

June 1997
Unabridged version.

**WORKFORCE, ECONOMIC, AND COMMUNITY DEVELOPMENT:
THE CHANGING LANDSCAPE OF THE
"ENTREPRENEURIAL" COMMUNITY COLLEGE**

W. Norton Grubb, Norena Badway, and Denise Bell
University of California, Berkeley

Debra Bragg and Maxine Russman
University of Illinois at Urbana-Champaign

A Report of the
The National Center for Research in Vocational Education
The League for Innovation in the Community College
The National Council on Occupational Education

This research has been supported by the U.S. Department of Education, the Office of Vocational and Adult Education, through a grant to the National Center for Research in Vocational Education, the University of California at Berkeley.

**WORKFORCE, ECONOMIC, AND COMMUNITY DEVELOPMENT:
THE CHANGING LANDSCAPE OF
THE "ENTREPRENEURIAL" COMMUNITY COLLEGE**

Table of Contents

Acknowledgements	iii
Executive Summary	v
Introduction	1
Section One: Mapping the Entrepreneurial Community College: Definitions and Examples	7
The Functions of the "Regular" Community College	8
The Emerging Functions of the "Entrepreneurial" Community College	13
The Real World: The Overlap of Functions	27
Defining Success in the "Entrepreneurial" College	32
How Big is the "Entrepreneurial" College?	37
Section Two: Factors Influencing the "Entrepreneurial College"	42
Influences within Community Colleges	42
Influences External to Community Colleges	47
Section Three: The Role of State Policy	53
State Funding for Workforce and Economic Development	54
State Regulations and Definitions of Success	60
Local Initiative versus State Initiative	63
The Emerging Concerns of State Officials	64
Section Four: The Potential Tensions within Community Colleges	70
Sources of Tension	70
Is Tension Harmful to the Community College?	81

Section Five: Conclusions and Recommendations	84
Promoting the "Entrepreneurial" Community College	84
Integrating the "Regular" and the "Entrepreneurial" College	87
State Policies to Enhance the Entrepreneurial College	98
Some Directions for Research	102
Alternative Futures for the Community College	107
Footnotes	110
References	114

ACKNOWLEDGEMENTS

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 as Terry O'Banion's idea 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 changes take place in economic conditions and in government policy. 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 institutions decided to examine the variety of efforts undertaken by community colleges that fall outside the provision of courses for students — efforts sometimes termed the "shadow" college, that we call the "entrepreneurial" college (for reasons we outline in the Introduction). To carry out this project, seven colleges joined with researchers from NCRVE and representatives of the League, and the plan for the study was developed 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 and John Quinley 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 Lopic-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.

W. Norton Grubb

National Center for Research in Vocational Education

Ernie Leach

League for Innovation in the Community College]

Jim Jacobs

National Council on Occupational Education

EXECUTIVE SUMMARY

INTRODUCTION

The community college has never been a traditional educational institution. Its missions and purposes have been evolving constantly, particularly in the last three decades as occupational preparation, developmental/remedial education and community services have expanded its role as a community-serving organization. Yet other roles have recently emerged that, while they are related to the occupational mission, are quite different from these previous purposes. The ones we emphasize in this monograph – workforce development, economic development, and community development – are difficult to understand even within the context of a non-traditional educational institution, for a number of reasons.

A primary confusion about these three activities 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 an additional mission of colleges in some states, terminology is used in myriad ways to explain various college activities – some traditional and others quite innovative. Many colleges use the terms "community development" and "economic development" interchangeably; others lump together activities that we have distinguished in two separate categories as "workplace development" and "economic development". This has created a confusing situation described by one state economic development officer:

I think one 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 monograph, then, is to differentiate among these three forms of development, recognizing that in the real world this simple division cannot always be

maintained. Overlap among these three roles is the rule rather than the exception — among goals, personnel, curriculum, funding and sometimes even students.

A second purpose of this 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 that we describe take place in formats quite different from conventional courses: the activities they offer are much more varied, the "clients" they serve are more extensive and include a variety of employers and community groups — instead of, or in addition to, students. These new roles of the community college are more entrepreneurial, more market-oriented, less subject to conventional accountability measures. Often, these roles *create* demand for services, rather than simply responding to the demands 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 roles have created an institution within the college, operating with a new culture, 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, because it has been in the shadow of the more conventional programs of the community college (Jacobs and Teahen, 1997; Banach, 1994). We label this institution within the community college the "entrepreneurial college"; while no one label is adequate to the variety of activities, this term better captures the entrepreneurial spirit and market-oriented drive behind these activities. In addition, describing a broad range of such activities — as we do in Section One — may stimulate other colleges to identify such opportunities for themselves.

A third purpose is to clarify the organizational issues involved in the expansion of these new roles — the benefits but also the difficulties, the new importance they 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 (like employers and community groups) that have not traditionally been seen as clients. On the other hand, changes in roles are not always easily accomplished, and they have sometimes resulted in institutions that are segmented and bewildering, instead of the coherent communities of learners for which many have wished. (For example, the expansion of occupational programs in some colleges has created a bifurcated institution reflecting the status differences of academic and occupational education, and the expansion of remedial/developmental education has sometimes been threatening to the academic and "collegiate" identity of the community college.) And so we identify those forces that have led to the expansion of the "entrepreneurial" college, some of them caused by forces outside the institutions but some of them reflecting the limitations and rigidities of conventional practices. Similarly, we identify the tensions between these entrepreneurial functions and the "regular" college. There is much to celebrate in these expanded roles, but there is too much at stake merely to celebrate these accomplishments: in many ways, community colleges are at a potential turning point.

This study differs from previous efforts to describe different types of workforce and economic development.¹ Rather than survey a large number of colleges, we have turned to a "purposive sample" of seven community colleges, to understand in greater detail the activities related to these three forms of development, the reasons these activities have expanded, the tensions they have caused within the colleges, and the role of state policy in promoting or hampering such efforts. We began this research with a conference at which representatives of the seven colleges helped us design the research and defined the issues as they saw them. We then interviewed the relevant administrators and support personnel they identified, collected as much data and other institutional information as we could, and interviewed the appropriate state officials in charge of both community colleges generally and of particular state programs related to

workforce development.² This has been, therefore, a highly collaborative piece of work, possible only with the cooperation of these seven colleges. The result has been a deeper understanding of the landscape of entrepreneurial initiatives compared to what we can learn from surveys.

The seven colleges participating in this study are not, of course, a random or representative sample of institutions. They include:

- Black Hawk College, located in northwestern Illinois, serving neighboring urban and rural areas in the Moline region;

- Central Piedmont Community College, serving both urban and rural 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 just east of Detroit, Michigan;

- North Seattle Community College, in a suburban area close to the University of Washington;

- Sacramento City College, in the center city of a growing region near the capital of California;

- Sinclair Community College serving Dayton, Ohio, and the surrounding industrial communities.

The seven colleges vary substantially, from urban to suburban to rural, in the composition of their students, in the geographic regions of the country, and in the amount of economic initiatives undertaken; they provide a snapshot of the varying landscape of community, workforce and economic development in its various forms across the nation. They were interested in participating in this collaborative research for the insights it might provide them, and several were already active in national

organizations such as the League for Innovation in the Community College and National Council on Occupational Education.

Throughout, we have followed a particular convention: we have named specific colleges (and states) when we describe their successes, but we provide them anonymity when we discuss the conditions that are less exemplary. We do this because, in the interests of getting an accurate picture, we guaranteed anonymity to all those we interviewed. In addition, embarrassment of individuals serves no purpose; where we identify tensions or problems, we are generally interested in *institutional* or *structural* issues, those that emerge from the very nature of providing new services, under market conditions, to new clients ranging from employers to community groups.

As we clarify in Section One, three emerging roles for community colleges – workforce, economic, and community development – 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 our study, are quite new; in fact, they are in such transition that they are sometimes difficult to capture, but they are easily distinguished from the more traditional roles of the community college in education and training. In Section Two we identify internal and external forces that have influenced the development of these new roles, with special attention to campus and state policies (developed more fully in Section Three) that facilitate their development as well as those that hinder it. In this transition, tensions with the "regular" college have developed, as we clarify 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. In addition, the community college could potentially split into two rather different institutions, the "regular" college adhering more clearly to the norms of traditional educational institutions, while the "entrepreneurial" college acts more like a business, taking risks to bolster the "bottom line", valuing innovation over coherence, oriented to

the employer as "client" and sometimes less concerned with students. But this split need not develop, and so in the Conclusion (Section Five) we offer ideas for making the "regular" college and employer-serving initiatives complementary to one another – fulfilling the ideal of *community* that has always been part of the community college vision. As the Commission on the Future of Community Colleges (1988, p. 7) stated a decade ago,

We define the term "community" not only as a region to be served, but also a climate to be created.

This ideal has the ability to continue the evolution of the comprehensive community college, expanding its roles without eclipsing its earlier missions.

SECTION ONE

MAPPING THE ENTREPRENEURIAL COMMUNITY COLLEGE: DEFINITIONS AND EXAMPLES

Community colleges now offer a bewildering variety of programs. Our first task is therefore to create some clarity, to categorize these offerings so that we can more clearly understand what colleges are doing. Our 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 these purposes overlap in many ways. In fact, this overlap is precisely what makes the various entrepreneurial initiatives so difficult to understand and to research. The three emerging functions of the expanded college — workforce, economic, and community development — vary in their purpose, in the typical activities they undertake, in the sense of who the "client" is; they generally vary in how they are funded, though that depends on the state. None of them is wholly "traditional", though colleges vary in the degree to which their 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 accountability — for example, completion rates, or graduation rates — while others substitute more market-oriented measures of success, like placement rates, customer satisfaction, profitability or expanding market share. This not only complicates the problems of accountability, of knowing what these different programs accomplish, but it makes the task of counting much more difficult — because in our educational system, most community colleges count only that for which they have to account. So, when we

try at the end of this section to measure the magnitude of these three roles, our efforts are not particularly successful; not only are the data systems not yet in place to allow us to measure the "entrepreneurial" college very well, the very notion of size proves to be difficult to define.

For our purposes, it is useful to distinguish six distinct functions in the colleges with which we collaborated on this study. The first three functions are present in nearly every college, and are typically delivered in organized *courses* and *programs* of study. In this monograph, we emphasize workforce development, economic development, and community development, which are typically delivered in many different ways including services that do not look like courses at all. We emphasize the entrepreneurial college not because we believe it is intrinsically more valuable than education for credentials or community service, but because it is still emerging; while it has political support and high visibility, in some institutions its purposes are still developing.

The Functions of the "Regular" Community College

What we call the "regular" or traditional community college is not a traditional education institution at all, since it serves so many non-traditional students in a variety of ways. However, it has certainly become familiar to the public at large, and its dominant mode of operation — providing courses that meet in a regular format, usually based on semesters or quarters — has developed from other educational institutions. We find it useful to distinguish three different functions within the "regular" college.

Education for credentials: The most familiar offerings in community colleges are programs leading to credentials — credit courses for one-year certificates or two-year associate degrees, and non-credit courses that correct basic skill deficiencies. They are part of the well-developed "pipeline" of the educational system. Students can enter them from high school, or with the equivalent of high school preparation. They can lead

to subsequent enrollment in four-year colleges since most courses are credit courses, defined in most states as counting toward baccalaureate requirements³ (see especially Eaton, 1994, on the "collegiate" function of the community college). Credential programs typically consist of courses meeting three hours per week, in conventional semesters or quarters – though some academic and occupational courses have different schedules because of their workshops. The "client" is the student, and their enrollments determine the direction of many community colleges. These familiar programs are funded largely by student tuition, local taxes and state governments; 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 are typically provided in conventional courses on the usual schedule, even though they are often non-credit courses that do not count toward transfer. And, even though education for credentials is usually organized into one or two year programs, students often convert them into shorter, more specific programs by the simple expedient of enrolling only for as long as they think is necessary.

There is some evidence that, at least for certain purposes, credential length programs are the most valuable for students. As the dean of business and engineering technology at Central Piedmont reported of associate degrees in engineering and computer science, "Those degrees are almost exactly what employers want." In addition, the statistical evidence indicates that completing certificates and associate degrees provides the greatest increases in earnings to students, while those who complete coursework without credentials have much smaller and uncertain benefits (Grubb, 1996a, Ch. 3). But, as we shall see, many employers (and perhaps students) don't care about credentials at all, and so the credential function of the "regular" college ends up being eliminated in most offerings of the "entrepreneurial" college.

Although education for credentials is the heart of the "regular" college, the overlaps between it and the types of employer-related education and training that

occurs in the "entrepreneurial" college become apparent at first glance. Education for credentials encompasses courses of study with explicitly avocational goals (liberal arts) as well as with employment-related purposes (occupational education); the courses may earn credit for transfer, or may be non-credit. As we shall see, the goals and content of course offerings or programs may be quite similar, regardless of whether a course is non-credit, credit, vocational or avocational.

Workforce preparation for specific populations: Many colleges set up special programs for specific groups of students: short-term training or remediation programs for JTPA or welfare clients, specific programs for dislocated workers, and the like. The programs differ from "regular" credential-oriented programs because they are shorter, usually non-credit, and often are provided in special formats – more intensive, for example, or help at particular hours so that working adults or parents can attend. These education and training programs are usually established with special funding – for example, contracts from JTPA or welfare programs, or state grants for dislocated workers. Whether or not they also receive the funding provided regular students, through the state's FTE payments, depends on the state. The "clients" are the students or the clients enrolled, through state agencies providing funding often become the most immediate client, 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 all intended to enhance employment – rather than, for example, serving avocational purposes like community service courses. These are sometimes given as credit courses, but it is more usual to offer them as non-credit courses – on the belief that employers don't care about credits. As the director of JTPA programs serving the Central Piedmont area noted:

Credits are irrelevant. What I'm hearing back consistently from these advisory committee 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 we discovered many examples of colleges serving welfare recipients, students needing work skills but not seeking a degree, the unemployed and the underemployed. For example, community colleges often act as subcontractors to JTPA and welfare programs, providing specific services under contract. The Opportunities Program at Black Hawk 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 non-credit 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 (HRD) 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 the college flows from a factor of the difference of the client's pre-training (essentially welfare or unemployment) and post-training income. To serve students, and to attract students to training programs, North Seattle cooperates an office with the Employment Security Service; while the Employment Service is open to all, it generally serves a population of unemployed and underemployed individuals, including those on JTPA and welfare.

When colleges serve special populations, it is often difficult to know precisely how many have been served. 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 as regular programs are not typically identified as JTPA clients, or welfare recipient, or dislocated workers – especially if they simply

enroll on their own (or as part of self-directed program in welfare, for example). It's therefore difficult to estimate the scale of these efforts.

Community service: Community colleges offer a variety of non-credit courses for non-occupational purposes. Many of these are related to crafts and hobbies; others include language programs, literature courses, or courses and public forums on political and current events. Sometimes they are targeted to specific groups, like senior citizens or expectant parents; in other cases these offerings are open to all. The "client" is the student, and most states have decreed that avocational courses should be self-supporting. However, there are other funding mechanisms as well. 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 are self supporting.

We distinguish community service from other course offerings because they are likely to be completely 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 intended to be forms of occupational preparation, the variety of student goals can create considerable overlap between the outcomes of community service courses and other occupational programs.

The Emerging Functions of the "Entrepreneurial " Community College

Three new functions of community colleges are emerging, and while we define the three quite separately, 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 broad variety of social, cultural, and egalitarian objectives. While workforce development can be expected to boost certain types of student enrollment, economic and community development work in very different ways, and may have only an indirect impact (or even no effect at all) 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 – ways 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 institutions they already have, and in the future challenges they face, the mission of serving the local community takes varied forms in different localities: the "entrepreneurial" college will look quite different from place to place, and there can be no correct way to discharge this mission. When we examine the offerings of "entrepreneurial" colleges, then, the variety that initially seems so bewildering simply means that colleges have found different needs in their different communities, and the activities appropriate 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, we make a distinction between the two because they generate different activities, though they share the purpose of serving employers and the 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 non-

standard formats on topics selected by employers themselves, to teach relatively specific skills to their incumbent workers. What we call workforce development is sometimes referred to as customized training or contract education, though customized or contract education can also represent training for JTPA or welfare recipients rather than particular 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, 1996). Sometimes, the barriers to initiating new occupational programs or changing current ones discourage colleges from being flexible enough to meet changing industry methods or labor market demands, although a few states follow Illinois in permitting "flexible and moderate" changes in course content. The formats of credential-oriented occupational programs – meeting during the day, in conventional semesters – are often inappropriate for the training and retraining of employees. In addition, there are few incentives or requirements for colleges to measure and publish outcomes of occupational program – placement rates, wages, and the upward mobility of graduates – so that students have little information with which to weigh their educational options. Since college funding is based on enrollment, quantity of students rather than quality of outcomes is the measure of success.

In our sample of colleges, many innovative approaches to workforce development were implemented to overcome the gap between what colleges teach and what employers want. In every case, these innovations responded to active employer advisory mechanisms, in which formal networks of employers aided the college in designing curriculum, assessment methods, and scheduling. Colleges used several innovative 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 was excited about the entrepreneurial nature of his division

Colleges can no longer say "Here's 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?"

LA Trade Tech has institutionalized this philosophy, and several credit based occupational courses have been converted to six-week modules, which run 4 days a week for three hours each day. Open entry and exit at each six week cycle allows students to alternate education with employment. This enables students who are not interested in a degree to 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 vast amount of instruction within a 12 month period. In addition, Friday courses are open to entering students, allowing them to explore this career and providing an enrollment stream as openings in the Culinary program come available.

At Sacramento City, the Recreation Vehicle Technology program offers courses only on Saturday, making instruction available to students employed in the field as well as entering students. Sac City also uses a satellite campus in downtown Sacramento, near state government buildings, to offer associate degrees especially for those employees. Sinclair offers Late Night Learning classes to third shift workers, as well as entire degree programs earned 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, not the employee: the employer selects the individuals to be enrolled, specifies the content, and details any measures of success or satisfaction.

Sometimes the content of the program comes from an existing occupational program – for example, a CAD program or one in computer applications – but often the curriculum is customized to meet the specific needs of an employers. Similarly, sometimes the instructors are taken from the regular occupational faculty of a college, though often they are hired from a pool of potential trainers in the community. Often (but not always) training takes place at the employer's premises, on a schedule that allows employees to complete a portion of the production day or week in addition to the classroom education. Workforce development therefore draws on varying ways on the existing resources of a college's occupational programs and on other resources including the employer – a balance that contributes to the potential tension between workforce development and regular occupational programs, as we will see in the next section.

An innovative international version of contract education takes place at LA Trade Tech, where cycles of young Japanese carpenters come to learn American methods of balloon construction, methods that allow dwellings to withstand earthquakes better than traditional Japanese construction. The students attend class all day, 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 must have completed a designated course at Los Angeles Trade Tech. This arrangement screens potential applicants for motivation and basic skills at the same time it introduces the occupational preparation available at the community college.

- Collaborations with private providers: Rather than compete with proprietary training providers, collaborations can benefit students and institutions alike. Macomb joins with a number of private education providers in its region: they offer customized

training 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, while Macomb recruits students through the college mailings, registers students and provides transcripts of the continuing education units. This type of "co-opting" benefits the private vendor, who might have specialized expertise, with the college's vast marketing and recordkeeping capability.

Community colleges stress that workforce development is responsive – responsive to the demands of employers for particular types of training. This responsiveness to *employers* then adds to the responsiveness to *students* that takes place in the regular, credential-oriented programs of the college. But it also means that workforce development reacts to initiatives from outside the college – one of the features that distinguishes it from the pro-active mission of economic development.

Economic development: Some community colleges play a more active role in stabilizing or increasing employment in a local area, and therefore the demand for education and training – rather than simply responding to existing demand by firms. The activities that we consider forms of economic development are quite varied, but they usually do not generate enrollments in conventional courses; they are therefore quite different from both credential-oriented programs and from the short courses provided for specific employers through workforce development efforts. 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 (apparel manufacturing) or firms with similar needs, (small businesses needing assistance in computer technology), so that a formal alliance between industry and

education is fostered. We identified at least two directions colleges might take 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 mentioned,

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, 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. Another way colleges can aid employers is with 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 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 convenor and meeting place for this group, the college led efforts to persuade local officials that apparel was a growth industry in the area, to attract public funds, and 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 in the first instance; any effects on enrollments in their programs came thereafter. When apparel firms do turn to the college for preparation of their employees, they 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. We found examples 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. North Seattle's Small Business Development Center and a local law firm jointly sponsor an annual lecture series on legal issues facing small business operators interested in international trade. Sacramento City College is the host campus for the International Trade Center, which provides funding for small local businesses expanding into export markets; this initiative also offers seminars and short courses for small business establishments. At Central Piedmont, the Small Business Center (part of a statewide network) provides services and workshops to assist small businesses in starting up and then staying in business. The first result of these activities is intended to upgrade the productivity of these businesses; the secondary effects may be to increase demand for the training of technicians or business personnel. However, the effect on the subsequent demand for education and training is often difficult to trace, since it may take place much later and cannot readily be traced to the earlier advice; and any subsequent training may take the form either of customized training or of employees enrolling in regular credit programs.

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 maintains an Advanced Manufacturing Center for working out prototypes and mockups, allowing firms to see how a technology will work and reducing the risk that it may be inappropriate for them. Again, the principal effect is on technology and productivity, and only secondarily on the demand for education and training.

In the same way, Macomb and Sinclair operate a corporate education facility 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 8000 individuals, in addition to another 37000 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 pro-active 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 as a new education and training facility, to be managed by the college.

- 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 offers a Leadership Program to train community individuals to serve on public and non-profit agency Boards of Directors.

- Economic environmental scanning: Community colleges participate in local planning groups that scan the business environment for new technologies, developing practices, new and pending regulations that will affect local businesses, and other developments of which local firms might otherwise not be aware. 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 this kind of survey and research. When colleges participate in these activities, the primary effect is to keep firms abreast of developments that help make them competitive, productive, and profitable; again the effects on the demand for education and training are secondary and, as in technology transfer, difficult to trace and therefore to quantify since employees may show up either in regular credit programs or in customized programs.

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 that examine and interpret demographic, economic and social changes in the community, based partly on surveys

of citizen opinions. This forecast is widely used by local economic development and private sector firms in their determination of future activities.

In California, EdNet (the Economic Development Network) operates at the Sacramento City College district level from a line item in the Chancellor's budget for economic development initiatives. EdNet funds the International Trade Center at Sac City, and uses college faculty to provide contract education to area businesses, under the auspices of its Training Source. EdNet conducts performance research and consulting about improving productivity at a particular work site, evaluating wage increases resulting from contract training, and calculating 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 define set local policy for economic development, ascertain the need for education and training, and negotiate resources. For example, Sinclair 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 other information for employers.

- Attracting employers to a local region: As part of a state or local initiative, community colleges can participate in a private-public partnership to attract employers to a local area. For example, as part of a North Carolina policy of aiding firm relocation through tax and training incentives, the Economic Development Director at Central Piedmont accompanies city and county officials when they meet with potential employers interested in relocating to the Charlotte area. As a member of the team, the community college representative can describe customized and conventional education and training services available to new employers, and guide the firm in determining its workforce needs. Once a firm has been successfully wooed to the area, then the college can deliver entry and upgrade training.

- Media/telecommunication: A few colleges operate newspapers, television or radio stations, that introduce the college to the public and provide a forum for sharing information about the college and 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, with effects on education and training secondary and often difficult to trace. Unlike workforce development, economic development itself does not normally generate larger enrollments (though there are a few exceptions, like courses for small employers). The dominant activities include meetings, information, transfer, 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 confer expertise and credibility. We stress, then, 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 types of development 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 promote equity, sometimes on the implicit understanding that inclusive and equitable policies are in the long run better for the well-being of the community as a whole. Efforts in community development may have a long-run economic purposes, particularly if they create the conditions in which communities can be stable, vibrant, and attractive to potential residents and employers alike, and some community colleges equate community development with economic development. However, community development has a broader focus than economic goals, and its emphasis is not in the first instance economic or occupational.

The role of two-year colleges in *community development* is somewhat different from its more "traditional" role in *community service*, like the avocational and continuing education courses provided by many colleges. *Community service* efforts respond to the demand by the public for particular kinds of non-credit and special-purpose courses. But *community development* activities work at the larger scale of the community; 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 trace. In the seven colleges with which we worked, we found several exemplars of community development that can create prosperous conditions in a locality:

- Community development education: Following the Los Angeles riots in 1992, LA Trade Tech used grants from Department of Housing and Urban Development and the Ford Foundation to initiate a two-year degree for Community Development practitioners. These local students serve internships in area agencies, gaining both theoretical and practical knowledge of how communities can organize to benefit their residents. While this program is a "traditional" 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 issues, including health, criminal justice, the status of minority populations as well as education. While a local task force on education may generate recommendations that affect college enrollments directly, the other roles do not. For example, Sinclair has convened literacy projects, and participated in the Center for Healthy Communities; Sacramento City 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 Habitat for Humanity program; Black Hawk Community College has participated with the local Hispanic community in several ways, helping them define their educational and social needs.

- Educational leadership for K-12 opportunities: Often, colleges work with the K-12 schooling system, 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.) Of course, such participation may lead to higher enrollments as more high school students are attracted to the community college. However, such participation is often undertaken more to improve the quality of the local schools than to increase enrollments directly; in earlier research with NCRVE, the League and NCOE, it became clear that many tech prep programs enable high school students to attend a *variety* of post-secondary institutions, so that the community colleges sponsoring them may not benefit directly (Grubb, Badway, Bell, and Kraskouskas, 1996). And part of the tech prep process is educating local schools about the many possibilities they can pursue. 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 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 Puget Sound employers. Macomb's Kids College has picked up some of the decline in enrichment activities offered by 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 a great deal of music, theater, and art at its performing arts facilities; these don't generate enrollments, but they do cause 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 in too many ways to make many generalizations. Some of this activity stems from administrators participating on local boards and commissions; department heads or instructors participate when they have specific expertise to offer. Particular activities – for example, Macomb's Performing Arts complex – usually require specific funding from other sources. Although community development does not in the first instance increase enrollments, it may create a great deal more visibility for a community college. And, community development may strengthen and expand other college initiatives housed in both the "regular" and the "entrepreneurial" college.

The Real World: The Overlap of Functions

In the previous sections, we described six conceptually distinct roles that community colleges perform, including the three newer roles of the "entrepreneurial" college. In reality, however, these roles are not neatly divided, and therefore disentangling them – whether for the purpose of accountability, or examining the size of the "entrepreneurial" college – is nearly impossible. In the seven colleges we examined, for example, the reality is much more complex than the simple categories we have developed so far. This overlap makes it more difficult to understand what colleges do, but in many cases such overlap produces substantial benefits. For example, the employees 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, in some colleges like Macomb, there has been a concerted effort not

to keep programs distinct, but to align them so that the institution appears to be a seamless whole; there are "mission managers" to provide institutional leadership for particular missions regardless of their administrative positions, and so particular missions (like economic development) can be enhanced no matter what the administrative structure of the institution.

The distinct functions we have described so far in practice overlap in numerous ways:

Credit programs serve various students: Often, credit courses and programs in the "regular" credential-oriented programs serve individuals entering under other auspices. 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 non-credit courses (which are reimbursed at a much lower rate in California than credit courses).⁴ Similarly, apprentices preparing for journeyman certificates are enrolled in credit courses. At North Seattle, where there is 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 credential programs. For instance, in California, nearly 20% of welfare clients attend community college on their own initiative as regular students (Anderson, 1997). They are not usually counted separately: they appear to the college as regular students, and the college does not get any special funding for them. There may be a trend toward this kind of enrollment because of pressures within job training. As the JTPA director for Macomb County explained, local agencies have moved away from contracting for class-size projects and toward developing individual plans and individual referrals with their clients, partly because of fiscal pressures; the number of individuals referred in this way has increased from 17 to 130, while the local agency no longer contracts for

entire JTPA classes. In addition, as colleges develop more flexible ways of delivering credit courses, students with different needs can enroll in them and the boundary between "regular" credit courses and non-credit offerings erodes. Central Piedmont has set up a post-baccalaureate cytotechnology program, essentially for Hoffman LaRoche. Although it is a full-time credit-granting program, it is really a form of customized training for a single employer, breaking down the boundaries between credit and customized training.

Physical facilities serve several 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 AIM Center at Sinclair develops curriculum 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 don't need credentials, continuing education for those already employed, and customized efforts for individual fire departments throughout the region. It is therefore difficult to disentangle enrollments and funding for different types of programs. In addition, for students the distinction between credit and non-credit enrollments blur as students choose the courses they need but without regard for credentials; as the dean of health and community services mentioned,

They can come in here and go through the training program that we offer them; they don't need a degree, they just need for 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 non-credit and credit.

Customized and contract education serve many customers: Each college in this study delivers both short-term training in response to demands from both private employers (which we have defined as workforce development) and public agencies including JTPA and welfare programs, which we have defined as training for non-traditional 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 vantage, there's not much difference between the two: both require responding to external demand, shaping courses to fit the needs of particular clients with a mixture of "off the shelf" and customized courses. To be sure, the value to the institution of the two types of programs is quite different – because customized training for employers can potentially provide information back to the institution about employers needs, while training for JTPA and welfare programs cannot – but the organizational structure of the two is the same, and they are often difficult to distinguish in counts of enrollment and funding.

Workforce programs are provided by several units: Many colleges include several units providing workforce development. For example, at Central Piedmont workforce development can take place in non-credit occupational extension courses; in the New and Expanding Industries program, a categorical grant from the state to provide customized training; in the Focused Industrial Training Program; and, when firms subsidize tuition for their employees, in regular credit courses. Since workforce development can be found throughout the college, it becomes difficult to specify its size and funding.

Student enrollment meets 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 in them say they took personal interest courses; but 84 percent of all students enrolled in management classes, and of these 44 percent said that what they learned was transferable to the workplace. These students may declare themselves to be pursuing personal interests (what we have defined as community service), but 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 in the transfer program; some are really there for short-term skill upgrading, or they are "experimenters" trying to see whether postsecondary education is appropriate for them.

Another way to see how complex community colleges are is to try to categorize *students* rather than *programs*, and then see where different types of students are enrolled. For Central Piedmont, Kantor (1994) distinguishes among 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; transitional learners can be in virtually any program of the college; entrepreneurial learners can take business courses in either non-credit occupational extension or credit-based courses, but they can also enroll in business programs in community services or continuing education. And existing workforce learners can be in the New and Expanding Industries program or Focused Industry Training, established precisely for customized training, but they may also enroll in credit or non-credit courses. From a student perspective, then, the different programs of the college blend together.

Our point is that, while it's important to create neat categories of activities in order to understand what community colleges do, in practice this kind of simple division cannot be maintained. When we try in one of the following sections to

determine the relative size of the "entrepreneurial college", this is one of the reasons why it is impossible to do. There are also be organizational issues to consider, which we raise in Section Four when we ask how the different functions of the community college can be made more synergistic and less fragmented.

Now transparency – that is, clarity about what programs are offered, for what purposes, to whom – to researchers is never a goal of educational institutions. But transparency to students and to employers is, and some observers fear that the crazy-quilt of offerings makes life difficult for students and employers alike, who sometimes cannot understand why so many programs exist, or where they should go to find what they need. In response, 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 position for a coordinator of its public safety facility, a "one-stop person", who can 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 said,

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 students knows exactly what she or his is getting before starting.

These developments tacitly acknowledge that the confusion within the comprehensive community college has gone far enough that some solution is necessary.

Defining Success in the "Entrepreneurial" College

What defines success in community, workforce and economic development? How can anyone know whether these relatively new roles of the community college are doing what they should, spending public money wisely, or truly serving the "clients" to

whom they respond? How can we distinguish rhetoric from reality? And – if institutions only do what they measure, or measure what they do – what new measures should be collected by community colleges?

Defining success in the regular credential programs of the community college has been difficult enough. Colleges keep detailed enrollment figures, since they are often reimbursed 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 over-state their goals, or specify a goal when they are completely uncertain about what they will do; some colleges acknowledge that they do not know what their students intend – and indeed, finding out on a regular basis would be too expensive to undertake.⁷ Transfer rates are also popular measures of success, for academic if not occupational programs (Bragg, 1992), but different measures vary wildly (Cohen, 1990; Grubb, 1992), and some measures are simply invalid if different types of students are being commingled. Some states are beginning to collect follow-up data on the wages of completers in occupational education (e.g., Friedlander, 1993, reported in Grubb, 1996, Ch. 3). However, this information is rarely published, so that students have little information about success measures within programs, nor is follow-up data generally collected for liberal arts or transfer students. In general, then, there are few well-established measures of success even for credential programs.

When we move beyond these "regular" credit-bearing programs, measures of success become even more difficult. When we asked about measuring the success of workforce development, most college officials use different measures of employer satisfaction, either from employer surveys or more informally from comments of advisory committees and the community in general. One director of job training services acknowledged that the transition of students among programs "is more observable than documented – it's kind of historically we know where they're going, and we've never really focused on gathering the data". Enrollment continues to be the primary definition of success; as a state-level official commented about their efforts to monitor local colleges,

We look at the enrollment. We make some 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 goals (with the exception of "employer satisfaction") overwhelmingly relate to the "regular" college.

Indeed, we could uncover no efforts to measure the success of workforce development in any terms except client satisfaction – that is, *employer* satisfaction – and the continued level of enrollment in contract or customized education. There are, to our knowledge, no studies that follow up the 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 that occurs in occupational programs subject to external licensing (as in health occupations) or voluntary standards (as in auto repair, welding, and electronics, for example). Normally, the content of workforce development courses is negotiated between the college and an employer,⁹ but these processes tend to specify competencies *taught* rather than outcomes *learned*.

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

When we turn to economic development, the effects are even more difficult to pin down. Colleges can, for example, provide information to small firms about good practice, 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, and Sinclair depends on the cooperation of many other organizations, and the results again cannot be entirely controlled by the college. There are very few evaluations of economic development efforts of any kind,¹⁰ and so it is unsurprising that community colleges — with relatively few resources for research and evaluation — have not undertaken such studies.

The "entrepreneurial college" represents a substantial shift in the measure of "success", compared with the "regular" college — a market-oriented rather than institutionally-defined conception of success. For firms operating in 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 similarly customer satisfaction need not be measured directly since it will be reflected in continuing (or declining) sales. In effect, the efforts of the "entrepreneurial" college have taken these market-oriented conceptions of growth. In contrast, the institutionally-defined measure 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 of success are not possible in public institutions with multiple outcomes for many groups of individuals.¹¹

For the moment, we see no alternative measures of success possible for workforce and economic development programs. 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, we also see little possibility in the short run for more refined measures of success. Over the longer run, however, it should be possible to develop clearer criteria for the activities that colleges do and do not undertake — an issue we address 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 would also be appropriate for academic research to address questions like 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 see how large it is: is the "shadow college" overshadowing the regular college? Again, difficulties abound, because there are several different ways to measure the relative importance of different functions.

The most obvious ways to measure size are enrollments and revenues. In previous surveys, workforce development (or customized training, or contract education) seemed to be relatively small. For example, the NCRVE/AACC study, found that the median ratio of contract enrollments to credit enrollments was .22, meaning that at half of all colleges there is less than one individual in contract education for every 5 students in regular credit courses (Lynch, Palmer, and Grubb, 1991).¹² Similarly, in the League for Innovation study, half of all colleges surveyed provide training for 25 employers or less, and fewer than 1,000 employees – though 10 - 15 percent of college reported quite substantial efforts (Doucette, 1993). Neither of these reports suggest that the "regular" college was in any danger of being overshadowed. However, both studies reported serious problems in collecting data: colleges had a difficult time estimating the magnitude of workforce development because they need not, and therefore do not, keep accurate enrollment figures – as they must for credit enrollment, for example, in order to be reimbursed by states.

In the seven colleges with which we worked, there is a substantial variation in the relative size of the entrepreneurial college, 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, there were 24,144 students enrolled in credit programs, the equivalent of 11,412 full-time equivalent (FTE) students, and 11,484 FTE students in non-credit programs. In sheer numbers, then, workforce development overshadows regular programs; but FTE students average 15.5 credit hours per semester, or about 45 contact hours during the semester, while a typical individual in firm-specific training might be enrolled for 10 - 20 hours in all; the 35,000 students in workforce development might therefore equal 2,500 FTE students.¹³ In terms of revenues, the customized training efforts generated around \$20 million per year in revenues, while the "regular" credit programs generated about \$72 million in formula funding. Whether measured by enrollments or revenues, then, workforce development programs are from 10 to 15 percent of the size of credit and non-credit programs in the "regular" college.

Piedmont Community College collects data on headcounts and FTE enrollments in various programs, presented in Table 2; workforce development programs represented a little over 10 percent of total enrollments. While some high-profile programs (like the Human Resources Development program and contract education) expanded, other forms of corporate and continuing education actually declined (like practical skills labs). The roughly parallel data from Sinclair are presented in Table 3; they indicate that enrollments in workforce development programs accounted for about one third of total headcount enrollment. However, because these programs are typically much less intensive than credit and non-credit education, again we can conclude that workforce development represents only a small fraction of overall enrollments when counted by full-time equivalents. Evidently workforce development programs are sizable, but even in these active institutions they constitute perhaps 10 to 15 percent of enrollments in conventional credential-oriented programs. The "entrepreneurial" college is not likely to overwhelm the regular credit programs.

However, enrollments and revenues — traditional measures of success in educational institutions — are not necessarily the best measures of size in the "entrepreneurial" college. A different 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 brings in 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, and they are subject to public audit because they are public revenues. However, revenues generated by workforce development in excess of costs are more readily available as "profit" (though community college administrators avoid the "p" word): they tend to be private rather than public funds, and they are not necessarily subject to capture by the rest of the institutions. As one continuing education director noted

At most community colleges, 70%-80% 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 did aid 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 surpluses: several require all excess revenue to go back into general revenue; some allow surplus revenue to be kept within the workforce development department and used for new programs; and Macomb, somewhere in between, requires that every program provide 8 percent of any surplus to the general fund. But however these surpluses are used, they are valuable bonuses in institutions where there is little discretionary funding.

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 non-credit programs for special populations like welfare recipients, cannot: presidents can use their ties to local businesses to enhance their colleges' reputations, to clarify their colleges' connections to the most dynamic elements in the community. 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 much more difficult from an educational perspective, but they are unlikely to get 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. The effects on the community or on employment are so far in the future and so uncertain that success cannot be measured in conventional terms. Visibility and connections to the rest of the community are the currency of this particular realm. But how might these forms of success benefit the college? They might, of course, increase enrollment in workforce development and regular education programs, as the college becomes more visible and more potential students learn about the college; or they might generate information for other programs about the requirements of employers and community agencies. When we turn in section Four to understanding how to knit together the "regular" college and the "entrepreneurial" college, these kinds of benefits prove to be important.

For the moment, however, the size of the entrepreneurial college is ambiguous. In conventional terms — in enrollments and revenues — it does not come close to the size of the "regular" college. But in terms of growth, discretionary revenue, and of

visibility among high-status members of the community, the entrepreneurial college is more important than its size measured in conventional ways.

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 growth rates. But growth varies substantially from college to college, and so the factors that enhance and impede growth vary substantially as well. In this section we clarify these factors — most of them internal to colleges, but some of them related to the demand for training and economic development activities from the business sector itself — that have affected the growth of workforce development and economic development in particular.¹⁴

Influences within Community Colleges

The seven colleges with which we worked mentioned many factors influencing the growth of the "shadow college", but seven stand out as being particularly important:

1. The 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 its history has made its movement into workforce and economic development natural. Similarly, LA Trade Tech has a technical history, though it has grown to be a comprehensive college. In both situations, the transfer function that overshadows many community colleges is not a barrier. In North Carolina, the state's limitation on transfer enrollments has given community colleges a

more occupational focus, again making it more natural 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 steeped in services to employers.

2. The aggressiveness of administrators: Community college people 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 is "He never makes a speech, he never talks to faculty member, without giving them the vision that we are going to be the national leader in workforce development". But 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 out of teaching. They are more entrepreneurial, and they think of programs in market terms (what's 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 laying 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 characteristic of workforce and economic development generates tensions with the educators in "regular" programs, as we will see in Section Four, but it is central to the

success of economic development. Presidents have been especially important in creating this entrepreneurial spirit; the presidents of colleges most active in entrepreneurial endeavors are frequently cited as individuals who have steered their institutions in new ways.

3. Faculty with 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 the flexible schedules (evenings and weekends, for example) necessary for workforce development. Where faculty are "traditional" – oriented to academic disciplines, inflexible, or in academia a long time – it becomes harder to use them in workforce development programs. Then colleges often use contract faculty, hired for specific courses, instead of their regular faculty.

It's difficult to judge criticism about "inflexible" faculty, because we did not interview many faculty members. Elsewhere, we have 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.¹⁵ In addition, in some colleges the salary schedule makes it difficult for full-time faculty to teach additional courses, or on a flexible schedule; for example, district policies at Sacramento City College allow instructors to only work xx hours or credits, precluding them from teaching workforce development courses. Blaming faculty for being inflexible is therefore inappropriate until a college understands more about the existing pressures and incentives that faculty face.

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

In our vocational programs, we are not competitive salary-wise to industry, to engage the faculty we need to teach in the newly emerging areas of information

systems, electronics, and business simply because there is a gap of probably \$20,000-\$40,000 annually between a professional salary and an educational salary.

4. 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, 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, 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. Other colleges have found it necessary to reorganize internally, so that administrative support for flexible schedules and revised curriculum was clear.

5. Faculty unions and Senates: Faculty unions and Senates typically have established procedures and rules governing new courses and programs, and these are invariably cited as reducing the flexibility and speed of responding to employer demands. Indeed, one common explanation for the rise of the "shadow college" is that the only way for colleges to circumvent unions and Senates is to create a separate, parallel institutions within which these "academic" practices cannot take root. We note once again that this represents the division between "educational" approaches, in which deliberation and coherent policies are important, and entrepreneurial approaches in which speedy results — programs established, contracts signed — are much more important than lengthy deliberation.

One issue with unions is that they promote what one administrator described as the "narcotic of job security", and another — a strong supporter of unions himself — called "a double security position":

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, unions rules and regulation 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 makes flexible provision of workforce development difficult — not necessarily the requirement to keep faculty hired. In our research with these seven campuses, we noted that colleges without strong union and academic senates, and states without faculty tenure, were able to respond more quickly to community needs than were their more restricted counterparts.

6. Elected versus appointed boards of trustees: Several colleges complained about elected boards, because they rarely include representatives of business interests and therefore do not have the "big picture". In contrast, appointed boards are more likely to include business representatives. (For example, Sinclair is proud of having two top managers of Fortune 500 companies on its board — something that is unlikely to happen with elected boards.) This kind of complaint also reveals dissatisfaction with the fractiousness of politics surrounding many community colleges, particularly in cities: 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 to the steady development of the "entrepreneurial college".

7. The 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 1990-92 recession. Where this has happened, colleges have sought new forms of "business" in order to maintain their revenues. Demographic effects can be complex, however: while certain enrollments decline during periods of growth and prospective students are more likely to find jobs, these are also periods when firms may need more training and retraining as they expand their new hires.

Influences External to Community Colleges

In addition, a number of policies external to any particular community college influence its activities. We note that these include state policies and particularly the nature of state funding, which we discuss in Section Three. However, there are several other external effects that are important:

1. District policies: Many colleges are part of districts, of course, and often district policies specify what they can and cannot do. For example, Sacramento City and North Seattle are part of larger college districts; workforce and economic development are managed by the district office, although individual offerings may be housed at a local site. In addition, colleges within larger districts 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 have caused colleges to establish separate "entrepreneurial" divisions in the first place. From the district perspective, their policies are intended to prevent competition within the district. But we note again the difference between institutional conceptions of accountability — where local colleges should not compete with their fellow colleges — and market conceptions, in which unbridled competition is desirable and competition

within a district perfectly acceptable. These district policies therefore provide a kind of hybrid approach, limiting purely market-oriented competition in the presumed interests of the district.

2. *Developments within firms:* Customized training for employers is increasing in response to changing demands from firms. Nationwide, there has been a modest increase in the training that firms provide their workers.¹⁶ One factor influencing the demand for firm-specific training is the tendency of many firms to subcontract portions of their production – for example, the manufacturing of parts and components. (Subcontracting means that they can be more flexible as demand waxes and wanes since they do not have to maintain the capacity for producing these parts.) One way to subcontract some production functions is to use the outside market for training as needed, rather than maintaining a training division (particularly for small and medium-sized firms). This is the niche that Macomb filled with its Manufacturing Industrial Network, which targets small and medium firms for tailored training. In addition, the expansion of workforce development is in part a reflection of the shift toward firms sometimes described as "high performance", with fewer layers of hierarchy, a greater use of contracting out in the interests of flexibility, and a greater level of skills necessary (particularly for new technologies). Of course, the extent of such changes varies substantially around the country, and therefore the opportunities for workforce development vary as well.

3. *External uncertainties:* In some areas, new uncertainties and business realities have propelled the growth of customized training. For example, in California the growth in immigration has meant that firms have many more non-English-speaking employees, creating demand for English as a Second Language programs as well as training for managers who face a culturally diverse workforce. The American with

Disabilities Act has created a number of new mandates, prompting employers to contract for training in order to avoid violating these regulations.

4. The pressure for economic and community development: The demand for economic and community 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-size employees – that competition is much fiercer, and that firms that are behind in technology and business practices are less likely to survive. Communities face these competitive pressures too, and don't want to lose out in the competition for employment and population. The increasingly competitive environments of the 90's have therefore driven communities to search for strategies to enhance their growth and development, and community colleges have been a part of this. This kind of pressure varies from place to place; 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.

5. Local economic conditions: The business cycle also is a prevalent effect on the type of community college students and their enrollment patterns. 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 a period of declining employment will see dislocated worker training and regular credential-oriented enrollments increase (and possible JTPA and welfare-related training) while customized training falls. Thus the mix of students in community colleges is constantly changing over the business cycle, again putting a premium on flexibility.

6. *The comparative 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. Given competition, what makes community colleges competitive? And what tactics have colleges developed to maintain their positions? We can see several different kinds of strategies among community colleges, including price and quality competition, creating market niches, leveraging revenue flexibility and co-opting 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 we will discuss 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. But other colleges complain that they cannot meet the competition because of high wages and salaries set within the "regular" college, as we noted earlier. In addition, the reputation for quality earned by many colleges allows them to be the vendor of first choice for firm-specific training as well as for students seeking occupational credentials. LA Trade Tech, Sinclair, Macomb, and Central Piedmont can point to success 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 period of time.

Colleges have also created niche markets for specialized training – for example, on the Internet – which is cheaper for certain kinds of students. Distance learning is another technology that some community colleges (like Sinclair) have been able to develop. The Human Resource Development Program at Central Piedmont has created its own niche among unemployed and underemployed workers: they typically enroll individuals who are not on welfare or eligible for JTPA, though they do need additional training to improve their employment. The unique funding structure of this program helps create this niche: the HRD program is funded by a percentage of the *increased* tax

dollars generated by its graduates, and has to support itself from these revenues – placing a premium on enrolling students who have a good chance of moving into enhanced employment.

However, the creation of market niches also shunts some students out of programs. For students who are not independent enough to work with computer-based or distance learning in these ways, and for whom conventional classroom arrangements are necessary, the costs per students 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 under-prepared and "dependent" students who are among the non-traditional students in community colleges – out of an increasingly cost-conscious market for training. We return to this point in Section Four, examining the tensions between the "entrepreneurial" college and regular college.

A few colleges have flexibility in funding streams. Central Piedmont has several different revenue sources available to it for workforce development, with different kinds of restrictions. As particular employers come to them for customized training, they can match the employer's needs with the most appropriate program, typically allowing them to find some kind of subsidy for most employers. But this strategy does not work in all cases; as one dean mentioned, "We got into contract ed because we had requests for training that did not fit into one of our typical funded categories." Thus large firms are more likely to be able to pay for contract education, and there is a feeling in some colleges that large firms capable of funding their own training (corporate "welfare queens", as one dean described them) should not be publicly subsidized; smaller and more marginal firms are more likely to qualify for state subsidy. The college sometimes uses Focused Industry Training to attract firms 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 their respective regions, but will try not to "poach" on the territory of others. While this is a somewhat fragile agreement and there are complaints about such "poaching", it reduces competition somewhat. In addition, Macomb has formed alliances with a number of private providers in its region: they offer customized training jointly, with the private provider getting 60 percent of the revenue and Macomb the remaining 40 percent. Participants in these courses pay market rate for the training, but by co-opting the competition, both the private firm and the public college benefit.

There are, then, various ways in which community colleges can create a comparative advantage for themselves in the training "market". These strategies are not available to every college: some lack state support for customized training, for example, or the 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, but some external to the college. This helps explain the enormous variation among colleges in the extent of the "entrepreneurial" college.

SECTION THREE

THE ROLE OF STATE POLICY

The "entrepreneurial college" represents, in many ways, the development of new ways in which community colleges can be responsive to the particular conditions and needs of the local communities they serve. As we saw in the prior section, many of the factors influencing the "entrepreneurial college" are local conditions. However, state policies have — often inadvertently — played a large role too, because they provide certain kinds of funding and regulation that can either promote or impede workforce and economic development. In addition, state policies have sometimes created such rigidities in the "regular" college that the development of a "shadow" college has often seemed the only way around the problem. These state policies have not always been carefully considered, and therefore state effects on the "entrepreneurial" college are often contradictory.

When we shift our focus from the local to the state level, the policy-related concerns change as well, 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 of whether the resulting expenditures are worth the taxes paid by the citizenry. From the local perspective, most forms of local economic growth are worth pursuing; but from the state perspective, "smokestack chasing" — public subsidies intended to encourage employment locating 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 vast amount of state money

in community colleges¹⁷ argues for some state oversight and accountability. Even though the state governance of community colleges has been quite weak in most states,¹⁸ the area of workforce and economic development generates some issues for states to confront that may work against the interests of local colleges.

States vary enormously in their policies toward workforce and economic development. As we will see, 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 of local initiative and state initiative in creating economic activities in the community college varies from state to state, further complicating the question of what explains the growth of these non-traditional 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 allows local initiative to determine the amount of state funding received since local enrollments determine the amount of state funding. In contrast, categorical funding involves much more state discretion about how dollars are spent. Each varies substantially from state to state, and their balance creates very different programs in local colleges.

Formula funding: States vary enormously in their fiscal treatment of workforce development programs. In California for example, credit programs must be open to all students, so 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 non-credit training or for credit courses not part of a degree or certificate. Ordinarily, therefore, employers would pay the full cost of customized training, and normally one would expect there to be less workforce development as a result. However, there are ways to get around this restriction; for example, workforce development efforts like those at LA Trade Tech send employees to regular credit courses in which regular students are also enrolled – though they have modularized courses to facilitate this process – and thereby allow their 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, at least in a small sample of states, partly because the data that colleges keep on workforce development programs are imprecise. In addition, the variations among colleges in their aggressiveness, in the limitations imposed by district policies, in their ability to find ways around state restrictions, and in the demand from local employers all affect the extent of workforce development, complicating the effect of state funding structures. 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, California funds credit courses at the rate of \$3391 per FTES, while non-credit courses – including the personal interest offerings of

community education – at only \$891; continuing education is therefore less important in the California colleges than it is elsewhere.

Categorical Funding: States also provide categorical funding through specific programs. In California, for example, firm-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 firm-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 the 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 firm). 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 competitive.

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 allocation, although the moneys are acquired through special funds established for job retraining which colleges can receive competitively, and 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 provider of firm-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 firm-specific training, but community colleges do not enjoy any preference in the allocation of these funds; indeed, these contracts are

performance-funded in ways that work 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" which is, from the state's vantage, pointless. 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, even more rarely 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 under-provide 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.²⁰ By extension, categorical programs which *fail* to impose such principled restrictions make little sense.²¹

In the states where our seven colleges are located, there has been little thought 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, then, the resources for workforce development come from a combination of regular state revenue, special state programs, and employer payments. But when (as in Washington) workforce development enrollments qualify for regular state payments, community colleges typically do not break these revenues out separately; therefore it becomes nearly impossible to specify total funding for workforce development.

The Detrimental Effects of FTE Funding: A different kind of funding issue arises from the conventional funding mechanism used for community colleges (and K-12 education) in most states — funding on the basis for full-time equivalent (FTE) student. This funding approach is based on an institution that has predominantly full-time students, to which the funding formula is geared. But as more and more students attend part-time — as has been the trend in community colleges — then FTE formulas become more awkward, more elaborated by rules about how to count part-time students and what kinds of courses count. In workforce development programs, where all "students" are by definition part-time, FTE funding becomes extremely 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 layer 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 non-credit courses. In most states non-credit education is funded at substantially less than credit courses; indeed, non-credit courses in North Carolina receive no state funding at all. This means that functionally equivalent courses end up being treated in very different ways, exacerbating the split between credit and non-credit divisions, or between "regular" programs and those offered in the "entrepreneurial" college. As a state official in North Carolina mentioned,

One of the issues that has to do with the funding disparity between credit and non-credit is there's more of a line in the colleges than there should be. . . It's difficult to provide continuing education with the same facility that you provide your curricular education, and so that's created an artificial division. One of the things we're trying to do by equalizing [the credit and non-credit funding] is to move it so that it would be more natural for an instructor who is seeing person X in two courses to start getting them to move toward a degree program or certificate program — [more natural] than it is now where things are offered more on a short-term basis.

Furthermore, the credit/non-credit distinction sets up an undesirable hierarchy; as an administrator at Back Hawk commented,

"Continuing education units" is a valuable designation for companies, and often it's referred to as "non-credit". I seldom refer to it as "non-credit" — 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.

Thus the fundamental structure of state funding remains a serious problem for the "entrepreneurial" college, not simply the specific details of particular regulations.

State Regulations and Definitions of Success

Just as state vary in their funding, so too do they vary in the regulations they impose on community colleges. Very often these have the effects of constraining what local colleges do, to the detriment of the "entrepreneurial" college.

One form state regulations take is the measurement of 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. But these measures, designed with the "regular" college in mind, are difficult to apply to shorter courses and the more flexible efforts of workforce development: completion of credentials is irrelevant, and it has been impossible to persuade to adopt more flexible measures of success. As one occupational dean mentioned,

What we're now finding is the change in students, 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 it 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 marked at the legislature.

To be sure, states recognizing that students don't need a credential still don't know whether they receive what they need; as an official in North Carolina mentioned,

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 just sort of in a general way 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 that good a tracking system to know whether they're getting what they came for and if they're leaving happy.

Therefore some different measures of success other than completion of credentials are necessary, but precisely what should replace (or add to) these conventional definitions is not yet clear.

By the same token, placement rates are irrelevant in programs for individuals who are already employed, though other measures – for example, earnings *increases* over time (as are used to measure the effectiveness of North Carolina's Human Resource Development program) or employment stability over time – might be more appropriate. The result is that state-imposed measures of success often reduce the ability of colleges to provide workforce development, without providing them any incentives to determine which activities might be the most effective. For example, Washington's funding policies – which allow short programs only for certain kinds of dislocated workers, and disallows funding for non-credit education – mean that the state rather than the local college is the principal driver of economic development efforts. This makes it difficult for workforce and economic development to serve as ways of allowing colleges to respond to local needs.

In California, the state has added to state regulations over many years, creating a bewildering thicket of rules and regulations that almost everyone abhors, governing an infinite minutia 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 co-operative 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 EdNet, the small size of these efforts compared to the burden of regulation means that the state overall has been quite limiting in its effect on 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 a "service organization", providing technical assistance to local colleges rather than imposing restrictions. As one 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 what our role is and educating the colleges to look to us for assistance as opposed to look to slap them on the wrist.

We note that the role of the state as a service organization has not yet been put in place, and this official acknowledges that it 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 mentioned,

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, then, the regulations that states have devised have been intended for the "regular" college, to hold local institutions accountable for the ways they use public funds and for certain kinds of outcomes. But these kinds of institutional policies operate awkwardly in the more entrepreneurial and market-oriented environment of the "entrepreneurial" college, where flexibility is more important and "success" is measured

in different ways than in conventional credential programs. Workforce and economic development are also areas where the variation among colleges is enormous, and where technical assistance would help local institutions realize the potential of serving their institutions in new and different ways.

Local Initiative Versus State Initiative

Is the expansion of the "developmental college" over the past decade or so the result of local initiative? Or of state initiative? What's the balance of power between the two? ²²

There is enormous variation among colleges and among states in the balance of state versus local initiative. At North Seattle Community College, for example, the college participates in several state programs – including the Workforce Training program for dislocated workers – but there are few local initiatives, partly because state (and district) policy precludes much local flexibility. The same kinds of restriction constrain many colleges in California as well. At the other extreme, 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, but they are almost entirely local.

And in the middle, several of the colleges with the most extensive "entrepreneurial colleges" have shown a great deal of local initiative *and* participate in special state initiatives. The cases of Sinclair, Central Piedmont, and Macomb are cases where aggressive local colleges can both develop their own initiatives and take advantage of state programs sponsoring firm-specific training. Even though barriers remain – for example, the regulatory emphasis in North Carolina, the lack of funding for non-credit education in Ohio – these states are generally more supportive than are Washington and California, and local colleges can find more room to expand their own

efforts. The moral of this story is not particularly surprising: the colleges that are most active in their developmental efforts can 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 "developmental" college. If states and localities can 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 gives state administrations and local colleges a great deal to work with.

The Emerging Concerns of State Officials

State officials have different perspectives than do local college officials, of course, and their concerns indicate certain issues in the "entrepreneurial" college that are potentially troublesome — or that might become troublesome if left unchecked. And 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 community colleges will confront in the coming years — individually if not collectively.

The split between the "regular" and the "entrepreneurial" college: Officials in several states noted that the growth of the "shadow" college has created a dual

institution, with potentially negative consequences. As an 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's one part about 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 — they want the community college, they don't care what the internal structure is. . . One of the contributing factors in declining enrollments is the fierce competition within the individual institution 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", but noted a positive trend::

Within the institution, historically, workforce training was outside the academic . . . more in line with continuing education, you know, sort of out the back door — "go out and get as many FTE 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.

To be sure, it isn't always clear what states can do about the potential split between the "regular" college and the "entrepreneurial" college. The ways of minimizing these tensions — which we examine more carefully in the Conclusion — generally involve relatively subtle ways of sharing resources between the two, and it isn't clear that state policy can do much to facilitate such institution-level cooperation. Still, the recognition of this potential split at the state level suggests that colleges themselves might take notice of this danger — a topic to which we return in Section Four.

The effectiveness of the "entrepreneurial" college: In this age of accountability, the effectiveness of all local programs comes to be 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 firm'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 s under — I assume this is to meet some performance agendas?" Well, yes. Well, how about 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, and the purpose of that would e to develop a methodology for identifying a performance improvement project in an organization. . . In other words, we're not going to give you any service by delivering some training if it is not linked to an understanding of those things that determine whether those trained people ever get a chance to apply those skills and achieve those results you envision, and if they have a supervisor who doesn't support it. . . . Our interest is in your long-term success, NOT getting this contract tomorrow.

The issue of defining and measuring effectiveness is not, of course, an easy one, and a different official in Ohio noted the process that they might look for in lieu of any definitive outcomes:

One of the things we look for it making sure it meets the needs of the community which it serves. . . I guess, in one word, to categorize what we are looking for in as company or college is understanding their customer, and they can state it in a proposal. If they can clearly and distinctly say: I've assessed, I've evaluated, I've discussed at all levels and not just with top management, but they've gone to the top and they've also gone to the workers on the floor, we've talked to some of their subcontractors and this is our evaluation what this company needs. With this grant and the money the state can bring, and this case. . . that's a good proposal.

State efforts at building coherent systems of education and training: 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 an official in Ohio noted,

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.

A different official in 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, an official in North Carolina discussed the difficulty employers have had with fragmented services:

When we talk to employers, employers don't care what program you're providing your training at; 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 so much of the labels on.

This particular 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 in our small sample except California have been similarly concerned with system-building: Washington has created the 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 — though there is substantial variation in what one-stop centers actually do. It is too early to tell what these statewide initiatives will generate — after all, "there will always be turfisms", and political resistance looms as a significant barriers — but these are important concerns in virtually all states.

The looming problems with welfare: A final problem is one set in motion by changes in federal welfare policy enacted in fall 1996. These changes will 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. In the fall of 1996, when we interviewed state officials, it was still too early to tell what decisions 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 the pressure on states. But sometime in the next five years there are likely to be new pressures for getting more welfare recipients into work. How welfare "reform" might influence workforce development 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, while other states may develop more expensive programs of work and education that use community colleges more intensively. (We suggest in the conclusion that the expertise community colleges have built up in working with employers might provide the basis for improving the quality of welfare-to-work programs.) For the moment, welfare "reform" looms as a great uncertainty in state's education and training systems.

SECTION FOUR

THE 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. These tensions vary substantially: some colleges have recognized them 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 these tensions are not all bad — they have some real advantages that we point out in a subsequent part of this section — they do threaten to divide the community college into two, one of them (the "regular" college) somewhat more student-centered and operating according to established institutional practices, the other more employer- and market-oriented, and operating according to more entrepreneurial principles.

There's 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 that can do no good. Such a cleavage would, we think, threaten the ideal of the comprehensive community college; it might undermine the view of the institution as the "people's college", committed to teaching and to non-traditional 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

There are numerous sources of difference and tension between "regular" credential-oriented programs and those associated with workforce development and economic development. These tend to create resentment on both sides, to widen the cleavage that begins with different purposes and clients. Working with seven community colleges, we can see evidence of the following:

Flexibility and modes of operation: There are many differences in the way programs work, with workforce development being much more flexible. Workforce development programs can often be put in place in one or two months, while conventional programs require months of planning and deliberation — at least 18 months, Central Piedmont estimates. Because employers typically care about competencies rather than credentials, workforce development programs rarely worry about certificates or credentials — while conventional occupational programs are sometimes criticized for being too concerned with credentials that mean little to employers. 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 to 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; but this creates additional hurdles to producing new programs.

Given increasing state oversight of curriculum, we might expect the number of credential-oriented programs to be fairly static, with flexibility and responsiveness resting within the "entrepreneurial" college. If this process continues, credential-oriented programs will wind up as state creations, difficult to modify, and all changes will take place within the "entrepreneurial" college.

"Relevance" and contacts with employers: Since they are responsive to employer demands, workforce development programs are often in greater contact with employers than are credit-oriented occupational programs, and can claim a greater "relevance".²³ For similar reasons, those involved in workforce development often complain that regular faculty do not keep current in their occupational areas or in the ways in which academic skills are used in workplaces. On the other hand, instructors in credit-oriented programs complain about the lack of time and resources for staying abreast of current developments. State and local policies that place the responsibility for professional development on colleges, rather than on individual faculty, contribute to this skill gap.

Admissions, selection, and service to non-traditional students: The courses and programs of workforce development generally have their "students" chosen by employers: they are (by definition) employed, and in many cases they are highly capable employees chosen to benefit from additional training. In contrast to this kind of creaming, the regular programs of the open-admissions college are not subject to any selection (except self-selection): they often have to contend with students who are under-prepared academically, whose motivation is uncertain, and whose occupational purposes are unclear. But while the lack of selection creates pedagogical problems in the "regular" college, the commitment to open admissions and the hostility to creaming and tracking among many faculty is strong, creating resentment toward the "entrepreneurial" college. A split has already begun to develop, particularly as some

community colleges (like those in urban areas) have been saddled with increasing remedial/developmental students: the contrast in the 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. And so, there's a real philosophical decision about that. 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 about who they serve, and how they justify that to their communities.

When a college begins to pursue community, workforce and economic development, it may lose sight of its other missions. One of the seven colleges we examined, located in an urban center, has enlarged its workforce development programs and built several gleaming buildings serving the employment community. But its remedial/developmental programs and other efforts on behalf of low-income and minority students are not nearly as well-marketed, so its enrollment of JTPA and welfare clients is tiny. It's easy to see how this can happen given the enormous visibility associated with workforce and economic development; but this trend can only exacerbate the division between educational haves and have-nots that the "people's college" is supposed to remedy.

To be sure, the division between well-prepared students in workforce development and under-prepared 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 can stay viable, so it can hire our emerging workers and on-campus students.

Still, the issue of whether students in workforce development programs are on average better prepared than the non-traditional students in regular programs merits further examination, lest such a difference further split 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. Even if many colleges do not provide much institutional support to enhance the quality of teaching, the ideal that teaching should be pre-eminent and student-centered is widespread.²⁴ As an English instructor mentioned,

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 have seen little attention to the nature of teaching in workforce development courses. Faculty are selected on the basis of subject-matter expertise, availability, and cost, and there is a presumption that students will learn whatever is "delivered". We have no idea how this works out in practice since we have not observed any teaching in workforce development programs, but we fear that didactic and skills-oriented teaching is the most common²⁵ — 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 "teaching college", and we suspect it undermines the effectiveness of these programs.

On the other hand, the flexibility within the "entrepreneurial college" might 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 teacher 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's difficult to know what the overall effects on the quality of teacher are, then, though the lack of explicit attention to the quality of teaching remains a source of concern; without explicit concern for teaching, many instructors revert to the kinds of didactic methods that they themselves grew up with.

The inattention to teaching methods in workforce development is part of a broader problem. Outside 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 a variety of programs including workforce development could learn from the best efforts of community colleges — in ways we outline in the Conclusion.

Intra-institutional competition: Because employers in need of additional training can either turn to workforce development programs, or send their employees to regular credit-based courses, there is a certain danger of competition for students between the "regular" college and the "entrepreneurial" college. This becomes a

particular problem when colleges then set up separate centers to handle various types of 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 – which is, in an enrollment-based system, the life-blood of any institution – as well as denying "regular" programs access to employers and the information about current practices. Particularly in periods and regions of declining enrollments in "regular" programs, this may create an 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 mention,

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 have far more duplication of things. 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 of multiple provision is the more powerful is unclear to us, and almost surely varies from college to college. We note that 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 – and so it is unsurprising to see the "entrepreneurial" college engaging in more competition even within an institution.

In many states, there is a funding differential between credit- and non-credit 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 non-credit courses, since many of them are substantively interchangeable in any event – a move that would reduce both confusion and tension within the institution.

Costs, revenue, "profit", and risk: All institutions, departments, and programs face fiscal incentives, of course, but they are structured differently in the "regular" college and the "shadow" 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 brought in from state and local revenues plus tuition. Classes that don't meet this break-even enrollment level are often canceled, though small numbers of such expensive classes may be maintained – sophomore classes required for transfer, for example, or high-cost occupational programs like nursing. Other classes with high enrollments and low costs generate "profits" or surpluses, which are then used to support student services and other offerings that don't generate their own revenues. These are institutional decisions, and departments don't 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's little risk-taking of this sort. As one director noted

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 structures and delivery system that calls for a whole new way of thinking from the ground up. So, 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 a cost-plus pricing policy, so that courses are offered only if they make a profit: there is no pressure to provide courses that are money-losing ventures, as there is in the regular college with its expectations of serving many different students and offering many courses. To be sure, workplace development programs engage in the same strategic behavior as any business, and so may offer a course below costs 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 the workforce development programs — and indeed this allows the entrepreneurial college to start new ventures whereas the FTE funding of the regular college makes start-up difficult. But of course no program in the entrepreneurial college will continue money-losing courses for long. These are market-driven decisions rather than institutional decisions, where workforce development programs have more control over their offerings and pricing.

The "shadow college" as a 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 much resources, and has so much 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 in the long term if it's not addressed.

This 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 abates when its programs are simply transferred to the shadow college. Again, the long-term result would be a complete split, with the "regular" college suffering badly by comparison.

The 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 the non-traditional students — often poorer, older, more likely to be minorities, more likely to be educationally under-prepared — who have flocked to the "people's college". Such advocates may be either hostile or indifferent to the interests of employers, partly because the students they want to serve have often been badly treated within the employment system; even if employers are not the enemy, they are certainly not the principal clients of the "regular" college. In contrast, workforce development and economic development efforts see *employers* as the main clients of their efforts: if employers want short-term, specific training that may not be in the long-run interests of employees and their job mobility, workforce development programs provide that. This is a debate about equity versus selection, of individual economic opportunity versus employer's immediate needs, and of non-market conceptions of educational institutions versus market-oriented conceptions.

In the Conclusion of this monograph, we suggest ways that this antagonism over purposes might be muted, by reinterpreting these two purposes as complementary rather than antagonistic. For the moment, however, we should point 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 our economy. Service to individual students has been just as powerful a 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.²⁶ The two inevitably coexist; the trick is to find a way to make sure the difference between them does not become destructive.

What are the Skills Employers Want? Finally, we should mention a problem that sometimes manifests itself as a tension between short-term job training and workforce development programs versus longer-term certificate and Associate programs. Not surprisingly, the business community does not speak with one voice. Small and medium-size employers, those hiring for entry-level work, and those contracting with colleges for customized training are usually most concerned with relatively narrowly-defined, job-specific skills. But other employers — often representatives of larger national and international corporations, or those concerned more with more advanced employees — are likely to be more concerned about more general skills, "SCANS skills", or higher-order skills (sometimes mislabeled "academic" skills): problem-solving, initiative, the ability to learn independently, the ability to communicate with a variety of co-workers, 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 these 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 "developmental" 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 we suggest ways that the differences can be minimized. But there are also benefits to the tensions we have outlined above.

In many ways, the "entrepreneurial college" counters the tendency for regular, credential-oriented programs to be inward-looking, to neglect the economic realities outside the college walls. Particularly in academic departments, English teachers look to their discipline for guidance, and only sometimes to the way communication and literacy are used in economic and political life; math instructors look to the math profession, often with little idea of what math is used on the job. Occupational departments are less prone to this separation, because some occupational faculty have excellent ties with business and industry. Still, workforce development programs complain about them too; even occupational instructors can become distant from local labor market needs.²⁷ Perhaps all educational institutions tend to become self-contained – the "ivory tower" is the derogatory phrase commonly applied to the university – and periodically efforts emerge to make them "relevant", to make teaching more applied, more "contextualized".

In these efforts, 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, and so later we argue that the developmental 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 occupational students would never 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. As a result, employers have shifted to employment practices that place a greater premium on competence: hiring procedures that require highly specific job experience, as evidence of both technical skills and personal attributes, rather than or in addition to educational credentials, and "post and bid" promotion systems that examine the competence rather than the seniority of workers.²⁸ Community college students are, almost uniformly, using colleges as routes into employment – either directly through occupational programs, through transfer programs and transfer to four-year colleges, or indirectly by remedying skill deficiencies and determining what they might want to do with their lives. If they are not prepared – if they do not have the "skills employers want", to cite 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 as well as the operations of the "shadow college" itself, and can therefore serve as lessons both to students and their instructors in the "regular" college.

But these lessons could run both ways. The concern of conventional credential programs with longer and deeper preparation should be a reminder that individuals preparing for employment over the long run need more extensive preparation than the short, specific training within most workforce development. The concern with the quality of teaching in the conventional community college is a warning that presenting

material by "experts" without attention to teaching methods may be ineffective — particularly where there are no other measures of success like increased learning or subsequent success in educational settings. And so we see some of the bickering between the "regular" and the "entrepreneurial" college as healthy: each side 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 better recognize the realities of competition and employer demands.

But 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 sort of like 19th century capitalists who are out there, and [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.

Or, to restate the conclusions of the Commission on the Future of the Community College (1988, p. 39), 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 role of the entrepreneurial college as a buffer is that there will be too *little* tension, since the existence of the entrepreneurial college relieves the regular college of the need to reform. Clearly, it is necessary to explore other ways of continuing the development of the comprehensive community college — a subject to which we turn in the Conclusion.

SECTION FIVE

CONCLUSIONS AND RECOMMENDATIONS:

The continuing changes in community colleges present both opportunities and dangers — as changes in the past have too. The further expansion 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, but they have also created some tensions with faculty in regular, credential-oriented programs and the threat that the college could become less unified in its purposes — less of a community in every way. The challenge, as we have suggested throughout, will be to realize the distinctive benefits of the "developmental college" without causing a split in the comprehensive community college.

In this conclusion, we examine some implications for colleges themselves, particularly the steps that colleges can take in promoting the "entrepreneurial" college", on the one hand, and the steps they can take in making sure that it is integrated with the more familiar programs of the "regular" college. We also review some issues that states face — since their policies toward workforce, economic, and community development have been so haphazard — and, because it is so difficult to learn about the "entrepreneurial" college — some areas for further research. We conclude with a section forecasting alternative futures for community colleges — not because anyone can do this particularly successfully, 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 we have stressed throughout this monograph, the programs of the emerging "entrepreneurial" college have great promise. They are 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 – especially the programs we defined as workforce development, where college provide short-term training for the employees of particular firms – increase the enrollments and revenues of colleges; but the more varied activities of economic development and community development are not so closely linked to the short-run self-interest of colleges. Instead, they 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.

If we view workforce development, economic development, and community development as a roster of particular activities – like the many activities illustrated in Section One by the seven colleges with which we worked – then there is an extensive agenda of possibilities for colleges to pursue. (We will not concentrate here on the details of how to initiate such efforts; other publications – including Zeiss and Associates, 1997, and McCabe, 1997 – provide more detailed guidance.) However, if the "entrepreneurial" college is viewed instead as a process for keeping a college connected to its community, then different issues arise. An obvious question is whether they plan which ones 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 with which we worked have developed careful planning processes to decide what kinds of activities to pursue; they engage relatively constantly in environmental scans, market research to determine the direction of labor force and community needs, and then decide how to fill these needs. Indeed, some of the

activities of economic and community development – participation on community boards and taskforces, cooperation in local planning activities, and providing certain kinds of research for community planning – themselves provide the information necessary for effective planning. Then, once having identified local needs, such planning efforts can decide on ways 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 on-going 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 a need in the best possible way: these efforts try to identify the provider with the existing expertise to most readily meet a particular need, rather than having all providers duplicate facilities and programs.

However, some colleges – including a large number of colleges across the country that have not yet done much in workforce of economic development – to appear to be more opportunistic in their approach to workforce and economic development: they may take advantage of invitations to participate in community forums and employer programs but without any clear planning, or any idea of 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, we think, 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 more planful approach is – in the manner of the "environmental scans" described in Section One – more proactive, since it identifies opportunities and sorts through the worthwhile activities from those that make little sense, given the comparative advantages of a particular college. In addition, the more planful approach could *anticipate* the problems and tensions that now arise between the "entrepreneurial" college and more established credit programs – the subject of the next section – and could work to make these two parts 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 to one another. As one vice president noted:

Industrial networks strengthen and expanded 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 student permanently. We work to get industrial network employers appointed to the newly created Workforce Development Board, so that small and medium 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 policymakers, and learning to gather and interpret the information is valuable for college faculty and administrators.

Workforce and economic development depend 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 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 recompense, there are many ways the "entrepreneurial" college aids the regular college. The programs of community development and workforce development provide exposure to the college among many workers and community members who can then enroll on their own — though the magnitude of these transfer are 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 can also attract part-time instructors to the college, some of whom migrate into full-time teaching of part-time instruction 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, and often quite different from "school math".

As the entrepreneurial college continues to expand, the challenge is to find mechanisms to make the two parts of the comprehensive college complementary rather than antagonistic to one another. These are activities which the seven colleges we surveyed have only begun to explore. Nonetheless, a number of practices have begun to emerge which could provide the basis for greater cooperation, in place of the antagonism which has sometimes been evident.

Use of college faculty: Many colleges try to use their regular faculty for workforce development efforts. For example, Central Piedmont reports that 80 percent of the individuals providing customized training are from the regular occupational faculty. Sinclair has an unwritten, good-faith policy to use full-time faculty for the CCS and AIM centers. These individuals therefore benefit directly from learning about the unmet needs of industry, changing technology, and work organization. Sometimes they use the materials from credential programs "off the shelf", though often they develop new or customized teaching materials; in turn, they can sometimes incorporate these materials into other courses. The use of the same individuals in both credential and customized programs therefore facilitates the transfer of information back and forth.

However, on many campuses there are institutional barriers to faculty participating in both credential programs and workforce development. In North Carolina, the state differential paying two-thirds as much for non-credit courses makes it difficult to hire regular faculty; at Central Piedmont, less than 5 percent of customized instruction is done by full-time faculty due to scheduling and out-of-date skills as well as this wage differential. At Sacramento City College, for example, faculty are limited in their ability to teach additional classes – presumably to make sure that they don't shortchange their regular teaching. In some colleges the salary scale is lower for short courses, and faculty with enough to do in their regular teaching find the pay insufficient. In these cases, then, 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, by creating "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 then allocate their time more flexibly and carry out tasks

– maintaining relationships with employers, for example, or counseling students, or doing placement – that are typically not part of their current job descriptions. 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 it will be out of these people working 40 hours a week that's going to come the innovation that keeps the classes going.

Though it is not yet developed, these platform teams provide a model where community college instructors are distinctive: they follow neither the four-year college approach nor the high school model. In the process the split between working in the inflexible "regular" college and the innovative "shadow" college could disappear.

Eliminating the credit/non-credit differential: Central Piedmont has started to pressure North Carolina to eliminate the funding and regulatory differences between credit and non-credit courses. This would facilitate students moving between the two kinds of programs, and would also enable faculty to teach both more flexibly. As a state official in North Carolina noted about credit and non-credit courses,

They're 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 – there's not going to be any concern about what's the intent, as to a degree student or a non-degree student. It doesn't matter: they're all kind of the same.

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

Joint student services: At Sinclair Community Colleges, career placement services work with all kinds of individuals – with students enrolled in credential programs, of course, but also with short-term job training clients in JTPA and welfare

programs as well as individuals enrolled in customized training. The services include not only providing information about job possibilities in the area, but also counseling about the requirements to apply for various kinds of jobs — that is, information to individuals about whether their academic and occupational skills are sufficient for the occupations they would like to enter.²⁹ Then, of course, the college provides a variety of programs that enable individuals to remedy any deficiencies in their skills. When this kind of service is provided to employees enrolled in customized training, then it provides a "bridging" mechanism between the short-term, job-specific requirements of employers and the desire of at least some employees to develop more sophisticated abilities for longer-run advancement — a route for individuals in customized training to find their way into credential programs.³⁰

Related services that could serve a variety of individuals are variously called student development centers, or opportunity centers,. For example, the community colleges in North Carolina include state-funded student centers, which facilitate the inclusion of job training clients into the college. These centers typically support student progress in various ways: through guidance, counseling, and occupational information to inform their career-related decisions; through assessment, tutoring, or referral to other remediation programs as necessary; through help with financial aid; and potentially through job placement. These centers can provide information both to students in credential programs as well as individuals in workforce development programs; conversely, they can provide information back to the institution about needs of individuals that are not being met in customized training.

Joint advisory committees: Another possible link between credential-oriented programs and workforce development programs is the advisory committee. Most colleges have advisory committees for their occupational programs — though they vary enormously in their frequency of meeting and usefulness — and different committees

for customized training. However, we have not seen any college that encourages employers to advise academic faculty on course content or competencies. If one joint committee served all these 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 firms, or those concerned with more advanced positions – about the more general and higher-order competencies that workforce development programs cannot provide. It's important, of course, 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 would also address the emerging cluster of occupations that are multidisciplinary, such as media design which 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 all 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 on-going staff development about teaching methods (rather than one-shot workshops), mentorships and seminars for new instructors, mini-grants for curriculum innovation, curriculum and resource materials, and many other sources of support for the quality of teaching.³¹

Many problems that influence teaching in the regular college also affect teaching in workforce development programs. Typically, instructors come in from business and industry, with subject-matter knowledge but no background in teaching itself; they are

left to develop their own methods by trial and error, and the enormous complexity of occupational teaching (Achtenhagen and Grubb, forthcoming) is never recognized. But if community colleges established instructional centers for their regular faculty, then the same resources could be used at only small additional cost for the faculty in workforce development programs. This need not impose an enormous burden on such instructors, or reduce the flexibility of customized training; it *would* provide a resource that now does not exist for instructors to consider the alternative approaches to teaching, the different ways they can present their subjects, and the various techniques for knowing whether students are learning.³² The very presence of such instructional centers would acknowledge that the quality of teaching is important — perhaps especially 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 in the two parts of the community college.

As an example of what an instructional center could accomplish, faculty at Sinclair now need resources to buy their time to redesign more customized courses for employers. But resource limits force them to repackage existing courses when more thorough changes are necessary — "repackaging is not enough", as one dean said. An instructional center could help instructors transform existing courses to be more effective for particular employers, at the same time that they help regular academic and occupational instructors with their teaching.

Physical Location: Several colleges in this study are relocating contract education in a separate building, which both 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: it 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 vantage of integrating the "regular" and the "shadow" college, a much better solution is to have physical facilities that serve several different functions, allowing a free flow of students and staff and symbolizing the integration of different purposes.

Integrated administration: Several community college have integrated the administration of credential programs and workforce development. For example, Central Piedmont is combining continuing education into mainstream departments, with the goal of "infecting them [traditional degree divisions] with the entrepreneurial disease." The hope is that the continuing education instructors will help regular instructors understand the need to generate dollars and to evaluate programs on a cost/benefit to the college basis. 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, providing both credit and non-credit courses for a variety of students as well as customized training for firms. (In contrast, the remaining community colleges in our sample have organized credential programs under one dean, and workforce development efforts under another, keeping them quite independent.) An integrated administration allows information about these two activities to be shared, and in theory allows the institution first to understand and then to resolve any common problems, sources of friction or destructive competition, or institutional barriers to integration (like 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 surplus generated by workforce development activities is a matter of some debate. But the real funding issue is different, it seems to us. Restrictions on funding credential programs have caused colleges to turn increasingly to part-time instructors; but part-time instructors cannot participate in the life of the institutions — and in creating special programs like workforce development efforts. And when a college increases the numbers of part-timers, then the burdens on full-time faculty increase as well; they have to maintain the institutional fabric of the "regular" college and supervise all the part-time faculty, and their abilities to take initiative within the "shadow" college are consequently restricted. As one vice-president commented about the current efforts to knit the two part of the community college together, "While that opportunity is there, it may be snatched away from us by financial considerations."

Another tactic to induce cooperation is to split 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 used the lab about half the time. This approach is spreading within the college; as 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, things that are just killing us now, costwise, supply costs and recent additional equipment. So 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 clarify that the "regular" and the "shadow": college are complementary to one another. Therefore it is appropriate to share revenue — to have any surplus from one side of the college be available for the college as a whole. By the same token, since the two are complementary, it is in no one's advantage to have the "regular" college weakened by fiscal pressures while the "developmental" college

prospers – and comprehensive community colleges need to take steps to prevent this division, including reallocating revenues.

Reconciling workforce development and the "people's college": Finally, how can the commitment of the community college to non-traditional students – including those with poor academic preparation, low-income and minority students, and those with marginal employment – be reconciled with the tendency of workforce development programs to concentrate on those individuals chosen by employers? The most obvious reconciliation would be to develop programs moving non-traditional students – including job training and welfare clients – into employment with firms committed to continued training, so that the community college could complete through customized training what they start in the "regular" college. We doubt that employers would be open to such approaches, since they are generally 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, we can suggest only that colleges look for opportunities to reconcile these two opposing commitments – hoping that they other efforts to make the different purposes complementary will facilitate this aspect as well.

The common element in these ways of making credential programs and workforce development programs complementary is the common use of important resources: joint use of faculty, joint use of student services, integrated advisory committees, joint use of teaching centers, and integrated administration. These represent resources, not regulatory or deliberative mechanisms that might impede the flexibility of the "entrepreneurial" college. They facilitate the flow of information back and forth, so that the "regular" college can benefit from the information generated by the greater contact with employers in workforce and economic development – in

reciprocity for the fact that the "developmental" college depends in part on the reputation and the resources (including the overhead costs) of the "regular" college. In this vision, strong developmental programs would improve the quality of regular credential programs and short-term job training alike; and regular programs of high quality – together with ancillary features like student services and teaching centers – would strengthen the quality of entrepreneurial efforts. This is a vision in which the different parts of the comprehensive community college are complementary to one another – rather than remaining in tension.

State Policies to Enhance the Entrepreneurial College

As we clarified in Section Three, states vary enormously in their policies toward community colleges. In many cases, policies that seriously limit the "entrepreneurial" college – like the complex of regulations in California – have grown up without much thought; in other cases policies defined for purposes of the "regular" college – like 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 by a confusing array of regulations and program initiatives that weaken the ability of colleges to create local initiatives. The most pressing need, therefore, is for states to examine their policies toward the "entrepreneurial" college carefully and to see where policies are inconsistent or inadvertently detrimental to the desirable aspects 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. And 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: State funding for workforce development is quite uneven. These decisions are, of course, political in the deepest sense since they express values about the merits of subsidizing firm-based training. We note that the United States has low levels of upgrade training compared to its major competitors (Lynch, 1994), and there is good reason to think that certain market failures affect firms' decisions about how much training to provide their employees (Stern and Ritzgen, 1991) – and both are reasons for government to increase subsidies for training, at least under some conditions which we review below. States may therefore need to review their overall funding for workforce development.

However, the form in which funding comes. is just as difficult an issue for states to reconsider. The differential in funding between credit and non-credit courses, for example, has made it more difficult for colleges to support certain kinds of workforce and community development, and has sometimes led to elaborate ways of getting around these funding restrictions. And the categorical programs that states have devised for economic development are sometimes – as in California – biased against community college despite state policy that promotes economic development in these institutions. Some states, therefore, need to reconsider the form as well as the levels of funding they provide.

Finally, we note that several of the policies that would help integrate the "regular" and the "entrepreneurial" college require additional funding – for instructional centers, for example, or certain kinds of student services that facilitate access for a variety of students. .

Flexibility and regulation: Many community colleges have complained about state regulation as a factor driving them to expand the "shadow" college. The specific regulations that limit flexibility vary from state to state, so a "regulatory audit" would be appropriate in many states, to determine which of its regulations are most responsible for inflexibility and have outlived their usefulness. This is, we should note, an aspect of integrating the regular and the "shadow" 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 some accountability for how these funds are used. So far, states have done little to establish measures of accountability and success for these programs, and colleges have tended to use consumer satisfaction and repeat business as measures of success. But, as several state officials have acknowledged, such measures assume a great deal, and other measures could be developed to make colleges more accountable for the state revenues they spend. To be sure, doing so will require considerable deliberation at the state and local level, 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 enhancing 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 best community colleges can participate.

One dimension of accountability that many states have not yet considered is the basic rationale for public subsidy. While some states are clear — for example, Washington with its support for dislocated workers, and Michigan's prohibition against using state funds for firms 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 this basic kind of decision may be unpopular with local colleges that would like state subsidies to expand, this recommendation is consistent with general principle of spending public funds only when there is clear justification.

The balance of regulation and technical assistance: We note the concern of state officials in North Carolina that their state – like many others – has tended to impose regulations and accountability measures but without helping colleges meet them. A more even balance between technical assistance – or state agencies playing a greater role as "service agencies" – and regulation would be welcome in many states, certainly in policies applicable to the "entrepreneurial" college but also, we suspect, in many other areas of community colleges. In fact, if we could articulate a simple statement of state policy, it might be this: no funding without accountability; but no accountability without technical assistance.

Toward state systems of education and training: Many states are wrestling with the question of how to coordinate, or consolidate, or streamline, or otherwise rationalize their post-secondary education and training programs, which in many states have become too numerous, too overlapping, and too complex for potential students and employers alike to navigate. States are now experimenting with different approaches, including new programs like one-stop centers, and it is too soon to know which of them will be effective in providing improved services, better information, or more substantial outcomes.³³ However, one pattern we consider dangerous is to consider short-term job training and welfare-to-work programs in these reforms but not to include community colleges, adult education, and economic development efforts – in other words, to consider a restricted set of programs for coordination. We have argued elsewhere (Grubb, 1996b) that the limited value of short-term job training and of conventional

adult education can be remedied only 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 first-chance educational system. But even if there are other ways of improving job training and adult education, we think it is at best incomplete, and at worst totally ineffective, for states to try reforming their workforce development programs without considering community colleges.

As states wrestle with 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 therefore need to find sources of employment for welfare recipients, some of whom lack both the technical and personal skills to move into employment. This is an area where the workforce development programs of community colleges may be of special help, 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 mentioned,

One of the main roles that I see [community college] 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 be used remains unclear, but our point again is that developing state policy without considering the special expertise of community colleges is unwise.

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 we documented in Section One, and data systems are never 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 opening new ventures, or deciding which 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 to careful planning; by national organizations like the League for Innovation in the Community College, the Department of Education, and the AACC; and by academic researchers concerned with educational developments and their influence. Among the crucial categories of questions are the following:

The magnitude of the "entrepreneurial" college: Our efforts to nail down the size of workforce development activities (in Section One) were not particularly successful; economic and community development, which typically take forms other than the provision of courses, are even more difficult to describe. However, the size and growth of these efforts is a crucial issue, both to clarify where a college's efforts are going – the college analogue to Willie Sutton's point about "where the money is" – and to provide some empirical foundation to debates over the direction of colleges, to both defenders and critics of the "entrepreneurial" college.³⁴ The most obvious tasks for research – to be carried out by individual colleges – is therefore to become clear about the magnitude of different activities. Whether the 6-part categorization we 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 characteristics, would help clarify what colleges are currently doing – to both themselves and to others.

The nature of planning and evaluation: If we view the "entrepreneurial" college not as a set of activities but as a mechanism for keeping a college in contact with its local community, then the nature of planning processes are 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, and how can they best learn about them (particularly when employers themselves are uncertain about even the near future)? In addition, there are various evaluation mechanisms that can help colleges understand local labor markets, including student follow-up and employer surveys; which of these are the most accurate, and provide the most useful information to local colleges? These kinds of research questions need to examine the practices in a number of colleges, and so are best undertaken with by states or by regional and national association of colleges.

Studies of effectiveness: 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 effectiveness. 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 non-traditional programs: For example, what are the long-run effects on employees who go through customized training? What are the effects on the firm's productivity? Which kinds of economic development efforts stimulate local growth, and which are ineffective? Which merely shift the locus of activity without

increasing overall output, and which kinds of training merely shift 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 should be done, we suspect, by employers concerned with the conditions under which further training of their workforce increases productivity; other studies could be carried out by local colleges, 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 impose on workforce development programs. And still others are 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.

The quality of instruction: We remain concerned about the quality of instruction in the "entrepreneurial college". (Indeed, this is an important issue for all non-traditional settings in which instruction takes place, like job training programs, welfare-to-work programs, and adult education, as well as regular credential programs.) We simply don't know whether the quality of instruction in workforce development efforts is very good – and, because there are few mechanisms of evaluation or observation, most colleges don't know either. But the teaching conditions in workforce development programs are especially challenging. There's little preparation of instructors for the task of teaching, since most are hired for their subject expertise (or, in some cases, are employees of a company). There are substantial pressures for teaching to be efficient – that is, low cost – since firms are typically paying for at least some of the costs and time away from employment must be minimized. Some of the programs take place within schedules – for example, meeting late in the afternoon, or at night – that are

not especially conducive to learning. Some of the "students" – both the non-traditional students in community colleges, and some new hires in firms – are poorly prepared in basic literacy and mathematical competencies, and teaching remedial or developmental subjects is especially difficult. And the balance of relatively specific skills necessary for immediate productivity and broader competencies – or SCANS skills, or higher-order or general abilities – necessary for high-performance firms is always a difficult issue, one that often must be resolved by individual instructors.

Given the teaching challenges inherent in the nature of workforce development, the quality of instruction should be 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, to their opportunities for subsequent schooling and training. Then, a related agenda would ascertain what kinds of policies – for example, selection mechanisms for instructors, training in teaching methods, development of curriculum materials, instructor centers such as those mentioned earlier in this Section – can improve the quality of instruction without compromising the flexibility of workforce development. This kind of research is consistent with the ideal of the community college as a "teaching institution" – one that extends its concern with the quality of teaching to all the activities it supports, including those outside regular credential programs.

We could, of course, elaborate these examples of research endlessly. Our point is simply to illustrate that there are many questions that are central to the "entrepreneurial" college – to persuading others of its importance, to making it a process for connecting local colleges to their communities, and to ensuring customer satisfaction 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 us all identify the most critical issues, rather than emphasizing fads and passing fancies. In the midst of considerable uncertainty, there are several trends about which there is a great deal of consensus — at least, we should admit, at the moment:³⁵

- The community college will continue to enroll many students whose academic preparation is inadequate (or who are immigrants with adequate command of English), but 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 a constant stream of immigration. These underprepared students will contrast ever more sharply with those who have been the usual clients in workforce development programs, who are better educated, more experienced in the labor force, and often selected by their employers for their potential.

- The strength of the American economy will lie in its high-performance firms — firms characterized by a skilled and flexible workforce, with various "higher-order" competencies including communications skills, initiative and independence, problem-solving abilities, and the like (e.g., SCANS, 1991). Increasingly vigorous international competition will drive firms to adopt the technologies and organizational structures of high-performance firms. Large numbers of relatively unskilled jobs will continue, but these are not positions to which most individuals should 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 these 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 especially plentiful, and faith in government is considerably weaker than it was 30 years ago. The movements for accountability reflect this kind of skepticism.

In several ways, these trends — *if* they continue to be trends — could continue to fragment the community college. The "regular" college would be the place where under-prepared individuals come for remedial/developmental education, which is so difficult and time-consuming that it becomes difficult to teach higher-order competencies; then the "entrepreneurial" college is 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 measures of accountability — completion rates, placement rates, transfer rates, earnings targets — which it would become increasingly unable to meet because of the nature of students it enrolls and the competitiveness of the labor market; in contrast, the "entrepreneurial" college would thrive because competitive conditions require firms to upgrade their workers more and more. 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 (or private wealth and public squalor, as John Kenneth Galbraith described it), the greater variation among prospective students — fragment the community college as well.

But, as we have stressed throughout, 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 firms, 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 therefore remain responsive to changes and sensitive to markets – but it does so by being a coherent and flexible institution, not by fragmenting that institution into specialized and non-communicating parts. This direction is, we think, the strongest future for the comprehensive community college.

FOOTNOTES

¹Several previous studies have studied workforce development. NCRVE and the 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 concluded that workforce development efforts are widespread, but relatively modest in most colleges; they tend to provide relatively job-specific skills, usually to small- and medium size firms, with courses usually developed in collaboration with the employer. Revenue sources vary substantially, though employers contribute a substantial fraction. However, the information from these surveys was incomplete because most colleges collect very little data on their programs, and the effort to collect comprehensive information from many institutions meant that neither report could give much sense of the institutional issues involved. Two more recent examinations of workforce development are Zeiss and Associates (1997), from the AACC, and McCabe (1997) from the League for Innovation. Both promote workforce development as a natural extension of the community college's mission to serve local community needs and to expand occupational preparation.

² Throughout, we used structured interview protocols that were reviewed by the seven colleges for their appropriateness and completeness, with different protocols for local and state officials. We also used a data collection format to try to get college the same data from each institution; this was less successful because the data we could collect was limited by the kind of data that these seven colleges already collect.

³ However, in some states, like Illinois, career courses generally do not transfer to four year institutions

⁴ In California, credit courses are reimbursed at \$3,391 per FTE, while non-credit courses are reimbursed at \$891. While there are rules detailing which courses count as credit courses, the fiscal incentive for colleges to use credit rather than non-credit courses is obviously powerful.

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 don't; 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 But see Holzer, Cheatham, and Knott (1993) and Walker and Greenstreet (1991).

¹¹ There's an irony here: The difficulty of applying of 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 quite large contract enrollments.

¹³ If an FTE student takes 15 hours per week times 15 weeks = 225 contact hours per semester, then $15/225 \times 35,000 = 2,333$ FTE students.

¹⁴ See also Jacobs and Teahen (1997).

¹⁵ This is based on a study that observed and interviewed about 300 community college faculty and administrators; see Grubb et al. (forthcoming).

¹⁶ 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% in 1983 to 41 percent in 1991. In general, however, the U.S. is a country with relatively low levels of employer-sponsored training compared to others; see Lynch (1994), Introduction.

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 figures, taken from Table 325 of the *Digest of Educational Statistics, 1996* (NCES, 1996).

¹⁸ See Grubb (1996), 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 with little attention by the proponents of economic development.

²¹ In looking across all states, very few have imposed principled restrictions on their economic development funds — though Iowa doesn't allow funds to go to wholesale or retail establishments of professional services, since they cannot typically be attracted to the state by incentives; Michigan disallows funding for employers moving within the state. Our efforts for ETP in California (Grubb et al., 1993) were intended to give the state some principles dictating which economic development efforts should be funded, but this is the only effort of its kind we know.

²² Because we concentrate on the "entrepreneurial" college, we don't say much about non-credit programs for JTPA or welfare recipients. But it's 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 has led to local initiative being much more important; but elsewhere states have taken the lead in promoting the integration of job training and welfare-related training in community colleges.

²³ 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).

²⁴ See Grubb et al. (forthcoming), based on observations and interviews with about 300 community college instructors.

²⁵ Didactic instruction is much more common in community colleges than instructors themselves think it is, as the study cited in the previous footnote clarifies. In addition, Badway and Grubb (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.

²⁶ See also Labaree (1996) 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 donated social efficiency within the community college; one can interpret the expansion of the "developmental" college as the rise of social efficiency.

²⁷ On the tendency for occupational departments to become isolated from local business and industry, see Grubb (1996a), Ch. 6.

²⁸ On the demands of employers within the middle-skilled labor market that community colleges serve, see Grubb (1996a), Ch. 1.

²⁹ We note that 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 these kinds of low-paid, temporary work (Grubb, 1996a, Ch. 6), but these efforts cannot help move individuals into the right kinds of programs.

³⁰ 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; but given the independence of workforce development from credit programs it seems unlikely that such "transfers" are very common.

³¹ These observations about teaching are based on the research cited in footnote 15 above. On teaching centers see also Lauridsen (1994).

³² We would anticipate the same problem in both the "shadow" 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 worst instructors to participate is difficult, but it cannot happen if institutional mechanisms to emphasize the importance of teaching are lacking.

³³ 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 reworking their education and training programs. Preliminary results from this study should be available in early 1998.

³⁴ We suspect (but we cannot be sure) that the patterns we found in Section One – with workforce development a substantial but not overwhelming part of most college's efforts, in the range of 10 to 20 percent of enrollments and revenues – will be true for most colleges; such figures would clarify the importance of these activities, but clarify the continuing centrality of conventional credential programs – as a way of clarifying that college can afford to neglect neither the "regular" nor the "entrepreneurial" college.

³⁵ This section is drawn in part from Grubb (1996a), Ch. 8.

REFERENCES

- Achtenhagen, F. and Grubb, W.N. (forthcoming 1998). Vocational and occupational education: Pedagogical complexity, institutional indifference. In Virginia Richardson, ed., *Handbook of Research on Teaching*, Fourth Edition. Washington D.C.: American Educational Research Association.
- Anderson (1997).
- Banach, W. (1994). *Critical issues facing America's community colleges, 1994-95*. Warren, MI: Macomb Press, Macomb Community College.
- Bragg, D. (1992, December). *Alternative Approaches to Outcomes Assessment for Postsecondary Vocational Education*. MDS-239. Berkeley: National Center for Research in Vocational Education, University of California, Berkeley.
- Bragg, D., and Jacobs, J. (1991, November). *A Conceptual Framework for Evaluating Community College Customized Training Programs*. MDS-175. Berkeley: National Center for Research in Vocational Education.
- Cohen, A. (1990, April 24). Counting the transfers: Pick a number. *Community, Technical, and Junior College Times*.
- Commission on the Future of Community Colleges. (1988). *Building communities: A vision for a new century*. Washington, DC: American Association of Community and Junior Colleges.
- Doucette, D. (1993, March). *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.
- Eaton, J. (1994). *Strengthening collegiate education in community colleges*. San Francisco : Jossey-Bass Publishers.
- Friedlander, J. (1993, Fall). *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.
- Grubb, W. N. (1992, September). *Finding an equilibrium: Enhancing transfer rates while strengthening the comprehensive community college*. Working Papers Vol. 3, No. 6. Washington, DC: National Center for Academic Achievement and Transfer.

- Grubb, W.N. (1996a). *Working in the Middle: Strengthening Education and Training for the Mid-Skilled Labor Force*. San Francisco: Jossey-Bass Publishers.
- Grubb, W.N. (1996b). *Learning to Work: The Case for Re-integrating Job Training and Education*. New York: Russell Sage Foundation.
- Grubb, W.N., et al. (forthcoming). *Honored Even in the Breach: The Nature of Instruction in "Teaching Colleges"*. Berkeley: School of Education, University of California.
- Grubb, W. N., Badway, N., Dickens, W., Finkelstein, N., Hoynes, H., and Stern, D. (1993, October). *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.
- Grubb, W. N., Badway, N., Bell, D., and Kraskouskas, E. (1996). *Community College Innovations in Workforce Preparation: Curriculum Integration and Tech Prep*. Mission Viejo: League for Innovation in the Community College.
- Grubb, W.N., and Badway, N. (1995, June). 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.
- Holzer, H., Black, R., Cheatham, M., and Knott, J. (1993). Are Training Subsidies for Firms Effective? The Michigan Experience. *Industrial and Labor Relations Review*, forthcoming.
- How workers get their training: A 1991 update*. (1992, August). Bulletin 2407. U.S. Department of Labor, Bureau of Labor Statistics.
- Jacobs, J., and Teahen, R. (1997, January). The shadow college and NCA accreditation: A conceptual framework. Warren, MI: Macomb Community College.
- Kantor S. (1994, Spring). A practical guide for understanding customized workforce training. In *New Directions for Community Colleges*, No. 85, pp. 5 - 11.. San Francisco: Jossey-Bass Publishing.
- Labaree, D. (1997, Spring). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal* 34(1):39-81.
- Lauridsen, K. (1994). A contemporary view of teaching and learning centers for faculty. In Terry O'Banion, ed., *Teaching and Learning in the Community College*. Washington D.C.: American Association of Community Colleges.

- Lynch, L. (1994). *Training and the Private Sector: International Comparisons*. Chicago: University of Chicago Press.
- Lynch, R., Palmer, J. C., & Grubb, W. N. (1991). *Community college involvement in contract training and other economic development activities*. Berkeley: National Center for Research in Vocational Education, University of California at Berkeley.
- McCabe, R. (1997, February). *The American Community College: Nexus for Workforce Development*. Mission Viejo, CA: League for Innovation in the Community College.
- McDonnell, L. M., & Zellman, G. L. (1993). *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.
- Moore, R., Blake, D., and Phillips, G.M. (1995, July). *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.
- Secretary's Commission on Achieving Necessary Skills (SCANS). (1991, June). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: U.S. Department of Labor.
- Stern, D. and Ritzen, J.M.M. (eds.) (1991). *Market Failure in Training?* New York: Springer-Verlag.
- Van Horn, C. (1995, Oct.). *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.
- Vaughan
- Walker, R., and Greenstreet, D. (1991). The Effect of Government Incentives and Assistance on Location and Job Growth in Manufacturing. *Regional Studies* 21(1):13-30.
- Zeiss, T., and Associates (1997). *Developing the World's Workforce: An Agenda for America's Community Colleges*. Washington D.C.: Community College Press, American Association of Community Colleges.

Table 1

FTE enrollments, Central Piedmont Community College		
	<u>1988-89</u>	<u>1993-94</u>
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	1181
Academic	34	52
Occupational	597	732
Practical skills/learning labs	363	68
New and expanding industries	230	110
Human Resource Development	17	40
Self-support (contract ed.)	27	179
Total	10,566	11,091

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

Table 2

Enrollments, Sinclair Community College

All credit classes – FTEs	9,815
All credit classes – head count	19,817
Career/technical classes	12,257
Academic classes	7560
JTPA	183
JOBS	*
Employees served in business and industry	10,590

Source: Data provided by Sinclair Community College.

*not available, but enrollments in prior years average about 250.