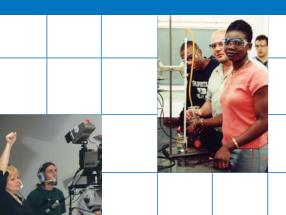


The 21st-Century Community College



Maximizing Labor
Market Responsiveness

VOLUME 1

Unleashing the Power of the Community College



The 21st-Century Community College: A Strategic Guide to Maximizing Labor Market Responsiveness

Volume 1 Unleashing the Power of the Community College

September 2004

Keith MacAllum Karla Yoder with Anne Rogers Poliakoff

Academy for Educational Development

Prepared for the Office of Vocational and Adult Education (OVAE), U.S. Department of Education, by the Academy for Educational Development (AED), Washington, D.C., and Westat, Rockville, Md.

This publication was produced under U.S. Department of Education Contract No. MOBIS 6S-23-F-814414 from the Office of Vocational and Adult Education (OVAE) to Westat and the Academy for Educational Development (AED). Direction was provided by Burt Carlson, Acting Chief, OVAE, Effective Practices Branch. Andrew Abrams served as the contracting officer's technical representative (COR). The views expressed herein do not necessarily represent the positions or policies of the Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service, or enterprise mentioned in this publication is intended or should be inferred.

U.S. Department of Education

Rod Paige Secretary

Office of Vocational and Adult Education

Susan Sclafani Assistant Secretary

September 2004

This publication is in the public domain. Authorization to reproduce it in whole or in part is granted. While permission to reprint this publication is not necessary, the citation should be: U.S. Department of Education, Office of Vocational and Adult Education, *The 21st-Century Community College: A Strategic Guide to Maximizing Labor Market Responsiveness, Volume 1 - Unleashing the Power of the Community College,* Washington, D.C., 2004.

To order copies of this publication:

Write to: ED Pubs, Education Publications Center, U.S. Department of Education, P. O. Box 1398, Jessup, MD 20794-1398;

or **fax** your request to: (301) 470-1244;

or e-mail your request to: edpubs@inet.ed.gov;

or **call** in your request toll-free: 1-877-433-7827 (1-877-4-ED-PUBS). If 877 service is not yet available in your area, call 1-800-872-5327 (1-800-USA-LEARN). Those who use a telecommunications device for the deaf (TDD) or a teletypewriter (TTY) should call 1-877-576-7734;

or **order online** at: www.edpubs.org

This publication is also available on the Department's Web site at: www.ed.gov/about/offices/list/ovae

Volume 1

Unleashing the Power of The Community College

CONTENTS

Preface
Acknowledgments
The Time Is Now
A Closer Look at Labor Market Responsiveness
Key Lessons Learned
Overcoming Impediments
The Responsive Community College in Context
The Promise of Labor Market Responsiveness
Afterword: A Vision for the Future
Notes
Appendix A: The Colleges: Who They Are and Why They Were Chosen
Appendix B: Members of the Community College Labor Market
Responsiveness Advisory Committee

Preface

The Community College Labor Market Responsiveness Initiative

The Community College Labor Market
Responsiveness (CCLMR) Initiative was created by
the U.S. Department of Education, Office of
Vocational and Adult Education (OVAE), to develop
and disseminate information and tools enabling
community colleges, as a unique and critical
component of America's education and training
system, to keep pace with the needs of a diverse
student body and a dynamic labor market.

The main goals of the initiative are to: 1) determine the characteristics of a "market-responsive" community college and identify the indicators and measures by which market responsiveness can be judged; 2) identify the policies and practices community colleges have put in place to facilitate and support labor market responsiveness; 3) pinpoint the steps colleges can take to improve labor market responsiveness and the quality of customized programs they offer to students; and 4) disseminate that knowledge to the field.

This guidebook is the main tool for this dissemination effort. In writing the guide, Westat and AED relied heavily upon case study analysis of more than 30 community colleges in 10

diverse labor markets, especially hundreds of interviews and discussions conducted with college leaders, local employers and economic development professionals. To augment the case studies, we collected standardized data across all colleges using surveys and document review, conducted statistical analyses, reviewed the relevant literature, and consulted with experts.

This report does not represent findings from an experimentally designed study carried out in a controlled setting. Rather, it represents an extensive analysis of the work being undertaken by multiple community colleges. This is a new area of study, and no preliminary analysis has been conducted that was ready to be subjected to a more rigorous research design. Given these methodological constraints, the report cannot assert a direct causality between any of the identified characteristics and particular student labor market outcomes. This study, however, can lay the groundwork for future research that would use an experimental or quasi-experimental design to test the impacts of the characteristics identified.

Nonetheless, documenting current practice across a sample of more than 30 colleges, something that has never been done as extensively as in this study, may provide value to college leaders. As more colleges review these

materials and take action based on the collected professional wisdom documented, we expect to advance the field of knowledge about how community colleges can better respond to and provide leadership in preparing students for labor market success.

In addition to this guidebook, other useful products listed below have emerged from the research component of this initiative. These are available at www.ed.gov/about/offices/list/ovae:

- Documented Characteristics of Labor Market-Responsive Community Colleges and a Review of Supporting Literature (Westat and AED, 2003)
- Research appendices to The 21st-Century Community College (Westat, forthcoming)

Purpose of This Guidebook

Aiming to help all community colleges unleash their potential for workforce and economic development the Office of Vocational and Adult Education of the U.S. Department of Education sought to identify ways college leaders can improve those programs and services that most directly affect the ability of citizens to compete in today's increasingly demanding skill-based labor market, and the ability of employers to compete in today's challenging global market. The result is this guidebook, which has three major goals. The first goal is to share up-to-date information on labor market responsiveness. Based on contemporary research, this guide explains what is meant by "labor market responsiveness," delineates factors associated with becoming more responsive, and clarifies why labor market responsiveness is so important to community colleges in the 21st century.

The nation's community colleges provide the most logical—and, for all practical purposes, the only—foundation for building a broad-based workforce development system that can respond to local and regional needs.

Julian Alssid, Workforce Strategy Center¹

The second goal is to offer practical guidance to college administrators seeking to take actions that will allow them to maximize their labor market responsiveness. We believe college leaders will be especially interested in learning how their colleagues across the nation have endeavored to make their colleges more responsive to labor market conditions.

The third goal is to encourage community college administrators to engage in a critical self-assessment process. The guiding questions that appear throughout the guidebook and the self-assessment tools provided suggest a process that will help college leaders and top officials to identify gaps in programs and services as well as opportunities for promoting action on campus.

This guidebook is directed to you, the top leadership at community colleges as presidents, boards of trustees, and the senior administrators and deans responsible for the colleges' missions and programs. In turn, we expect that you will share portions of this guide, or its entirety, with others—faculty, staff, employers, economic development professionals, and public officials. Involving the broader campus and community in self-assessment and strategic planning is an important step toward becoming increasingly anticipatory of and responsive to local and regional workforce development needs.

The guidebook has three volumes. In Volume 1, we provide an overview of labor market responsiveness. We define what it is, explain why community colleges need to be intentional in their responsiveness to labor market conditions, and show how responsive colleges can more effectively contribute to the economic development of their communities. Volume 1 previews the main lessons learned from the literature and case-study research. We encourage college leadership, in particular the president and members of the board of trustees, to read through Volume 1 to obtain a common grounding on the issues. Volume 1 provides the information necessary to enlighten and motivate community college leaders toward decisions that will maximize their labor market responsiveness.

Volume 2 is the heart of the guidebook. Drawing from in-depth case studies of more than 30 colleges, it presents a roadmap for action. Each of Volume 2's seven modules explores a different facet of the

community college that contributes to labor market responsiveness. These modules are expected to function as practical guides that can be used independently of one another and referenced time and again as each college president and his or her team progresses through the processes of self-reflection and strategic planning. In each, broad findings and lessons learned are explained in great detail and numerous examples from colleges are presented. Throughout the seven modules, there are guiding questions that will cause presidents and their staff to reflect on current structures, policies, procedures, and programs at your college. Each module closes with a brief summary of lessons learned. Interspersed between the seven modules, we have included detailed information on especially relevant resources and practical advice that have general applicability to labor market responsiveness culled from other sources.

Volume 3 contains two practical tools to guide each team through a self-assessment process and a wealth of resources to help them build a strategic plan. The first tool, keyed directly to the seven modules in Volume 2, helps each college to reflect on the internal structures. policies, and practices that inhibit or promote responsiveness. The second tool helps the college to systematically look outward to its community to determine specifically what programs and services will best meet the needs of its service area. Both of these are designed to be completed by a team, including leadership, administrators, faculty, and even community partners. We have also included an annotated bibliography of documents and reports to inform effective thinking and planning, in addition to an annotated listing of organizations and projects that are interested in providing assistance to colleges as they strive to become more labormarket responsive.

Acknowledgments

The authors wish to thank, first and foremost, the countless individuals at the participating colleges who provided open access to their institutions and programs. Their professionalism, enthusiasm, and creativity served to inspire us. The participating colleges were:

- Anne Arundel Community College, Arnold, Md.
- Asnuntuck Community College, Enfield, Conn.
- Bellevue Community College, Bellevue, Wash.
- Black Hawk College, Moline, III.
- Central Piedmont Community College, Charlotte, N.C.
- Dallas County Community College District (Brook Haven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, Richland), Dallas, Texas
- Gaston College, Dallas, N.C.
- Green River Community College, Auburn, Wash.
- Holyoke Community College, Holyoke, Mass.
- Indian River Community College, Fort Pierce, Fla.
- Kirkwood Community College, Cedar Rapids, lowa

- Malcolm X College, Chicago, Ill.
- Montgomery College, Montgomery County, Md.
- Moraine Valley Community College, Palos Hills, III.
- Mountain Empire Community College, Big Stone Gap, Va.
- Northern Virginia Community College, Annandale, Va.
- Oakton Community College, Des Plaines, III.
- Palomar College, San Marcos, Calif.
- San Diego Community College District (Mesa, Miramar, City College), San Diego, Calif.
- Scott Community College, Bettendorf, Iowa
- Seminole Community College, Sanford, Fla.
- Shoreline Community College, Shoreline, Wash.
- South Piedmont Community College, Polkton, N.C.
- Springfield Technical Community College, Springfield, Conn.
- Valencia Community College, Orlando, Fla.
- Walla Walla Community College, Walla Walla, Wash.
- York Technical College, Rock Hill, S.C.

We are especially grateful for the generous time and valuable guidance of the CCLMRI Review Committee Members.

- Roy Church, president, Lorain County Community College, and Mary Ellen Duncan, president, Howard Community College, graciously shared their expertise and perspective as reviewers of the guidebook.
- Kent Phillippe, senior research associate at the American Association of Community Colleges, and Jeffrey Schwartz, education program manager, Appalachian Regional Commission, provided valuable contributions to the research design, site selection, and product development. J. Noah Brown, vice-president for public policy, Association of Community College Trustees, graciously shared his expertise and perspective as a reviewer of the guidebook.
- This project was conceived and informed by staff in the Office of Vocational and Adult Education including Hans Meeder, deputy assistant secretary; Joan Athen, special assistant for community colleges; Andrew Abrams, research analyst; and Burt Carlson, acting chief, Effective Practices and Dissemination Branch.
- Fieldwork was completed by Sarah Demma, Patsy Flannigan, Robert Harmon, and Amy Shimshak of Westat; Bryna Shore Fraser, Mark Johnson-Lewis, Keith MacAllum, Anne Rogers Poliakoff, and Karla Yoder of AED. Additional material was collected by Ian Petta and Regina Yudd of Westat.
- Louis Jacobson of Westat served as the principal investigator of the CCLMR project. Alex Ratnofsky, senior vice president, Westat, provided invaluable oversight and leadership.
- The graphic designer was Jel Montoya, AED.

The Time Is Now

The story is told of a Midwestern community college located in a town that was facing a major economic downturn. Historically productive plants were soon to be shut down as the existing technology was becoming obsolete and production was slated to be moved elsewhere. Everyone saw that the writing was on the wall. Eventually, the plants closed, jobs were lost, and the entire town suffered, just as predicted. Looking back, a staff member of the community college said, "The saddest thing is, we saw this thing coming. We talked about it a lot, but we never took action." Ten years later, faced with another economic shift, the community college was at the forefront of envisioning the area's economic future, recruiting new industry, and retraining dislocated workers for the new opportunities under development. Community members recognized the economic development resource they had in their community college, and the transition was markedly less painful. Clearly, community colleges have a vital role to play in ensuring that their communities effectively anticipate and respond to the economic challenges and opportunities they face.

Many believe that as community colleges enter their second century of service, their role as engines of economic development will come to the fore. Twenty-first century community colleges will be characterized by their pivotal role in a seamless system of education, workforce development, and economic development. As Norton Grubb observed, "Modern community colleges have a major responsibility for preparing the nation's current and future mid-skilled workforce, which accounts for three-fourths of all employees in the United States."2 Now more than ever, it is critical that all community colleges realize their potential to strengthen the U.S. economy by meeting the workforce development needs of its citizens and employers.

The need for 21st-century community colleges to become flexible, market-responsive providers of postsecondary education, worker retraining and certification, and continuing education stems from the need for ever-evolving job skills in a continually changing work environment. Global competition contributes to increased pressure on business and industry to be more productive. The demand for skilled labor grows. As a result, the training needs of employers have expanded

and accelerated. Communities that prosper are ever more dependent on employers that respond to the need for skilled labor.

The ability of a company to be competitive in this new economic environment requires a capacity to improve productivity, to innovate, and to push innovations to market faster than competitors. None of this can be accomplished without a skilled frontline workforce that can harness the tools of technology and quickly adapt to changes in a global economy.

Bob Templin,
 Northern Virginia Community College³

Health-care, manufacturing, and information technology-based companies spend more dollars every year on training to upgrade the skills of their workforce. The demand for training has created a market for contract training and curriculum development that community colleges are uniquely qualified to meet. At the same time, with the increase in training budgets, competition for this market has expanded both from private vendors and from within the companies themselves. Although many community colleges have become more market-responsive, securing such training contracts, others have been less successful.

Workforce development is almost universally accepted as a key component of economic development. The time is right for community colleges to fully embrace and achieve their potential as engines for economic development. With a network of 1,600 community college campuses and countless on-site training facilities, this potential is vast. Our community colleges are well positioned to contribute statewide and locally. At their best, they work closely with business and industry to offer a continuum of training—from students without workforce experience to veteran employees upgrading their skills to advance in their jobs or make career transitions.

While recognizing the potential of community colleges to promote economic development, it is important to remember that their missions are multifaceted. Community colleges are well aware of the multiple roles that they play-in providing opportunities for students to earn associate degrees and to prepare for transfer to four-year colleges, for adult members of the community to pursue continuing education and avocations, and for new and incumbent workers to obtain vocational training in the form of certification and other specialized programs. Colleges need to balance these and other functions if they are to maximize their role in workforce and economic development in response to changing conditions. As our nation undergoes a continuous technological and economic evolution. the importance of the workforce development mission of community colleges rises to the fore. For many of them, this will require significant institutional change before the potential for meeting local labor market needs is fully realized. How effectively community colleges transform themselves into market-responsive institutions determines how effectively they will support the economic development of their communities.

Market-responsive community colleges with highquality career-oriented programs are able to anticipate local community needs, secure contracts to custom-build programs for employers, deliver courses and credentials that align with current and future workplace needs, and accurately evaluate training outcomes. Over the course of their 100year history, a growing number of America's community colleges have become highly responsive to labor market conditions. Several of these colleges have been recognized by the American Association of Community Colleges, the National Alliance of Business, and the National Council for Continuing Education and Training, among other organizations, as exemplary in their efforts to advance the linkages between education and training and economic development.

The mission of community colleges is evolving because the communities within which they are situated are changing.

- Debra Bragg, University of Illinois⁴

Yet, not every community college fully recognizes its potential in meeting these goals nor are they equally capable of providing careeroriented training. Colleges vary with respect to the economic conditions in which they operate, the dynamism of their leadership, the resources allotted by state and local funding sources to the vocational training mission, the nature of local training needs and interests, and the extent to which they must compete with other providers of vocational training in their area. In his landmark 1994 study The Contradictory College, Kevin Dougherty found most community colleges to be "much less responsive to the demands of the labor market" than many observers contend, stating that the typical community college "dances to the music of the labor market but does so only clumsily."5

Others have likewise doubted the ability of community colleges to be tightly linked to local labor market demands. They cite the oversupply of graduates in some vocational fields, the inability of other graduates to find employment directly related to their training, and the reliance of some employers and industries on proprietary schools. For researchers like Dougherty, the weak connection between output and demand is explained by "the fact that the community college's vocational effort has been governed by nonmarket as well as market criteria."

Community colleges, for many reasons, are moving to the forefront of workforce and economic development due primarily to their location at the grass-roots level in their service regions. Today's community colleges offer far more than the traditional vocational and general education programs of the recent past, yet many still need to adopt a more market-driven approach to workforce and economic development programming.

- Richard Drury,

Challenging Management Development, Inc.6

Nevertheless, as local economies and employment outlooks change, some community colleges are able to respond. Some even anticipate these changes. Looking to better serve their students and employer partners, these colleges have become more aggressive in their outreach to their communities. Leadership at these colleges tends to assume an anticipatory stance. College presidents and boards of trustees have gathered adequate information to point the institution toward the most promising set of economic and workforce opportunities. Leaders have improved internal responses to these opportunities by confronting the institution's structural and cultural weaknesses. And these institutions have developed strong relationships and partnerships, and committed resources adequate to overcome obstacles.

The specific strategies employed by market-responsive community colleges are not identical. Although any college can serve economic and workforce needs, these needs vary according to the local economy, the size and strength of the business community, the types of industries that dominate, the level of demand for specific skill sets, and the changing demographics of the community. Moreover, college structures and strategies are shaped by state and local policy, funding arrangements, and local history. Therefore, there is no "one size fits all" approach to labor market responsiveness.

Yet, market-driven community colleges do tend to share fundamental characteristics. The literature on market-responsive community colleges, published over the last 10 years, suggests that they share the following important traits:⁷

- Leadership committed to the goal of making the college market-responsive;
- Internal response mechanisms that influence campus organizational structure and culture;
- Conscious and deliberate efforts to nurture business and other partnerships; and
- Thoughtful and strategic approaches to building stronger connections to the local economy.

Volume 2 of this guidebook introduces a wide range of colleges across the United States that have taken steps, sometimes incremental, sometimes bold, toward reorganizing themselves as educational and training institutions that are market-responsive. In our fieldwork, we visited with staff at more than 30 colleges in 10 diverse labor markets. (See Appendix A for a listing of the specific colleges and their labor markets.) Through these case studies, as well as through a review of the literature and consultation with experts, we discovered how colleges approach their workforce and economic development missions, how they design effective programs, and the creative ways that they overcome obstacles. This guide presents the

cumulative experience of these colleges as well as the strategies that their presidents, boards, and other top officials have used to pilot their transformation. Volume 2 describes the practical steps they have taken on their journey toward becoming ever more responsive to their labor markets, and perhaps more importantly, anticipatory of future needs, regardless of the economic environment that they face. This guidebook provides community college leaders with the encouragement, information, and resources with which to take action now. Volume 3 provides a self-assessment tool to help colleges reflect on internal structures, policies and practices that inhibit and promote responsiveness.

A Closer Look at Labor Market Responsiveness

By now, most community college leaders have a general sense of what is meant by the term "labor market responsiveness." They recognize the role that colleges can play in workforce preparation, workforce development, and economic development. Community colleges are increasingly key players in developing technology parks, hosting small business incubators, offering entrepreneurship development, partnering in business recruitment, and conducting applied research to name a few. The preponderance of activity at community colleges, however, remains centered on education and training. Therefore this guide carefully examines the important contribution that labor market responsiveness makes to economic development through a better prepared workforce. Using this lens, we sought to establish a definition of "labor market responsiveness" that focuses attention on workforce development.

Drawing on the written literature as well as the hundreds of conversations and interviews we conducted, we propose the following definition:

A labor-market-responsive community college delivers programs and services that align with and seek to anticipate the changing dynamics of the labor market it serves. These programs and services

address the educational and workforce development needs of both employers and students as part of the college's overall contribution to the social and economic vitality of its community.

This definition highlights several important facets of market responsiveness:

- First, it distinguishes programs, such as courses or certificate programs, from services, such as small business development, industry recruitment, and corporate consulting, while identifying both as equally important. Although analyses of labor market responsiveness often emphasize noncredit programs, it is important to note that this definition does not distinguish between credit and noncredit programs, because both are important components of a comprehensive strategy.
- Second, this definition draws attention to the importance of aligning these programs and services with local conditions and recognizes the fact that local conditions are constantly changing. In other words, one size does not fit all, and what worked yesterday may not work tomorrow.

- Third, this definition indicates that to be responsive means to be anticipatory. Even the most nimble community colleges, which can develop new courses of study in a matter of months, must constantly look ahead to ensure that new programs are in place by the time that business and industry need them.
- Fourth, a college's service area is not restricted to its locality. More and more colleges are responding to markets that extend far beyond county, state, or even national borders. Economies and markets do not recognize political or geographic boundaries.
- Fifth, this definition incorporates academic education as well as vocational education and workforce development. The traditional hard lines—between academic education and vocational training, between credit and noncredit courses—are increasingly blurred.
- Sixth, it recognizes that the constituencies who benefit from labor market responsiveness include students, employers, the community as a whole, and the college itself. Responsiveness enables the college to better serve all of its customers.
- And lastly, the definition asserts that the community's economic vitality, and by extension the region's, depends upon meeting the mutually reinforcing needs of students and employers. By addressing the supply side and the demand side, and by aligning the educational and training needs dictated by each, the community college enhances the overall well-being of the community in which it is located.

The community colleges are very well adapted to meeting the needs of local employers. They're flexible, they're able to say to an employer, 'What do you need?' and 'We'll educate the people for the kind of workers you need.'

President George W. Bush⁸

What does this definition mean in practice? It means going the extra mile to develop programs to meet community needs perhaps not immediately obvious. Colleges take markedly varied paths toward market responsiveness, shaped to a great degree by surrounding community conditions and internal institutional capabilities. Each community college is unique in its approach to and relationship with its local market, and each labor market presents a unique set of conditions and opportunities.

There exists a wide range of effective approaches to determine and meet economic needs, some simple, some complex. The more well-known approaches include contract and customized training programs, new certification and credentialing programs, and increased flexibility with respect to course delivery, scheduling, and location. However, forward-thinking college leaders tend to incorporate a variety of mutually reinforcing strategies, approaches, and techniques to position the institution as responsive.

Contextual factors, such as changing local demographics and industrial mix, inevitably influence the choice and effectiveness of these approaches. Depending on local conditions, context can either enhance or inhibit their implementation. The important lesson is that a college's ability to serve its constituents and contribute to economic development is directly related to its ability to design, develop, and implement practical approaches that take into account these contextual factors while tightening the linkages between what the college offers and what the community needs. Let's take a closer look at three instructive examples to see how community colleges have tackled the issue of labor market responsiveness in practice.

EXAMPLE

1

The Institute for Manufacturing Productivity at York Technical College

The Institute for Manufacturing Productivity (IMP) at York Technical College in South Carolina is an effort to meet both local and national workforce needs in the area of manufacturing, and to improve the productivity of manufacturing industries in the United States. In 2002, the college built a 20,000-square-foot facility, today filled with millions of dollars of equipment—machine tools, simulators, and CAM software—in partnership with about 15 companies. The executive vice president of the college characterized the IMP as "the college's niche right now."

Okuma America, a machine tool manufacturer with its Western hemisphere headquarters in Charlotte, N.C., is a key partner in the IMP. Historically, Okuma maintained a training division with a physical facility on a company site. During the 1990s, Okuma leadership realized they no longer wanted to support their own training center. When York Tech approached the company in 2001, asking Okuma to place several machines in the college's new facility, the company suggested a larger-scale partnership. That year, Okuma moved its entire corporate training center to the IMP. Okuma donates the training equipment and York Tech employs company trainers. The IMP conducts training almost every week for employees, customers, and suppliers from North and South America, and sells Okuma equipment off the floor. The president of York Tech noted that he plays a major role in maintaining this valuable partnership through his personal involvement.

The IMP also functions as Charmilles
Technologies' application and demonstration
center for the Southeastern United States and is
now building a metrology lab with a grant from
the Tyco Electronics Foundation. The IMP

conducts training and product development for other national and international companies, including General Motors, Ingersol-Rand, Harley Davidson, Federal-Mogul, Honda, and Siemens, serving hundreds of incumbent employees. The facility provides office space to technical people from the partner companies. Laboratories, classrooms, and offices are named for the major donors to the effort. The institute also serves as a training ground for York Tech students in machining and industrial technologies.

The college capitalizes on the opportunity to interact weekly with manufacturers, suppliers, and their employees from around the country, staying current on training needs and future trends in the industries represented by those visiting the center. York Tech conducts follow-up with the home companies of those trained, not just on their satisfaction with the training received but to learn what lies ahead for those industries.

The IMP also plays a consulting role, assisting local industry in identifying in-house manufacturing, process, and operational improvements. A success story in this realm involves a core pin that Tyco Electronics bought for \$50-75 a piece in the United States. The company was considering getting the parts from China for about \$47. The director of the IMP assembled a team of local industry experts and a Tyco employee, who performed hours of research to create a new method for manufacturing core pins and succeeded in creating a process to produce them for about \$9 a piece. This team gave the process to Tyco and trained a company technician, feeling that they had made a significant contribution to keeping manufacturing in the United States.

EXAMPLE

2

Nursing Program Partnership With the University of Chicago Hospitals Academy

A three-way partnership—between the Moraine Valley Community College Nursing Program, the University of Chicago Hospitals (UCH), and the UCH Academy (UCHA)—offers qualified UCH employees the opportunity to complete an associate of applied science degree in nursing. The partnership responds to projected nursing shortages, a crisis evident to hospitals attempting to hire nursing staff, and thoroughly documented in labor market analyses. By training its employees to become nurses, the UCH realized it could "increase capacity and the number of students matriculating with nursing degrees, not just compete for the existing talent." The Nursing at the Forefront Scholarship pays 100 percent of an employee's tuition, fees, and textbook expenses. All coursework, theory, and clinical experiences are offered at UCH.

Three years ago, UCHA approached Moraine Valley about bringing the college's nursing program to UCH. UCHA and the college had an existing relationship, having partnered on previous efforts, such as a medical terminology program. The excellent reputation of Moraine Valley's nursing program also attracted UCHA—as its executive director noted, "one of the finest degree completion nursing programs in the state."

Given the opportunity to contribute to the social good, the leadership of Moraine Valley was enthusiastic about the invitation. "The board is so pleased and proud of this program, because it was absolutely the right thing to do," one administrator explained. Not only would the new program help those on the long waiting list for admission to the college nursing program, but it also addressed a social crisis—the shortage of nurses.

Support from the college's top leadership was critical, because the logistics of creating the

program were very challenging and required consistent administrative support. The willingness of senior administrators to tackle this challenge reflected the college's organizational culture, which values risk-taking, vision, and continuous improvement. The nursing program's faculty members were initially very cautious, wanting to ensure that the UCHA program would be of identical quality as Moraine Valley's. Thanks to an organizational structure that permits creative strategies for scheduling courses and compensating faculty, one result is that Moraine Valley nursing faculty, not adjuncts, travel into Chicago to deliver the program. UCHA pays an annual stipend of \$10,000 to cover the college's additional responsibilities incurred by this partnership. Moraine Valley covers the cost of faculty assignments at UCHA, as all clinical staff faculty are full-time faculty members at Moraine Valley. The college absorbs the travel costs, and UCHA covers the cost of additional instructional materials required by the program.

The program began in spring 2002. Each cohort of 18 new students must meet UCHA's eligibility requirements as well as Moraine Valley's admission requirements. Some prospective nursing students on Moraine Valley's waiting list have become employees of UCH in order to get into the new program. The UCH system is already seeing results. UCH employs all the students, many as nursing assistants, and they are smoothly assimilated into the organization. Formal evaluations, comparing employees who learned through tuition reimbursement outside of UCHA with its cohort learners, have found that 90 percent of cohort learners are still employed by the UCH system while 50 percent of the tuition reimbursement group has left by the time they receive their degree. It appears that cohort learners feel a greater affiliation with the organization where they trained.

EXAMPLE

The Professional Automotive Training Center at Shoreline Community College

Shoreline Community College's Professional Automotive Training Center (PATC) is a nationally recognized, award-winning initiative. The center houses the college's automotive factory training programs sponsored by General Motors, American Honda, Toyota, and DaimlerChrysler. The center offers two-year technical training programs specific to each manufacturer's technical needs. Dealerships sponsor students for the duration of the program. Students alternate each quarter taking classes at the PATC and working in a dealership. Students who complete the program receive an associate degree as well as factory certification. Of those who enter, approximately 90 percent complete the program and 100 percent are placed in jobs.

Shoreline's automotive program began in the late 1980s when an instructor in the college's manufacturing technician program explored the need for automotive technicians in the Puget Sound region. The college conducted research by talking to representatives from the Puget Sound Automotive Dealers Association (PSADA), comprising more than 260 new car dealers. Personal leadership by the president, the vice president for academic affairs, and the vice president for administrative services, in collaboration with PSADA, particularly the association's executive director, was instrumental in Shoreline's success.

Beginning with a partnership with GM, the initiative has expanded to include four major corporations. The program, geared to both emerging and incumbent workers, is overseen by the college's Business, Automotive, and Manufacturing Division, which is part of academic affairs and primarily state-funded. Over the years, the college's partnerships with the PSADA, as well as with the dealers and the factories, have greatly expanded. For example,

the PSADA's headquarters has been housed in the program's center since the 32,000-square-foot building was constructed in 1992, through private money raised by the college foundation and donated by area banks, business leaders, and dealerships. As a tenant of the building, the PSADA provides the infrastructure for the automotive division in terms of secretarial support, office equipment, and building maintenance.

Shoreline's partnerships with dealerships are an integral part of the program's success. In addition to internships and employment, dealers provide students with tools and equipment during their training. The college also relies on its partnerships with the sponsoring factories. For example, they provide the college with new vehicles for training purposes and upgrade training for instructors. Most of the training equipment is loaned to the college from various manufacturers. For example, Snap-On Tools loaned the college \$400,000 worth of equipment, and Hunter Engineering Corporation supplies the college with alignment equipment.

Relationships with high school automotive programs are crucial to the PATC as well. The college is an active participant in the Automotive Youth Educational System (AYES) and has partnered with more than 16 high schools in the state. The program has an advisory committee of dealers that meets three times a year with instructors and the dean of the automotive division. Through these meetings, the college is able to determine how well the dealers' needs are being addressed and identify needs that have not been met.

These vignettes describe innovative programs that go beyond the traditional and expected institutional responses to changing needs. These community colleges determined specific local workforce needs and responded with creative solutions to those needs. The programs are far-reaching and strategically planned. Once we had heard numerous such stories, through interviews with more than 200 individuals at more than 30 community colleges, we acquired a clear picture of labor-market-responsive strategies and an appreciation for their range. We then set about to determine what accounts for the varying ability of colleges to enact these strategies, beyond the influences of their differing economic contexts. We focused on factors over which community college leaders have the most control. Our research question and the question we believe college leaders want answered—became, What specific things do effective colleges do that enable them to be more market-responsive?

Community colleges are specially situated to address the unique workforce and education needs of any given community. I have long admired the community colleges' ability to adapt and evolve with the ever-changing face of today's students. Community colleges have long been at the forefront of meeting the education needs, transfer opportunities, and training needs of emerging workforces, and I applaud their continued effort.

Rep. Michael N. Castle,
 Chairman of the House
 Subcommittee on Education Reform⁹

Even the casual reader of these three stories alone will note emerging themes. All three colleges successfully addressed such issues as partnership, organizational flexibility, information gathering, strategic planning, resource development, and leadership. We found that the answers to the research question we had posed could be organized into seven broad dimensions that promote or inhibit a college's ability to be labor-market-responsive. It is these dimensions of the community college that leaders must address in order to maximize labor market responsiveness:

- 1. Leadership and governance
- 2. Organizational structure and staffing
- 3. Organizational culture
- 4. Resources and funding
- 5. Information and data
- 6. Relationship-building
- 7. Partnerships

These seven dimensions provide a useful way to examine the factors that colleges need to address to improve their labor market responsiveness. Although we have separated them for the purposes of discussion, in reality they form an integrated, mutually reinforcing set of practices, policies, and philosophies. Addressing any one in isolation is unlikely to result in the intended outcome. In and of themselves, these dimensions do not equal labor market responsiveness. Instead, they represent the dimensions of college life and practice that leaders must successfully manage on the path towards becoming more labor-market-responsive. Volume 2 of this guide is organized into seven modules informed by authentic and practical examples that guide colleges toward selfassessment and action. A self-assessment questionnaire in Volume 3 may be helpful in prioritizing the areas on which to focus attention, thus determining the most useful modules of Volume 2.

Key Lessons Learned

As a preview of Volume 2, we offer a brief summary of key lessons and strategies explored in its seven modules. Examining this overview may enable you and your team to determine which modules to explore in greater detail.

Leadership and governance

The leadership of top college officials—the president, the board of trustees, the vice presidents, and the deans—underlies and influences each of the other six dimensions.

- Effective leaders make market responsiveness one of their college's priorities and communicate this mission internally and externally.
- They maintain a regional, national, or even international outlook, conveying a vision that extends beyond the college's traditional service area.
- Leaders inform themselves about economic and workforce trends and function as a key conduit for bringing information back to campus and putting it to work.
- Leaders effectively portray the college as a workforce development partner in the community and build relationships with powerful people, in the process often

acquiring the resources needed to start new, large-scale programs.

Organizational structure and staffing

The reporting structure of community colleges reflects their priorities. At responsive colleges, the continuing education or workforce development division no longer suffers from second-class status in comparison with credit programs, and this is reflected in the senior administration.

- Responsive colleges tend to centralize relevant services into one division to support larger efforts and provide clients with a single point of contact. However, no one division should hold sole responsibility for an institution's labor market responsiveness.
- Responsive colleges bridge the traditional credit-noncredit divide, and staff collaborate across these divisions in mutually supportive ways.
- Because collaboration requires faculty and staff to play expanded roles, the college invests in professional development to help everyone succeed in these new roles.

Organizational culture

In responsive colleges, new values, attitudes, and orientations toward market-responsive activities prevail over traditional mindsets. The culture is entrepreneurial, flexible, open-minded, innovative, and collaborative.

- A cultural hallmark of a responsive college is how well its staff members reflect and respond to diverse cultures and changing populations in the surrounding communities, in the effort to meet their needs.
- Responsive colleges involve business and industry in curriculum development to ensure that credit courses meet employer needs.

Resources and funding

Successful labor market responsiveness requires adequate resources. College leadership assumes responsibility for identifying and accessing these resources.

- Responsive colleges access a wide variety of resources beyond state funding, including grants, state initiatives, federal funds, in-kind donations, and employer partnerships.
- Responsive colleges are creative and entrepreneurial in fundraising, securing new funds through legislation or providing college services on a fee-for-service basis, for example.
- Local funding is crucial, whether obtained through increased county support or bond initiatives to construct new facilities.
- Staff dedicated to seeking new funding sources and writing proposals are essential, as are the fundraising efforts of the president and trustees.

Information and data

Effective community college leaders rely on solid data and current information to inform their strategic planning and decision-making.

- Key types of information concern local and regional economic and workforce trends and employer needs.
- Personal contacts with employers and the economic development community are crucial

- for gathering up-to-the-minute information on local needs and trends. To make program decisions and evaluate market responsiveness, hard data are usually required.
- Enrollments in career-oriented programs often serve as a proxy for the needs of the market and employers. However, responsive colleges seek out any mismatches between enrollments and employer needs in highwage occupations and address the imbalance by promoting interest and enrollment in these programs.

Relationship-building

Responsive colleges develop relationships with an expanded set of constituencies—a broader range of employer partners and economic development groups, planning groups, community-based organizations, K–12 systems, four-year educational institutions, political leaders and power brokers, the department of social services and Workforce Investment Boards (WIB), industry associations, and unions.

- Forming relationships with other community colleges is also important—for informationsharing, for regional collaboration, and for jointly accessing large grants.
- The president, trustees, and the workforce development division take the lead in relationship-building, but it is considered the responsibility of everyone, including faculty and administrators in for-credit programs.
- Colleges find new avenues to market their responsive services to employers and students. They convey messages to potential partners about the institution's quality as a training provider, its flexibility, and its proactive and problem-solving approach.

Partnerships

Effective colleges partner with employers and associations based on strategic priorities. They assess local labor market needs and determine how the college could most effectively meet them. They consider future trends and partner with emerging and expanding industries.

- The most responsive colleges partner with leaders—large employers and innovative industries when possible.
- Responsive colleges ask partners not for resources, but rather how the college can help accomplish mutual goals.
- When partnering, effective colleges emphasize long-term benefits over short-term gains.
- Successful partnerships often lead to expanded or entirely new partnerships.

Overcoming Impediments

As community college leaders initiate strategic planning around the design and development of labor-market-responsive programs and approaches, they will inevitably encounter an array of barriers. Some of these barriers are very real; others are more a matter of perception or misinformation. The box at right lists some of the impediments most commonly invoked. Yet this guidebook provides many examples of community colleges that, having faced these same barriers, found effective strategies to address and overcome them.

The findings presented in this guidebook confirm that through a combination of self-reflection, strategic planning, and strong leadership, all community colleges are able to enhance their labor market responsiveness, regardless of the specific barriers that they may initially encounter. Resistance to change is to be expected. A sober assessment of unique challenges, a clear plan for moving forward, and the application of proven remedies will help manage the change process. The tools provided in Volume 3 are a beginning step in assessing the environment surrounding your college and its unique barriers and in taking stock of factors internal to the college that might hinder your institution from reaching its potential in labor market responsiveness.

Common Barriers to Market Responsiveness

"That's not our mission."

"Noncredit programs and career-oriented programs are second-class at this college."

"All our students transfer to 4-year colleges."

"This community won't go for it."

"We're already labor market responsive. Look at this great program we have over here."

"It's hard to fund career-oriented programs besides, they cost more to offer than transfer courses."

"We'd like to be more market driven, but state funding won't allow it."

"The faculty here is very traditional and academically oriented."

"We're unionized."

"There aren't any companies in our district to partner with."

"We don't have enough information on which to base that kind of effort."

"The accreditation procedures for credit programs prevent that kind of flexibility."

The Responsive Community College in Context

An important lesson emerging from our study is that colleges in dramatically diverse environments, with very different enrollments and budgets, launched highly innovative and highly useful programs (see Appendix). This confirms the premise that regardless of the unique challenges and opportunities a community college faces, its leadership can succeed in enhancing its labor market responsiveness. However, it is critical to recognize that the context in which the college operates—the local economy, the local workforce, and the history and circumstances of the institution itself—do affect the college's capacity for innovation.

No doubt, community colleges with solid financial assets, healthy enrollments, and a supportive economic environment start out at an advantage. Substantial enrollments and budgets indicate that there are (a) the administrative resources to devote to designing and securing funds for effective market-responsive programs, and (b) the educational resources to create cooperative programs with businesses and economic development groups. Financial

support from local government brings not only new dollars but also represents the buy-in from local civic leaders that rewards and recognizes the college's efforts to meet local education and training needs.

America's community colleges play a critical role in expanding access to the skills and knowledge students of all ages need to be competitive in an everchanging global economy. The high-quality education and training community colleges provide are increasingly developed in partnership with business. This trend means students are better prepared to meet the needs of the local and regional workforce, a development that must continue for the benefit of students across the nation

Senator Judd Gregg,
 Chairman of the Senate Health, Education,
 Labor and Pensions Committee¹⁰

A campus in proximity to major high-tech employers is an asset to a college because its location presents rich partnership opportunities that will reinforce the college's role in contributing to local and regional prosperity. While a suburban location is not inherently an advantage, most major high-tech firms, especially headquarter operations, are located in suburbs.

A campus in a predominantly blue-collar community has an advantage because such populations are more likely to seek training in order to gain employment, advancement, or new careers. Community colleges in affluent areas often face high demand for programs geared toward students looking to transfer to a four-year institution and leisure-oriented continuing education. Community colleges in low-income areas must address the pressing need for basic education. A community college that must respond to demands for these types of programs, regardless of their importance, may have difficulty freeing up the resources and attention to devote to career-oriented programs.

The policies and funding practices of state governments and governing boards establish another context within which community colleges operate. Centralized statewide workforce and economic development, operated through the state community college system, may offer important resources and funds to some colleges. Some state systems provide information resources, for example, giving colleges access to outcome data on the employment of their graduates, occasionally matched to wage records. State funding formulas, including the extent to

which these cover the costs of noncredit programming, may limit a college's ability to tap these resources for career-oriented programming. Performance-based funding systems and regional accreditation agencies may also limit a college's ability to focus on labor market outcomes. Thus, if colleges are constrained by the state, having strong local support provides the freedom to be substantially more innovative.

However, these advantages and disadvantages do not determine which colleges will become more market-responsive. The challenges differ, but whether a college is situated in a high-growth, high-tech environment or a more rural region, the pursuit of a labor-market-responsive mission will require its leadership to engage in strategic efforts and secure additional resources.

Colleges, whatever their circumstances, need to recognize that impediments to market responsiveness can be overcome through investment of effort and innovation.

Careful self-assessment and strategic planning enable a college to recognize its environmental assets and liabilities, and, as many colleges have demonstrated, to move on, working within and even building successfully upon what appeared to be constraints. Our case studies suggest that in various circumstances – whether small or large, rural or urban or suburban, financially comfortable or facing lean times, receiving more state support or less – colleges can successfully maximize their potential. The bottom line is, as one economic developer observed, "No matter where you are or what obstacles you face, you can do more."

The Promise of Labor Market Responsiveness

The value of being a labor-market-responsive college extends well beyond the college itself, beyond its students, beyond its public- and private-sector partners. Many community colleges have demonstrated that by developing programs to address employer and industry needs and continually seeking ways to engage in the region's economic development, they improve not only the employment prospects of their students but also the economic outlook for their communities and regions as well.

Colleges that maximize their responsiveness enable displaced workers to transition from one career to another, employed workers to upgrade or learn new skills, and students to prepare for meaningful careers. Such a college is also a magnet to industries and employers because its training capacity promises a steady supply of properly trained workers.

Although community colleges have historically pursued multiple missions, their emergence as trainers of choice has brought to the forefront their potential as engines of workforce and economic development, improving the economy of their communities and simultaneously the employment outlook of their students.

The avenues to acquiring [new] skills are many, and one effective tool that we have developed to facilitate the transition to a new job or profession has been our community colleges. These two-year institutions have been in the forefront of teaching the types of skills that build on workers' previous experiences to create new job skills.

- Alan Greenspan,

Chairman of the Federal Reserve¹¹

The journey to labor market responsiveness requires thoughtful self-reflection and strategic planning. Maximizing a college's responsiveness is a function of effectively managing the seven dimensions discussed in this guide. A focus on any one or two dimensions is not sufficient. Guided by visionary leadership and governance, built on an appropriate organizational structure, staffed by

empowered professionals, nurtured by a conducive organizational culture, supported through adequate resources and funding, informed by solid data and current information, inspired by strategic relationship-building, and delivered through innovative partnerships, the community college of the 21st century can realize its full potential as an engine of economic development.

Afterword: A Vision For the Future

The Center for Workforce Preparation at the U.S. Chamber of Commerce, in conjunction with the American Association of Community Colleges (AACC), conducted a series of regional forums to identify promising practices that will build the capacity of chambers of commerce and community colleges to develop the workforce necessary to keep their communities competitive in today's and tomorrow's economy.

Participants were asked to imagine themselves five years in the future telling a group of business associates about their local market-responsive community colleges. Here are some aspects of their vision:

- Community colleges are the "trainers of choice" for local businesses.
- Businesses play an important and active role in the development of community colleges' strategic plans by providing richer quantitative data on specific job needs.
- Community colleges design career-ladder approaches to certificates, with course sequences drawn from associate degree programs.
- Community colleges blur the lines between credit and noncredit courses.
- Community colleges, workforce investment

- boards, chambers, and local business leaders meet regularly to keep current on the changing marketplace.
- Community colleges offer flexible training options and multiple delivery systems.
- One-stop centers are located on community college campuses, presenting an educational environment instead of a governmental social-service stigma.
- Community colleges collaborate with each other to meet specific workforce needs in the community and region.
- Bridge programs have been created with schools and universities to seamlessly serve students K–16.
- The community college system has a "center for excellence" that provides resources to the system and that helps gauge supply and demand in the local labor market.
- There is a bridging of internal service delivery "silos" to achieve the set of economic goals and objectives set by the community.
- Workforce investment boards develop regional economic centers at community colleges.
- Small businesses are able to cost-effectively create contracts with community colleges.
- The return on investment from marketresponsive community colleges is equal to that of regional economic development.

Notes

- 1. Julian Alssid, executive director, Workforce Strategy Center in a discussion with the authors, Feb. 11, 2004.
- 2. W. Norton Grubb, Working in the Middle: Strengthening Education and Training for the Mid-Skilled Labor Force (San Francisco: Jossey-Bass, 1996).
- 3. Bob Templin, "The Calm Before the Surge," *Community College Journal* (June/July 2002).
- Debra D. Bragg, "Opportunities and Challenges for the New Vocationalism in American Community Colleges," in *The New* Vocationalism in Community Colleges, ed. Debra D. Bragg, New Directions for Community Colleges, Number 115 (San Francisco: Jossey-Bass, Fall 2001).
- Kevin J. Dougherty, The Contradictory College: The Conflicting Origins, Impacts, and Futures of the Community College (Albany, N.Y.: State University of New York Press, 1994).
- 6. Richard L. Drury, "The Entrepreneurial Community College: Bringing Workforce, Economic and Community Development to Virginia Communities," *Inquiry 6,* Virginia Community College System, (Spring 2001).

- 7. See Documented Characteristics of Labor Market-Responsive Community Colleges and a Review of Supporting Literature (Westat and AED, Washington, D.C. 2003) available at www.nccte.org and at www.ed.gov/about/offices/list/ovae/
- 8. President George W. Bush, remarks made at South Arkansas Community College, April 6, 2004 available at http://www.whitehouse.gov/news/releases/2004/04/20040406-6.html.
- 9. Communication to the U.S. Department of Education, July 30, 2004.
- 10. Communication to the U.S. Department of Education, July 29, 2004.
- 11. Alan Greenspan, "The Critical Role of Education in the Nation's Economy," Remarks at the Greater Omaha Chamber of Commerce 2004 Annual Meeting, Omaha, Nebraska, February 20, 2004.

APPENDIX A

The Colleges: Who They Are And Why They Were Chosen

Westat and AED systematically gathered information from a variety of sources. We began by synthesizing the existing literature on labor market responsiveness. We invited expert opinion from researchers, practitioners, and policy-makers. An analysis of the accumulated literature produced a set of general findings and themes. These findings were then converted into research hypotheses and areas of inquiry that were put to the test using a strategically selected sample of colleges.

Our original charge from the U.S. Department of Education was to carefully examine 10 community colleges that presented the characteristics documented in the literature associated with exemplary labor market responsiveness. As we began identifying such colleges, we came to the important realization that they exist in and serve unique labor markets. Thus, to better understand the context in which they operate, and the internal and contextual variables associated with labor market responsiveness, we agreed with the Department of Education to examine small sets of colleges serving the same labor market. This afforded the research team an opportunity to compare and contrast variations across colleges facing similar contextual circumstances.

The study design then evolved from an analysis of 10 "exemplary" community colleges to an analysis of multiple colleges serving 10 distinct labor market areas. Colleges in the final sample include those with a national reputation for being market-responsive; those that appeared to have similar assets and liabilities but did not attract national notice: and those that lacked some of the assets of the nationally prominent colleges, but were in the same labor market. For seven of the 10 labor markets, we chose three colleges to include in the final sample. The rural community colleges, located in different states, each served different labor markets. Finally, two of the areas are served by community college districts, and in these cases, we were able to collect and include data from more than three colleges. Thus, the final sample contained more than 30 community colleges. The participating colleges, organized by labor market area, are presented in figure 1. The colleges in the study sample vary with respect to size, geographic location, overall budget, student populations, funding stream, and other variables reflecting the full range of community colleges in the United States.

Field researchers conducted case studies of these community colleges to determine how they anticipate and respond to the changing needs of business and industry in their communities. This approach offered the opportunity to tease out the different strategies that colleges employ when faced with comparable economic and market conditions. It also provided the opportunity to observe how varying contexts influence college behavior and responsiveness. We sought to critically examine the differences in the colleges' programs and relate those differences to

variations we observed in a set of critical factors, such as internal leadership and organization, resource allocation and sources of support, and external relationships and partnerships.

Examining these colleges, our field teams set out to collect and organize lessons learned that others could fruitfully apply in their own settings. A comprehensive analysis of these colleges led to the findings and recommendations presented in the guidebook.

Figure 1: Colleges in Study Sample by Labor Market Area*				
Labor Market Colleges/Presidents				
Charlotte, N.C.	Central Piedmont/	Gaston/	York Tech, S.C./	
	Anthony Zeiss	Patricia Skinner	Dennis Merrill	
Chicago, III.	Moraine Valley/	Oakton/	Malcolm X/	
	Vernon Crawley	Margaret Lee	Zierre Campbell	
Metropolitan D.C.	Anne Arundel, Md./	Montgomery, Md./	Northern Virginia/	
	Martha Smith	Charlene Nunley	Robert Templin	
Greater Orlando, Fla.	Valencia/	Seminole/	Indian River/	
	Sanford Shugart	E. Ann McGee	Edwin Massey	
Quad Cities, Iowa/III.	Kirkwood, Iowa/	Black Hawk, III./	Scott, Iowa/	
	Norm Neilsen	Keith Miller	Patricia Keir (Chancellor)	
Springfield, Mass.	Springfield Tech/	Holyoke/	Asnuntuck, Conn./	
	Andrew Scibelli	William Messner	Martha McLeod	
Seattle, Wash.	Bellevue/	Shoreline/	Green River/	
	Jean Floten	Holly Moore	Richard Rutkowski	
Rural Colleges	South Piedmont, N.C./	Mountain Empire, Va./	Walla Walla, Wash./	
	John McKay	Terrance Suarez	Steven VanAusdle	
San Diego, Calif.	San Diego District: Mesa / Constance Carroll Miramar / Ron Manzoni San Diego City / Terrence Burgess		Palomar/ Richard Jones	
Dallas, Texas	Dallas County District / Jesus Carreon (Chancellor): Richland Mountain View North Lake Brook Haven Cedar Valley El Centro		Eastfield	

^{*} In Dallas, all of the colleges were part of a single community college district. In San Diego, the colleges were in two community college districts. In those cases, we examined the organizational structures at the district level and drew examples from among the colleges in those districts. Because rural colleges each serve a unique labor market but share similar characteristics, we selected three rural colleges in different states to constitute one case study.

To examine the economic and social environment of each of the 10 labor market areas, the team first reviewed published documents and gathered regional and county-level data from the U.S. Census Bureau and from the U.S. Bureau of Labor Statistics. The team also reviewed college mission statements, organizational charts, budgets, student enrollment information, student handbooks, promotional materials, course catalogues, and college fact books, as well as documents collected on site—including meeting minutes, program reports, curriculum samples, and where possible, data describing or assessing the impact of college programs on business recruitment, retention, and growth.

Data collection activities (primarily document review, on-site visits, and phone interviews) occurred between August and December 2003. To ensure cross-site consistency, semi-structured, open-ended interview protocols were used to guide interviews and focus group discussions with college administrators, college faculty, and community partners. The team interviewed organizations and individuals beyond the college, including employers, community-based organizations, and economic development agencies.

Data analysis resulted in three broad but not mutually exclusive categories of variables related to labor market responsiveness that we named contextual, internal and external. Used primarily to structure the case studies, these categories helped the team organize the features and factors that appear to be correlated with labor market responsiveness across the numerous colleges participating in the study.

Contextual variables are those that exist independently of the college and reflect conditions and features of the environment in which the college operates. These include:

- State-level polices and funding formulas
- Community demographics
- Local labor market conditions
- Economic trends and conditions
- The community orientation toward the community college specifically and higher education in general

Internal variables are those that exist within the confines of the institution itself and as such are those over which the community college has the greatest degree of control. These include:

- Leadership
- Organizational structure
- Organizational culture
- Internal resource allocation
- Internally developed data

External variables are those that exist in relationship to the college and are manifested through the interplay between the college and its context. Thus, "external" variables capture the interaction between internal practices and the surrounding context. These include:

- College funding (i.e., local and non-formula funding)
- Relationship-building (formal and informal)
- Partnership operation
- Externally developed data

The guidebook recognizes the significance of contextual factors, but mainly addresses those factors over which college presidents, trustees, and administrators have greater control, namely, the internal and external variables listed above. Volume 2 examines in detail these variables and their relationship to labor market responsiveness.

APPENDIX B

Members of the Community College Labor Market Responsiveness Advisory Committee

Tom Bailey

Director

Institute on Education and the Economy Community College Research Center Columbia University, New York.

Beth Buehlmann

Executive Director
Center for Workforce Preparation
U.S. Chamber of Commerce, Washington, D.C.

Tony Carnevale

Senior Fellow

National Center on Education and the Economy, Washington, D.C.

Phyllis Eisen

Executive Director
Center for Workforce Success
National Association of Manufacturers,
Washington, D.C.

Jim McKenney

Vice President

Economic Development and International Programs

American Association of Community Colleges,

American Association of Community Colleges, Washington, D.C.

Jay Pfeiffer

Director

Office of Education Accountability and Information
Florida Department of Education,
Tallahassee, Fla.

Bill Sanders

Director of Workforce Innovation U.S. Department of Labor, Washington, D.C.

Steve Wandner

Director of Research and Demonstrations Employment and Training Administration U.S. Department of Labor, Washington D.C.

Larry Warford

Senior Consultant for Workforce Development League for Innovation in the Community College, Phoenix, Ariz.

Tony Zeiss

President

Central Piedmont Community College, Charlotte, N.C.

Photo credits:

Main cover photo: courtesy of Springfield Technical Community College.

Additional photos:

Cover (top to bottom)—courtesy of Miami-Dade Community College, Springfield Technical Community College, and Miami-Dade Community College.

