instructor. The curriculum contains both technical literacy and technical specialty components. Within technical literacy, students take classes in Workplace Mathematics, Workplace Communications, Applied Physics, and Industrial Computer Applications. After seven weeks, students also begin a paid internship with one of the program's

partner firms. Though the program is designed for immediate job placement, students also earn five credits towards an AAS degree at Daley College.

Through the National Science Foundation (NSF) grant, the University of Illinois at Chicago (UIC) commissioned the Academy for Educational Development to conduct an evaluation of the first five years of the Manufacturing Bridge program, during which time 351 students participated in the Bridge and 64% graduated. Using Unemployment Insurance wage data from the Illinois Department of Employment Security (IDES), the evaluators compared participant employment outcomes for one year prior and roughly two years after program enrollment. Manufacturing Bridge had an immediate and longer-term impact on the proportion of graduates employed at a livable wage (\$8.00 per hour). Similarly, the average annual income of graduates dropped from \$19,516 to \$14,732 for the year prior to enrollment and then rose back to \$20,116 one year after enrollment. Bridge participants also showed higher rates of employment than a matched comparison of Job Training Partnership Act participants. In particular, Hispanic males with a stable work history showed strong employment and earnings after enrolling in Manufacturing Bridge.

The dean of WSTI, the program director at Instituto, and a researcher at UIC developed the Bridge. Funding comes primarily from a NSF grant and is supplemented by a grant from the John D. and Catherine T. MacArthur Foundation, as well as funding from the Illinois Department of Commerce and Community Affairs (DCCA) and federal Empowerment Zone funding.

**Key Initiative: VESL and Bilingual Bridge.** Manufacturing Bridge requires Test of Adult Basic Education (TABE) scores of 8.0 in reading and math to be admitted into the program, which limits access for otherwise strong applicants. For those students with limited English proficiency, WSTI and Instituto created VESL and Bilingual Bridge programs.

The VESL program, which served 180 students in 2001, uses contextualized teaching in order to connect language learning to meaningful aspects of students' lives and work interests. The 16-week curriculum, taught by four full-time instructors, includes hours spent not only in VESL instruction but also time in a computer lab and a workplace math class. The cur-

riculum is designed to offer a structured progression of grammar and workplace English. Upon enrollment, students are assessed using Basic English Skills Test or another assessment suitable for language learners and then placed in a skills-appropriate cohort with whom they take two terms of VESL. Upon completion, some students enroll in the Manufacturing Bridge, while those with lower entry-level skills in English go on to the Bilingual Manufacturing Bridge.

In the Bilingual Bridge program, technical specialty and computer classes are taught primarily in Spanish (although the materials are in English), while workplace mathematics classes are taught in English (a bilingual tutor is made available during class time). In lieu of the workplace communications component, students receive additional VESL instruction. Bilingual Bridge is a new program and has not yet been evaluated.

**Key Initiative: Career Bridge Program.** Like the VESL program, Career Bridge was designed for students scoring below the minimum threshold on TABE required for admissions to vocational programs at WSTI. The goal of Career Bridge is to better prepare students for these programs and more generally orient them to college and careers. Using a version of a "learning communities" approach, the ten-week program offers an integrated set of courses in Reading/Employment Skills, Mathematics, and TABE Test-Taking Strategies.

Career Bridge was developed because the majority of individuals who came to WSTI seeking job training could not qualify for the college-level technical training programs. Also, there was no connection to the Institute's job training programs for the more than 2,000 students a year who came to WSTI seeking to learn English. The philosophy of the Career Bridge is simple—make classes engaging and meaningful so students learn the skills they need for advancement. This is done through the following four strategies:

- Making employment and careers the context for reading instruction
- Designing instruction so native and non-native speakers learn together
- Teaching math in a hands-on and applied fashion
- Teaching test-taking strategies explicitly so other



**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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classes can focus on skills

In addition, all students are given a comprehensive orientation to Career Bridge that explains the program and orients them to college work and future advanced-degree opportunities. The purpose of this is to both bond cohorts with faculty and staff and create a sense of "urgency" around student success. Career Bridge has shown some level of success. During 2001, 90% of 250 TABE tests taken by students showed improvement, and 43% achieved scores high enough to enroll in a Daley vocational program. Of the 500 students who enrolled in Career Bridge from fall 1999 to summer 2000, nearly three-fifths went on to enroll in one of the college's advanced certificate programs.

**Sustainability: Promising Practices and Continuing Challenges.** While most of Instituto's programs are built on a soft money foundation, the organization has strong relationships with funders and a track record of success that will likely sustain it. Thus far, they have been able to fund a Training Director, four full-time VESL faculty, and a cadre of quality adjuncts, as well as a case manager and two job developers. Even with lower salaries than most colleges, this is an impressive accomplishment and helps them put together a high quality program. In addition, now that the Bridge program is certified by the state for Workforce Investment Act (WIA) funds, Instituto is likely to rely increasingly on WIA individual training account (ITA) vouchers to fund the program.

**Going to Scale: Facilitating Factors and Continuing Challenges.** The dean at WSTI wants to increase enrollment in vocational certificate and degree programs by making the VESL and Career Bridge model the default option for students in need of basic skills development. Other adult education programs at the college have little contextualized content and have typical problems with retention and student advancement. Currently, just under half of WSTI's TABE test-takers are enrolled in Career Bridge. While some of these students go straight into advanced certificate programs, the rest currently have no option other than traditional ESL. Under the proposed revision, those students would be placed in a new VESL sequence, modeled after the Instituto program. Eventually, the dean would like to see all adult learners, Spanish-

speaking or otherwise, served by pre-bridge and bridge programs at WSTI. However, the challenge of going to scale, as in most colleges, rests in the details of program operation and classroom practice. To achieve this vision, WSTI will need an infusion of new teachers who are knowledgeable about contextualized teaching and learning and will need to retrain its current ESL faculty. This will require extensive professional development and a sustained effort to promote a different curricular and instructional philosophy at a school with few resources for professional development. Staff will need time and support to become instructional leaders, time that will have to come from reduced teaching and administrative loads. If the dean's vision is to be realized, a collaborative culture of teaching and learning must be created and sustained in Career Bridge and the VESL program.

**Henry Ford Community College,  
Dearborn, Michigan**

Henry Ford Community College (HFCC), a mid-sized community college located in the heart of the automotive industry, is striving to link low-income individuals to the world of work. Contextualized learning is part of several educational and training programs at HFCC where creative faculty members work with staff at the college's Corporate Training Division to create unique programs that blend academic and vocational instruction with contextualized basic skills. These programs include a Manufacturing Bridge pilot and a pathways program involving a local high school.

**Key Initiatives: The Detroit Manufacturing Bridge.** The Detroit Bridge, a three-year pilot program that ended in 2001, emphasized training in applied basic skills, soft skills and technical skills in an effort to move low-income adults into career paths in technology fields. It was also an NSF pilot program similar to the Bridge at WSTI and was constructed by some of the same individuals. The primary partners in the Detroit Bridge were HFCC's Corporate Training Division and the Detroit Hispanic Development Corporation, a community based organization (CBO) in southwest Detroit.

An interdisciplinary team of both academic and career



**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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faculty at HFCC were involved in the development of the Bridge curriculum, which uses a hands-on contextualized approach to learning. According to the Bridge director, it was extremely important to involve experienced full-time faculty who were open to operating in a more flexible environment. "It's not about having a defined set of tools, or a toolbox to use in the classroom—it's about having a framework in which faculty work. Maybe it's a three-dimensional toolbox," he said. The curriculum was built around a series of instructional modules that interwove academic and vocational instruction (available on the web at <http://ctweb.hfcc.net/dmb>). Developmental education and remediation were fundamental to the Bridge program, and a community-based educator provided individual mentoring throughout the program. The Bridge faculty used several innovative approaches to teaching, including:

- Working collaboratively on both developing a new contextualized curriculum and implementing it in the classroom
- Taking risks in class by using innovative teaching techniques, such as "tag team" lectures, where one teacher builds off what another teacher said
- Encouraging group work that respected students' multiple intelligences and various cultural backgrounds
- Giving the students a voice in the classroom, using activities such as journaling and student-led review sessions

The Bridge students were mostly Latino and African-American adults, ranging in age from 18 to 40, who were recruited by the CBO. Most students spoke English, and had math skills between the 6th- and 9th-grade levels. The entry-level requirements for the program were minimal, based not on test scores but on functional skills. Over the course of three Bridge pilots, lasting 16 weeks each, nearly fifty students began the program, and about thirty finished. The Bridge program's purpose was to link students to both jobs and further education. "Not only is the Bridge a bridge to employment opportunities, but it is a bridge to further educational opportunities," said one instructor. Of the thirty students who completed the Bridge, about a third went on to

jobs or further education. The director attributes that relatively low success rate to poor initial assessment of students who were not screened well for barriers to career path employment or continuation of higher education.

**Key Initiative: A High School Bridge.** HFCC is currently working on developing a relationship with the Detroit Community High School (DCHS), a four-year-old charter school located approximately ten minutes from HFCC within the city boundaries of Detroit. Most of the students are African-American and on free or reduced lunch. Many of the students could not succeed in the public schools, having skills three to five grades below grade level, and thus they came to DCHS. The Bridge director and the co-founder of DCHS are rethinking learning appropriate for motivating and preparing inner-city youth to go on to HFCC. DCHS has a hands-on "world of work" curriculum that focuses on craftwork within the context of a college preparatory framework. This links up well with HFCC, which has a history of apprenticeship and vocational education. "The community college is the ideal connection for the 11th and 12th graders to learn skills and find out what the world is about," said the co-founder of DCHS.

As a first step to building the high school Bridge program, a 10-week technology-driven course for the DCHS 11th graders on "Exploration of Casting" was created. To supplement class, students visited local businesses that use casting in order to practice their observational, report writing, communications and math skills. The goal of the program is to provide in-depth experience with a particular technology and industry. The leaders hope that as a result, students will take advantage of available apprenticeships over the summer. The Bridge director views this as a potential pathway for students to become employed in one of the many advanced technology jobs available in the area. The course is the first step in developing a larger high school Bridge project.

**Sustainability: Promising Practices and Continuing Challenges.** After the Manufacturing Bridge pilot ended in 2001, HFCC began working to create an Allied Health Bridge, but the details are still being hammered out. For example, while they have secured

funding, they are still working on creating relevant modules, adapting the curriculum to the new field and dealing with institutional politics. The Manufacturing Bridge has not yet been repeated, in part because of the substantial costs associated with bridge programs that require small faculty-student ratios. HFCC is considering applying for additional NSF funding for the high school bridge.

***Going to Scale: Facilitating Factors and Continuing Challenges.*** The Bridge program was successful in part because it drew on existing efforts used by HFCC's Corporate Training Division in customized work to promote contextualized, hands-on instruction. The integration of the academic and career sides of the college also enabled the Bridge program to take place at HFCC. The participation of both full-time academic and vocational faculty members in corporate training activities such as the Bridge is evidence of the administration's successful attempt to diminish traditional academic/vocational divisions, as well as the strength and leadership of the unionized faculty. The learning modules and teaching methods from the Manufacturing Bridge are now used in other corporate training programs and in the classrooms of the academic faculty who ran the Bridge. But in order for career pathways models and contextualized learning to become part of the larger institution, more faculty members need to become involved. Since HFCC is a faculty-led institution, it is essential to bring large numbers of faculty on board in order to create support for new ideas such as contextualized learning. Yet expanding the role of faculty will no doubt increase the need for professional development and raise the overall cost of the Bridge program model. In addition, faculty at the high school must be brought on board and trained in the kind of teaching the model presupposes in order for that partnership to succeed.

Continuing to develop close collaboration with local employers is also essential to the success of bridge-type programs. The Corporate Training Division does a good deal of contract training, and it strives to get more faculty out into industry in order to gain valuable experiences and insights that they can then impart to students. Better collaboration with the CBO would also have made the Manufacturing Bridge more successful.

### **Portland Community College, Portland, Oregon**

Portland Community College (PCC) offers a good example of an institution that is strongly committed to the career pathways model and backs that commitment with resources, capacity building and partnerships with external agencies and organizations. Currently, PCC is working to institutionalize a career pathways approach throughout its occupational programs. As part of these efforts, the college is strongly committed to bridge programming that links basic skills students to degrees. Contextualized teaching and learning is a significant part of these efforts. Most promising are relatively newer initiatives at PCC to better serve dislocated workers and WIA clients (for example, The Regional Workforce Training Team) and the college's ABE, ESL and developmental education students. These latter efforts, though still in their early stages, offer important lessons in program design and resource development for other colleges seeking to create a career pathways model inclusive of lower-skilled adults and English language learners. Contextualized basic skill development is also fully developed in PCC's long-standing programs for out-of-school and at-risk youth (PCC Prep) and current and past welfare recipients (Steps to Success).

The key leadership driving the career pathways model at PCC is the Dean of Adult and Continuing Education for the PCC district. She is also the Dean of Instruction at the "Open Campus" where she oversees many of the college's workforce programs and its community sites, including the two colleges' managed One-Stop Career Centers. Career pathways efforts at PCC have the active support of the new president.

***Key Initiative: The Regional Workforce Training Team (RWTT).*** The RWTT is a partnership among Worksystems (the local workforce investment board), PCC and Mount Hood Community College that was created in 2001 to serve "as a conduit between local One-Stop Providers, businesses and College training programs." The emphasis is on short-term training for dislocated workers, which prepares them for new jobs. The RWTT also has a strong focus on serving students with limited English proficiency and low basic skills. For students with stronger English language skills, "the training team works with college departments to reorganize and repackage preexisting

**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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curriculum into short-term trainings." Training modules are offered in four fields: Accounting/Bookkeeping, Criminal Justice, Metals Manufacturing and Phlebotomy. Since full-time training is offered for one term, students can earn preliminary certificates and enter jobs in these fields. Because these short-term modules are part of existing college programs, students are eligible for both federal financial aid and WIA funding. RWTT encourages employed students to continue toward advanced credentials.

For English language learners, the RWTT offers ESL training in three career clusters: Health Care, Food Services and Office Skills. Students are taught in a VESL format enhanced by strong links with employers and a mandatory internship. Classroom training emphasizes computers, communication, customer service, job readiness and industry-specific knowledge. The health care cluster has successfully worked with a number of area employers and hospitals, and in its three years of existence it has placed over 90% of its students in jobs paying living wages, with high retention rates.

All language and basic skills instruction in the ESL clusters is strongly contextualized within the specific career areas. This necessarily puts tremendous demands upon instructors to continually link skill development and language learning. According to a training coordinator who focuses on immigrant and refugee students, the RWTT seeks "culturally competent" ESL instructors who are paired up—as needed—with vocational instructors within the cluster. Professional development for program instructors is limited, however. To compensate for this, the RWTT has created highly prescriptive course outlines and curriculum guides.

**Key Initiative: Adult Basic Education.** The Division Dean for Adult Education has forged collaborations with a number of Professional Technical (PT) programs at PCC in order to craft a comprehensive "bridge curriculum." The effort targets students who meet minimum thresholds on the college's placement test in reading and writing (admittedly excluding students with very limited English or very low basic skills). Students are placed in field-specific learning communities where they spend three terms in a cohort taking reading and writing, mathematics, PT content courses and a sequence of college survival and career guidance courses. Upon completion, students are ready for

regular departmental offerings. Currently, the model is being piloted in Computer Applications and Office Systems with other fields to follow. According to the dean, of the 17,000 adult education/developmental students in PCC's professional and technical programs, almost half meet the skill thresholds to be served through the bridge curriculum.

To make the bridge approach work, PCC has restructured its support services for PT students. In order to do so, PCC is experimenting with using Perkins (VATEA) monies in order to see if the approach improves outcomes and retention. Some PT students at the college now have a "Technical Skills Learning Specialist" assigned to them who will monitor student progress and provide general career guidance and support. The goal is to meet the new Perkins benchmark of 50% of students successfully completing professional and technical programs.

**Sustainability: Promising Practices and Continuing Challenges.** PCC has built its contextualized learning efforts on a stable funding base that ensures their longer-term survival. The RWTT uses WIA training dollars extensively and has a strong partnership with Worksystems. Dislocated workers served by the RWTT earn state per capita education funds (FTE) for the college since they are in credit-bearing classes. These students are also eligible for federal financial aid, which helps PCC retain them. Efforts to reform ABE/ESL and developmental education for professional technical students is enabled by state policy that allows PCC to earn FTE's for most of its workforce training programs.

However, the Dean of Adult and Continuing Education admits that PCC has had little success in convincing employers to make greater investments in workforce development to serve both entry-level and incumbent workers. Area employers seem to want to rely on federal categorical revenue streams and the college's own FTE dollars to train lower-skill students. New partnerships with Oregon Health & Science University (OHSU) and PacificCorp offer promise of a more active employer role in financing entry-level and upgrade skills training.

**Going to Scale: Facilitating Factors and Continuing Challenges.** PCC's potential for going to scale starts with strong administrative leader-

ship. PCC's efforts to create comprehensive career pathways are also aided by state community college system control over the ABE/ESL program. The presence of ABE/ESL students on the campus in large numbers provides a kind of subtle pressure on staff to better serve this population and has helped develop expertise among faculty and staff in how to best do this. The bridge curriculum is an example of how senior staffers have creatively responded to the significant numbers of basic skill students on campus. The college also has a strong base for scaling up contextualized learning efforts because it captures full FTE support for all Professional Technical programs, and there are no caps on enrollment for most of the programs (there is a cap for the Allied Health programs since they are not open enrollment).

But PCC faces three persistent challenges in its efforts to scale up its career pathways program. First, like most colleges around the country, PCC must improve its retention rates among its ABE and ESL student population. The bridge curriculum targets the highest-skilled of this population, and PCC has few efforts in place to address the needs of students with low basic skills or those with literacy gaps in English and Spanish. The second challenge involves integrating the workforce development and academic sides of the college. Short-term training for second language learners is non-credit, which makes it harder for students to transition to advanced certificate and degree programs. Further, the "remediation" done in these programs appears to be more focused on preparing students for work than for the next level of education. The third persistent challenge is the need for professional development in order to train teachers to better serve lower-skilled students. Though the PCC staff is clearly committed to professional development, the college has a long way to go to make teacher learning a part of the everyday program culture. In short, the focus on creating model bridge curricula and developing comprehensive career pathways would be well served by a complementary focus on the instructional practice necessary to get there.

### **Community College of Denver, Denver, Colorado**

Community College of Denver (CCD) has had a long history of providing access to low-income and low-skilled adults, and recently the administration has worked with the Mayor's Office for Workforce Development (MOWD) to promote a model of wage progression and career advancement for low-income adults. One program they have created, Quick Start, is designed to publicize a set of CCD high-wage, shorter-term training opportunities to dislocated workers and former welfare recipients (for more on Quick Start, see Alssid et al, 2002). CCD is also home to the Essential Skills Program (ESP), a nationally recognized welfare-to-work program that employs a career ladder model built explicitly on a contextualized learning curriculum and program philosophy. ESP is one of four winners of the 2002 American Association of Community Colleges/U.S. Department of Labor AACC/DOL award which recognizes community college leadership and partnership in local workforce development systems as well as one or more of the colleges' exemplary services for at-risk populations.

**Key Initiative: The Essential Skills Program.** The Essential Skills Program (ESP) is a bridge program that provides entry-level skills training in specific employment "tracks." Current tracks include Information Technology (IT), Early Childhood Education (ECE), Financial Services/Accounting (FS), and Community Health Worker (CHW).<sup>3</sup> Pathways to careers and further education are mapped out most fully in ECE and FS.

ESP was designed to conform to the work-first orientation of welfare reform as implemented in Colorado. Students take 1 month of full-time classes followed by a 3-month internship that is combined with 15 hours of class time. All students take core classes in reading, writing, speaking, communications for the workplace, and computer literacy. They also take courses specific to each of the tracks. All courses teach basic skills in the context of problems and vocabulary specific to each of the industry tracks. The

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<sup>3</sup> Tracks have varied in the program with labor market demand. For example, the IT track was suspended for the upcoming year because of weak labor market demand for graduates.

**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

working theory of the program is that students need an integrated combination of work and school to be successful. Employer connections are strong, facilitated by a full-time job developer on staff. Internships are used to connect students to the world of work and prepare them for the future demands of balancing work and school. "Students are interested in the program because it provides them an identity as college students and a real connection to work," notes the director of ESP.

The IT and CHW tracks require a minimum of 9th-grade reading and math on TABE or Comprehensive Adult Student Assessment System (CASAS). Students in the other tracks only need a minimum 7th-grade TABE or CASAS score. Students with lower levels of English language proficiency are placed in a VESL program that is not connected to the four tracks.

Students are recruited at Denver Housing Authority, through local CBOs and MOWD and via a strong word of mouth network. ESP also has a full-time recruiter who is housed at the DHS office. About 70% of the students are Temporary Assistance for Needy Families (TANF) recipients and half are Work and Family Assistance (WFAA). Some of the students in the IT track were WIA clients, but ESP no longer has a WIA contract. Overall, ESP is funded through a combination of TANF (40%), WtW (50%) and WIA (10%) monies with the overall budget at around \$750,000. The college contributes around \$15,000 for general operations.

The program has many strengths and innovative features. Intensive support services are built into the ESP curriculum. There is also a clear program culture of student support and even "handholding" that keeps students engaged. A full-time "transitions coordinator" works with students to address personal barriers in transitioning to work and teaches a class where students confront and give voice to their fear, shame, regret, and frustration. While students are motivated by the idea of going to college, this does not always transfer to commitment or knowledge of how to succeed, notes the transitions coordinator. As she put it, students must first "accept their weak abilities and recognize the possibility that they can change."

One of ESP's enduring strengths is the presence of a strong leadership team. In addition to the transitions coordinator, recruiter and job developer positions, there are four "track coordinators" who, in addition to teaching, are in charge of scheduling, student support

services and working with employers on internship placements and pathways development. The heavy presence of full-time staff has allowed for a fairly strong program culture to develop around class instruction, program delivery, and student issues and support. Classroom instruction is grounded in concrete skills and knowledge that students need for their occupations, and many faculty members use a combination of group work and individual assignments. Basic skills instruction, especially reading comprehension, is infused throughout classes. By any standards, the workload, expectations and analytic content of many of the classes is highly rigorous and demanding.

ESP tracks how many students complete a certificate and keeps data on employment, student wages and job retention for one year after students complete the program. Since 1998, 290 students have enrolled in ESP, with 219 finishing the program. Nearly 80% of graduates from the first two years are still employed. The average wage has risen by 11.5%, though average wages still hover between \$8.40 and \$9.00 per hour, relatively low for the high-cost Denver area. Over 50% of students left the TANF rolls and a smaller subset (around 25%) of students actually completed the ESP certificate. The program does not compare wages of completers with non-completers nor track how many students continue their education at CCD or elsewhere.

***Sustainability: Promising Practices and Continuing Challenges.*** ESP's long-term viability lies in the strengths of the program, namely the strong teamwork, professional community and commitment to enhancing student skills and employment opportunities. The program does a remarkable job at a kind of balancing act for its students—between work and school, between the academic and the personal, between affirming what students know and can do and teaching them skills they will need in the future. Much of the curriculum is rigorous and thoughtful. Administrators were quite articulate about their desire to empower students with a strong "professional identity," one that acculturates students to the workplace while offering them a vision beyond a first job.

However, the program confronts several future challenges, most notably funding. Nearly half of program funds come from WtW, which is scheduled to end in 2003. While CCD and MOWD have a good working relationship, it is clear to MOWD officials that ESP has



a higher cost per student and may be difficult to fully fund as the TANF surplus shrinks and if the regional economy continues to contract. One potential source of dollars is CCD itself, given the FTEs the program generates for the college. While the administration provides basic administrative support and overhead, it is less clear whether they are willing to take on program salaries if other sources of money disappear or are reduced.

***Going to Scale: Facilitating Factors and Continuing Challenges.*** ESP leaders hope to serve additional students and realize that the program needs to engage more of the full-time CCD faculty if it wishes to do so. Currently, about half of the classes are taught by full-time faculty. The Community Health Worker track is being designed in strong collaboration with the Nursing and Health faculty, who will also teach in the program. If this is successful, it offers a model for bringing other departmental faculty into ESP classrooms, which both serves to integrate the program into the mainstream college and to provide full-time instructional staff with salaries supported by FTE's. CCD's president is a strong supporter of engaging full-time faculty with ESP and the college's other workforce programs. Support for this agenda, she admits, varies from department to department.

But ESP is, by design, a small program. The cohort structure and the level of student support and personalization of services all make extensive expansion difficult, if not inconsistent with the premise and philosophy of the program. ESP might serve more students within its existing structure by finding ways to more successfully serve students with weak basic skills. Minimum entry requirements are both employer- and college-driven. As of fall 2001, CCD has set up basic minimum test scores on Accuplacer to get into certain programs/classes, including its workforce programs. While ESP asked for and received an exemption, the program has been under some pressure to raise its basic skill minimums. Students who cannot meet these thresholds are referred to the Learning Lab, which works individually with those students.

A second challenge in scaling up is to strengthen the linkages between ESP and the CCD's advanced degree programs. A rough estimate is around 25% of ESP graduates go onto other CCD programs. One interviewee believes that part of the problem is that ESP is still seen

by many faculty members as the "welfare" program. Some faculty and deans are apparently not sold on the merits of having ESP students in programs with more "typical" students. Another barrier may be organizational—unlike Portland, Cabrillo, and other colleges, CCD does not have a Dean for Workforce Development or a Dean of Instruction with cross-cutting responsibility for workforce, contract and occupation programs and departments who can drive integration of programmatic efforts.

A final challenge is one that all five colleges face: that of supporting quality instruction throughout all its programs and classrooms. Professional development opportunities are minimal at CCD, especially for part-time faculty. Part of the problem is that while instructors appear to be open to more supervision and instructional leadership, it is less clear that they see the track coordinators as sufficiently expert to do this. This speaks to the difficulty of promoting instructional improvement in a program environment where management is expected to have many different skills, few of which are necessarily connected to teaching and learning. This is one challenge all workforce development programs in community colleges face to some degree.

## **SUMMARY OF KEY FINDINGS**

The five community colleges profiled in this report have made tremendous strides in developing bridges to college and careers for disadvantaged students. In moving beyond the traditional, and less successful, model of adult basic education, each of the colleges are:

- Integrating developmental and academic content and teaching this integrated content in a contextualized fashion
- Maintaining active links with employers and industry associations
- Developing or adapting new curricular materials



and providing instructional support and professional development to help faculty learn to teach in a new way

- Finding ways to sustain these efforts financially—at least in the short-term
- Producing promising program outcomes, especially in terms of job placement and earnings

While there is much to celebrate across the five schools, there are innumerable issues that these and other colleges face in creating bridge programs for developmental and adult education students. In the concluding section, we highlight for practitioners, policy makers and funders five key policy and programmatic issues that emerged from our research: balancing relevance and content in instruction; promoting instructional leadership; serving lower-skilled students; identifying program outcomes; and going to scale. We end with a set of recommendations for addressing these issues.

### **Balancing Relevance and Content in Instruction**

The concept of contextualized learning means different things to different people, and it is often not precisely defined even in the minds of community college leaders and faculty. Is “contextualized” basic education simply education that draws materials and curricular content from functional experiences like the workplace that have relevance to students’ future lives (see Sticht, 1995, 1997)? Or should we also be concerned with the nature of pedagogy in basic skills education and the degree to which instruction uses constructivist and student-centered instructional approaches to engage and motivate learners (see Grubb & Kalman, 1994; Grubb, 2001)? While these philosophies—content relevance and student engagement—are complimentary dimensions of good adult education programs (Purcell-Gates, Degener & Jacobsen, 1998), the five colleges continually struggled to balance them in practice. In some of the programs and classes we observed, materials and pedagogy, while relevant, were not particularly engaging. In other settings we found the opposite problem—engaging teaching and curricular materials were used but

there was little evidence of actual content being taught.

Since our observations of classroom teaching were limited, these findings should be viewed as tentative. Nevertheless, those wishing to promote contextualized teaching and learning should find ways to help practitioners and program operators engage in regular conversations about instructional philosophy and practice. Staff and faculty should be encouraged to ask hard questions about whether a program’s instructional approach both engages students and gives them the basic skills to advance to work or further education. This after all is the true test of a successful bridge program.

### **Promoting Instructional Leadership**

A strong focus on teaching and learning drives successful program development. At each of the five colleges we found similar problems: faculty unwilling or unable to teach basic skills in a new way; limited professional development opportunities for instructors; and few opportunities for sustained dialogue about students, classroom instruction or other problems of practice. Yet at all of the sites we saw an effort by senior administrators and program directors to provide leadership around teaching and learning issues—what we call “instructional leadership.” Like good principals who drive instructional improvement and student performance in K-12 schools, many of the community college administrators at our five sites sought to hire quality staff, observe classroom instruction, model good teaching practice, create opportunities for dialogue around teaching and learning and build strong professional communities focused on instructional quality and student success (see Sebring & Bryk, 2000; Elmore, 2000).

Yet more often than not, community college administrators have little time to be instructional leaders, nor are their jobs designed as such. The culture of workforce development at community colleges is one that values entrepreneurialism, program development skills and responsiveness to employers and funders, not necessarily teaching and learning. Staff are usually part-time and low paid, and there is little funding available for professional development. One byproduct of this culture is a strong reliance on highly prescriptive curriculum materials or guides to drive

practice. While curriculum materials can be very useful, most research suggests that curriculum itself cannot promote instructional change without a complementary investment in professional development (Ball & Cohen, 1999; Elmore, 2002).

### **Serving Lower-Skilled Students**

All of the colleges we visited focused their energies on a relatively high-skilled portion of the potential developmental and adult education student pool. We saw few efforts to serve students who tested well below eight-grade level on TABE, or had lower levels of English proficiency (exceptions were the programs at Westside Technical Institute and the bilingual bridge program at Cabrillo College). Given increasing demands for program accountability and the limited resources available to support bridge programs, it is not surprising that colleges minimize risk by serving higher-skilled students. Policy makers and others who are committed to contextualized basic skills training need to create incentives for colleges to serve the lower-skilled adults. States and institutions also need to look more closely at the needs of this population. What portion of lower-skilled adults, for example, are learning disabled and how might community colleges or other providers provide educational programs for these students? How viable are bilingual bridge programs and in what specific industries, regions and political contexts?<sup>4</sup>

### **Identifying Program Outcomes**

Data from the Manufacturing Bridge program at West Side Technical Institute and from the Essential Skills Program at the Community College of Denver

suggest that these innovative programs had an impact on the proportion of graduates employed and working at a living wage.<sup>5</sup> Despite these promising findings, there is still a lack of systematic data on bridge programs that is both useful for practitioners and persuasive to policy makers. Because of the connection to workforce development, earnings were the most common outcome measure the colleges use. Earnings are generally measured as gains over time (so called "pre-post" designs) on in comparison to a group of similarly situated individuals who did not participate in the program ("experimental" designs). In both instances, students partake of a program and effects are measured after a short duration of time (1-3 years). Many researchers and program operators now argue that measures such as long-term wage gains, job retention and career progression are crucially important in assessing education program impacts (Clymer, Roberts and Strawn, 2001). While supportive of the idea, none of the colleges we visited have plans for a long-term evaluation (5+ years) of their bridge and career pathway programs.

To better understand how programs produce outcomes, measures of learning and student growth are required. All five colleges used standardized assessments such as CASAS and TABE to diagnose the basic skill levels of incoming students. Yet none of the five examine CASAS or TABE gains over time or in comparison with scores of non-participants.<sup>6</sup> Whatever the limits of CASAS, TABE or standardized tests in general (see Grubb, 2001), such data is crucial for testing the basic premise of contextualized job-training programs—that greater content relevance and student engagement will ultimately lead to long-term gains in income and self-sufficiency. Towards this end, test

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<sup>4</sup> Supporters of contextualized teaching and learning also need to examine whether their preferred pedagogy serves all members of the low-skilled student population equally well. Alamprese (2001), for example, offers such cautions in her summary of a qualitative study of reading instruction in ABE programs. When working with "first level learners"—native English speakers scoring at Level 1 of the National Adult Literacy Survey (NALS)—contextual strategies, she argues, may work less well than more direct instruction in phonemic awareness, phonics and comprehension. Both observations of lessons and interviews with participants confirmed the effectiveness of direct instructional strategies in teaching these adults to read.

<sup>5</sup> The Manufacturing Bridge had an immediate and longer-term impact on the proportion of graduates employed at a livable wage (\$8.00 per hour), according to UI wage data. The average annual income of Bridge graduates dropped from \$19,516 to \$14,732 for the year prior to enrollment and then rose back to \$20,116 one year after enrollment. Since 1998, 290 students have enrolled in Denver's ESP program, with 219 finishing the program. Nearly 80% of graduates from the first two years are still employed. The average wage has risen by 11.5%; though average wages still hover between \$8.40 and \$9.00 per hour, relatively low for the high-cost Denver area.

<sup>6</sup> The College Bridge program at Westside Technical Institute indirectly measures TABE gains by comparing the percentage of students each semester who reach 8.6 on TABE after going through the program.

scores can and should be supplemented with interview and survey data from faculty and students.

One important outcome measure that needs greater attention at community colleges is what might be called "educational persistence." There is near unanimous agreement among researchers that earnings increase with years in school and degree progression. Yet it is equally well known among practitioners and researchers that adult education dropout rates are very high (Strawn, 1998; Morris, 2000) and students rarely make it out of ABE classes to higher levels of education.<sup>7</sup> To address this issue, administrators and policy makers must make sure that student-level data can be tracked over time, even beyond the confines of an individual program or college. Bridge programs might be usefully compared with traditional developmental and adult education efforts to examine whether students are more likely to persist in coherent career-path programs with a more certain long-term economic payoff.

### **Going to Scale**

The colleges we visited serve only a small portion of their developmental, ESL and adult education students through bridge programming.<sup>8</sup> While there was commitment at all five colleges to scale up these efforts, and emerging efforts to do so at three of the colleges, the challenge of going to scale are quite formidable. The bridge programs we saw began in individual departments, welfare and workforce development programs, or in the cases of Ford, Cabrillo and Portland, through continuing and occupational education division-led efforts. Linkages with regular full-time college faculty were weak overall, yet these are an important part of institutionalizing the bridge model college-wide. Further, none of the programs we visited had particularly strong linkages with developmental and adult education divisions within the college, though these linkages are being developed and strengthened at some of the colleges. In some cases these linkages are

being made with agencies and providers outside the community college system (see Alssid et al, 2002).

Involving college faculty and developing partnerships with adult and developmental educators are only first steps. Efforts to institutionalize a bridge model require additional resources to provide at scale the kinds of teaching and learning environments and supports that bridge programs typically offer. Bridge programs may cost as much as \$5,000 per student, when the additional costs of recruitment, curriculum development, case management and job placement are added to the costs of instruction (Jenkins, 2002). Yet most adult education and developmental programs receive only a fraction of this amount per student.

Going to scale will require extensive professional development for all faculty, who need greater exposure to occupational specialties and industry norms, strategies for teaching students with skills weaknesses in reading, writing and even math, and instruction on how to integrate content and skills development and teach students in more collaborative ways. Yet while college administrators recognize these needs, few resources are currently dedicated by community colleges and college systems to support professional development and instructional improvement.<sup>9</sup>

### **Recommendations and Next Steps**

A key finding of this study is that community colleges around the country are making significant strides in rethinking their approach to basic skills education in the context of a larger effort to better connect students to college credentials and rewarding careers. The goal for funders and policy makers is to find ways to support these efforts, move them to scale and help catalyze similar changes in other community colleges. Reaching such a goal will require changes in institutional practice and public policy. In particular, policy makers and foundations should consider the following three steps to support the expansion of bridge programming.

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<sup>7</sup> One 1999 study at Miami-Dade Community College (Morris, 2000) found that over 80% of ABE and 70% of Vocational English as a Second Language (VESOL) students were no longer enrolled in the college one year later.

<sup>8</sup> Based on our research, the five colleges served fewer than 20% of their developmental and adult education students in bridge programs during Fall 2002. Three of the colleges serve fewer than 5% of the potential pool of bridge students.

<sup>9</sup> The resources that are available are almost exclusively targeted to full-time faculty, again underscoring the need for regular faculty involvement in bridge programming.

**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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**1) Provide resources for professional development**

One enduring lesson of this study is that bridge programs require extensive expertise in teaching and learning to be developed and delivered effectively. Commitment, while essential, is not sufficient to drive changes in teaching that lead to student success. Program faculty and administrators need to be given time and resources to expand their knowledge of how to successfully bridge basic skill students to college and careers. For new programs in colleges, this process requires more than adopting a program model and implementing a new curriculum. Instead, it requires policy makers and foundations to support professional learning and faculty collaboration across traditional college divisions (transfer, occupational, developmental, adult education/ESL), and at times, across agencies and organizations. How such professional development should be funded is an open question. Many of the programs we visited rely strongly on federal dollars (TANF, WtW, WIA) or foundation grants with few discretionary dollars available for capacity building. Cases where bridge programs earn FTE revenue may be more promising, but we found no significant use of these dollars for sustained professional development around the bridge model.

**2) Cultivate instructional leadership**

Professional development will only be successful to the extent key program and college leadership is committed to the task of instructional improvement, and has the skills to lead such change. This is an important finding from this study, and one that confirms the lessons learned from the K-12 school reform literature

cited earlier (see Louis & Kruse, 1995; Newmann, King & Youngs, 2000; Sebring & Bryk, 2000; Elmore, 2002). Though program directors, coordinators and others themselves need professional development, however, this will not be enough to cultivate instructional leadership. Job expectations, performance standards and the messages sent by division deans and college presidents all need to signal that teaching and learning is a college priority, and that the time and resources for real instructional leadership will be made available to program staff. The Essential Skills Program at the Community College of Denver and the Bridge at Henry Ford offer useful models for what such leadership looks like in community colleges.

**3) Fund evaluations and additional research**

We still know remarkable little about the effectiveness of bridge programs in meeting a range of outcome goals. Do students learn basic skills more effectively this way? Are rates of persistence and certificate/degree attainment higher in these programs compared to traditional developmental and adult education? Which program models are particularly effective? How much do bridge programs cost and what monies are available to pay for them? What are the benefits of bridge programming relative to their costs? Policy makers and foundations can support research to help answer these questions. In addition, "process" studies are needed to examine efforts to expand bridge programming to a greater portion of basic skills students. How have these efforts fared? What are the obstacles and what are the lessons?

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**BUILDING BRIDGES TO COLLEGE AND CAREERS:  
Contextualized Basic Skills Programs at Community Colleges**

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