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ABSTRACT

Focusing on nontraditional workforce, economic, and community development programs being developed within community colleges, this monograph defines these efforts as "entrepreneurial colleges" within community colleges and reviews characteristics and trends related to these efforts. Following an executive summary and introduction, the first section provides definitions and examples of entrepreneurial community colleges, contrasting them with regular community colleges, describing difficulties in determining the success of entrepreneurial colleges, and providing data on enrollments in entrepreneurial colleges at seven community colleges. The second section discusses internal and external factors influencing entrepreneurial colleges, including college missions, faculty attitudes and activities, and local pressures, while the third section address the role of state policy in promoting workforce and economic development, focusing on issues related to funding, regulations, and balancing state and local initiatives. This section also highlights emerging concerns of state officials related to entrepreneurial college effectiveness, their coherence in state educational systems, and the effects of welfare reform initiatives. The fourth section examines potential tensions within comprehensive community colleges with the rise of these new programs. The fifth and final section presents conclusions and recommendations for promoting and integrating entrepreneurial colleges, developing new state and federal policies, and conducting further research. Contains 35 references. (BCY)

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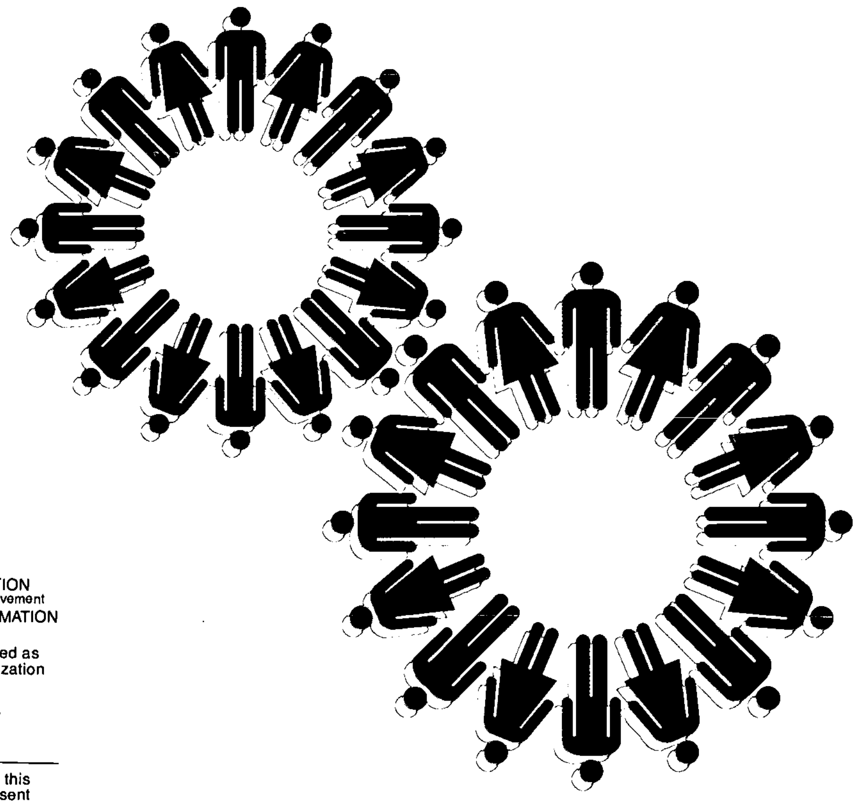
THE CHANGING LANDSCAPE OF THE ENTREPRENEURIAL COMMUNITY COLLEGE



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ACKNOWLEDGMENTS

This monograph is the result of a collaborative effort among the National Center for Research in Vocational Education (NCRVE), the League for Innovation in the Community College, and the National Council on Occupational Education. It began with a proposal to survey the "landscape" of workforce innovations in community colleges, a landscape that has been changing rapidly and that will continue to do so as shifts in economic conditions and in government policy take place. This is the second monograph to result from this collaboration; an earlier publication of the League concentrated on two specific innovations, the integration of academic and occupational education, and tech-prep (Grubb, Badway, Bell, and Kraskouskas 1996).

For this project, the three organizations decided to examine the variety of efforts undertaken by community colleges that fall outside the provision of credential-oriented courses for students–efforts sometimes termed the "shadow college", but that we call the "entrepreneurial college" for reasons we outline in the Introduction. To carry out this project, representatives of seven colleges joined with researchers from NCRVE and representatives of the League to develop a plan for the study at an initial meeting in July 1996. Our first debt, then, is to the individuals who cooperated throughout in planning and executing this project, and in reviewing several drafts of this report: Susan McBride and Joe Dockery-Jackson of Black Hawk Community College; John Duncan, John Quinley, and Sherrie Kantor of Central Piedmont Community College; Sharon Tate, Bobbie McNeel and Maury Pearl of Los Angeles Trade-Technical College; Jim Jacobs and John Krnacik of Macomb Community College; Mary Burnett and Wendy Lapic-Hall of North Seattle Community College; Norv Wellsfry and Julie Brootkowski of Sacramento City College; Tom Huguley, Bonnie Coe, and Joan Patten of Sinclair Community College; and Brenda Beckman, Ernie Leach, and Terry O'Banion of the League for Innovation in the Community College.

In addition, we talked with many administrators at the seven community colleges. While we cannot thank them all individually, they were unfailingly helpful in providing their time, their insights, and various documents. We also met with state officials in the six states where these colleges are located, and we thank them as well. Their perspectives have formed the basis for our review of state policy in Section Three.

Finally, we want to acknowledge ACT for its generous support for printing and distributing this monograph to presidents of all community colleges in the United States and Canada, all university departments of higher education which train future community college leaders, and all national education associations. ACT has a long history of partnership with the League for Innovation and with community colleges to improve the quality of the work force of the future.

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EXECUTIVE SUMMARY

The community college, ever a changing institution, has developed a bewildering variety of innovative programs over the past 10 to 15 years. This monograph examines three nontraditional program areas that have emerged over this period in response to change in the community college landscape: **workforce development**, which provides training for employees of particular firms; **economic development**, in which colleges act in various ways (other than providing courses) to stabilize or increase employment in their communities; and **community development**, in which colleges promote the well-being of their communities in political, social, or cultural areas. In many cases, these new functions have created a college within the community college, operating with a new culture, new rules and regulations–an institution that for the purposes of this study has been labeled the "entrepreneurial college," a term designed to capture its entrepreneurial spirit, market-oriented drive, and responsiveness to external organizations.

These three relatively novel roles join the more traditional ones characterizing what this study refers to as the "regular college": providing degree and certificate programs; offering workforce preparation programs for specific populations, such as dislocated workers or welfare recipients; and supporting community service courses for nonoccupational and continuing education purposes. The seven colleges examined in this study provide an amazing array of activities related to these newer roles that can be interpreted as new ways of understanding and participating in the communities that colleges serve. It is not unusual for these activities to *create* conditions of economic and community well-being and demand for services, rather than simply being a *response* to the demand for educational programs. In practice, of course, the neat categories of workforce development, economic development, and community development break down. College activities often overlap in their purposes–one of the factors making the entrepreneurial college difficult to understand. When this confusion has affected the ability of students and employers to perceive what programs best suit their needs, some colleges have established one-stop centers to provide guidance.

Partly because of the new and overlapping roles of the entrepreneurial college, clear standards for success have not yet been established. Often, market-oriented concepts like customer satisfaction or frequency of repeat business are the only indicators of success.

Similarly, the size of the entrepreneurial college proves difficult to measure. By conventional measures–enrollments and revenues generated–the entrepreneurial college represents about 30 percent of the regular college in one of the seven community colleges studied; in two others, it represents about 10 to 15 percent. By these measures, the entrepreneurial college is clearly important, but unlikely to overshadow more traditional functions. However, entrepreneurial functions are often judged less by size and more by their contributions to discretionary revenue and to the visibility of the college–two areas where the entrepreneurial college has become more important than enrollments might indicate. The size of the entrepreneurial college is therefore ambiguous, since different measures yield different estimates.

Many factors have influenced the development of the entrepreneurial college. Among influences within the colleges, the most important have been the relative emphasis of colleges on occupational rather than academic or transfer missions; the aggressiveness of administrators; the presence of faculty with connections to employers; the stability of support for entrepreneurial activities; the effects of faculty senates and unions on the rigidity of the regular college (which has sometimes forced colleges to undertake new activities outside the regular college); and demographic factors. There also appear to be differences in influence on the entrepreneurial college between elected and appointed boards of trustees, with appointed boards being more likely to include business representatives supportive of workforce and economic development and less likely to engage in fractious politics.

Several policies external to colleges, over which they have much less control, have also influenced the entrepreneurial college. These include district politics that restrict local colleges; developments within local firms, particularly those generating greater demand for training; external uncertainties, such as those associated with immigration and new legislation; pressures for economic and community development; and local economic conditions. Colleges have often been able to make themselves competitive with other providers in the market for education and training, but this ability also depends on local conditions and institutions that they cannot always control.

Among the most important influences on the development of the entrepreneurial college has been state funding policy. In some states, funding for workforce development is relatively generous, either through formula funding for enrollment or through categorical funding for dislocated workers, or state economic development. Other states have restricted funding for workforce development. Most states have funded noncredit courses–the form of most offerings in the entrepreneurial college–at a much lower level than funding for credit courses in the regular college. In addition, many states have imposed regulatory burdens on colleges that make entrepreneurial efforts extremely difficult to undertake. Overall, funding policies among different states vary enormously; they tend to have in common that they have been developed without careful consideration of their impact on entrepreneurial college functions.

The rise of the entrepreneurial college–like the earlier emergence of occupational missions and remedial/developmental education in the community college–has created tensions within the comprehensive community college. Sometimes these tensions arise from differences in modes of operation, since the entrepreneurial college has a strong allegiance to employers and other groups outside the college and is more flexible and less constrained by admissions policies. Sometimes tensions arise when regular and entrepreneurial programs are established in separate centers offering similar courses in credit and noncredit formats. The allocation of revenues, including the "profits" generated by entrepreneurial efforts, is another source of tension. Finally, the basic purposes of the community college are to some extent at issue, since the college's commitment to the quality of teaching, to equity, to nontraditional students, and to a range of academic as well as occupational offerings are less important in the entrepreneurial college. Nevertheless, some of this tension appears positive in that each side can remind the other of its weaknesses: the entrepreneurial college can remind the regular college of new community needs; the comprehensive community college can clarify the importance of teaching and of student needs for the entrepreneurial college. But the greater danger is that the growing entrepreneurial college will become increasingly independent of the rest of the college, preventing the kind of cooperation and communication that has the potential to strengthen both program areas.

Findings from this study suggest several recommendations. First, this study indicates that the entrepreneurial college shows great promise for serving local community needs, including groups that may have been neglected prior to its emergence and suggests that greater attention should be paid to this emerging college role. Careful assessment of community needs and strategic planning to decide which responses to make–epitomized by Sinclair Community College's motto, "Find the need and endeavor to meet it"–could help institutions expand their entrepreneurial activities. Second, colleges need to find ways to integrate the regular and the entrepreneurial college, or they will continue to grow apart. Several mechanisms can enhance the connection between the traditional and emerging college programs, including sharing faculty; eliminating the differential funding between credit and noncredit courses; creating joint student services, joint advisory committees, and joint instructional centers to improve the quality of teaching; and integrating their administration and physical locations.

Third, states wishing to support the entrepreneurial college need to reconsider their funding and regulatory policies, since these have powerful effects on the entrepreneurial college. However, in exchange for supporting the entrepreneurial college, states may want to increase the accountability requirements for these activities, since determining the level of success of these programs has been difficult. And states should consider the balance between their twin roles of regulation and technical assistance; most states have been much less active in providing technical support to improve community colleges than they have been in regulating them. A simple but appropriate approach to state policy might be: no funding without accountability, but no accountability without technical assistance.

Fourth, this study points to considerably more research that colleges themselves and states should undertake. Such basic issues as the magnitude of the entrepreneurial college, its effects on employment and business productivity, the quality of instruction in nontraditional settings, and the most appropriate mechanisms of planning and evaluation for entrepreneurial activities have received almost no attention. Research in these areas is needed to help colleges and state policy makers improve the effectiveness of the entrepreneurial college.

Many national trends, including increases in the numbers of underprepared students, growth in high-performance workplaces, and weakened public support for education, could continue to fragment the community college and to drive the regular college and its entrepreneurial counterpart further apart. The alternative, however, is that a greater integration between the two could provide benefits for both by creating richer connections to employers and the community while maintaining the commitment of the community college to high-quality instruction, equity, and its comprehensive mission.

INTRODUCTION

The community college has never been a traditional educational institution. Its missions and purposes have continuously evolved, particularly in the last three decades, as occupational preparation, developmental/remedial education, and community services have expanded the college role as a community-serving organization. Other roles have also emerged recently that are related to the community college's occupational mission, yet are quite different from its traditional purposes. These newer roles explored in this study–workforce development, economic development, and community development–are difficult to understand even within the context of a nontraditional educational institution for a variety of reasons.

A primary confusion about the three areas of development is that neither policy makers nor colleges themselves agree on the definition of these terms. While there is consensus that all three are beneficial, and are even mandated as essential elements of the expanded mission of community colleges in some states, a mixture of terms is used to explain these various college activities–some traditional and others quite new. Many colleges use the terms "community development" and "economic development" interchangeably. Others lump together "workforce development" and "economic development." This creates a confusing situation described by one state economic development officer:

> I think one of the mistakes that was made was the failure to define terms at the beginning [of state workforce development programs] because there was a lot of conflict and contention along the way that could have probably been avoided.

One purpose of this study, then, is to differentiate between the workforce development, economic development, and community development roles of community college, recognizing that in the real world this simple categorization is far from discrete. Overlap among these three roles is the rule rather than the exception, with overlap found among goals, personnel, curriculum, funding, and, with increasing frequency, students.

A second purpose of the study is to introduce other community colleges to a broader array of options, a vision of what innovative institutions can accomplish. The examples of community, workforce, and economic development described take place in formats quite different from conventional courses. The activities are much more varied; the clients served are often employers and community groups rather than individual students. The new roles of the community college are entrepreneurial, market oriented, and less subject to conventional accountability measures. Often, the college *creates* a demand for services rather than simply *responding* to the needs of students, employers, and community groups. In some cases, these new roles have been performed within the traditional, credit structure of the college. In other cases, new functions have created a separate entity within the college, operating with a new culture and new rules and regulations–an institution sometimes referred to as the "shadow college," because its activities have not always been recognized when citizens think of the community college, and because it has been in the shadow of more conventional programs (Jacobs and Teahen 1997; Banach 1994). For the purposes of this study, this college within the college is labeled the "entrepreneurial college." While no one label is adequate to the variety of activities, this term attempts to capture the entrepreneurial spirit, the market-oriented drive, and the responsiveness to outside institutions behind these activities. In addition, describing a broad range of such activities–as is done in Section One–may help to stimulate other colleges to identify such opportunities for themselves.

A third purpose of this study is to clarify the organizational issues involved in the expansion of these new roles–the benefits, but also the difficulties, the new importance these roles can give to the community college, but also the challenges they pose to institutions that think of themselves as comprehensive, open-access "people's colleges." On the one hand, the various workforce development strategies reflect new ways that colleges can serve their communities, including constituents that have not traditionally been viewed as clients, such as employers and community groups. On the other hand, changes in roles are not always easily accomplished. Other instances in which the roles of community colleges have expanded have sometimes resulted in institutions becoming segmented and bewildered rather than coherent communities of learners. For example, in some colleges, the expansion of occupational programs has created bifurcated institutions, reflecting status differences between academic and occupational education. In addition, the expansion of remedial/developmental education has sometimes been perceived as threatening to the academic and collegiate identity of the community college. This study identifies forces leading to the expansion of the entrepreneurial college, some stemming from influences outside the institutions and some reflecting the internal limitations and rigidities of conventional practices. This study examines tensions between these entrepreneurial functions and those of the regular college as the traditional college activities are designated. Findings reveal much to celebrate in the expanded community college roles, but also point to broader implications and challenges needing attention.

Finally, this study is a departure from previous efforts to describe different types of community college workforce and economic development.[1] Rather than survey a large number of institutions, a purposive sample of seven community colleges was studied in depth with three goals in mind: (1) to clarify in greater detail the increase in workforce economic and community development activities among community colleges, (2) to identify the reasons why these activities have expanded, and (3) to examine the tensions within colleges resulting from these activities. In addition, the study looks at the role of state policy in promoting or hampering entrepreneurial efforts.

This research began with a conference at which representatives of the seven colleges helped to identify the issues and design the study. Relevant administrators and support personnel were interviewed, data and other institutional information was collected, and interviews conducted with state officials with responsibilities for community colleges or state programs related to workforce development.[2] This has been, therefore, a highly collaborative piece of work, possible only with the cooperation of the colleges studied, as well as that of many other individuals. The result is an understanding of the landscape of entrepreneurial initiatives that is deeper than what might have been learned from broad surveys.

Seven colleges participated in this study:

- Black Hawk College, serving neighboring urban and rural areas in the Moline region of Northwestern Illinois;
- Central Piedmont Community College, serving both urban and suburban areas near Charlotte, North Carolina;
- Los Angeles Trade and Technical College, located in the heart of downtown Los Angeles;
- Macomb Community College, located in Macomb County east of Detroit, Michigan;
- North Seattle Community College, in a suburban area close to the University of Washington;
- Sacramento City College, in the city center of the state capital, in a growing region of Northern California; and
- Sinclair Community College serving Dayton, Ohio, and surrounding industrial communities.

These seven colleges are not claimed to be either a random or a representative sample of institutions. Nevertheless, they vary substantially from urban to suburban to rural; in the composition of their student bodies; in the geographic regions of the country; and in the number and scope of economic initiatives undertaken. They provide a snapshot of the diverse landscape of community, workforce, and economic development in its various forms across the nation. The colleges were willing to participate in this collaborative research for the insights it might provide, and several were already active in national organizations, such as the League for Innovation in the Community College and the National Council on Occupational Education.

An obvious caveat is necessary. Relying on information from seven community colleges means, of course, that it is not possible to describe every region's patterns or every state's policies. Examples from a larger sample of colleges might have been richer and more varied. But the researchers chose to work intensively with this small sample of colleges because only in this way would it be possible to understand the complexity of the entrepreneurial college, its interactions with the regular college, and the forces that have led to its development.

Throughout, a particular convention has been followed: specific colleges (and states) are named when successes are described, but anonymity is maintained when less exemplary situations are discussed. This approach was followed in the interests of getting the most accurate picture possible. Anonymity was guaranteed to all those interviewed.

Section One documents the three emerging roles for community colleges–workforce, economic, and community development–which have brought new students, new clients, new revenues, and new visibility to some community colleges. Aspects of these roles, and some of the responses from colleges in the study, are quite new; in fact, they are in such rapid transition that they are somewhat difficult to capture. Nevertheless, they are easily distinguished from the more traditional roles of the community college in education and training. In Section Two, internal and external forces that have influenced the development of these new roles are identified, with special attention to institutional and state policies (developed more fully in Section Three) that facilitate their development, as well as those that hinder it. In the transition to adopting more entrepreneurial roles, tensions with the regular college have developed, as is clarified in Section Four. Most obviously, the emergence of new roles creates some confusion about what the community college is–a confusion that sometimes affects the very employers and students the college seeks to serve. Findings of this study suggest that the community college could potentially split into two rather different institutions–the regular college, adhering more clearly to the norms of traditional educational institutions, and the entrepreneurial college, which acts more like a business. The entrepreneurial college may be more likely to take risks to bolster the "bottom line," value innovation over coherence, focus on the employer as client, and may sometimes be less concerned with students. Nevertheless, findings also indicate that such a split could be avoided. In the Conclusion (Section Five), ideas are offered for making the regular college and employer-serving initiatives more cohesive, fulfilling the ideal of community that has always been part of the community college vision. As was stated a decade ago by the Commission on the Future of Community Colleges in *Building Communities*; "We define the term 'community' not only as a region to be served, but also a climate to be created (1988, p. 7)." This ideal has the ability to continue the evolution of the comprehensive community college, expanding its roles without eclipsing any of its earlier mission.

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[1] Several previous studies have examined workforce development. NCRVE and AACC sponsored two studies, by Lynch, Palmer and Grubb (1991) and by Bragg and Jacobs (1991); the League for Innovation in the Community College has sponsored another (Doucette, 1993). These studies conclude that workforce development efforts are widespread, but relatively modest in most colleges. They tend to provide relatively narrow, job-specific skills, usually to small- and medium sized firms, with courses usually developed in collaboration with the employer. Revenue sources vary substantially, though employers contribute a substantial proportion. However, the information from these surveys is incomplete because most colleges collect very little data on their workforce development programs, and the effort to collect comprehensive information from many institutions meant that more of these reports could comprehensively describe the institutional issues involved. Two more recent examinations of workforce development are Zeiss and Associates (1997) from AACC, and McCabe (1997) from the League for

Innovation. Both promote workforce development as a natural extension of the community college mission to serve local community needs and to expand occupational preparation.

[2]Throughout, structured interview protocols were used that were reviewed by the seven colleges for their appropriateness and completeness, with different protocols for local and state officials. Attempts to collect the same data from each institution were less successful because the data collected was limited by the types of data that these seven colleges had already collected.

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SECTION ONE
MAPPING THE ENTREPRENEURIAL COMMUNITY COLLEGE: DEFINITIONS AND EXAMPLES

Community colleges now offer a bewildering variety of programs. The first task of this study is therefore to create some clarity, to categorize these offerings so that what colleges are actually doing can be more clearly understood. The categories–encompassing the traditional functions of the regular college and the emerging functions of the entrepreneurial college–are much neater than actual practices in the real world because roles overlap in many ways. In fact, overlapping functions are precisely what make the various entrepreneurial initiatives so difficult to understand and to research. The three emerging functions of the entrepreneurial college–workforce development, economic development, and community development–vary in their purpose, in the typical activities they undertake, and in the sense of who the client is. They also often vary in how they are funded, depending on public policies of the states. None of them is wholly traditional, although colleges vary in the degree to which these newer functions have been incorporated into the "regular" college offerings or housed within a "shadow" division.

Furthermore, the definitions of success vary enormously among these different offerings. Some of them subscribe to academic, institutionally defined measures of performance–for example, completion rates or graduation rates–while others substitute more market-oriented measures of success such as customer satisfaction, profitability, or expanding market share. This not only complicates the problems of accountability and knowing what the different programs accomplish, but also it makes the task of assessment much more difficult because most community colleges only collect data which they are required to report. So, when an attempt is made at the end of this section to measure the magnitude of these three roles, the effort is not particularly successful. Not only are the data systems not yet in place to allow the entrepreneurial college to be measured accurately, the very notion of size proves difficult to define.

It may be useful, however, to distinguish among six distinct functions identified in the seven colleges that collaborated in this study. The first three functions–education for credentials, workforce preparation for special populations, and community service–are present in nearly every college, and are typically delivered in organized courses and programs of study. In this study, three relatively new functions are emphasized–workforce development, economic development, and community development–which are delivered in many different ways including services that do not look like courses of study at all. The entrepreneurial college is the focus of this study, not because it is intrinsically more or less valuable than education for credentials or community service, but because it is still emerging. Although it has political support and high visibility, in some institutions its purposes are still developing.

Functions of the Regular Community College

What is often called the "regular" or "traditional" community college is not necessarily a traditional education institution at all, in that it serves so many nontraditional students in a variety of ways. However, it has certainly become familiar to the public at large, and its dominant mode of providing courses that meet in a regular format, usually based on semesters or quarters, has developed from other educational institutions. Following is an effort to distinguish three primary roles of the regular college.

Education for Credentials. The most familiar offerings in community colleges are programs leading to credentials–credit courses for two-year associate degrees and one-year certificates–as well as a growing number of courses that are designed to correct basic skill deficiencies and are often not transferable to four-year colleges. These are part of the well-developed "pipeline" of the educational system. Students can enter these programs from high school or with the equivalent of high school preparation. These programs may lead to subsequent enrollment in four-year colleges since many courses are transferable to the four-year college or university level and are defined in most states as counting toward baccalaureate requirements.[3] Credential programs typically consist of courses meeting three hours per week, in conventional semesters or quarters, although some academic and occupational courses have different schedules because of workshops or labs. The "client" is the student, and student patterns of enrollment determine the direction of many community colleges. These familiar programs are funded predominantly by student tuition, local taxes, and state revenues; they generate the most definitive counts of students reported by colleges, and by state and federal agencies. Remedial or developmental courses are also part of this traditional "pipeline" because they commonly are provided in conventional courses on the traditional schedule, even though they often earn no college-level credit. Although education for credentials is usually organized into one- or two-year programs, students often choose shorter, more specific programs by the simple expedient of enrolling only for the courses they want.

There is some evidence that, at least for certain purposes, credential-length programs are more valuable for students than shorter programs. As the dean of the Business and Technology Group at Central Piedmont reported on associate degrees in engineering and computer science, "Those degrees are almost exactly what employers want." In addition, statistical evidence indicates that certificate and associate degree completion provides greater and more certain increases in earnings to students than completion of coursework without credentials (Grubb 1996a, Ch. 3). Nevertheless, this study suggests that many employers (and perhaps students) do not care about credentials at all. Therefore, the credentialing function of the regular college may become irrelevant in most offerings of the entrepreneurial college.

Although education for credentials is the heart of the regular college, this function clearly overlaps with the employer-related education and training that occurs in the entrepreneurial college. Education for credentials encompasses courses of study with explicitly avocational goals, as well as those with employment-related purposes; courses may earn credit for transfer or may be noncredit. The goals and content of courses may be quite similar, whether a course is noncredit, credit, vocational, or avocational, and sometimes traditional course and those offered by the entrepreneurial college are indistinguishable.

Workforce Preparation for Specific Populations. Many colleges establish special short-term training or remediation programs for specific groups of students. These special programs differ from regular programs in that they are shorter, do not lead to a credential, are usually noncredit, and are often provided in special formats on an intensive schedule, or at particular hours so that working adults can attend. These education and training programs are usually established with special funding from such sources as the Job Training Partnership Act (JTPA), welfare programs, or state grants for dislocated workers. In some states, colleges also receive the funding provided regular students through the state's funding formula. The clients of the college are the students enrolled in these programs, although agencies providing funding often become intermediate clients and may impose their own conceptions of success–for example, the performance standards of JTPA, or movement off the welfare rolls.

These short-term education and training programs are intended to enhance employment rather than to serve avocational purposes like community service courses. These programs are sometimes offered as credit courses, but it is more usual to offer them without credit in the belief that employers do not care about credit. As the director of JTPA programs serving the Charlotte, North Carolina, area noted:

> Credits are irrelevant. What I'm hearing consistently from these advisory committees is, "I want somebody who can do the job; the credential is not the critical issue for us. We're looking for somebody who can do this, this, and this, who doesn't take a tremendous amount of training from ground zero to the point where they're being productive."

These education and training programs for specific groups vary according to the needs of the clients, and many examples of colleges serving welfare recipients, students needing work skills but not seeking a degree, the unemployed, and the underemployed were found. For example, community colleges often act as subcontractors to JTPA and welfare programs, providing specific services under contract. The Opportunities Program at Black Hawk Community College enrolls public aid recipients in Adult Basic Education classes and provides help with child care, transportation and other expenses. North Carolina has a program called Occupational Extension, which offers noncredit, short-term occupational courses for those not wanting associate degrees. These offerings are funded at two-thirds the rate of credit courses in credential programs. Through the community college system, the state also operates the Human Resource Development program that targets individuals who are unemployed or underemployed, regardless of whether they are eligible for JTPA, welfare, or other forms of public assistance. Funding for this program is based on the difference between the client's pretraining earnings and posttraining earnings, making this a highly performance-oriented program. To serve and to attract students to training programs, North Seattle cooperates with the Employment Security Service, which generally serves a population of unemployed and underemployed individuals, including those eligible for JTPA and welfare assistance.

Determining how many special-populations students are served by colleges is hampered by several factors. Those enrolled in special programs are sometimes not counted among the regular credit students of the institutions and may not be separately reported. Those who enroll in regular programs are usually not identified as JTPA clients, welfare recipients, or dislocated workers, especially if they simply enroll on their own. It is therefore difficult to estimate the scale of these college efforts with any degree of accuracy.

Community Service. Community colleges offer a variety of noncredit courses for nonoccupational purposes. Many of these are related to crafts and hobbies; others include language programs, literature courses, or courses and public forums about political and current events. Sometimes they are targeted to specific groups, like senior citizens or expectant parents; in other cases they are open to all. The client is the student, and most states have decreed that avocational courses should be self-supporting. However, other funding mechanisms also exist. For example, the state of Washington pays a reduced rate to colleges for certain avocational courses. In North Carolina, colleges receive small community service block grants; many fund classes for senior citizens, but require that other activities be self-supporting.

Community service courses are distinguished from other course offerings because they are likely to be unrelated to economic or occupational goals. However, some students meet economic goals through these classes, by using the skills learned in courses like upholstery, flower arranging, computer use, or small engine repair to earn or supplement an income. So, even though community service courses are not designed to be forms of occupational preparation, the variety of student goals can create considerable overlap between community service courses and other occupational offerings.

Emerging Functions of the Entrepreneurial Community College

Three new functions of community colleges are emerging, and although separately defined, they share a common purpose–to improve the economic and social well-being of a community. Two of these, workforce and economic development, focus on economic and occupational goals, while community development addresses a broader variety of social, cultural, and egalitarian objectives. While workforce development can be expected to boost certain categories of student enrollment, economic and community development may have only an indirect impact on enrollment and revenue for a college.

All three emerging functions represent ways that a community college can understand and participate in the community it serves that go beyond the typical offerings to students. As

Vaughan (1997, p. 39) has expressed it, these roles are ways in which a community college "can and should serve as a catalyst and leader in resolving issues for which the solution is not always educational"-that is, where the provision of conventional courses is not the solution. Because communities vary substantially in their needs, in the availability of agencies and educational institutions, and in the challenges they face, the mission of serving the local community values different localities. Because there is no single way to discharge this mission, the entrepreneurial college looks quite different from place to place. Thus, the variety of offerings of entrepreneurial colleges that initially seems so bewildering, simply means that colleges have found different needs in their different communities. Activities that are an appropriate response in one area may be unnecessary in another.

Workforce Development. Community colleges often use the terms "workforce development" and "economic development" interchangeably to refer to efforts on behalf of employers. However, a distinction is made between the two because they generate different activities, although they share the purpose of serving employers and increasing the economic strength of a community. In workforce development, community colleges respond to the education and training needs of local employers by adapting traditional schedules or content or by putting together short courses in nonstandard formats. Topics are selected by employers to teach relatively specific skills to incumbent workers. What is defined in this study as workforce development is sometimes referred to as customized training or contract education, although it should be noted that customized or contract education may also represent training for JTPA or welfare recipients rather than specific employers.

Traditionally, colleges have responded to employer needs through occupational education programs, with employers serving on advisory councils for content, methods, and equipment. However, employers have sometimes complained that occupational programs are too narrow and lack the broader competencies necessary in high-performance workplaces (Van Horn, 1995). Sometimes bureaucratic barriers to initiating new occupational programs or modifying current ones discourage colleges from being flexible and responsive in meeting changing industry methods or labor market demands, although a few states follow Illinois in permitting "flexible and moderate" changes in course content. The approved formats of credential-oriented occupational programs–meeting during the day in conventional semesters–are often inappropriate for the training and retraining of current employees.

In the colleges studied, many innovative approaches to workforce development have been implemented to overcome the gap between what colleges teach in credential programs and what employers want for their employees. In every case, these innovations responded to active employer advisory mechanisms, in which formal networks of employers have helped the college in designing curriculum, assessment methods, and scheduling. Colleges have used several different approaches:

- ***Flexible scheduling.*** At some colleges, administrators and faculty have identified course scheduling as a way to meet the needs of students and employers. The vice president of workforce development at one college described the entrepreneurial nature of his division:

> Colleges can no longer say, "Here are our courses from 8-12 in the morning, come and take them." Colleges must move to "What do you need to succeed and how can we help? And when do you need the help offered?"

Los Angeles Trade Technical College has institutionalized this philosophy, and several credit-based occupational courses have been converted to six-week modules, which run five days a week for three hours each day. Open entry and exit for each six-week cycle allows students to alternate education with employment. Students who are not interested in degrees can take only the modules appropriate for their purposes. Similarly, the culinary arts program at LA Trade Tech operates continuously for six hours per day, four days a week, to allow students to complete a large amount of instruction within a 12-month period. In addition, Friday courses are open to entering students, allowing them to explore culinary arts careers and providing an enrollment stream as openings in the program come available.

At Sacramento City College, the recreation vehicle technology program offers courses on Saturdays, making instruction available to students employed in the field, as well as to entering students. The college also uses a satellite campus in downtown Sacramento near state government buildings to make associate degrees programs accessible to public employees. Sinclair Community College offers Late Night Learning classes to third-shift workers, as well as entire degree programs offered through weekend-only courses.

- ***Workforce development through contract or customized education.*** By far the most widely known type of workforce development is contract education, in which the client is the employer rather than the employee. The employer contracts for a specific course or several courses, selects the individuals to be enrolled, specifies the content, and details the measures of success or satisfaction. Although the content may come from an existing occupational program–for example, a CAD course or one in computer applications–the curriculum is often customized to meet the specific needs of an employer. Sometimes the instructors came from the ranks of the regular faculty of a college, or they may be hired from a pool of potential trainers in the community. Frequently, training is conducted on the employer's premises on a schedule that allows employees to work a part of the day in addition to attending classes. This approach to workforce development draws, in varying ways, on the existing resources of the college as well as on other resources, including the employer's, and contributes to the potential tension between workforce development and regular occupational programs, as outlined in Section Two.

  An innovative international version of contract education takes place at LA Trade Tech, where cycles of Japanese carpenters come to learn American methods of sheerwall construction, methods that allow buildings to withstand earthquakes better than traditional Japanese construction. The students attend class seven hours per day, five days per week, with instruction divided between theory and lab work.

- ***Collaborations with public employers.*** Since the public sector provides a large portion of the labor market, colleges find that local government agencies are desirable clients for customized training. Applicants to the City of Los Angeles Department of Water and Power complete a designated course at Los Angeles Trade Tech. This arrangement screens potential employees for motivation and basic skills and, at the same time, introduces applicants to the occupational preparation available at the community college.

- ***Collaborations with private providers.*** Rather than competing with proprietary training providers, some colleges collaborate with private providers to benefit students and institutions alike. Macomb Community College joins with a number of private education providers in its region. Customized training is offered jointly, with the private provider and Macomb sharing the revenue. The private firm delivers the training, often at its own location and using its own equipment; Macomb recruits students through the college mailings, registers students, and provides transcripts of the continuing education units. This cooperative arrangement links the specialized expertise of the vendor with the college's marketing and record-keeping capability.

Community colleges stress that workforce development is responsive to the demands of employers for particular types of training. This responsiveness to *employers* also enhances the responsiveness to *students* within the regular, credential-oriented programs of the college. But it also means that workforce development is reactive to initiatives from outside the college–one of the features that distinguishes it from the more proactive mission of economic development.

Economic Development. Some community colleges play a more active role in stabilizing or increasing employment in a local area, and thereby the demand for education and training, rather than simply responding to existing demand by firms. The activities that are considered forms of economic development are quite varied, but usually they do not generate enrollments in conventional courses. Therefore, they are different from both credential-oriented programs and from the short courses provided for specific employers through workforce development. Common examples of economic development include:

- *Convening industry clusters.* Industries are often informed of changes in technology, work processes, regulations, and use of human resources by trade associations, consortia, networks, or more informal groups. Community colleges can act as economic development partners by convening owners and operators of similar firms (such as those in apparel manufacturing) or firms with similar needs (such as small businesses needing help in computer technology), so that a formal alliance between industry and education is fostered.

  Colleges take at least two directions in convening industry clusters. The first is to help employers clarify their training needs, so that the college can determine what services are appropriate for that firm or industry. As the vice president for community and employer services at Macomb observed:

  > What we've found is that employers don't know exactly what they want. They have this kind of vague feeling about training in some area. So that usually requires a call or a meeting to determine specifically what it is.

  By convening groups of employers within an industrial sector to identify their present and future training needs, community colleges help employers learn how to increase their productivity and retain or increase profitability.

  A second way colleges aid employers is through training to comply with new regulations. The acting president of LA Trade Tech commented:

  > Our departments are attempting to assist industry in things they didn't even know they needed. One of these is contractor compliance, which has always been a very difficult issue. And I see that the schools should be leaders in knowing what the issues are and assisting industry to meet them.

  At LA Trade Tech, the fashion design program has been active in convening the major apparel firms in Central Los Angeles. As the convener and meeting place for the group, the college led efforts to document that apparel is a growth industry by assessing labor market demand in order to receive special funding that was used to create apparel design and manufacturing training programs. As an example of proactive leadership, the college helped create the conditions for growth in the apparel industry. Effects on regular program enrollments followed these economic development activities. Now, when apparel firms turn to the college for training of their employees, they usually do so through the regular credit-bearing courses.

- *Technology Transfer.* Small- and medium-sized firms often lack the resources to learn about and implement new technologies. Many examples were found of colleges offering specific training to small business, serving as incubators for small businesses, and building production facilities in which regional firms can learn, practice, and train employees for new technologies. For example, North Seattle's Small Business Development Center and a local law firm jointly sponsor an annual lecture series on legal issues facing small businesses in international trade. Sacramento City College is host to the Center for International Trade Development, which provides counseling services and information about opportunities for small businesses expanding into export markets. This initiative also offers seminars and short courses for small business establishments. Macomb Community College houses the Midwest Manufacturing Technology Center regional office, which provides advice about technological change to small- and medium-sized firms. At Central Piedmont Community College, the Small Business Center provides services and workshops to assist in the start-up and support of new small businesses. These activities are intended primarily to upgrade the productivity of these businesses, but may also secondarily lead to increases in demand for training of technicians or business personnel.

When colleges engage in technology transfer, they may take an additional step by using college facilities as incubators to allow firms to test new technologies and work processes. For example, Sinclair Community College maintains an Advanced Manufacturing Center for testing prototypes and mock-ups, allowing firms to see how a technology will work and reducing the risk of selecting inappropriate technology. Again, the principal effect is on technology and productivity, and only secondarily on the demand for education and training.

Both Macomb and Sinclair operate corporate education facilities for business, industry, and community organizations. Sinclair's is located on the campus in downtown Dayton and is used by over 500 organizations conducting customized training for 8,000 individuals, in addition to an estimated 37,000 participants in community development activities. Macomb staff note that their conference center often serves as a "hook" to engage corporations in discussing their training needs, which can subsequently be met by college faculty. Macomb administrators took a proactive stance when the Detroit Tank Arsenal was closed, providing leadership for a Local Reuse Committee to develop a plan for civilian use of the property.

- ***Fostering local business leadership.*** North Seattle Continuing Education Division hosts a monthly Women's Network Breakfast, which helps small business owners develop contacts with other community members. In partnership with the Chamber of Commerce, Black Hawk Community College offers a Leadership Program to train community individuals to serve on public and nonprofit agency boards of directors.
- ***Economic environmental scanning.*** Community colleges participate in local planning groups that scan the business environment for new technologies, emerging work practices, new and pending regulations affecting local businesses, and other area developments. For example, Central Piedmont surveys firms and produces joint reports with the city, the University of North Carolina at Charlotte, and the Chamber of Commerce. There are economies of scale and benefits of inclusiveness from having such a group carry out such research. When colleges participate in these activities, the primary effect is to keep firms abreast of developments to help make them competitive, productive, and profitable.

Similarly, the Center for Community Studies at Macomb publishes two types of documents projecting economic conditions in the county: an Annual Economic Review and Forecast and a series of Bellwether Reports, based partly on surveys of citizen opinions, that examine and interpret demographic, economic, and social changes in the community. The forecast is widely used by local economic development and private sector firms in their determination of future activities.

In California, the Economic Development Network (ED>Net) is a statewide consortium of community colleges funded by the State Chancellor's Office to advance economic development initiatives. ED>Net funds the Center for International Trade Development at Sacramento City Colleges and uses college faculty to provide contract education to area businesses under the auspices of its Training Source. ED>Net offers consulting to improve productivity at local work sites, evaluates wage increases resulting from contract training, and calculates the return on investment for employer-sponsored training.

- *Participation in local economic policy making.* Colleges participate in relatively formal collaborations of public- and private-sector organizations that set local policy for economic development, determine the need for education and training, and negotiate resources. For example, Sinclair Community College took the lead in the Miami Valley Economic Assistance Initiative, which has many other participants. The group provides updates on business climate, incentives for economic development, and related information for employers.
- *Attracting employers to a local region.* As part of state or local initiatives, community colleges participate in private-public partnerships to attract employers to local areas. For example, the director of New and Expanding Industry Training at Central Piedmont Community College accompanies city and county officials when they meet with potential employers interested in relocating to the Charlotte area. As part of a North Carolina policy of aiding corporate relocation through tax and training incentives, the community college representative describes customized and conventional education and training services available to new employers and guides interested firms in determining workforce needs. Once a firm has been successfully attracted to the area, the college can deliver entry and upgrade training.
- *Media/telecommunications.* A few colleges operate newspapers or television or radio stations that introduce the college to the public and provide a forum for sharing information about local economic and social conditions. Central Piedmont and Black Hawk provide regular information about local labor conditions on their television stations. Central Piedmont also makes its teleconference facility available to local employers. Macomb's two regular programs on the local cable television station highlight the college's activities and curriculum. North Seattle hosts distance learning conferences, such as the 1996 "Virtually Yours: Teaching and Learning in Cyberspace."

These economic development activities–as distinct from the workforce development efforts outlined above–have in common the goal of enhancing productivity and employment in the local area. Effects on education and training are often secondary and difficult to trace. Unlike workforce development, economic development itself does not normally generate larger enrollments (though there are a few exceptions, such as courses for small employers). Dominant activities include convening meetings, gathering and disseminating information, providing help with technology transfer, performing research, and planning. These activities are therefore difficult to quantify or to compare in magnitude with conventional course enrollments since the activities are so different.

The special role of community colleges in these efforts is that, in many communities, they are visible public institutions that can legitimately play the "convening" role, and their existing ties to business and industry through their regular programs attest to their expertise and reinforce their credibility. It should be stressed that the economic development function depends in part on the expertise–the institutional human capital–of the regular college, without which the entrepreneurial college could not exist.

Community Development. The last of the three emerging types of development roles is community development, in which colleges operate to promote the well-being of the local community in political, social, or cultural areas. Often, these efforts also promote equity, sometimes on the implicit understanding that inclusive and equitable policies enhance the well-being of the community as a whole. Efforts in community development may have long-term economic purposes, particularly if they create conditions in which communities can be stable, vibrant, and attractive to potential residents as well as employers. Therefore some community colleges equate community development with economic development, and some of the activities we label community development–for example, tech-prep and school-to-work programs operated in collaboration with K-12 school districts–are considered part of workforce development. However, community development is distinguished from economic and workforce development because it has a broader focus, and its primary emphasis is neither economic nor occupational.

The role of two-year colleges in community development is somewhat different from their more traditional community service role of offering avocational and continuing education courses. Community service efforts respond to the demand by the public for particular kinds of noncredit and special-purpose courses. But community development activities are focused on the larger scale of community life. They try to create the conditions in which a local community can prosper, and their effects on the demand for education and training are secondary, indirect, and often difficult to quantify. In the seven colleges involved in this study, several exemplars of community development were identified that create potentially prosperous community conditions:

- *Community development education.* Following the Los Angeles riots in 1992, LA Trade Tech has used grants from the Department of Housing and Urban Development and the Ford Foundation to initiate a two-year degree for community development practitioners. Students from the local community serve internships in area agencies, gaining both theoretical and practical knowledge of how communities can organize to benefit their residents. While this program is "traditional" in the sense of being a credential program, its purpose is much broader than simply responding to occupational demand. It is intended to create the conditions for greater community prosperity.
- *Participation on social issues task forces.* Many colleges participate in local task forces on social as well as educational issues, including health, criminal justice, and the status of minority populations. While a local task force on education may generate recommendations that affect college enrollments directly, these other community roles have broader effects. For example, Sinclair Community College has convened literacy projects and participated in the Center for Healthy Communities. Sacramento City College serves as a member of the Allied Health Council. LA Trade Tech construction students and faculty assist in building homes for low-income residents through the Habitat for Humanity program. Black Hawk Community College has participated with the local Hispanic community in several ways, helping them to define their educational and social needs.
- *Educational leadership for K-12 opportunities.* Often, colleges work with K-12 school districts, particularly in formalized programs like tech-prep and school-to-work. Macomb is the school-to-work agency in its region, though it is rare for community colleges to serve this role, despite the fact that many other colleges serve as fiscal agents for school-to-work programs. Of course, such participation may lead to higher enrollments as more high school students are attracted to the community college and might therefore be included as a facet of the regular college, providing preemployment for credentials. However, such participation with K-12 districts is often undertaken more to improve the quality of the local schools than to increase college enrollments directly. Earlier research with the National Center for Research in Vocational Education, the League for Innovation in the Community College, and the National Council for Occupational Education revealed that many tech-prep programs enable high school students to attend a variety of postsecondary institutions, including four-year colleges, so that the community colleges sponsoring them may not benefit exclusively (Grubb, Badway, Bell, and Kraskouskas 1996). And, part of the tech-prep process is educating local schools about the many possibilities students can pursue. Tech-prep can therefore become a vehicle, not only for smoothing the transition from high school to postsecondary education, but also for introducing high schools to a variety of other reform options.

For example, the director of such programs for Macomb who defines community development as "the college's responsibility to assist the community in economic development and educational leadership," described the institution's efforts with Detroit schools:

> We received a request from the [Detroit] public schools to teach classes; originally their request was only for math and communications classes which would be transferable. In our meetings, we brought together mission managers and broadened the discussion immediately so that we were talking about our apprenticeship program in construction trades; we're talking about working with firms in Detroit. Their initial request was broadened by us because we were able to take our mission managers, who have real responsibilities in different areas, to see this interaction in a much broader way. And I feel that was most powerful.

Using a $75,000 grant from the Chrysler Foundation, Macomb guided secondary school faculty and students in understanding the significance of skills learned in performing arts to those demanded by employers. Similarly, North Seattle sponsors an annual career fair for high school students to meet the needs of Puget Sound employers. Macomb's Kids College has filled some of the gap left by the decline in enrichment activities in public elementary and high schools and is looking to expand into gifted education.

- ***Educational leadership for disadvantaged students.*** Using their expertise in education, colleges sometimes develop accelerated or second-chance programs for high school students. Black Hawk offers an alternative high school program through special agreements between the college and six area high schools, enabling students to attend classes in the college's Outreach Center and still receive credits and a diploma from the home high school. Support services, including personal counseling, vocational advising, and specialized GED classes, are part of the program. Sinclair sponsors a ten-week Young Scholars Program for first generation minority students in eighth grade. Successful completion merits guaranteed tuition to attend Sinclair. In addition, a decade-old Summer Institute offers academic enrichment to fourth through tenth graders; 353 students from 28 cities and 8 counties participated last year.
- ***Management of conference and performance facilities.*** Macomb Community College operates a theater which brings music, drama, and other special events to the community. It is the only such facility in the county. In some ways Macomb is–like many suburban and rural community colleges–the "only game in town," the only institution large enough to organize such an effort. Similarly, Sinclair sponsors music, theater, and art at its performing arts facilities. These do not generate enrollments, but they do entice many more residents to come onto the Sinclair campus.

The clients for community development are varied. Often the activities are amorphous and diffuse, and the funding of community development varies too much to make any generalizations. Some activities are initiated by administrators, department heads, and instructors who serve on local boards and commissions. Particular activities–for example, Macomb's Performing Arts complex–require specific funding from other sources, in this instance, a dedicated tax. Although community development does not initially increase enrollments, it may increase the visibility of the community college. And community development may strengthen and expand other college initiatives housed in both the regular and the entrepreneurial college.

It should be noted that community development efforts were found to be less prominent than either workforce or economic development among the colleges researched. The funding for these efforts is more precarious, the status of certain community functions is much lower (particularly those associated with equity), and there often is no politically powerful constituency for community development comparable to the business community supporting workforce or economic development. Readers will note that most examples of the entrepreneurial college refer almost exclusively to workforce and economic development, and that in many colleges community development is largely missing or simply lumped in with economic development. Still, this separate category has been retained because study participants emphasize the important of the noneconomic purposes community college can and do serve, and because community development is a crucial part of the community service role of the college. In the rush to economic expansion that has preoccupied the country for the last quarter-century, it becomes increasingly important not to forget the cultural, social, and spiritual aspects of life. Economic growth means little without healthy, balanced communities.

The Real World: An Overlap of Functions

In the previous sections, six conceptually distinct roles that community colleges perform were described, half of which were roles attributed to the regular college, half to the entrepreneurial college. In reality, however, these roles are not neatly segregated, and disentangling them–whether for the purpose of accountability or for examining the dimensions of the entrepreneurial college–is almost impossible. In the seven colleges examined, the reality is much more complex than the simple categories developed so far would suggest. The overlap among roles makes it more difficult to understand and delineate what colleges do, but in many cases such overlap produces substantial benefits. For example, employers who use a college for customized training may also provide opportunities for school-to-work programs serving high school students or training for welfare recipients. Indeed, some colleges like Macomb have purposefully avoided keeping programs separate and have aligned them functionally rather than structurally so that the institution works as a seamless whole. Macomb has designated "mission managers" to provide institutional leadership for particular missions regardless of their administrative positions so that functional missions such as economic development can be enhanced regardless of the administrative structure of the institution. The distinct functions described thus far overlap in numerous ways in practice. The participating colleges in this study demonstrated overlap among roles related to six factors.

Credit Programs Serve a Variety of Students. Often, traditional credit and credential-oriented programs serve individuals entering the college for nontraditional reasons. When LA Trade Tech provides training for local apparel manufacturers needing to upgrade their employees, they do so through a series of modules taught in the regular college–not through customized training or noncredit courses (which are reimbursed at a much lower rate than credit courses in California).[4] Similarly, apprentices preparing for journeyman certificates are enrolled in credit courses. At North Seattle, which conducts little customized training, individuals in the dislocated workers program operated by the state enroll in regular credit courses.

Similarly, JTPA and welfare clients often enroll directly in regular courses offered in certificate and degree programs. For instance, in California, nearly 20 percent of welfare clients attend community colleges on their own initiative as regular students (Anderson 1997). They are not usually counted separately but enroll in the college as regular students, and the college does not receive special funding for them. There may be a trend toward this kind of enrollment due to pressures within public job training programs. As the JTPA director for Macomb County explained, local agencies have moved away from contracting for class-size projects and instead have begun to develop individual plans and referrals with their clients, partly because of fiscal pressures. Central Piedmont established a post-baccalaureate cytotechnology program, essentially for one locally based company. Although it is a full-time credit-granting program, it is really a form of customized training for a single employer, one that breaks down the boundaries between credit and customized training. In addition, as colleges develop more flexible ways of delivering credit courses, students with different needs will find them more accessible, and the boundary between regular credit courses and noncredit offerings will erode further.

Collaboration with K-12 Schools. When colleges work with K-12 school districts on programs like tech-prep, school-to-work, or college-based courses for high school students, these efforts simultaneously fall into the category of education for credentials and into community development. These activities may be seen as contributing to community development because they help school districts resolve some of their most pressing educational problems. It may be tempting to view these efforts as simply ways of increasing enrollments in community colleges, but–as the examples given above illustrate–what starts as a relatively limited request for an articulation relationship (in tech-prep, for example) may end up as a broader relationship, in which the college can share its expertise in ways that are not directly related to future enrollments.

Physical Facilities Serve Multiple Purposes. In many cases, a single physical facility serves several functions, making it difficult to disentangle the funding and enrollment in different conceptually distinct programs. For example, the Advanced Integrated Manufacturing (AIM) Center at Sinclair develops curricula for degree programs, but it also helps companies pursue manufacturing projects and develops curriculum for their training as well. Central Piedmont has a public safety facility that offers credential programs for new police and fire fighters, occupational extension for those who do not need credentials, continuing education for those already employed, and customized training for individual fire departments throughout the region. It is therefore difficult to disentangle enrollments and funding for these different programs. For students, the distinction between credit and noncredit enrollments blurs as they choose the courses they need without regard for credentials. The dean of health and community services described the multiple outcomes of police science training:

> They can come in here and go through the training program that we offer; they don't need a degree, they just need somebody to provide them with the skills and information that they need. They receive a certificate of completion, and then they can go back and they're eligible for promotion, or they're eligible to participate in a SWAT team. So that's why there's a real blending of noncredit and credit.

Customized and Contract Education Serve Many Customers. Each college in this study delivers short-term training in response to demands from both private employers (which has been defined as workforce development) and public agencies including JTPA and welfare programs (which has been defined as training for nontraditional groups). Often this training is called contract education, because it is done under contract with an outside agency, or customized training, because the college's standard curriculum is modified or customized to fit a particular client. From an institutional perspective, there is little difference between the two: both require responses to external demands, shaping courses to fit the needs of particular clients with a mixture of "off-the-shelf" and customized courses. However, the value to the institution of the two types of programs is quite different in that customized training for employers can potentially provide feedback to the institution about workforce training needs, while training for JTPA and welfare programs cannot. Nevertheless, the organizational structure required to deliver both programs may be the same, and they may be indistinguishable in reports of enrollment and funding.

Workforce Programs Provided by Several Units. Many colleges assign the responsibility for workforce development to several different units. For example, at Central Piedmont workforce development can take place in noncredit occupational extension courses, in the New and Expanding Industries program funded by a categorical grant from the state to provide customized training, in the Focused Industrial Training Program, and in regular credit courses when firms subsidize tuition for their employees. Since workforce development can be found throughout the college, it becomes difficult to categorize either the students enrolled or the funding that supports its workforce development efforts.

Students Have Multiple Goals. The actions of students also cause categories to blur. At

Macomb, the division of continuing education offers a variety of courses, and 47 percent of students enrolled report taking these courses for personal interest. Yet, 84 percent of all continuing education students enrolled in management classes and, of these, 44 percent said that what they learned was transferable to the workplace. Thus, although these students may declare themselves to be pursuing personal interests (defined in this study as community service), they act more like individuals pursuing upgrade training, or thinking about getting into business. Similarly, three-quarters of entering students list transfer as their goal, but only 22 percent are actually enrolled in the transfer program. In reality, some are really there for short-term skill upgrading, and others are experimenters trying to see whether postsecondary education is appropriate for them.

Another way to discover the complexity of clearly defining community college roles is to try to categorize students within programs. At Central Piedmont, Kantor (1994) distinguishes among three groups of emerging workforce learners: transitional workforce learners, moving among jobs (including dislocated workers and those seeking better opportunities); entrepreneurial workforce learners, those starting or running their own businesses; and existing workforce learners, who are currently employed.[5] But emerging workforce learners can be enrolled in either credential programs or occupational extension courses. Transitional learners can be found in almost any program of the college. Entrepreneurial learners take business courses in either noncredit occupational extension or credit-based programs and may also enroll in business programs in community services or continuing education. And, existing workforce learners enroll in the New and Expanding Industries program or Focused Industry Training, established for customized training, but they may also enroll in credit or noncredit courses. Clearly, from a student perspective the different programs of the college blend together.

The point to be made is that, while it is important to create neat categories of activities in order to understand what community colleges do, this kind of simple division breaks down in practice. Clarity about what programs are offered, for what purposes, and to whom rarely appears to be the goal of educational institutions. But clarity for students and to employers is an important aim, and some observers fear that the crazy quilt of offerings makes life difficult for students and employers alike. Frequently, they do not understand why so many programs exist or where they should go to find what they need. In response to such confusion, Macomb and Black Hawk have set up one-stop offices where employers and students can get information about all the programs the college offers. Similarly, Central Piedmont is creating a public safety "one-stop person" to perform the same function. North Seattle takes a somewhat different approach; their workforce training programs have an elaborate student intake process involving information sessions, skill assessment, background questionnaires and an interview. As one administrator explained:

> We're not going to get somebody in the program that we have serious doubts about and have to replace them. The intake process is pretty rigorous in the sense that we make sure the student knows exactly what she or he is getting before starting.

These examples illustrate the complexity within the comprehensive community college and suggest that clarifying and integrating community college roles may become increasingly imperative.

Defining Success in the Entrepreneurial College

What defines success in community, workforce and economic development? How can anyone know whether these relatively new community college programs are spending public money wisely, or are truly serving the "clients" to whom they seek to respond? How can rhetoric be distinguished from reality? And–if institutions only do what they measure or only measure what they do–what new measures need to be collected by community colleges to assess these new roles?

Defining success in the regular credential programs of the community college has been difficult in itself. Colleges keep detailed enrollment data, because they are often reimbursed based on enrollment, and enrollment has often been the dominant measure of success. Most colleges count credentials completed as another measure of success and a few calculate completion rates for cohorts of students, a more complex procedure requiring longitudinal data.[6] But completion is a difficult measure of success in community colleges since many students are experimenters who enter in order to see whether they want to continue in postsecondary education. In some colleges–particularly those like LA Trade Tech and North Seattle which send their short-term and customized training students to credit courses–students intending to complete credentials mix with those who have no intention of doing so. Most colleges collect information about student intentions when they enter, but students can easily overstate their goals or specify a goal when they actually are uncertain about what they want to do. Some colleges acknowledge that they do not know what their students intend and that finding out on a regular basis would be too costly to undertake.[7]

Transfer rates are also popular measures of success, certainly for academic programs and increasingly for occupational programs as well (Bragg 1992). But measures used by colleges vary wildly (Cohen 1990; Grubb 1992), and some measures are simply invalid if different categories of students are mixed. Some states are beginning to collect follow-up data on the wages of occupational education completers (e.g., Friedlander 1993, reported in Grubb 1996, Ch. 3). However, this information is rarely published, so students have little access to information about success measures within programs. In general, then, there are few well-established measures of success even for credential programs.

When looking beyond regular credit-bearing programs, measures of success become even more elusive. When asked about measuring the success of workforce development, most college officials report that they use different measures of employer satisfaction, either from employer surveys or more informally from comments of advisory committees and the community in general. For example, Central Piedmont has used the adoption of customized training by area businesses as an indicator of success in workforce development. One director of job training services acknowledges that the transition of students among programs "is more observable than documented–historically we know where they're going, but we've never really focused on gathering the data." Enrollment continues to be the primary definition of success. One state-level official described state efforts to monitor local colleges:

> We look at the enrollment. We make an assumption, and it may not be a valid assumption, that if students continue to enroll in certain programs that the community is happy with that. If the students are going around saying, oh, that program is not very good, the enrollment we assume is going to suffer. It's sort of a self-correcting process. But other than that and the critical success factors and the occasional business surveys, we're making the assumption that we would hear if there were some problems.

Even where colleges are trying hard to measure success, they have been unable to develop measures appropriate to the entrepreneurial college. For example, Central Piedmont has state-defined and Macomb and Sinclair have locally defined indicators of success for the college, but these measures (with the exception of employer satisfaction) overwhelmingly relate to the regular college.

Indeed, in this study few efforts were identified that measure the success of workforce development in any terms except employer satisfaction and the continued level of enrollment in contract or customized education. There appear to be no studies that follow individuals in customized training to see if they are more productive, or are employed longer, or are promoted more frequently as a result of their training.[8] Furthermore, there are few efforts to define, teach, and then measure competencies in workforce development programs–nothing parallel to the concern with competencies found in occupational programs subject to external licensing (as in health occupations) or voluntary standards (as in auto repair, welding, and electronics). Normally, the content of workforce development courses is negotiated between the college and an employer,[9] but these processes tend to specify competencies to be taught rather than outcomes learned.

Furthermore, the requirement to define and measure success might itself impede the entrepreneurial college. One director of a small business center made it quite clear that studies to measure success, such as following up on individuals in customized training to see if they are more productive, or promoted more frequently, would complicate the negotiation of contracts with employers and detract from the colleges' ability to serve them. Resources for record keeping are a low priority, and such time-consuming procedures would hamper the flexibility and speed so prized by employers.

When focusing on economic development, the effects are even more difficult to pin down. Colleges can, for example, provide information to small firms about good practices, but whether firms adopt these practices or take advantage of training opportunities as a result is out of the college's control and difficult to measure. The convening function of colleges like LA Trade Tech, Macomb, Sinclair, and Black Hawk depends on the cooperation of many other organizations, and the results cannot be entirely controlled by the college. There are very few evaluations of economic development efforts of any kind,[10] and so it is not surprising that community colleges–with relatively few resources for research and evaluation–have not undertaken their own studies.

The entrepreneurial college represents a substantial shift in the conception of success compared with the regular college–a market-oriented rather than an institutionally defined conception. For companies operating in competitive markets, the principal measures of success are continued profitability–repeat customers coupled with receipts in excess of costs–and growth, which is a requirement for profit in subsequent periods. The performance of the product itself need not be measured as long as profits continue, and customer satisfaction need not be measured directly since it will be reflected in continuing or declining sales. In effect, the entrepreneurial college has adopted these market-oriented conceptions of success. In contrast, the institutionally-defined measures of success that are more familiar in regular credit programs–completion rates, transfer rates, placement rates, and all the rest-are necessary precisely because market measures are not possible in public institutions with multiple outcomes for many groups of individuals.[11]

For the moment, no clear alternative measures of success for workforce and economic development programs appear to be at hand. One feature of contract education is that employers strongly prefer arrangements with the minimum of bureaucratic intrusion. Any additional requirements–for example, reporting requirements that might arise from efforts to measure success more precisely–might cause many of them to turn to alternative providers. As one director of workforce development mentioned, "Our success is pretty clearly defined. We're given X number of dollars every year to fund X number of students to well-paid employment. So our accountability is pretty clear cut."

For economic development, where effects on employment, growth, and subsequent education and training are highly indirect, there seems to be little promise in the short run for more refined measures of success. Over the longer run, however, it may be possible to develop clearer criteria for the activities that colleges do and do not undertake–an issue addressed at the end of Section Two. Such measures would enable colleges to monitor how well they serve their communities, rather than relying solely on continuing enrollment data. It seems appropriate for academic research to address questions such as the effect of customized training on the subsequent productivity and mobility of employees and the effects of economic development activities on local employment, earnings, and growth. But at the moment, these are not measures of success that can be applied routinely to the large number of programs developed by colleges.

How Big Is the Entrepreneurial College?

A final step in defining the entrepreneurial college is to measure its scope. Is this "shadow college" overshadowing the regular college? Again, difficulties abound, because there are several different ways of measuring the relative importance of the different functions.

The most obvious ways to measure size are by enrollments and revenues. In previous surveys, workforce development (or customized training, or contract education) efforts seemed to be relatively small compared to regular college activities. For example, the NCRVE/AACC study found the median ratio of contract enrollments to credit enrollments to be 22. This means that at half of all colleges, for every 5 students enrolled in regular credit courses, less than one is enrolled in contract education (Lynch, Palmer, and Grubb 1991).[12] Similarly, a League for Innovation study reported that half of all colleges surveyed provide training for 25 or fewer employers and for under 1,000 employees, although 10-15 percent of colleges did report quite substantial efforts (Doucette 1993). Neither of these reports suggest that the regular college is in any danger of being overshadowed. However, both studies reported serious problems in collecting data. Colleges had difficulty estimating the magnitude of workforce development because most are not required to (and therefore do not) keep accurate contract training enrollment statistics to qualify for state reimbursement, as they are required to do for credit enrollment.

Substantial variation in the relative size of the entrepreneurial college exists among the seven colleges studied, as measured by enrollments and earnings. Macomb Community College reports that it served 35,000 individuals through workforce development programs in 1995. In fall 1995, 24,144 students were enrolled in credit programs, the equivalent of 11,412 full-time equivalent (FTE) students, and 11,484 FTE students in noncredit programs. In sheer numbers, then, workforce development exceeds regular programs at Macomb; but FTE students average 15.5 credit hours per semester, or about 45 contact hours during the semester, while a typical individual in company-specific training is enrolled for far fewer hours. The 35,000 students in workforce development might approximate the contact hour load of about 7,000 FTE students. In terms of revenues, Macomb's customized training efforts generated around $20 million per year, while the regular credit programs generated about $72 million in formula funding. Whether measured by enrollments or revenues, workforce development programs at Macomb are about 30 percent as large as credit and noncredit programs in the regular college.

Central Piedmont Community College collects data on headcount and FTE enrollments in various programs, as presented in Table 1. These data indicate that workforce development programs represent a little over 10 percent of total enrollments. While some high-profile programs, such as the Human Resources Development program and contract education, have expanded, other forms of corporate and continuing education such as practical skills labs have diminished. Overall, the entrepreneurial college has not grown over the 5-year period represented in these data.

TABLE 1

FTE Enrollments, Central Piedmont Community College

	1988-1989	1993-1994
Education for credentials	8,638	9,119
Academic and transfer	3,392	3,590
Occupational	5,246	5,529
Remedial/developmental/adult education	579	660
Community Service (avocational)	80	131
Corporate and continuing education	1,269	1,181
TOTAL	10,566	11,091

Source: Fact Book, Central Piedmont Community College, Planning and Research, April 1995, Table 1.5.

The roughly parallel data from Sinclair are presented in Table 2. These indicate that enrollments in workforce development programs accounted for about one-third of total headcount enrollment. However, because these programs are often much shorter than credit and noncredit courses, again we conclude that workforce development represents only a small fraction of overall enrollments when counted in full-time equivalents. Evidently workforce development programs are sizable, but even in these three active institutions they constitute between 10 and 15 percent of conventional enrollments in Central Piedmont and Sinclair, and approximately 30 percent at Macomb. Using enrollment as the measure of success, the entrepreneurial college is not likely to overwhelm regular credit programs.

TABLE 2

Enrollments, Sinclair Community College, Fall 1995

All credit classes–FTEs	9,815
All credit classes–HEAD COUNT	19,817
Career/technical classes	12,257
Academic classes	7,560
JTPA	183
Employees served in business and industry	10,590

Source: Data provided by Sinclair Community College

However, enrollments and overall revenues–traditional measures of success in educational institutions–may not be the best measures of size of the entrepreneurial college. An alternate measure is the discretionary revenue generated by various projects and programs. Regular credit-bearing programs generate discretionary revenue under certain conditions–for example, when a high-enrollment class costs less to teach than it generates from state revenues and tuition–but these are typically spent on administrative overhead, student services, and other necessary components of community colleges that do not generate revenue by themselves. In contrast, however, revenues generated by workforce development in excess of costs are more readily available as discretionary funds. These revenues tend to be from private rather than public funds (even though commingling of public and private funds does occur) and can often be spent flexibly by college administrators. As one continuing education director noted:

> At most community colleges, 70 to 80 percent of revenues go straight into salaries, so there is very little real money controlled by administrators. This is not true with the shadow college, which does generate revenues that can be used to fund college growth and development. These are flexible funds that presidents like to use. Since these are generated through local activities and often come from the state, they represent a reverse subsidy for the institution–they actually bring in new dollars to the community which again helps the leadership. Many of these dollars wind up developing the regular part of the college. They also help in other ways. At our college, the customized training of designers aided in the development of new curriculum for the regular programs and eventually for new curriculum in the high schools.

Colleges vary in how they use these revenue surpluses. Several require all excess revenue to go back into the general fund. Some allow surplus revenue to be kept within the workforce development department and used for new program development. Macomb requires that every customized training program provide eight percent of any surplus to the general fund. However these surplus revenues are used, they are a valuable resource for institutions that have extremely limited discretionary funding available to them.

Still another way to measure size or importance is by visibility and public relations. There is little doubt that workforce development, economic development, and community development generate public attention in ways that regular credit programs or noncredit programs for special populations like welfare recipients cannot. Presidents can use their ties to local businesses to enhance their colleges' reputations and capitalize on their colleges' connections to some of the most dynamic organizations and activities in the community. In this sense, colleges measure their efforts by the number of organizations served, the number of school districts involved, and the variety of key community decisions made with college involvement. In contrast, the modest triumphs of regular education and training programs–for example, increasing completion and placement rates in an occupational program or getting a class of welfare clients through enough remedial/developmental education to enter regular college classes–may be more significant achievements from an educational perspective, but these are unlikely to generate much public attention.

Visibility is a particularly important aspect of community and economic development since these activities of the entrepreneurial college have no conventional enrollments to use as measures of success, as workforce development programs do. Effects on the community or on employment are often so far in the future and so uncertain that success cannot be measured in traditional terms. Visibility and connections to the community are the currency of this particular realm. But how might these forms of success benefit the college? One of the most concrete effects of visibility is that it helps the college generate the political support necessary for local tax initiatives. When the college is perceived as benefiting many different groups in the community, citizens can see how their taxes are being spent. In addition, such visibility may increase enrollments in workforce development and regular education programs as the college becomes more visible and more potential students learn about it. Interaction with the community, in turn, generates information for other programs about the requirements of employers and community agencies. In Section Four, the importance of knitting together the regular college and the entrepreneurial college is explored.

For the moment, however, the size of the entrepreneurial college is ambiguous. In conventional terms–enrollments and revenues–it does not approximate the size of the regular college. But in terms of growth, discretionary revenue, and visibility among high-status members of the community, the entrepreneurial college may be more important than its size suggests.

[3] However, in some states like Illinois, career courses generally do not transfer to four year institutions. In California, the transferability of occupational programs varies according to local agreement. (See especially Eaton 1994, on the "collegiate" function of the community college.)

[4] In California, credit courses are reimbursed at an average of $3,391 per FTE (in 1996-97), while noncredit courses are reimbursed at $891; these amounts vary somewhat among colleges. While there are rules detailing which courses count as credit courses, the fiscal incentive for colleges to use credit rather than noncredit courses is obvious.

[5] This conceptualization is also used in Zeiss (1997), p. 27.

[6] For example, Macomb and Central Piedmont have extensive studies examining completion rates of cohorts.

[7] On the difficulty of ascertaining what students intend, see Grubb (1996a), Ch. 2: based on lengthy interviews with community college students in California, students' responses to simple questions about intentions are much more certain than their actual actions and plans.

[8] There are some studies of individuals who complete California's Employment Training Panel (e.g., Moore, Blake, and Phillips 1995), which purport to show that individuals who complete programs earn more than those who do not; but selection effects could account for these results. The evaluation of such programs in a rigorous way is technically extremely difficult.

[9] Black Hawk, Sinclair, and LA Trade Tech use a modified DACUM process to determine content.

[10] See Holzer, Cheatham, and Knott (1993) and Walker and Greenstreet (1991).

[11] There is an irony here: the difficulty of applying market mechanisms has caused community colleges and other public institutions to develop institutional measures of success; then, when market-oriented programs like workforce development come along, the lack of institutional conceptions of success seem strange.

[12] However, the mean is higher (.455), because there are a few colleges reporting rather large contract enrollments.

SECTION TWO
FACTORS INFLUENCING THE ENTREPRENEURIAL COLLEGE

There is little question that the entrepreneurial college has grown substantially over the past decade, even though the available data are too weak to calculate precise growth rates. But growth varies widely from college to college, and the factors that enhance and impede growth vary as well. This section seeks to clarify these factors–most of them internal to colleges, but some of them related to the demands for training and economic development activities from the business sector itself–that have affected the growth of workforce development and economic development in particular.[13]

Influences within Community Colleges

The seven colleges involved in this study noted many factors influencing the growth of the entrepreneurial college, but the following stand out as being particularly important.

Emphasis of College Missions. Colleges that have been primarily occupational have found it easier and more consistent with their overall purposes to engage in workforce development. For example, Sinclair has been a technically oriented college virtually since its inception, and that history has made its movement into workforce and economic development natural. Similarly, LA Trade Tech has a technical history, although it has become a comprehensive college. In both situations, the transfer function that overshadows many community colleges is not a barrier. Historically, North Carolina has limited transfer enrollments, giving community colleges a more occupational focus and making it more natural for college such as Central Piedmont to provide other kinds of assistance to the employment community. In contrast, Black Hawk has focused on education for occupational credentials and transfer to four-year colleges; its efforts in workforce development have been relatively recent, fostered by a new president knowledgeable about services to employers.

Aggressiveness of Administrators. Community college respondents are quick to point to the personal attributes of particular administrators in explaining the growth of their workforce and economic development programs. A typical comment about a director of workforce development is: "He never makes a speech, he never talks to a faculty member, without giving them the vision that we are going to be the national leader in workforce development." This is not accidental. Colleges are hiring new types of individuals to run economic development efforts–very often people who have come out of the business sector rather than from education. These individuals are more entrepreneurial and think of programs in market terms (what is the demand? what price will the market bear?) rather than in educational terms (how can we maximize the learning of students? how can we provide a breadth of opportunities?). Because the demands of entrepreneurial environments can be quite difficult, administrators must act in ways quite different from their academic counterparts. As one director of workforce development described it:

> You can't just posture about this. You're going to have to leave some bodies lying around. An internal accountability is required for real partnerships to work. When someone doesn't live up to their end of the bargain, there's hell to pay–just like in real business. This is not "happy talk" which encourages traditional practices; you are all taking risks, you all have your necks stuck out. It's not a "feel good" kind of thing; there are nasty problems you'll have to deal with.

This business character of workforce and economic development generates tensions with educators in regular programs, as described in Section Four, but is central to the success of economic development. Presidents have been especially important in creating this enterprising spirit. The presidents of colleges most active in entrepreneurial endeavors are frequently cited as individuals who have steered their institutions in new directions.

Faculty Connections to Employers. Several colleges mentioned that "we need a new kind of faculty"–faculty with close connections to employers, and faculty willing to teach on flexible schedules (evenings and weekends, for example) required by currently employed workers. Faculty who are oriented to academic disciplines, who are inflexible, or who have worked in academia for a long time, find it harder to adjust to workforce development programs. As a result, colleges often use contract faculty hired for specific courses, instead of regular college faculty.

It is difficult to assess the criticism about "inflexible" faculty, because few faculty members themselves were interviewed in the course of this study. Elsewhere, it is argued that occupational faculty are more likely to be overloaded with their conventional teaching than are academic faculty–since they are often required to teach more contact hours (because of workshops), as well as having to scrounge for equipment and supplies.[14] In addition, in some colleges, salary policies make it difficult for full-time faculty to teach additional courses, or to teach on a flexible schedule. For example, district policies at Sacramento City College limit the overloads full-time faculty can teach and constrain the total amount that part-time faculty can teach, making it more difficult for any faculty member to teach both regular and entrepreneurial courses. Blaming faculty for being inflexible is therefore inappropriate until colleges understand more about the existing pressures and incentives that faculty face.

Instructional salaries in certain technical programs also influence a college's ability to deliver workforce preparation. As one administrator complained:

> In our vocational programs we are not competitive salary-wise with industry. To teach in the newly emerging areas of information systems, electronics, and business, there is a gap of probably $20,000-$40,000 annually between an industry salary and an educational salary.

On the other hand, in some places, downsizing of private firms has increased the pool of teaching applicants.

Stability. Sinclair and Macomb stressed that stability of administration is necessary in order to create entrepreneurial activities. As one dean noted:

> Instability of administrators is detrimental because new administrators and presidents tend to come in with their own agendas and their own conceptions of what ought to be done–sometimes reversing earlier developments and sending the college in a new direction.

Stability can be fostered to some extent by administrative structures that guarantee continued attention to workforce and economic development. For example, Sinclair and Macomb have administrators designated specifically as directors of economic or workforce development. Black Hawk's new president reorganized administrative positions, adding a vice president of corporate and community services to increase the visibility and priority given to workforce development. Such reorganization can also signal administrative support for flexible schedules and revised curricula, as well as the need for greater stability.

Faculty Unions and Senates. Faculty unions and senates have typically established procedures and rules governing new courses and programs, and these are repeatedly cited as reducing the flexibility and speed of responding to employer demands. Indeed, one common explanation for the rise of the entrepreneurial college is that the only way for colleges to circumvent unions and senates has been to create separate, parallel institutions within which these academic constraints cannot take root. It should be noted once again that this represents the divergence in educational approaches, in which deliberation and coherent policies are important in the regular college, and business-like tactics leading to speedy results with programs established and contracts signed are much more important to the entrepreneurial college.

Another problem arising from faculty unions and state regulations involves scheduling conflicts that constrain the ability of regular faculty to teach in the entrepreneurial college. While such rules may be designed to protect faculty from having to teach too much, they also contribute to the differentiation of the entrepreneurial college from the regular college.

One issue with unions is that they promote what one administrator describes as the "narcotic of job security." Another administrator–a strong supporter of unions–describes "a double security position" resulting from union contracts:

> The security and stability for the membership is taken one step further in our contract. We're providing security and stability for the membership *in the present organizational form*. That is, union rules and regulations not only preserve individual's jobs, but they effectively protect departments and their power–making it difficult to rearrange teaching loads, schedules, and planning processes.

This kind of rigidity, which goes well beyond the usual requirement of keeping full-time faculty on the payroll, makes the flexible provision of workforce programs difficult. In researching the seven colleges, it became clear that colleges without strong unions and academic senates and states that do not have faculty tenure were able to respond more quickly to community needs than were their more restricted counterparts.

Elected Versus Appointed Boards. Several colleges complained about elected boards of trustees, because they rarely include representatives of business interests and therefore do not seem to have the "big picture." In contrast, boards appointed by governors or community officials are more likely to include CEOs of public and private organizations. For example, Sinclair is proud of having two top managers of Fortune 500 companies on its board–something unlikely to happen with elected boards. Complaints about elected boards also reveal dissatisfaction with the fractiousness of politics surrounding many community colleges, particularly in urban areas. Boards are often arenas in which interest groups tussle on behalf of their constituencies, and these kinds of political battles can undermine the stability necessary for the steady development of the entrepreneurial college.

Demographics of Community College Students. Some colleges have experienced enrollment declines over the past several years, especially as a result of the economy improving after the 1990-1992 recession. Where this has happened, colleges have sought new forms of educational "business" in order to maintain their revenues. Demographic effects can be complex, however. While credential-oriented enrollments decline during periods of economic growth when prospective students are more likely to find jobs (Betts and McFarland 1995), these are also periods when companies may need more training and retraining as the workforce expands.

Influences External to Community Colleges

A number of policies external to any particular community college may influence its activities. These include state policies and the nature of state funding discussed in Section Three. However, several other external effects are important, including district policies, developments within corporations, external uncertainties, pressure for economic and community development, and local economic conditions.

District Policies. Many colleges are part of community college districts, and district policies often specify what individual colleges in the district can and cannot do. In this study, Sacramento City, LA Trade Tech, and North Seattle are part of larger college districts. Workforce and economic development are managed by the district offices, although individual offerings may be housed at a local site. In addition, colleges within larger districts often specialize in certain disciplines so that duplication of programs is reduced.

District policies are uniformly described as limiting the initiative and flexibility of individual colleges. Indeed, district policies comprise a layer of bureaucratic policy and accountability–the precise issue in the "regular," degree-granting programs that has caused colleges to establish separate entrepreneurial divisions in the first place. From the district perspective, policies are intended to prevent competition within the district. This again surfaces the difference between institutional concepts of accountability–in which individual colleges are not expected to compete with others in the same district–and market concepts–in which unbridled competition is desirable and duplication within a district (and the resulting competition among colleges) is perfectly acceptable.

Developments within Corporations. Customized training for employers is increasing in response to changing demands from firms. Nationwide, there has been a modest increase in the training that businesses and industries provide their workers.[15] One factor influencing the demand for corporate-specific training is the tendency of many companies to subcontract portions of their production–for example, the manufacturing of parts and components. One way companies subcontract some production functions is to use the outside market for training, rather than maintaining a training division. Such an approach is particularly attractive for small- and medium-sized firms. This is the niche that Macomb filled with its Macomb Industrial Network, which targets small- and medium-sized firms for custom training.

In addition, the expansion of workforce development is in part a reflection of the shift within companies sometimes described as "high performance," to fewer layers of hierarchy, a greater use of outsourcing in the interests of flexibility, and cultivation of a higher level of worker skills–particularly for new technologies. Of course, the extent of such changes varies substantially around the country, and the opportunities for workforce development therefore vary as well.

External Uncertainties. In some areas, new uncertainties and business realities have propelled the increase of customized training. For example, in California growth in immigration has meant that companies have many more non-English-speaking employees, creating greater demand for English-as-a-Second-Language programs, as well as training for managers who face a culturally diverse work force. In addition, the Americans with Disabilities Act has created several new mandates, prompting employers to contract for training to avoid violating these regulations.

Pressure for Economic Development. The demand for economic development can be interpreted as coming from the same competitive pressures that have spawned the high-performance workplace. There is a sense among employers–and especially small- and medium-sized companies–that competition is much fiercer and companies falling behind in technology and business practices are less likely to survive. Communities face these competitive pressures too, and do not want to lose out in the competition for employment and population. The increasingly competitive environments of the 1990s have driven communities to search for strategies to enhance their growth and development, and community colleges have been partners in this process. For example, North Carolina has been particularly aggressive in recruiting employers from other states, and so its community colleges are more active in economic and workforce development.

Pressure for Community Development. The location of a community college determines the types of community development needed. In rural areas, the college is often "the only game in town," and it provides a variety of social and cultural activities that would not be expected in an urban area. In central cities, the pressures associated with concentrations of poverty and the low quality of K-12 schools are more likely to be serious problems. In some suburban areas, the community college has such a strong reputation by virtue of its transfer function that it may be asked to serve in other ways as well.

Colleges have responded in various ways to these differing community needs. Some have chosen economic development over community needs, responding to the greater power of the business community. Some that are poorly organized or ill prepared to take on new roles, and others with weaker reputations are not in a good position to serve a convening or coordinating role in their communities. But many colleges have been able to respond to a broad variety of community needs, and the potential for more active roles in community development is strong.

Local Economic Conditions. Business cycles affect the types of students enrolling in community colleges, as well as their enrollment patterns. Typically, as a local economy improves and unemployment goes down, the number of students enrolling in regular credential-oriented courses declines, but upgrade training increases. Conversely, as employment declines, dislocated worker training and regular credential-oriented enrollments increase (as well as JTPA and welfare-related training) while customized training decreases. Thus the mix of students in community colleges is constantly changing over the business cycle, again putting a premium on flexibility.

Competitive Advantage of the Community College. Workforce development programs operate in a competitive environment, with a number of providers within a given region generally able to respond to employer requests for training. With this array of providers, what makes community colleges competitive? And what strategies have colleges developed to maintain their positions? Several different competitive responses can be found among community colleges, including price and quality competition, creating market niches, leveraging revenue flexibility, and coopting the competition.

Community colleges find they can often be the most price-competitive vendor of education, both for credentials and for customized training because of state subsidies, as is discussed in Section Three. Some community colleges have a price advantage over the competition, because they need not pay certain overhead costs which are borne by the regular college.[16] In addition, the reputation for quality earned by many colleges allows them to be the vendor of first choice for company-specific training, as well as for students seeking occupational credentials. LA Trade Tech, Sinclair, Macomb, and Central Piedmont all point to successes in working with local utility companies and public employers, the Chamber of Commerce, and regional trade associations as examples of their capacity to deliver responsive programs over an extended time period.

Colleges like Sinclair have also created niche markets for specialized training, such as distance learning, sometimes provided on the Internet, which is less costly for certain kinds of students. The Human Resource Development (HRD) Program at Central Piedmont has created its own niche among unemployed and underemployed workers. The program typically enrolls individuals who need additional training to improve their employment, but are neither on welfare nor eligible for JTPA. The unique funding structure of this program helps to create a niche. It is funded by a percentage of the increased tax dollars generated by its graduates and is required to support itself from these revenues, thus placing a premium on enrolling students who have a good chance of moving into enhanced employment.

However, the creation of market niches also bars some students from programs. For students who are not independent enough to work with computer-based or distance learning, and for whom conventional classroom arrangements are necessary, the costs per student are necessarily higher. Similarly, the long-term unemployed and welfare recipients who are not served in the HRD program are also more costly to prepare for employment. The danger here is that certain students will be "creamed," or served by low-cost methods, leaving other students–including the underprepared and dependent students who are among the nontraditional students in community colleges–out of an increasingly cost-conscious market for training. This point is further addressed in Section Four, which examines the tensions between the entrepreneurial college and regular college.

A few colleges have flexibility in funding streams. Central Piedmont has several revenue sources available for workforce development. As employers come to the college for customized training, Central Piedmont can match the employers' needs with the most appropriate programs, usually allowing the college to find some kind of subsidy for most employers. But this strategy does not work in all cases, and there is not enough money from state funds to serve all employees who want training. As one dean mentioned, "We got into contract education because we had requests for training that did not fit into one of our typical funded categories." Large corporations are more likely to be able to pay for contract education, while smaller firms are more likely to qualify for state subsidies. Central Piedmont uses the various funding streams to attract companies with no prior experience with the college, who may then contract for further training with their own funds.

Another strategy has been to limit competition by forming alliances. For example, the Southeast Michigan Community College Consortium has agreed that each college will provide customized training in its respective region, but will try not to "poach" on the territory of others. While this is a somewhat fragile agreement and there are still complaints about such poaching, it does reduce competition somewhat. In addition, Macomb has formed alliances with a number of private providers in its region. Customized training is offered jointly, with the private provider getting 60 percent of the revenue and Macomb the remaining 40 percent. Participants in these courses pay the market rate for training, but by coopting the competition, both the private training company and the public college benefit.

There are, then, various ways in which community colleges can create a competitive advantage for themselves in the training market. All strategies are not available to every college. Some lack state support for customized training or the strong positive reputations that would enable them to be competitive. Thus the emergence of the entrepreneurial college is contingent on a number of factors, some internal to colleges and somewhat under their control, and others external to the college, which explains some of the enormous variation among colleges in the size and scope of their entrepreneurial college activities.

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[13] See also Jacobs and Teahen (1997).

[14] This is based on a study that observed and interviewed about 300 community college faculty and administrators; see Grubb et al. (forthcoming).

[15] See, for example, *How Workers Get Their Training* (1992, Table 38), which indicates that the percent of workers receiving skill improvement training increased from 35 percent in 1983 to 41 percent in 1991. In general, however, the U.S. has relatively low levels of employer-sponsored training compared to other countries; see Lynch (1994), Introduction.

[16] Other colleges complain that they cannot meet the competition because of high salaries set within the regular college.

SECTION THREE
THE ROLE OF STATE POLICY

Often the entrepreneurial college represents the development of new ways in which community colleges can be responsive to the particular conditions and needs of their local communities. As seen in the preceding section, many of the factors influencing the entrepreneurial college are local conditions. State policies also play a large role because they provide certain kinds of funding and regulation that can either promote or impede workforce and economic development. Paradoxically, state policies often conflict with local priorities. In some cases, state policies have sometimes created such rigidities in the regular college that the development of a entrepreneurial college has seemed the only solution.

When the focus is shifted from the local to the state level, policy-related concerns change in some obvious ways. From the local perspective, almost any new resources that can be obtained from the state in the name of economic development are worth having; but from the state perspective, the question arises as to whether the results of local expenditures merit the taxes paid by the citizenry. From the state perspective, certain kinds of "smokestack chasing"–public subsidies intended to encourage employers to locate in one region of the state rather than another–are simply wasteful. From the local perspective, traditions of local control and institutional autonomy, including the tradition of academic freedom in higher education, argue against state regulation; but from the state perspective, the large amount of state money in community colleges[17] argues for state oversight and accountability requirements. Even though state governance of community colleges has been relatively weak in most states,[18] the area of workforce and economic development generates issues for some states to confront that may be working against the interests of local colleges.

States vary widely in their policies relating to workforce and economic development. As will be seen, some provide relatively expansive funding, while others do not. Some impose regulations and definitions of success that define what local colleges can do, while others do not. The balance between local and state initiatives in creating economic activities in the community college varies from state to state, further complicating the problem of explaining the growth of these nontraditional activities.

State Funding for Workforce and Economic Development

The funding for workforce development programs in the entrepreneurial college comes through two major state funding mechanisms: formula funding, which supports programs through payments to local colleges based largely on enrollments, and categorical funding, which provides funds for special purposes, including specific forms of workforce development. Formula funding is based on enrollments and allows local initiative to determine the amount of state funding received. In contrast, categorical funding involves much more state discretion about how dollars are spent. Each funding source varies substantially from state to state, and the balance between them creates different programs in local colleges.

Formula Funding. States vary widely in their fiscal treatment of workforce development programs. In California, for example, state-funded credit programs must be open to all students. Courses developed for specific employers or for specific groups like welfare recipients, do not qualify for state aid. Similarly, in Ohio there is no subsidy for noncredit training or for credit courses that are not part of a degree program (except for remedial courses). Ordinarily, employers would pay the full cost of customized training, thus it would be expected that less workforce development would result. However, colleges have found ways to adapt to this restriction. For example, workforce development efforts, such as those at LA Trade Tech, send employees to credit courses in which regular students are enrolled. Modularized courses facilitate this process and thereby allow employer-oriented programs to count for state aid. In Washington, on the other hand, individuals in workforce development programs receive standard FTE payments which originate from a special fund rather than the state's college fund. Therefore, dislocated worker programs for workers in the timber and aerospace industries generate state revenues, even if they are included in special short courses. In Illinois, employers are expected to pay the full cost of employer-specific training.

One might expect to see much more workforce development in states that allow it to be funded through normal formulas, but that expectation is difficult to confirm through the limited sample of states represented in this study. In addition, the data that colleges keep on workforce development programs are imprecise. Further confounding the effect of state funding structures are variations among colleges in their aggressiveness in seeking training contracts, in their ability to find ways around state restrictions, in limitations imposed by district policies, and in the demand from local employers. Formula funding almost surely makes it easier to support workforce development, but its effect is far from automatic.

Similarly, certain community development efforts are enhanced or impeded by the structure of state funding. For example, North Carolina funds noncredit courses at 60 percent of the credit rate. California reimburses credit courses at an average of $3,391 per FTE, while noncredit courses are funded at only $891. In these states, continuing education is often less emphasized than might be the case if noncredit funding were equivalent to the funding for credit courses.

Categorical Funding. States also provide categorical funding for specific programs. In California, for example, company-specific training does not qualify for regular education state aid, so firms must pay the cost of workforce development. However, a special state program, the Employment Training Panel, provides subsidies for some corporation-specific training, a small amount of which is operated through community colleges. North Carolina has a similar funding stream titled New and Expanding Industries, for which community colleges are the main training providers (though in some cases these are really "pass-through dollars" which the college pays to the training contractor chosen by the company). The Illinois Department of Commerce and Community Affairs also allocates state grants to community colleges. Workforce preparation grants are given to each college, whereas Prairie State 2000 and Industrial Training Program funds are distributed on a competitive basis.

In each of these states, employers are expected to assume at least part of the cost of training. In the state of Washington, on the other hand, individuals in workforce development qualify for the regular FTE allocations, but this funding comes from special funds established for job retraining that colleges can receive competitively. The employer typically pays little or none of the overall costs. North Seattle offers eight credit-bearing instructional programs under this provision.

In some states, community colleges are intended to be the principal providers of company-based training. For example, Michigan has the Economic Development and Job Training (EDJT) program, which was intended to allow community colleges to offer workforce preparation. In contrast, the Employment Training Panel in California also provides state revenues earmarked for corporate training, but community colleges have no preference in the allocation of these funds. Indeed, these contracts are performance funded and that works against community colleges, which are not allowed to place their public revenues at risk.[19] Thus, these categorical funds allow certain colleges to expand their workforce development efforts, but with enormous variation from state to state.

Typically, categorical funding mechanisms come with regulations attached to them. For example, Michigan does not allow these funds to be spent for employers relocating facilities within the state to avoid subsidizing "smokestack chasing." Washington's workforce training program is specifically intended for dislocated workers, and individuals must be certified according to the industry in which they previously worked in order to be eligible.

Should states use formula funding or categorical funding to enhance workforce development? A preliminary question–rarely asked and even less frequently answered–is what justifies state funding for economic development? Under what conditions should one expect public subsidies for employer-based training to enhance the public good? If the political answer is that such training is universally a good thing–because, for example, U.S. employers currently provide insufficient training to their employees, and such training is part of shifting to a "high-skills economy"–then states should place few restrictions on such subsidies and should presumably allow workforce development to be funded through formula mechanisms. But if the more principled answer is that only some workforce development efforts serve the public good, then formula funding is risky because it results in money being spent on relatively worthless projects. Categorical funding can more readily impose those limitations which distinguish worthwhile forms of workforce development from those that merely provide public subsidies to private employers. By extension, categorical programs which fail to impose such principled restrictions make little sense.[20]

In the states in which the seven colleges studied are located, little thought has been given to these questions. The state officials in charge of funding for workforce and economic development showed great concern with local providers meeting the legislative requirements of categorical funding, but not with the underlying policy issue of whether certain programs make sense from the state's perspective. However, it is possible that in a climate of greater accountability more states will turn their attention to the effectiveness of workforce development programs. As a state official from North Carolina mentioned:

> I think we're right now on the threshold of a new look at the accountability process. There's going to be a renewed emphasis on value added, and I think there's going to be an increased emphasis on looking at a formula.

Overall, the resources for workforce development come from a combination of regular state revenues, special state programs, and employer payments. But when (as in Washington) workforce development enrollments qualify for regular state payments, community colleges typically do not identify these revenues separately. Therefore, it becomes nearly impossible to get a clear picture of the total funding for workforce development.

Detrimental Effects of Full-Time Equivalent Funding. A different kind of funding issue arises from the conventional funding mechanism used for community colleges based on full-time equivalent (FTE) students. This funding approach is designed for institutions that have predominantly full-time students. But as the trend has been for more and more students to attend college part time, FTE formulas have become awkward and complicated by rules about how to count part-time students and nontraditional courses. In workforce development programs, in which all students are by definition part time, FTE funding becomes particularly difficult to apply. As a state official in Washington described it:

> There is a whole state funding system built around the FTE model, and under that principle there is a whole framework of rules and regulations as to what is acceptable and what is not, with layers of approval processes for new courses and programs. We need an entirely different structure and delivery system that calls for a whole new way of thinking from the ground up.

A related problem is the differential between credit and noncredit courses. In most states, noncredit education is funded at substantially less than credit courses. Indeed, noncredit courses in Ohio receive no state funding at all. This means that functionally equivalent courses are treated in very different ways, exacerbating the split between credit and noncredit divisions, or between regular programs and those offered in the entrepreneurial college.

The credit/noncredit distinction sometimes sets up an undesirable hierarchy, as an administrator at Black Hawk observed:

> Continuing education units are valuable designations for companies, and often they are referred to as noncredit. I seldom refer to them as noncredit–that's not what we're about at all. We're about building skills and competencies for people to succeed–and it's like that's "lesser than." Well, it's not "lesser than." In fact, most employers will tell you, "I don't want 'em spending 16 weeks; I want 'em to gain the skills and go back to work and apply those skills." I think that speaks again to the entrepreneurial nature of the community college.

It seems that the fundamental structure of state funding in many cases poses serious challenges for the entrepreneurial college.

State Regulations and Definitions of Success

Just as states vary in their funding, they also vary in the regulations they impose on community colleges. Very often these regulations constrain what local colleges do in particular activities of the entrepreneurial college.

One form that state regulations take is in the measurement of a college's success. In Washington state, for example, the state defines success in terms of students enrolled, completion of credentials, job placement rates, and the efficient use of resources. These measures, designed with the regular college in mind, are difficult to apply to shorter courses and the more flexible efforts of workforce development. As one occupational dean asserted:

> What we're now finding is a change in students' goals, in that degrees do not have value to some students. They want competencies or skills, and then don't necessarily want them packaged in the ways we have them in a degree. We are being penalized for that because there are many students here who I think are achieving their educational goals, but they are looked at as leavers. They come in and they may take fifteen credits in computers and leave. That's not a certificate; that's not a completion by any standard the state has made at the legislature.

To be sure, even states recognizing that students may not need credentials have not devised adequate new assessment methods to measure student success. As an official in North Carolina acknowledged:

> We have not gotten the funding for a more elaborate student tracking system to determine if students are getting what they came for. Our graduation rate is relatively low, but we know that a lot of students, even though they may be enrolled in a curriculum program, don't come there to complete X number of hours. They want to learn something and take it out in the workplace. So we really don't have a good tracking system to know whether they're getting what they came for and if they're leaving happy.

It seems clear that different measures of success other than completion of credentials are necessary, but precisely what measurements to use is not yet clear.

Similarly, placement rates are irrelevant in programs for individuals who are already employed. Measures such as earnings increases over time (as are used to determine funding for North Carolina's Human Resource Development program) or employment stability over time might be more appropriate. Currently, state-imposed measures of success often reduce the ability of colleges to provide workforce development and provide no incentives for activities based on their effectiveness. For example, Washington's funding policies allow short programs only for certain kinds of dislocated workers and disallow funding for noncredit education, positioning the state rather than the college as the principal driver of local economic development efforts. Such policies make it difficult for colleges to respond to community, workforce, and economic needs.

In California, state regulations have been added over many years, creating a bewildering thicket of rules and regulations governing the minutiae of personnel policy, course approval, local governance, budgeting, and virtually every other aspect of college functioning. The result is that some state rules operate to undermine other elements of state policy. For example, the rules governing cooperative education allow only two narrowly defined approaches (concurrent and sequential) at a time when the state is trying to encourage work-based learning. The state recently added economic development to the official missions of community colleges, but colleges are precluded from any activities that might put public funds at risk. And the major economic development program in the state, the Employment Training Panel, is structured so that community colleges have a hard time competing for funds. While the state does provide some technical assistance to local colleges through Ed>Net, the small size of these efforts compared to the burden of regulation means that overall state policy has limited the entrepreneurial college.

The tendency for states to operate in regulatory and punitive modes has also been an issue in North Carolina, even though that state has encouraged economic development through categorical funding (like the Human Resource Development program), as well as its creation of an occupationally oriented community college system. As one state official noted, there is now some sentiment for the state to shift away from operating as a regulatory organization toward becoming a service organization, providing technical assistance to local colleges rather than imposing restrictions. As another state official described the director for community colleges:

> He's very committed to tailoring the operations from the state as a service organization, more than as a regulatory organization, because he really feels that that's what we need at this time. . . . That is a cultural shift, not only within our building and our staff, but in educating the general assembly about our role and in educating the colleges to look to us for assistance, as opposed to slapping them on the wrist.

It should be noted that the role of the state as a service organization has not yet been put in place, and this official acknowledges that this shift in roles will take a considerable change in the culture of state government. But at least there is some recognition that the regulatory role by itself is unhelpful and insufficient.

A similar conception of the state's role emerged from the comments of state officials in Ohio. As one individual said:

> It is still the hard fact that [workforce development] doesn't happen at the state level. That's the fact. The rubber hits the road in the local areas. . . . So I think the state's role is to limit and, as it can, eliminate barriers to effective local service delivery.

Overall, regulations that states have devised have been intended for the regular college to hold local institutions accountable for the ways they use public funds. However, these kinds of institutional policies operate awkwardly in the more market-oriented environment of the entrepreneurial college where flexibility is more important and success is measured in ways different from conventional credential programs. The punitive and limiting aspect of state regulation is almost never balanced by technical assistance. Given the enormous variation among colleges in workforce and economic development, such state support would help local institutions realize the potential of serving their communities and employers in new and different ways.

Local Versus State Initiatives

Is the expansion of the entrepreneurial college over the past decade or so the result of local initiative or of state initiative? What is the balance of power between the two? [21]

As with other aspects related to the entrepreneurial college, enormous variation was found among colleges and among states in the balance of state versus local initiative. For example, North Seattle Community College participates in several state programs–including the workforce training program for dislocated workers–but shares in few local initiatives, partly because state and district policy precludes much local flexibility. Nevertheless, LA Trade Tech–in a state where state policy has not been especially friendly to economic development in community colleges–has several initiatives in economic and workforce development, most of which are local.

Several of the colleges with the most extensive entrepreneurial colleges have shown a great deal of local initiative in addition to participating in special state initiatives. Sinclair, Central Piedmont, and Macomb are cases where aggressive local colleges have both developed their own initiatives and taken advantage of state programs sponsoring company-specific training. Even though barriers remain–for example, the regulatory emphasis in North Carolina and the lack of funding for noncredit education in Ohio–these states are generally more supportive than are Washington and California, and local colleges find more room to expand their own efforts. The moral of this story is not particularly surprising: those colleges that are most active in their entrepreneurial efforts seem to find a synergy between local initiatives and active state policy.

In the end, we suspect that the balance of state and local initiative has the same moral as the balance of the regular college and the entrepreneurial college. If states and localities find ways to make state and local efforts complementary rather than antagonistic, then the result is not only a reduction of tension, but an overall increase in the scope of activity. To be sure, local interests and state interests sometimes diverge, as on issues of "smokestack chasing" or cases where states want to serve low-income populations while employers needing customized training want nothing to do with such groups. But recognizing areas of common ground and distinguishing them from areas of conflict give state administrations and local colleges a point of departure for reducing barriers to growth.

Emerging Concerns of State Officials

State officials have different perspectives from local college officials, and their concerns indicate certain issues with the entrepreneurial college that are potentially troublesome–or that may become troublesome if left unchecked. All states face certain challenges that may influence the ways they treat their education and training programs, and these provide yet other areas of emerging state policy. While political factors may preclude states from responding to these concerns, they still represent issues that most community colleges will confront in the coming years.

Split Between the Regular and the Entrepreneurial College. Officials in several states noted that the growth of the entrepreneurial college has created a dual institution with potentially negative consequences. As one administrator in Michigan noted:

> The one pitfall with some of this is: do we really link the shadow customized-training college back to the regular programs of the college? . . . I think that one part of workforce development that scares me the most is that we have two sides, or two divisions within a college, almost competing against each other for resources and recognition. But I think they have to work collaboratively because the students don't care and the employers don't care [whether they enroll in credit or noncredit courses]-they want the community college; they don't care what the internal structure is. . . One of the results of declining enrollments is the fierce competition within individual institutions at a time of shrinking infrastructure and a decline of resources.

In a similar vein, an official in Ohio was concerned about workforce development being done "out the back door," although he did note a positive trend:

> Within the institution, historically, workforce training was outside the academic. . . . more in line with continuing education, sort of out the back door–"go out and get as many FTEs as possible." The same thing has been true, I think, of workforce development. However, in the last few years it has become a more central part of the institution and more integrated into the mainstream of the institution.

But it is not always clear what states can do about the potential split between the regular college and the entrepreneurial college. The ways of minimizing the tensions between them–examined in more detail in the Conclusion section–generally involve relatively subtle ways of sharing resources, and it is not clear that state policy can do a great deal to facilitate such institution-level cooperation. Still, the recognition at the state level of this potential split suggests that colleges themselves might take notice of this danger–a topic addressed in Section Four.

Effectiveness of the Entrepreneurial College. In this age of accountability, the effectiveness of all local programs becomes an issue. One official in Ohio described the notion of "high-impact training," which not only provides training to particular firms but also identifies the conditions under which it is likely to improve the company's performance:

> In high-impact training your whole discussion is framed around the issue of performance. . . . I raised the question [with an employer], "I assume you do training because I know the stress your system is under–I assume this is to meet some performance agendas?" "Well, yes." "If we give you the training you asked for, why don't we also agree to do a project together with your managers and bring in some of our community college people to develop a methodology for identifying a performance improvement project?" In other words, we're not going to give you good service by delivering training if it is not linked to an understanding of things that determine whether those trained ever get a chance to apply their new skills and achieve the results that you envision. Our interest is in your long-term success, NOT getting this contract tomorrow.

The issue of defining and measuring effectiveness is not an easy one, and another state official in Ohio discussed process considerations in lieu of any definitive outcomes:

> One of the things we look for is making sure that training meets the needs of the community which it serves. . . . To summarize what we are looking for in a company or college is understanding their customer, and whether they can articulate that in a proposal. If they can clearly and distinctly say: "I've assessed, I've evaluated, I've discussed this at all levels and not just with top management and this is our evaluation of what this company needs"–that's a good proposal.

State Efforts to Build Coherent Education and Training Systems. One of the challenges that many states have recognized is that of developing their education and training programs into a more coherent system rather than a patchwork of unrelated programs that have been driven by federal legislation. As a state official in Ohio stated:

> For the first time people are beginning to look at education as a system. . . . People are looking at the whole [K-16] continuum for number one; for number two, you see this continuum broadening. It's not just an education continuum, it's a work/employment continuum . . . and it's a broad group, it's urban linked, it's business, it's labor, and at the state you are seeing the same thing happening. You are seeing a collaboration among agencies that represent human services. Even though there are a lot of turfisms, and there will always be turfisms, they have lessened in their significance.

Another state administrator from the same state noted that the fragmentation of programs has caused problems for employers, as well as students:

> The biggest challenge of our system is to make sure that the corporate business customer doesn't have to be the integrator of our services. Our institutions should integrate ALL of their services from both of these areas and others to meet the needs of the client: a

> company should have one point of contact with an institution who says, "we will assemble the full capabilities and resources of this institution to bear on YOUR specific need".... The test of that is: does the customer have to pull the resources together, or do you?

Similarly, a North Carolina state official discussed the difficulty employers have had with fragmented services:

> When we talk to employers, they don't care which program is providing training; they just want to get training that meets their needs. We really have to decompartmentalize ourselves to the extent that we have separated ourselves, either by funding streams or by categorical programs, and we need to be taking our whole palette to an employer. We need to be saying, "this is what you need, and this is what we can provide"–without the fragmental labels.

This individual was particularly concerned that the conventional FTE-based funding system did not provide the flexibility for such integrated services: "That is a really hard way to sustain a program–when you have to provide funding streams and make them all work [together] and make sure you've got every one separated [for audit purposes]."

Indeed, all the states represented in this study, except California, have been similarly concerned with system building. Washington has created a Workforce Training and Education Coordinating Board. North Carolina is moving toward a system where community colleges have greater responsibility for various programs. Ohio has formed the Governor's Human Resource Investment Council, and Michigan has begun developing a state Jobs Commission with local workforce boards. All states are developing one-stop centers with federal funding, designed in some way to coordinate services, although there is substantial variation in what one-stop centers actually do. It is too early to tell what these statewide initiatives will generate.[22] There will always be "turfism," and political resistance also looms as a significant barrier; but developing a more coherent system of education and job training is an important concern in virtually all states.

Impact of Welfare Reform. A final concern of state officials is one set in motion by changes in federal welfare policy enacted in 1996. These changes require states to have high and increasing fractions of their welfare populations in work placements, defined to include certain kinds of education and job training; and many state officials are preoccupied with what these changes might mean for existing programs. When state officials were interviewed in the fall of 1996, it was still too early to tell what decisions individual states might make. Since then the combination of good economic conditions and falling welfare rolls and a 1997 windfall in federal welfare funding have reduced some of the pressure on the states. But sometime in the next five years there are likely to be even more difficult demands for getting more welfare recipients into work.

How welfare reform might influence community colleges is still unclear. In some states the enrollment of welfare recipients in community colleges may even drop (as Black Hawk anticipates is likely to happen) as they are pushed out of education and into work. Other states may develop more expensive programs of work and education that use community colleges more intensively. As of the summer of 1997, community colleges throughout the country were searching for ways to serve welfare populations–ranging from incorporating them into regular programs to creating special programs tailored to their specific needs. Some community colleges have developed special expertise in working with welfare populations like those that have created learning communities to simultaneously meet the occupational needs and the requirements for remedial/developmental education (Grubb, Badway, Bell, and Kraskouskas 1996). Exemplary programs can be found all over the country,[23] and it is suggested in the Conclusion section that community college expertise in working with employers might provide the basis for improving the quality of welfare-to-work programs. All of these are ways of strengthening a college's commitment to equity and to community development in the broadest sense.

Unfortunately, these efforts will all be constrained by the decisions individual states make about their welfare programs. This is an area where community colleges will not always be able to exert the influence on policy that they may wish. At the point of writing, welfare reform looms as a great uncertainty in state education and training systems.

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[17] Across the country, states provide 43 percent of revenues in community colleges, compared to 19 percent from local sources, 22 percent from tuition and fees, and 5 percent from the federal government. These are 1993-94 statistics taken from Table 325 of the *Digest of Educational Statistics*, 1996 (NCES, 1996).

[18] See Grubb (1996a), Ch. 7, drawing heavily on McDonnell and Zellman (1993).

[19] See the study carried out by NCRVE of the ETP (Grubb et al., 1993).

[20] The conditions that might justify public subsidy are contained in Grubb et al. (1993). This turns out to be a complex question receiving little attention from the proponents of economic development. In looking across states, very few have imposed principled restrictions on their economic development funds–though Iowa does not allow funds to go to wholesale or retail establishments or professional services, since they cannot typically be attracted to the state by incentives; and Michigan prohibits funding for employers moving within the state.

[21] Because we concentrate on the entrepreneurial college, the authors say little about noncredit programs for JTPA or welfare recipients. But it is clear that this question applies to these programs as well. In California, for example, the weakness of state agencies and their inability to work together have led to local initiatives being much more important than state efforts in creating collaboration among community colleges and job training programs (Grubb and McDonnell 1996). Elsewhere states have taken the lead in promoting the integration of job training and welfare-related training in community colleges.

[22] The National Center for Research in Vocational Education is undertaking a study during 1997, in conjunction with the Center for the Study of Human Resources of the University of Texas, Austin, and with Jobs for the Future, of about ten states that are coordinating and otherwise reforming their education and training programs. Preliminary results from this study should be available in early 1998.

[23] The research cited in the previous footnote will develop information about programs thought to be exemplary in some way, to clarify what good practice might involve.

SECTION FOUR
POTENTIAL TENSIONS WITHIN COMMUNITY COLLEGES

The emergence of the entrepreneurial college has–like the emergence of occupational purposes and remedial/developmental education before it–created new tensions within comprehensive community colleges. Some colleges have acknowledged these tensions and are working hard to make the efforts of the regular and the entrepreneurial college complementary and mutually supportive, while others have barely recognized these emerging problems. While the tensions have had some positive effects that are pointed out in a subsequent part of this section, they threaten to divide the community college into two institutions: the regular college, that which is somewhat more student centered and operates according to established institutional practices, and the entrepreneurial college, which is more employer and market oriented and operates according to more competitive principles.

There is also a danger that the student-centered part of the college may become increasingly starved for political and financial resources, while the market-oriented part becomes increasingly well funded and well connected to employers–a division into "haves" and "have-nots." Such a cleavage would threaten the ideal of the comprehensive community college and could well undermine the view of the institution as the "people's college," committed to teaching and to nontraditional students. The challenge, then, is to find ways of making these two sides of the comprehensive community college complementary to one another.

Sources of Tension

Numerous sources of tension exist between regular credential-oriented programs and entrepreneurial programs. Evidence of the following sources of tension have been identified from the community colleges in the study.

Flexibility and Modes of Operation. Workforce development are generally much more flexible than regular credential programs. Workforce development programs often can be up and running with a short lead time, while conventional programs require months of planning and deliberation–at least 18 months in the estimation of most colleges. Because employers typically care about competencies rather than credentials, workforce development programs rarely reflect major concern about certificates or credentials; in fact, conventional occupational programs are sometimes criticized for being overly concerned with credentials that seem to mean little to employers. As one vice president observed:

> The issue is: how can the college have more than one core function if it is to serve multiple missions for the community? How can the college balance and align the various functions? The tensions are caused either by institutional disagreements over mission, or an inability of the institution to deal with the complexities of roles.

Current developments may be driving the regular college and the entrepreneurial college even further apart. In many states, efforts to create more coherent postsecondary education systems are imposing additional constraints on colleges. For example, in North Carolina, a statewide process for setting curriculum in credential-oriented programs is intended to create a system that is "seamless" from the student's viewpoint, allowing them to transfer courses between two- and four-year colleges. But this creates additional hurdles to producing new programs. Given increasing state oversight of curriculum, it can be expected that the number of credential-oriented programs would remain fairly static, with flexibility and responsiveness resting within the entrepreneurial college. If this process continues, credential-oriented programs may become state creations that are difficult to modify, and all changes will take place primarily within the entrepreneurial college.

Relevance and Contacts with Employers. Since workforce development programs are responsive to employer demands, they are often in close contact with employers, and thus are credit-oriented occupational programs, and can claim a greater relevance.[24] For these reasons, those involved in workforce development often complain than some regular faculty do not keep current in their occupational areas or in the ways in which academic skills are applied in the workplace. On the other hand, instructors in credit-oriented programs complain of a lack of time and resources for staying abreast of current developments. State and local policies that place the responsibility for professional development on individual faculty rather than on the colleges contribute to this skill gap by failing to assure that faculty have the time and information essential to keeping up to date.

Admissions, Selection, and Service to Nontraditional Students. Workforce development students are usually selected by employers. These students are in many cases highly capable employees chosen to benefit from additional training. In contrast, regular programs of the open-admissions college rely on self-selection on the part of students. Regular college programs must contend with students who are underprepared academically, whose motivation is uncertain, and whose occupational purposes are unclear. While self-selection creates pedagogical problems for the regular college, the commitment to open admissions and the hostility to tracking among many faculty is strong, creating resentment toward the entrepreneurial college.

A split has already begun to develop as some community colleges, especially those in urban areas, serve increasing numbers of remedial/developmental students. That contrast in the accompanying success of the regular and the entrepreneurial college is likely to grow ever wider. As one state-level administrator stated:

> As a system, we serve about 10 percent of the students who need service in this state which creates a real philosophical dilemma. If you can serve only a fraction of the students, which fraction should that be? There is a real concern about picking only the people who are likely to make it, or people who are going to be successful, people who have vocational training as a goal and ignoring the people who have equally worthy goals that don't have the political match. I think local programs are going to struggle somewhat with that to decide who they wish to serve, and how they justify that to their communities.

When a college begins to pursue community, workforce, and economic development, it risks losing sight of its other missions, given the enormous visibility associated with workforce and economic development.

However, the division between well-prepared students in workforce development and underprepared students in the regular college may sometimes be exaggerated. As one dean of corporate and continuing education noted:

> The implication that serving students in business [contract education] may get away from teaching our neediest students may have some truth with respect to stretching resources. However, many workforce learners, especially in manufacturing, have similar educational levels as do our students on campus–sometimes lower; we do a lot of workforce literacy. We help them keep their jobs and the company stay viable, so that it can hire our emerging workers and on-campus students.

Still, the issue of whether students in workforce development programs are better prepared than the nontraditional students in regular programs merits further examination to forestall further split between the regular and the entrepreneurial college.

Effects on Pedagogy. The community college has prided itself on being a "teaching college" concerned with the quality of instruction. Although many colleges do not provide sufficient institutional support to enhance the quality of teaching, the ideal that teaching should be preeminent and student centered is widespread.[25] As one English instructor observed:

> I think we have a tradition that is honored–I suppose as much in the breach as not–but we do have a tradition as seeing ourselves as the teaching college . . . at least the tradition is there and it can be called upon when the occasion warrants.

In contrast, we found little attention to the quality of teaching in workforce development courses. Faculty reportedly are selected on the basis of subject-matter expertise, availability, and cost, based on the assumption that students will learn whatever is taught. No teaching in workforce development programs was observed in this study, so little concrete evidence to show how this works out in practice was obtained. Didactic and basic skills–oriented teaching was most commonly reported[26]–precisely the kind of teaching from which many people, particularly adults, learn poorly. Furthermore, employers often turn to community colleges for remedial education and workplace literacy programs, two areas where approaches to teaching are especially critical. The neglect of pedagogy in workforce development certainly separates it from the vision of the "teaching college" and may undermine the effectiveness of these programs.

On the other hand, the flexibility within the entrepreneurial college may enhance the quality of instruction. One dean of instruction noted that her division:

> . . . has fought union contracts to retain autonomy so we can select the most current and vital teachers, often those with lowest seniority because they are recently out of industry. Often we hire from the outside to get the best and most effective teachers for contract education–oh, that we could do this for our regular students!

In addition, advocates for workforce development sometimes claim that the need to keep the customer satisfied has forced them to move away from conventional didactic classes toward more participatory methods that seem less childish, less "school-like." It is difficult to know the overall effects on the quality of teaching, although the lack of explicit attention to teaching is clearly a concern. Without such attention, many instructors revert to the kinds of didactic methods that they themselves experienced as students.

The inattention to teaching methods in workforce development is part of a broader problem. Outside of conventional educational institutions–in settings as diverse as workplaces, short-term job training (for JTPA and welfare clients, for example), literacy programs, adult education, and remedial education provided in a large numbers of programs–there is rarely any explicit consideration of teaching methods. Given the obvious difficulty that many individuals have in learning, and given the widespread problems of basic skills in the country and the labor force, this is an area where many programs, including workforce development, could learn from the best efforts of community colleges–in ways outlined in the Conclusion section.

Intra-Institutional Competition. Because employers using community colleges for additional training can either turn to workforce development programs or send their employees to regular credit-based courses, there is potential danger of competition for students between the regular and the entrepreneurial college. This becomes a particular problem when colleges set up separate centers to handle different categories of students and clients, including employers. For example, Sinclair Community College established a Center for Corporate and Community Services, Macomb has a Center for Training and Employer Services, and Central Piedmont has a Division of Economic Development. One possibility is that these alternatives may reduce the enrollment in credit-based programs–the lifeblood of any institution in an enrollment-based system–as well as reduce the access of regular programs to employers and information about current practices. Particularly in periods and regions of declining enrollments in regular programs, this may exacerbate the antagonism between the two parts of the comprehensive community college.

The same process takes place when several divisions of a college offer variations of a single course, and it can create problems with communication to employers–"customers"–as well as duplication and inefficiency. As one vice president of community and employer services stated:

> Introduction to Electronics is taught in at least four different sections of the school with four separate laboratories and four different teachers, and so we have a major problem from the outside from a customer perspective. We are often competing against ourselves in many cases, which results in fairly inefficient activity.

However, some colleges maintain that providing services in several different ways enhances consumer choice and the quality of offerings. Which of these two effects is the more powerful is unclear and almost surely varies from college to college. The conventional institutional view is that duplication and competition ought to be avoided in the interests of efficiency. The more market-oriented view is that competition should be encouraged rather than discouraged, so it is not surprising to see the entrepreneurial college engaging in more competition even within an institution.

Many states have a funding differential between credit and noncredit courses, with credit courses being funded at a higher rate. Institutions typically give the highest priority to the best-funded programs, so that regular credit-based programs continue to be of higher visibility from a funding perspective–again exacerbating tensions. Partly to remedy this problem, North Carolina is beginning to explore the possibility of eliminating the differential funding between credit and noncredit courses, since many of these courses are substantively interchangeable–a move that would reduce both confusion and tension within institutions.

Costs, Revenue, Profit, and Risk. All institutions, departments, and programs face fiscal incentives of course, but these are structured differently in the regular college and the entrepreneurial college. For conventional credit-oriented departments, administrators usually know the "break-even" point of classes, where the costs of the class (in terms of instructor costs plus materials) equal the revenues from state and local sources, plus tuition. Classes that do not meet this break-even enrollment level are often canceled, although small numbers of such expensive classes may be maintained–for example, sophomore classes required for transfer or individually accredited occupational programs such as nursing. Other classes with high enrollments and low costs create "profits" or surpluses, which can then be used to support student services and other offerings that do not generate their own revenues. These are institutional-level decisions, and normally, departments do not control their own revenues. New offerings–new programs and courses or innovative teaching like team teaching or learning communities–are often hard to start because of uncertainty over whether they will break even; in many institutions there is little risk taking of this sort. As one director–the same one quoted previously who complained about state funding built around the FTE model–noted:

> Moving against entrenched conservatism or introducing a new and different paradigm is an example of a barrier that has to be surmounted when developing new workforce courses or programs.

In contrast, costs and revenues in workforce development are calculated in a different manner. Typically, there is cost-plus pricing, and courses are offered only if they make a profit. There is no pressure to provide money-losing courses, as there is in the regular college with its expectations of offering many courses to diverse students. Workplace development programs engage in the same strategic behavior as any business, and so may offer a course below cost as a way of testing the market or of working with a particular employer. This kind of risk taking can be funded from the "profits" or surpluses of other workforce development programs–a practice that allows the entrepreneurial college to start new ventures.

The Entrepreneurial College as Buffer from External Demands. An interesting problem was identified by one vice president of community and employer services as the differences between the entrepreneurial college and the regular college widen:

> In our case, the shadow college is much more innovative than the regular college. Some of this is self-fulfilling. Because the shadow college is so big and has so many resources and freedom, the tendency in our case is to do things in the shadow college because it's so much easier–you don't have to come up against all these issues. The result is that we don't really change the rest of the school. We have a real problem with uneven development now, and I think that could be worse in the long term if it's not addressed.

Such uneven development presents the specter of an increasingly innovative entrepreneurial college, while the regular college stagnates as the pressure to make it more flexible, up-to-date, and innovative subsides when its programs are simply transferred to the entrepreneurial college. Again, the long-term result would be a complete split, with the regular college suffering badly in the process.

Debate over Purpose. Another tension involves the deepest discussions about the purposes of educational institutions. Many advocates of the community college stress its responsibility to students, especially to nontraditional students who are often poorer, older, more likely to be minority, more likely to be educationally underprepared, and who have flocked to the "people's college." Such advocates are sometimes hostile or indifferent to the interests of employers, partly because many of the nontraditional students they want to serve have been badly treated within the employment system. Even if employers are not perceived as the enemy, they are certainly not viewed as important clients of the regular college. In contrast, workforce development and economic development programs view employers as their main clients. For example, workforce development programs are quite willing to answer employers' desires for short-term, specific training even when such training may not be in the long-term interests of employees and their job stability. Ultimately, this is a debate over equity versus selection, of individual economic opportunity versus an employer's immediate needs, and of nonmarket conceptions of educational institutions versus market-oriented conceptions.

In the Conclusion section of this report, suggestions are offered for remedying antagonism over purposes by reinterpreting them as complementary rather than antagonistic. For the moment, however, it should be pointed out that the debate over purpose has been present in many other educational institutions, including the high school and the university. Service to employers and the economy has often provided the rhetoric and justification for public funding and has been particularly prominent since the publication in 1983 of *A Nation at Risk* and its concern for the economic competitiveness of the economy. Service to individual students has been an equally powerful purpose. In a higher education system where students can "vote with their feet," any institution that does not serve the employment interests of students cannot last long.[27] The two perspectives inevitably coexist; the trick is to find a way to make sure the difference between them does not become destructive.

Purposes, Funding, and Role of Community Development. In considering the multiple roles of the community college, it is important to clarify that emerging roles can rarely be developed without funding. Regular credential programs are supported by state and local funding. Programs for special populations are supported by special funding from welfare and job-training programs. Workforce and economic development are supported partly by employers and partly by state funding for this high-profile activity. But who will fund public service? Who will support community development, particularly when its benefits are diffuse, or when it serves purposes such as equity goals that do not have a powerful political base? As mentioned above, some colleges have used high-profile economic and community development activities to persuade local voters to support tax levies. However, community development is distinctly secondary to economic development in these political battles and secondary in the allocation systems of most colleges. So it becomes important to confront the imbalance in the political support for workforce and economic development on the one hand, and public service and community development on the other. One reason why community development has been so limited in many community colleges is simply that it has not had a powerful political constituency.[28] Until this imbalance is acknowledged and corrected, it is unlikely that community development will become as institutionally strong as workforce and economic development.

What Skills Do Employers Want? Finally, a problem should be mentioned that sometimes manifests itself as a tension between short-term job training and workforce development programs versus longer-term certificate and associate degree programs. Not surprisingly, the business community does not speak with one voice. Small- and medium-sized employers, those hiring for entry-level work, and those contracting with colleges for customized training are usually most concerned with narrowly defined, job-specific skills. But other employers, often representatives of larger national and international corporations or those concerned with advanced employees, are likely to be interested in a broader range of skills. These are the "SCANS" or higher-order skills (sometimes mislabeled "academic" skills) including the following: problem solving, initiative, the ability to learn independently, and the ability to communicate with a variety of coworkers, customers, and suppliers.

Colleges sometimes find themselves caught between both kinds of demands. For example, many credential programs report that their advisory committees have pressured them to integrate more of the higher-order skills necessary for advancement and for more sophisticated workplaces, while workforce development programs are pressured for job-specific technical skills. These are cases where employers may mistake their own interests–those in charge of entry-level hiring may not understand the requirements of advanced positions, for example–and in the process catch colleges in a conflict that is not of their making.

Is Tension Harmful to the Community College?

Given multiple sources of tension between regular programs of the community college and the entrepreneurial college, is this tension harmful or beneficial? There may be a tendency to see any conflict within an institution as destructive–and in the next section some ways are suggested to minimize the differences. But there are also benefits resulting from the tensions outlined above.

In many ways, the entrepreneurial college counters the tendency for regular, credential-oriented programs to be inward looking and to neglect the economic realities outside the college walls. This occurs particularly in academic departments. For example, English teachers look to their discipline for guidance and only sometimes to the ways communication and literacy are used in economic and political life; math instructors look to the math profession, often with little idea of how math is used on the job. Occupational departments are less prone to this separation, because some occupational faculty have up-to-date connections with business and industry. Still, workforce development programs complain that even occupational instructors can become distant from local labor market needs.[29] Perhaps all educational institutions tend to become self-contained. The "ivory tower" is the derogatory phrase commonly applied to the university, and periodic efforts emerge to make education relevant and make teaching more applied and contextualized.

The entrepreneurial college stands as a reminder of the world of employment outside the walls of the college and of the unmet needs of employers. Of course, these lessons cannot improve the credit offerings of community colleges unless this kind of information flows back to academic, remedial, and occupational faculties. Later it is argued that the entrepreneurial college should be structured to allow such information flows to take place. For example, one dean complained that math instructors insist students must do long division and other arithmetic calculations without a calculator, although employees would rarely be without this tool on the job.

In addition, the entrepreneurial college serves as a reminder of some harsh but unavoidable realities of the community college environment. The economic world has become much more competitive in the past twenty years or so, partly with the rise of international competition, and the demand for workforce development and economic development reflects this greater competitiveness. Employers have shifted to employment practices that place a greater premium on competence. Hiring procedures require highly specific technical skills, personal attributes, and educational credentials. "Post-and-bid" promotion systems examine the competence rather than the seniority of workers.[30] Community college students are almost uniformly using colleges as routes into employment–either directly through occupational programs, academic programs, and transfer to four-year colleges, or indirectly by remedying skill deficiencies and clarifying their career objectives. If they are not prepared–if they do not have the "skills employers want" as cited in the SCANS report–they are unlikely to find or retain stable and well-paid employment. The harsh realities of competitive environments determine the demand for workforce and economic development and also provide valuable lessons for both students and instructors in the regular college.

But these lessons can be applied both ways. The concern of conventional credential programs with longer and deeper preparation reminds entrepreneurial programs that individuals preparing for long-term employment need more extensive preparation than the short, specific training offered by most workforce development programs. The attention in some colleges to the integration of academic and higher-order competencies into occupational instruction reflects this concern (Grubb, Badway, Bell, and Kraskouskas 1996). Similarly, the concern for quality of teaching in the conventional community college is a warning that presenting material by "experts," without attention to teaching methods, may prove ineffective, particularly where no accurate measures of learning success are established. So some of the tensions between the regular and the entrepreneurial college can be viewed as healthy. Each unit can remind the other of its weaknesses, and a dialogue could emerge resulting in workforce development programs that are stronger, as well as credential-oriented programs that recognize more clearly the realities of competition and employer demands.

For the moment, the greatest danger seems to be that the growing entrepreneurial college will become more and more independent of the rest of the community college, that the tensions will grow rather than abate, and that these tensions will prevent the kind of cooperation and communication that could strengthen both. As one college administrator stated:

> The danger of the shadow college concept is that really, in the long run, it does not help the institution. What it is doing with us is like 19th century capitalists who are out there [saying], "we will overcome all obstacles." It's positive in the sense that there's a lot of spirit, but we may overcome the obstacles and destroy the college in the process.

Study findings support the conclusions of the Commission on the Future of the Community College (1988, p. 39), so aptly named *Building Communities*:

> We urge that alliances with employers be carefully integrated into existing community college programs and interests. The educational and civic significance of such partnerships must be defined and continuously sustained.

Furthermore, the danger of the entrepreneurial college serving as a buffer is that there will be too little tension, since the existence of the entrepreneurial college insulates the regular college from the pressures to reform. Evidently, it is necessary to explore other ways of continuing the development of the comprehensive community college–a subject addressed in the Conclusion section.

[24] The academic courses of the community college are often completely out of the competition on this dimension. Except in those institutions that have paired academic and occupational instructors and integrated the two sides, academic instructors are widely criticized for being out of touch with the demands of workplaces. See the previous monograph sponsored by NCRVE, the League, and NCOE by Grubb, Badway, Bell, and Kraskouskas (1996).

[25] See Grubb et al. (forthcoming), based on observations and interviews with about 300 community college instructors and administrators.

[26] Didactic instruction is much more common in community colleges than instructors themselves think it is, as the study cited in the previous footnote clarifies. One of the seven colleges examined surveyed their instructors, who reported that they used lecture more in the last year than they did five years ago. In addition, Grubb and Badway (1996) described a seminar related to work-based co-op programs which, despite the intentions of the designers of the co-op program, often turned into didactic instruction.

[27] See also Labaree (1997) on the purposes of American education, contrasting what he calls social efficiency–the use of education to promote the strength of the economy as a whole and the interests of employers–with what he calls social mobility (perhaps more appropriately named individual mobility), or the use of education as the route to upward mobility for individuals. Historically, individual mobility has dominated social efficiency within the community college. However, one can interpret the expansion of the entrepreneurial college as the rise of social efficiency.

[28] This is also a problem in four-year colleges, where teaching and research are well-supported activities, but public service usually gets short shrift.

[29] On the tendency for occupational departments to become isolated from local business and industry, see Grubb (1996a), Ch. 6.

[30] On the demands of employers within the middle-skilled labor market that community colleges serve, see Grubb (1996a), Ch. 1.

SECTION FIVE
CONCLUSIONS AND RECOMMENDATIONS

The current changes in community colleges present both opportunities and dangers, as have changes in the past. Expansion of college activities into workforce development, economic development, and community development has led to new students, new kinds of clients, new connections with local communities, and new forms of visibility. However, these new roles have also created tensions with faculty in regular credential-oriented programs and have presented the threat that the college could become less unified in its purposes–less of a community in every way. The challenge, as suggested throughout this monograph, will be to realize the distinctive benefits of the entrepreneurial college without causing a split in the comprehensive community college.

In this concluding section, implications for the colleges undertaking these new roles are examined, and steps are presented that colleges can take to promote the entrepreneurial college, as well as to make sure that it is integrated with the more familiar programs of the regular college. Related issues that states face are also examined–since their policies regarding workforce, economic, and community development have been so haphazard. This section also includes a brief discussion of federal policy, which could play a role in supporting the entrepreneurial college, although, so far, it has not loomed large in importance. This section concludes with a forecast of alternative futures for community colleges–not because this can be done with any degree of certainty, but because distinguishing a few certainties from a raft of uncertainties may help clarify the most important tasks in the years ahead.

Promoting the Entrepreneurial Community College

As stressed throughout this study, the programs of the still-emerging entrepreneurial college have great promise. These programs offer new ways for a college to understand the community it serves, to learn what its needs are, and to participate in its development. Some of these activities increase both college enrollments and revenues, particularly the workforce development programs, in which colleges provide short-term training for the employees of particular corporations. The more diverse activities of economic development and community development are not so directly linked with college interests, but they do create the conditions for economic growth, social vitality, and greater equity in a community–conditions that are preconditions for continued education and training, employment, and community life.

Focusing on work force development, economic development, and community development activities like the many activities illustrated in Section One by the seven colleges participating in the study, creates an extensive agenda of possibilities for colleges to pursue. However, if the entrepreneurial college is viewed as a process for keeping a college connected to its community, then different issues arise. An obvious question is whether colleges plan which they will pursue–based, for example, on the needs of the local community, on a careful calculation of their comparative advantage in a particular market, on their strengths and weaknesses, on the nature of state funding, and on the role entrepreneurial activities can play in strengthening regular programs. Several of the seven colleges studied have developed careful planning processes to decide what educational activities to pursue They conduct frequent environmental scans and do market research to determine the direction of labor force and community needs and then decide how to fill those needs. Indeed, some of the activities of economic and community development, participation on community boards and task forces, cooperation in local planning activities, and providing certain kinds of research for community planning, in themselves provide the information necessary for effective planning.

Once having identified the local needs, such planning efforts can guide decisions on how to meet these needs. The unofficial motto of Sinclair Community College, "Find the need and endeavor to meet it," reflects this view of the process; as one administrator commented:

> A constantly changing environment requires the entrepreneurial college to plan in response to market information. We can all benefit from more and better strategic planning . . . environmental scans, market research, and initiatives for action are a few examples of ongoing positioning to meet changing market needs.

The activities of the Southeast Michigan Community College Consortium and the participation of Macomb Community College with private providers in its region provide another example of trying to meet needs in the best possible way. These efforts try to connect the provider with the existing expertise to meet a particular need most effectively, rather than having all providers duplicate facilities and programs.

However, some colleges are more opportunistic in their approach to workforce and economic development. These institutions may take advantage of invitations to participate in community forums and employer programs, but they frequently do so without any clear planning or guidelines regarding which opportunities they should pursue. What difference does it make for colleges to pursue entrepreneurial activities in opportunistic or idiosyncratic ways, rather than as a result of careful planning? From a conventional institutional perspective, rational planning would be desirable, and consideration of all options–with full information about their likely effects on the rest of the college–should be the norm. But the real point of more careful planning is that it could widen the scope of activities that community colleges could consider. The opportunistic approach is reactive and responds only to opportunities as they present themselves. The planned approach is more proactive, since it identifies opportunities and sorts the worthwhile activities from those that make little sense given the competitive advantages of a particular college. In addition, the planned approach could anticipate the problems and tensions that now arise between the entrepreneurial college and more established credit programs of the regular college and could work to make these two components of the comprehensive community college complementary rather than antagonistic.

Integrating the Regular and the Entrepreneurial College

There are many ways in which the regular and the entrepreneurial colleges are complementary. As one vice president noted:

> Industrial networks strengthen and expand other college initiatives. For instance, the college conference facility hosts clients for customized training so that faculty can then recruit the firm for further training. Seminars of new technologies and careers are directed to parents of tech-prep students, bringing parents up to speed on workplace changes at the same time students explore careers, again using the conference facility. The school-to-work program finds slots for work-based education with industrial network members, who often then hire the students permanently. We work to get industrial network employers appointed to the newly created Workforce Development Board, so that small- and medium-sized firms are represented along with large firms. And also, firms in the network tend to support college millage campaigns. . . We also find that the economic reports we publish have a dual benefit–they convey useful information to city policy makers, and learning to gather and interpret the information is valuable for college faculty and administrators.

Workforce and economic development depend in large part on the reputation, the expertise in occupational teaching, and the visibility of the regular college, especially when the college performs a convening function. Often, the entrepreneurial college takes advantage of overhead costs paid by the college or of the funding that comes by virtue of its public status. Many courses in workforce development build on courses in the credential programs or modify them only slightly. In turn, there are many ways the entrepreneurial college aids the regular college. The programs of community development and workforce development provide exposure to the college by many workers and community members who can then enroll on their own, although the magnitude of these transfers is not generally unknown. Participation in customized training helps faculty keep up to date and allows them to develop curriculum materials useful in credit programs. Customized training also attracts part-time instructors to the college, some of whom migrate into part-time instruction or full-time teaching in credential courses. And while customized training often builds on regular courses, the process can work the other way around as well. For example, a division dean reported that the math department chair revised all credit-based classes after teaching customized courses for business and industry to incorporate the kinds of math and problem solving found more commonly on the job.

As the entrepreneurial college continues to expand, the challenge is to find mechanisms to make the two key elements of the comprehensive college complement one another. These are activities which the seven colleges surveyed have only begun to explore. Nonetheless, a number of practices have begun to emerge which could provide the basis for greater cooperation between the entrepreneurial and regular college.

Use of College Faculty. Many colleges try to use regular faculty for workforce development efforts. For example, Sinclair has an unwritten good-faith policy to use full-time faculty for Corporate and Community Service and for the AIM (Advanced Industrial Manufacturing) centers. These individuals benefit directly from learning about the unmet needs of industry, changing technology, and work organization. Sometimes they use off-the-shelf materials from credential programs, although more often they develop new or customized teaching materials. In turn, they can sometimes incorporate new materials into other courses. The use of the same individuals in both credential and customized programs, therefore, facilitates the interchange of information.

Faculty recruiting methods can also contribute to bridging the regular and the entrepreneurial college. Individuals who have come from business and industry–as most occupational instructors have–and who have maintained their contact with the field, are more likely to participate in workforce development. On the academic side where experience in business is less likely, hiring committees can seek out instructors who want to participate in novel teaching settings and innovative programs–whether these are learning communities or workforce development efforts.

However, on many campuses there are institutional barriers to faculty participating in both credential programs and workforce development. In North Carolina, the state subsidy differential which pays two-thirds as much for noncredit courses makes it difficult to hire regular faculty. At Central Piedmont Community College, only 5 to 10 percent of customized instruction is done by full-time faculty due to scheduling problems, as well as to the wage differential. At Sacramento City College, faculty are limited by policy in their ability to teach additional classes. In some colleges the salary scale is lower for short courses, and faculty with full regular teaching loads may find the pay insufficient. In these cases there is little exchange, and workforce development efforts are likely to be completely independent of regular credential programs.

Enhancing Faculty Flexibility. In part, the inflexibility of faculty reflects a professor's role at four-year colleges. Macomb has begun to think of a different way of structuring a faculty member's position, proposing "platform teams" of faculty who are responsible for a 40-hour work week rather than a fixed number of courses. Within this time commitment, faculty can allocate their time more flexibly and carry out a range of tasks that are typically not a specified part of their current job descriptions, maintaining relationships with employers, for example, or counseling students, or doing placement. The shift may be voluntary, but it will be institutionally encouraged:

> We're going to put our institutional resources into these platforms. You want to work 20 hours a week? We'll guarantee these jobs as long as the people are there; but if you want to be part of the action with us, you come over here [to platform teams]. I think the union is almost ready to accede to that because the leadership knows [that these people working 40 hours a week will develop] the innovation that will keep the classes going.

Though not yet developed, these platform teams provide a model where the role of community college instructors is distinctive: they follow neither the four-year college approach nor the high school model. Such a model should help heal the rift between working in the inflexible regular college and the innovative entrepreneurial college.

Eliminating the Credit/Noncredit Differential. Central Piedmont has begun to advocate eliminating the funding and regulatory differences between credit and noncredit courses. Such a change would facilitate students moving between the two types of programs and would also enable faculty to teach in both program areas more flexibly. As a state official in North Carolina described the rationale for having the same funding policy for credit and noncredit courses:

> Courses are not as distinct as they once were, and the recognition of that is something that we're looking forward to reviewing. Once we get to level funding, then it won't make any difference whether a student's intent is for a degree or a nondegree program. It doesn't matter; they're all the same.

Until this differential can be eliminated, however, "credit is a priority," as another dean put it, largely because it is reimbursed at a higher rate.

Joint Student Services. At Sinclair Community College, career placement services work with all types of students–with students enrolled in credential programs, with those in short-term job training for clients in JTPA and welfare programs, and with individuals enrolled in customized training. The services include not only providing information about job possibilities in the area, but also counseling about the requirements for various kinds of jobs–including information about whether students' academic and occupational skills are sufficient for the occupations they would like to enter.[31] When such a service is provided to employees enrolled in customized training, it provides a bridging mechanism between the short-term, job-specific requirements of employers and the desire of some employees to develop more sophisticated abilities for future advancement. Such counseling services also provide a route for individuals in customized training to find their way into credential programs.[32]

Related services that also help bridge regular and entrepreneurial programs are variously called student development or opportunity centers. Community colleges in North Carolina include state-funded student development centers, which help integrate job-training clients into the college. These centers typically support student progress in a variety of ways: academic advising and career counseling; assessment, tutoring, or referral to other remediation programs as necessary; help with financial aid; and job placement. These centers provide information both to students in credential programs, as well as individuals in workforce development programs. In addition, they can provide information back to the institution about the needs of individuals that may not be met through customized training.

Joint Advisory Committees. Another potential link between credential-oriented programs and workforce development programs are advisory committees. Most colleges have advisory committees for their occupational programs and different advisory committees for customized training. However, relatively few colleges encourage employers to advise academic faculty on course content or competencies. Sinclair, for one, uses a DACUM process for this purpose. If a single joint committee served both purposes, then department heads and faculty could hear about the most pressing needs of employers and the new developments for which they lack training. Conversely, those creating short-term specific training for particular employers could hear the pressures from employers–or from employers in larger corporations, or those concerned with more advanced positions–about the more general and higher-order competencies that workforce development programs are not providing. It is important not to reduce the flexibility and speed of response of workforce development by building in ponderous consulting requirements, but joint advisory committees could facilitate communication among the various programs of the comprehensive community college. Joint advisory committees could also address the emerging cluster of occupations that are multidisciplinary, such as media design that incorporates art, computer, and business skills.

Instructional Centers. The community college prides itself on being a "teaching college," and many individual instructors are exemplary teachers. In addition, some community colleges have made a series of institutional commitments to improve the quality of teaching, focusing many of their policies, as well as the attention of administrators, on the improvement of teaching. These colleges have invariably included teaching centers as part of their efforts. Such centers provide ongoing staff development (rather than one-shot workshops) about teaching methods, mentorships, seminars for new instructors, minigrants for curriculum innovation, curriculum and resource materials, and other sources of support for the quality of teaching.[33] Sometimes states fund such centers. Minnesota has a series of state-funded centers, and Illinois now supports 12 such centers within its 49 community colleges.

Many problems that influence teaching in the regular college also affect teaching in workforce development programs. Typically, workforce trainers come from business and industry with subject-matter knowledge but no background in teaching. They are left to develop their own methods by trial and error and receive no training to meet the enormous complexity of occupational teaching (Achtenhagen and Grubb forthcoming.) However, the same instructional centers established for their regular faculty could be used at modest additional cost for the faculty in workforce development programs. This would provide a resource that now does not exist for these nontraditional program instructors to consider alternative approaches to teaching, the new ways they can present their subjects, and various techniques for assessing student learning.[34] The very presence of such instructional centers would acknowledge that the *quality* of teaching is important in short-term training and customized programs. And instructional centers would provide yet another mechanism of information flows between the regular college and the entrepreneurial college, allowing instructors and administrators alike to see the common issues raised throughout the community college.

Sinclair provides an example of what an instructional center can accomplish. In the past, faculty have needed resources to design customized courses for employers, but resource limits forced them to repackage existing courses when more thorough changes were really necessary. But, as one dean explained, "Repackaging was not enough." The college obtained an NSF grant to revise and modularize its curriculum and has now established a Center for Interactive Learning to facilitate the improvement of courses and programs. Such instructional centers could help instructors transform existing courses to be more effective for particular employers and at the same time support regular academic and occupational instructors.

Physical Location. Several of the colleges involved in this study are relocating their contract education programs into separate buildings, which gives workforce development its own identity and allows it to charge for overhead costs more precisely. But the physical separation of workforce development from the regular college is more than symbolic. This will make it more difficult for students in various programs to mingle and to see the other alternatives offered by the college, and it is likely to increase the separation of faculty and administration. From the perspective of integrating the regular and the entrepreneurial college, a better solution might be to have physical facilities that are accessible by workforce development, academic, and occupational programs, allowing a free flow of students and staff and signifying the integration of different purposes.

Integrated Administration. Several community colleges have integrated the administration of credential and workforce development programs. Central Piedmont, for example, is incorporating continuing education into mainstream departments, with the goal of "infecting them [traditional degree divisions] with the entrepreneurial disease." The hope is that continuing education instructors will help regular instructors understand the need to generate dollars and to evaluate programs on the basis of costs and benefits to the college. In addition, continuing education faculty are skilled in assessing community needs through focus groups and interviews and experienced in configuring courses to meet constituent needs–areas in which regular faculty need information and motivation. A single dean is in charge of both corporate and continuing education, which provide credit and noncredit courses for a range of students, as well as customized corporate training. Such an integrated administration allows information about both types of activities to be shared, and, in theory, allows the institution first to understand and then to resolve common problems, sources of friction or destructive competition, and institutional barriers to integration such as restrictions on faculty participation in workforce development.

Integrated Funding. The division of funding between the regular and the entrepreneurial college is a final tension that must be resolved. Currently, the division of any revenue surplus generated by workforce development activities is a matter of some debate, and this needs to be addressed in all institutions or it will continue to be a sore subject. But the real funding issue is more subtle. Restrictions on funding credential programs have caused colleges to turn increasingly to part-time instructors; but part-time instructors are rarely able to participate in the life of the institutions to the same extent that full-time faculty can. In addition, when a college increases the numbers of part-timers, the responsibilities of full-time faculty increase as well. Full-timers have to maintain the institutional fabric of the regular college as well as supervise the increased numbers of part-time faculty, and their abilities to develop initiatives within the entrepreneurial college are restricted as a consequence. As one vice president commented about the current efforts to knit the two components of the community college together, "While that opportunity is there, it may be snatched away from us by financial considerations." The shift to using more part-time faculty in both the regular and the entrepreneurial colleges has left fewer individuals who can bridge both programs and work with both parts at the college simultaneously. Such individuals are important and need budgetary support to be able to serve their connecting role effectively.

Another tactic to induce cooperation is to share the costs of expensive equipment and facilities. As one example, Central Piedmont supported a new CAD lab with funding from both continuing education and credential programs; each uses the lab about half the time. This approach is spreading within the college. One dean described the advantages:

> We're getting ready to do similar deals like that. Another thing would be to run a self-supporting class and then take the money and split it 50-50. The curriculum side of the house would use their share of–I don't want to use the word profit–surplus over expenses to buy software and things that are just killing us now costwise. If you get people to trust each other, you've got a pretty good situation: it's a win-win situation for both sides of the house.

The solution to the ever-vexing problem of funding is not completely apparent. However, one step is to make the regular and the entrepreneurial college fiscally interdependent. It is appropriate to share revenue and to have any surplus from one side of the college be available for the other. The overall college suffers if, for example, the regular college is weakened by fiscal pressures while the entrepreneurial college prospers–and comprehensive community colleges need to take steps to prevent such disparity, including reallocating revenues.

Educating Community Leaders. Another recommendation related to integrating these different functions is for community colleges to play more active roles in educating community leaders about the issues that their communities face–education reform, economic development, and community development, including the human and social issues. This would blend the educational function of the college with the community development function and provide a forum for current and prospective leaders to learn about and research collectively the issues challenging the community. This form of community development could build on the convening function of the college as well as its academic expertise and could contribute in many indirect and diffuse ways to the future well being of the community.

Reconciling Workforce Development and the "People's College." A final integration question is how can the commitment of the community college to nontraditional students–low-income and minority students, those with marginal employment, and those with poor academic preparation–be reconciled with the tendency of workforce development programs to concentrate on those individuals chosen by employers? The most obvious solution is to develop programs moving nontraditional students, including job training and welfare clients, into employment with companies that are committed to continued training, so that the community college could complete through customized training what they start in the regular college. Employers might not be open to such approaches (except when labor markets are tight), since they tend to be leery of programs cast as "social welfare" rather than profit enhancing, and colleges are not in the position to impose their own selection mechanisms on contract training. For the moment, it is suggested only that colleges look for opportunities to reconcile these two opposing commitments in hopes that other efforts to make the different purposes complementary will facilitate this reconciliation as well.

The common element in these strategies for making credential programs and workforce development programs complementary is the shared use of key resources: joint use of faculty, joint use of student services, joint advisory committees, joint use of teaching centers, and joint administration. These represent resource reorganization rather than regulatory mechanisms that might impede the flexibility of the entrepreneurial college. These recommendations facilitate the interchange of information and reciprocal benefits. The regular college can benefit from the information generated through increased contact with employers in workforce and economic development, and the entrepreneurial college benefits from the reputation and resources of the regular college. Strong entrepreneurial programs have the potential to improve the quality of regular credential programs and short-term job training alike. Regular programs of high quality, together with support programs such as student services and teaching centers, can strengthen the quality of entrepreneurial efforts. In this scenario, the different program areas of the comprehensive community college are complementary rather than antagonistic.

State Policies to Enhance the Entrepreneurial College

As clarified in Section Three, states vary enormously in their policies affecting community colleges. In many cases, policies that seriously limit the entrepreneurial college, such as the complex of regulations in California, have been implemented without much thought to the actual consequences for the entrepreneurial colleges. In other cases, policies defined for purposes of the regular college, such as definitions of students, completers, and institutional success, do not fit the emerging programs of workforce development. Even though some states (like North Carolina) have been relatively consistent in defining economic development as a goal for community colleges, others (like California) have articulated this goal but then undermined it with a confusing array of regulations that weaken the ability of colleges to create local initiatives. The most pressing need, therefore, is for states to carefully examine the impact of their policies on the entrepreneurial college and to see where policies are inconsistent or inadvertently detrimental to the desirable outcomes of the entrepreneurial college. More specifically, reviews should at a minimum consider the state's role in funding, in regulation and flexibility, in accountability, and in the balance of regulation and technical assistance. As states consider their systems of workforce development, including short-term job training and welfare-to-work programs, they need to integrate community colleges more closely into the larger complex of programs.

State Funding. As noted earlier, state funding for workforce development is quite uneven. State funding decisions are, of course, political in the deepest sense since they express values about the merits of subsidizing company-based training. It should also be noted that the United States conducts little upgrade training compared to its major competitors (Lynch 1994), and there is good reason to think that certain market failures affect corporate decisions about how much training needs to be provided for employees (Stern and Ritzen 1991). Both of these factors are reasons for government to consider increasing subsidies for training, at least under some conditions. States may therefore need to review their overall funding support for workforce development.

The form in which funding comes to community colleges is a similarly thorny issue for states to consider. The differential in funding between credit and noncredit courses, in particular, has made it more difficult for colleges to support workforce and community development activities and has sometimes led to elaborate ways of getting around funding restrictions. Some categorical programs that states have devised for economic development are biased against community colleges despite state policy that, in theory, promotes economic development through these institutions, such as in California. Such states, therefore, need to reconsider the form as well as the levels of funding they provide.

Finally, several modifications that would help integrate the regular and the entrepreneurial college call for additional funding, for example, for instructional centers or for certain student services that facilitate access for a broader variety of students.

Flexibility and Regulation. Many community colleges have complained about state regulation as a factor driving them to expand the entrepreneurial college. The specific regulations that limit flexibility vary from state to state. A regulatory audit would be appropriate in many states to help determine which of its regulations are most responsible for inflexibility and may have outlived their usefulness. This is an important aspect of integrating the regular and the entrepreneurial college, since state policies that cause colleges to be unresponsive to changing conditions may drive them to provide programs outside the normal programs of the college.

Accountability. The other side of providing state funding for workforce, economic, and community development is to exact more accountability for how funds are used. So far, states have done little to establish accountability requirements for these programs, and colleges have tended to use consumer satisfaction and repeat business as measures of success. But, as several state officials in this study acknowledged, such measures assume a great deal, and other measures could be developed to make colleges more accountable for the state revenues they spend. Doing so will require considerable deliberation at the state and local levels, because measures of accountability that are too burdensome in terms of data collection, or unreflective of the real benefits, will stifle workforce development rather than enhance its quality. But the process itself would be useful in helping to define more precisely what employers and states want from workforce development and how community colleges can best participate.

One dimension of accountability that many states have not yet considered is the basic rationale for public subsidy. While some states are clear on this point–for example, Washington's support for dislocated workers and Michigan's prohibition against using state funds for companies relocating within the state–many others have failed to distinguish forms of workforce development that merit public subsidy from forms of training that employers should support on their own. While making this kind of basic decision may be unpopular with local colleges that would like state subsidies to expand, this recommendation is consistent with the general principle of spending public funds only when there is clear justification to do so.

Balance between Regulation and Technical Assistance. It is a concern of state officials in North Carolina that their state has tended to impose regulations and accountability measures without helping colleges meet them, and this is a concern that all states should be addressing. Achieving a more even balance between technical assistance and regulation, with state agencies playing a greater role as service agencies, would be welcome in most states. Certainly this is true for policies applicable to the entrepreneurial college, but is probably true of many other aspects of community colleges. In fact, if states could articulate one simple statement of policy, it should be this: no funding without accountability; but no accountability without technical assistance.

Toward State Education and Training Systems. Many states are wrestling with the question of how to coordinate, or consolidate, or streamline, or otherwise rationalize their postsecondary education and training programs, which often have become too numerous, too overlapping, and too complex for potential students and employers to navigate. States are now experimenting with different approaches, including new activities like one-stop centers. It is too soon to know which of these approaches will be effective in providing improved services, better information, or more substantial outcomes.[35] However, one that should be considered dangerous is the approach of coordinating short-term job training and welfare-to-work programs without including community colleges, adult education, and economic development efforts–in other words, selecting a restricted set of programs for coordination. It has been argued elsewhere (Grubb 1996b) that the limited value of short-term job training and of conventional adult education can be remedied only by connecting these efforts with the more substantial programs offered by community colleges, and that colleges can serve as a critical bridge between the second-chance programs of job training, welfare, and adult education and the mainstream programs of the educational system.

As states address issues of "welfare reform," many are turning to a strategy known as "work first," trying to place welfare recipients in employment as the solution to their presumed dependency on welfare. Such states need to find sources of employment for welfare recipients, some of whom lack both the technical and personal skills to move into employment. This need can be addressed through the workforce development programs of community colleges, since the best of these have established strong connections between colleges and employers–including large mainstream employers rather than the marginal employers often associated with JTPA and the Employment Service. As a state official in Michigan remarked:

> One of the main roles that I see [community colleges] playing is in terms of connections with employers: because of the industry-focused training that they do, they have a wealth of contacts with companies. Any companies that are doing training at colleges with their employees are going to be your cutting-edge firms that are clearly investing in their employees and care about working into the future.

Exactly how these connections can best be used remains unclear, but the point is that developing state policy without considering the special expertise of community colleges is extremely unwise.

A Note on Federal Policy

The reader will note limited mention of federal policy in this report. To be sure, federal funds for vocational education have supported some initiatives that engage community colleges with secondary schools in one aspect of community development, particularly tech-prep and school-to-work efforts. With these exceptions, the seven colleges in the study were silent about the federal role. Federal policy appears to have limited impact on the new roles of community colleges.

However, federal policy could play a more central role. Several of the authors have argued for some time that federal policy unfairly neglects community colleges that tend to fall between the cracks. Legislation specifically aimed at enhancing the quality of community colleges and addressing some of their persistent problems would be more helpful than continuing to lump them with secondary schools in programs like the Carl Perkins Act supporting vocational education or with four-year colleges in others like student grants and loans (Grubb and Stern 1989; Grubb 1996a, Ch. 7).

Federal policy has usually sought either to enhance equity or improve program quality, and much could be done to pursue these two goals within the entrepreneurial college. For example, the federal government could support pilot activities that include welfare recipients and the long-term unemployed in workforce development programs, to better understand the conditions under which employers are willing to work with such groups. Given that the entrepreneurial college has the capacity to enrich conventional credential programs, Perkins funds targeting occupational education could support bridging mechanisms between the two, such as instructional centers to prepare regular faculty for teaching in workforce development or experimental student services to serve regular students, disadvantaged students including welfare recipients, and those in workforce development programs. The entrepreneurial college is both a reality and a resource, and federal policy should acknowledge and reinforce its potential contributions.

Some Directions for Research

It has proved difficult to carry out research on the entrepreneurial college. Programs open and close more quickly than they can be documented. The varied functions of the community college overlap in bewildering ways, as documented in Section One, and data systems are rarely, if ever, up to date. Furthermore, the entrepreneurial college is not especially supportive of research. The flexibility of response and market orientation of the entrepreneurial college is inconsistent with the more academic and institutional preference of carrying out extensive research before beginning new ventures, or deciding which existing ones to continue. Nonetheless, there are at least four categories of research that would benefit community colleges, particularly by helping clarify to their internal and external stakeholders what the entrepreneurial college does. This research could be carried out by institutional researchers, particularly as part of the process of generating information necessary for strategic planning; by national organizations like the League for Innovation in the Community College, the Department of Education, and the American Association of Community Colleges; and by academic researchers concerned with educational developments and their influence. Following are some of the crucial questions that need to be raised:

What Is the Magnitude of the Entrepreneurial College? Efforts to nail down the size of workforce development activities (discussed in Section One) were not particularly successful. Economic and community development, which typically take forms other than the provision of courses, are even harder to describe. Nevertheless, the size and growth of these efforts is a crucial issue, both in order to clarify where a college's efforts are going and to provide some empirical foundation for debates over the direction of colleges to both defenders and critics of the entrepreneurial college.[36] The most obvious task for research by individual colleges is to become clear about the magnitude of entrepreneurial college activities. Whether the categorization provided in Section One is right for all colleges or all states is unclear, but some kind of consistent categorization of a college's activities, and consistent reporting of enrollment, revenues by source, and other related characteristics would help clarify what colleges are currently doing.

What Is the Nature of Planning and Evaluation? If the entrepreneurial college is viewed less as a set of activities and more as a mechanism for keeping a college in contact with its local community, then the nature of planning processes becomes crucial. What kinds of environmental scans are the most productive? What do colleges most need to know about employers' hiring practices and future employment needs? How can they best learn about these issues when employers themselves are uncertain about even the near future? What are the various evaluation mechanisms that can help colleges understand local labor markets, including what happens to students after training ends, and what results do corporations get from employee training? Which of these provide the most useful information to local colleges? These kinds of research questions need to be addressed by examining the practices of a number of colleges and so are best undertaken by states or by regional or national associations of colleges.

How Effective Is Workforce Development? There is virtually no evidence about the effectiveness of workforce development, even from companies who fund such training. Colleges continue to rely on customer satisfaction and repeat business (traditional market measures) as indicators of success. The effects of economic and community development efforts, which are much more varied and amorphous, are even less well understood. There is a potentially enormous agenda of research investigating the effectiveness of various nontraditional programs. For example, what are the long-term effects on employees who go through customized training? What are the effects on the company's productivity? Which kinds of economic development efforts stimulate local growth, and which do not? Which shift the locus of activity without increasing overall output? And what kind of training merely shifts employment from one group to another without increasing employment overall? Indeed, in many cases even defining the potential outcomes and the conditions under which they might be expected to occur would be an enormous step in the right direction.

Some of these studies need to be done by employers concerned with the conditions under which further training of their workforce increases productivity. Other studies could be carried out by local colleges that are more interested in documenting to stakeholders which of their activities bear fruit over time. Still other research should be carried out by states, particularly in considering what kinds of accountability to require of workforce development programs. And yet other research is logically the purview of academic researchers, particularly studies that examine the effects of education and training in conjunction with other policies on regional growth and development–studies that are much broader than any one college can support.

What About the Quality of Instruction? One concern remains about the quality of instruction in the entrepreneurial college. Indeed, this is an important issue for all nontraditional settings in which instruction takes place, including job training programs, welfare-to-work programs, and adult education, as well as regular credential programs. It is simply not generally known whether the quality of instruction in workforce development efforts is very good–and because there are few mechanisms of evaluation or observation, most colleges do not know either. But the teaching conditions in workforce development programs are especially challenging. There is little preparation of instructors for the task of teaching. Most are hired for their subject expertise and some are employees of the company. In neither case is instructional experience or ability a major criterion for hiring. There are substantial pressures for teaching to be efficient–that is, low-cost–since companies are typically paying for at least some of the costs, and time away from employment has to be minimized. Some of the programs are conducted on late afternoon or night schedules that are not especially conducive to learning. Some of the nontraditional students in community colleges, as well as some corporate employees, are poorly prepared in basic literacy and mathematical competencies, and teaching remedial or developmental subjects is especially difficult. In addition, deciding on the appropriate balance between relatively specific skills (necessary for immediate productivity) and broader competencies and higher-order SCANS skills (necessary for high-performance companies) is always a difficult issue, and is one that often has to be resolved by individual instructors.

Given the teaching challenges inherent in the nature of workforce development, the quality of instruction should be a focus of real concern. An obvious research task would be to examine the quality of teaching that now takes place and what difference it makes to outcomes–to the amount that students learn, to their future conduct on the job, and to their opportunities for subsequent schooling and training. Then, a related analysis agenda could ascertain what kinds of policies can improve the quality of instruction without compromising the flexibility of workforce development. These areas of research might address selection mechanisms for instructors, training in teaching methods, development of curriculum materials, and instructional centers, such as those mentioned earlier in this section. This kind of research is consistent with the ideal of the community college as a "teaching institution"–an ideal that extends its concern with the quality of teaching to all the activities it supports, including those outside regular credential programs.

There are many questions that are central to the entrepreneurial college that will have to be answered if others are to be persuaded of its importance, if the most effective processes are to be developed for connecting local colleges to their communities, and if customer satisfaction is to be ensured over the long run.

Alternative Futures for the Community College

Forecasting is a precarious exercise, especially in economics and in politics–two of the most powerful influences on community colleges. Still, some sense of the future is important because it may help to identify the most critical issues rather than emphasizing fads and passing fancies. In the midst of considerable uncertainty, there are several trends affecting the entrepreneurial college about which there is broad consensus-at least at the moment:[37]

- The community college will continue to enroll many students whose academic preparation is inadequate or who have inadequate command of English and who are using the college as a route into employment. In fact, many commentators feel that the numbers of such students are likely to increase, given increases in poverty, continuing problems in many urban school districts, and constant streams of immigration. These underprepared students will contrast ever more sharply with the better educated and more experienced so often selected by their employers for training in workforce development programs because of their potential.
- The strength of the American economy will lie in its high-performance corporations–corporations that are characterized by a skilled and flexible work force possessing higher-order competencies, including communications skills, initiative and independence, and problem-solving abilities. Increasingly, vigorous international competition will drive companies to adopt the technologies and organizational structures of high-performance organizations. Large numbers of relatively unskilled jobs will continue to exist, but these are not positions to which most individuals will aspire because wages are low (and decreasing in real terms) and employment is unstable. Community colleges, like other educational institutions, will therefore need to prepare their students for high-performance workplaces by staying alert to changes in employment requirements and translating such changes into the curriculum.
- Public support for education will continue to be embattled. On the one hand, public funding for education, particularly postsecondary education, is among the most generous of any country. On the other hand, neither federal nor state revenues are as plentiful as they used to be, and faith in government is markedly weaker than it was when community colleges were first established. Increased demands for accountability, particularly from public institutions, reflect this lack of faith.

If these trends continue they could continue to fragment the community college in several ways. The regular college could become the place where underprepared individuals come for remedial/developmental education, which is so difficult and time consuming that it often supplants the teaching of higher-order competencies. The entrepreneurial college would then be the place where those who have already passed muster with employers are taught new and different skills as the need arises. The regular college would be increasingly subject to accountability standards–designated completion, placement, transfer rates, and earnings targets–which it would have increasing difficulty meeting because of the underprepared nature of students enrolled and the competitiveness of the labor market. In contrast, the entrepreneurial college would thrive because competitive conditions require companies to upgrade their workers more and more. The regular college would be pressured to meet the needs of community development, but with no funding except that which supports regular credential programs. The entrepreneurial college would escape such obligations because of its economic focus, and community development would slowly be squeezed out of existence. This is a future in which the fragmenting tendencies of the larger world–the increases in wage and employment inequality, the difference between a limited public sector and an expanding private sector, the contrast between private wealth and public squalor (as John Kenneth Galbraith expressed it), and the greater variation among prospective students–fragment the community college as well.

But, as has been stressed throughout this report, there is an alternative. A greater integration between the regular and the entrepreneurial college can provide benefits for both. The entrepreneurial college can provide richer connections to the community and to the private sector, keeping the regular college up to date with employment trends, while the regular college continues to provide the educational foundation, the community visibility, and the convening function necessary for the entrepreneurial college to thrive. This kind of institution can remain responsive to changes and sensitive to markets–but it does so by being a coherent and flexible institution, not by fragmenting into specialized and noncommunicating parts. Thus, integrating the entrepreneurial college and the regular college clearly offers the strongest future for the comprehensive community college.

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[31] This type of job placement concentrates on jobs after leaving college, not on "stay-in-school" or temporary jobs designed to support students while they are enrolled. Many placement centers seem to concentrate on the latter kind of low-paid, temporary work (Grubb 1996a, Ch. 6), but these efforts cannot help move individuals into the right kinds of programs.

[32] Currently, no college collects information on the movement of individuals between the two types of programs, so it is impossible to know how common it is. Given the independence of workforce development from credit programs, it seems unlikely that such transfers are very common.

[33] These observations about teaching are based on the research cited in footnote 14 above. On teaching centers see also Lauridsen (1994).

[34] The same problem is anticipated in both the entrepreneurial and the regular college: the instructors likely to participate in the teaching center activities would be those who are already the best instructors. Getting the instructors who need assistance to participate is difficult, but it cannot happen if institutional mechanisms to emphasize the importance of teaching are lacking.

[35] The ongoing research mentioned in footnote 22 will provide more information about these state initiatives.

[36] The patterns found in Section One–with workforce development a substantial but not overwhelming part of most college's efforts, in the range of 10 to 15 percent of enrollments and revenues–suggest that this is true for many colleges. Such data would clarify both the importance of these activities and the centrality of conventional credential programs-as a way of indicting that colleges can afford to neglect neither the regular nor the entrepreneurial college.

[37] This section is drawn in part from Grubb (1996a), Ch. 8.

REFERENCES

Achtenhagen, F. and Grubb, W.N. "Vocational and Occupational Education: Pedagogical Complexity, Institutional Indifference," *Handbook of Research on Teaching*, Fourth Edition, (Virginia Richardson, editor). Washington D.C.: American Educational Research Association, 1998 (forthcoming).

Anderson, C. *Welfare Reform in the California Community Colleges*. Prepared for the Working Group for Job Training, Welfare Conference Committee by the Chancellor's Office, California Community Colleges, April 7, 1997.

Banach, W. *Critical Issues Facing America's Community Colleges, 1994-95*. Warren, MI: Macomb Press, Macomb Community College, 1994.

Betts, J., and McFarland, L. "Safe Port in a Storm: The Impact of Labor Market Conditions on Community College Enrollments," *Journal of Human Resources*, Vol. 30, No. 4, (1995), pp. 741-765.

Bragg, D. *Alternative Approaches to Outcomes Assessment for Postsecondary Vocational Education*. MDS-239. Berkeley: National Center for Research in Vocational Education, University of California, Berkeley, (December 1992).

Bragg, D., and Jacobs, J. *A Conceptual Framework for Evaluating Community College Customized Training Programs*. MDS-175. Berkeley: National Center for Research in Vocational Education, (November 1991).

Cohen, A. "Counting the Transfers: Pick a Number," *Community, Technical, and Junior College Times*, (April 24, 1990).

Commission on the Future of Community Colleges. *Building Communities: A Vision for a New Century*. Washington, D.C.: American Association of Community and Junior Colleges, 1988.

Doucette, D. *Community College Workforce Training Programs for Employees of Business, Industry, Labor, and Government: A Status Report*. Mission Viejo, CA: League for Innovation in the Community College, (March 1993).

Eaton, J. *Strengthening Collegiate Education in Community Colleges*. San Francisco: Jossey-Bass Publishers, 1994.

Friedlander, J. *Using Wage Record Data to Track the Post-College Employment and Earnings of Community College Students*. Santa Barbara, CA: Office of Academic Affairs, Santa Barbara City College, (Fall 1993).

Grubb, W. N. *Finding an Equilibrium: Enhancing Transfer Rates while Strengthening the Comprehensive Community College*. Working Papers Vol. 3, No. 6. Washington, D.C.: National Center for Academic Achievement and Transfer, (September 1992).

Grubb, W. N. *Working in the Middle: Strengthening Education and Training for the Mid-Skilled Labor Force*. San Francisco: Jossey-Bass Publishers, 1996a.

Grubb, W. N. *Learning to Work: The Case for Reintegrating Job Training and Education*. New York: Russell Sage Foundation, 1996b.

Grubb, W. N., et al. *Honored Even in the Breach: The Nature of Instruction in "Teaching Colleges."* Draft manuscript. Berkeley: School of Education, University of California, (forthcoming).

Grubb, W. N., Badway, N., Dickens, W., Finkelstein, N., Hoynes, H., and Stern, D. *Choosing Wisely for California: Targeting the Resources of the Employment Training Panel*. Berkeley: National Center for Research in Vocational Education and Center for Labor Education and Research, (October 1993).

Grubb, W. N., Badway., N., Bell., D., and Kraskouskas, E. *Community College Innovations in Workforce Preparation: Curriculum Integration and Tech-Prep*. Mission Viejo: League for Innovation in the Community College, 1996.

Grubb., W.N., and Badway, N. "Linking School-Based and Work-Based Learning: The Implications of LaGuardia's Co-Op Seminars for School-to-Work Programs." Berkeley: School of Education, University of California, for the Office of Technology Assessment, U.S. Congress, (June 1995).

Grubb, W.N., and McDonnell, L. "Combating Program Fragmentation: Local Systems of Vocational Education and Job Training," *Journal of Policy Analysis and Management*, Vol. 15, No. 2, (1996), pp. 252-270.

Grubb, W.N., and Stern, D. *Long Time A'Comin': Options for Federal Financing of Postsecondary Vocational Education*. Berkeley: MPR Associates, for the National Assessment of Vocational Education, U.S. Department of Education, 1989.

Holzer, H., Black, R., Cheatham, M., and Knott, J. "Are Training Subsidies for Firms Effective? The Michigan Experience," *Industrial and Labor Relations Review*, (forthcoming).

How Workers Get Their Training: A 1991 Update. Bulletin 2407. U.S. Department of Labor, Bureau of Labor Statistics, (August 1992).

Jacobs, J., and Teahen, R. *The Shadow College and NCA Accreditation: A Conceptual Framework*. Warren, MI: Macomb Community College, (January 1997).

Kantor S. "A Practical Guide for Understanding Customized Workforce Training," *New Directions for Community Colleges*, No. 85. San Francisco: Jossey-Bass, (Spring 1994), pp. 1-11.

Labaree, D. "Public Goods, Private Goods: The American Struggle over Educational Goals," *American Educational Research Journal*, Vol. 34, No. 1, (Spring 1997), pp. 39-81.

Lauridsen, K. "A Contemporary View of Teaching and Learning Centers for Faculty, (Terry O'Banion, editor), *Teaching and Learning in the Community College*. Washington D.C.: American Association of Community Colleges, 1994.

Lynch, L. *Training and the Private Sector: International Comparisons*. Chicago: University of Chicago Press, 1994.

Lynch, R., Palmer, J. C., and Grubb, W. N. *Community College Involvement in Contract Training and Other Economic Development Activities*. Berkeley: National Center for Research in Vocational Education, University of California at Berkeley, 1991.

McCabe, R. *The American Community College: Nexus for Workforce Development*. Mission Viejo, CA: League for Innovation in the Community College, (February 1997).

McDonnell, L. M., and Zellman, G. L. *Education and Training for Work in the Fifty States: A Compendium of State Policies*, (N-3560-NCRVE/UCB). Berkeley: University of California, National Center for Research in Vocational Education, 1993.

Moore, R., Blake, D., and Phillips, G.M. *Accounting for Training: An Analysis of the Outcomes of the California Employment Training Panel Programs*. Northridge, CA: California State Northridge, School of Business Administration and Economics, (July 1995).

Secretary's Commission on Achieving Necessary Skills (SCANS). *What Work Requires of Schools: A SCANS Report for America 2000*. Washington, D.C.: U.S. Department of Labor, (June 1991).

Stern, D. and Ritzen, J. M. M., (editors). *Market Failure in Training?* New York: Springer-Verlag, 1991.

Van Horn, C. *Enhancing the Connection between Higher Education and the Workplace: A Survey of Employers*. Denver: State Higher Education Executive Officers and Education Commission of the States, (October 1995).

Walker, R., and Greenstreet, D. "The Effect of Government Incentives and Assistance on Location and Job Growth in Manufacturing," *Regional Studies*, Vol. 21, No. 1, (1991), pp. 13-30.

Zeiss, T., et al. *Developing the World's Workforce: An Agenda for America's Community Colleges*. Washington D.C.: Community College Press, American Association of Community Colleges, 1997.

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