Noncredit Enrollment in Workforce Education:
State Policies and Community College Practices

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Executive Summary

Introduction

Postsecondary noncredit education has become increasingly common; many community colleges now enroll more noncredit than credit students. Much of the growth has occurred in workforce instruction and contract training. These programs are noted for their important role in meeting shifting workforce demands and providing skills in a way that is flexible and responsive to employer needs. Growth in this sector raises fundamental questions about whether colleges are keeping pace with need, using resources efficiently, and providing access to all students. The answers may challenge current state policies and college practices.

Methodology

The CCRC study, funded by the Sloan Foundation and conducted in collaboration with the National Council for Workforce Education and the National Council for Continuing Education and Training, focused on noncredit workforce instruction and contract training in community colleges. Specifically, it examined (1) the extent to which noncredit workforce education and state policies play a role in workforce development, provide disadvantaged groups with access to higher education, and generate revenue for colleges; (2) how colleges organize their noncredit workforce programs to balance the tradeoffs between the desired flexibility of noncredit education and the integration of credit and noncredit programs; and (3) the extent to which noncredit workforce education provides recorded outcomes for students, such as transcripts or industry certifications, and the extent to which outcome data are available.

Two key sources of information were used. First, we reviewed noncredit workforce education policies on funding and regulation in all 50 states by interviewing people in state departments with oversight for community colleges or workforce development. Second, we obtained case studies of 20 community colleges in 10 states by interviewing key administrative staff. The colleges selected reflect innovative practices in noncredit workforce education, as well as demographic diversity.

Noncredit Program Roles

As a local workforce development resource, community colleges serve many people seeking education for a variety of reasons and a wide range of industries needing employees at different skill levels. Noncredit students in the case study colleges have diverse educational backgrounds and tend to be older and interested in gaining skills. To bring students interested in pursuing a degree into credit programs, the colleges use a variety of features, such as recruiting noncredit students to credit programs and developing linkages between noncredit and credit programs. To support noncredit enrollment, more than half of the states provide general funds for community college noncredit workforce education, which may provide an important indication of the state's vision for noncredit education. More than half the states have guidelines for defining noncredit workforce courses.

In addition to meeting students' needs, the colleges seek to meet specific employer needs at the state and local levels. Some have developed flexible ways to offer courses in response to employer demand. Most states provide funds for workforce training and economic development, and just over half specify a direct role for community colleges as fiscal agents or preferred providers.

Community colleges also have a goal of generating revenue through noncredit workforce programs. Because few states place limits on what they may charge for noncredit workforce courses, they are free to charge what the market will bear. Many noncredit programs in the case study colleges are, or plan to become, self-supporting or profit-generating to add value to the college and secure broader support within the college. Serving students and employers successfully while also generating profits is a challenge for community colleges.

Noncredit Program Structure

The place of noncredit workforce education programs within the college's overall structure may have important implications for how they operate and what they achieve. The case study colleges use a range of organizational approaches, including both separate structures, where noncredit is a distinct organizational unit within the college, and integrated structures, where noncredit programs are interspersed across

the colleges' academic units by content area. Regardless of organizational structure, colleges use a variety of strategies to achieve collaboration between programs and are flexible in their noncredit operations. Noncredit programs with separate organizational structures coordinate their activities through regular meetings and communication throughout the college to encourage collaboration, avoid duplication, and allow movement between noncredit and credit programs. Conversely, noncredit programs with integrated organizational structures have an organizational entity to conduct entrepreneurial outreach, maintain flexibility, and act as a central point of contact with employers. No single right way exists to organize noncredit workforce education, but coordination between credit and noncredit programs may help better meet the needs of both students and employers.

The increase in noncredit workforce education has prompted changes in the organization and course offerings of the case study colleges. Recently, several of the colleges have changed the organization of noncredit education to consolidate programs, elevate noncredit education administratively within the college, and promote workforce development as a major college mission. Most are working to engage faculty and increase their appreciation of noncredit workforce education. In addition, noncredit workforce programs are bringing innovation to credit programs by developing strong links to the local labor market; they can benefit the college by increasing the depth and breadth of its offerings. State and federal funds have also spurred the development of noncredit program offerings in new technologies. As noncredit workforce education evolves, it is creating organizational changes within the community college that reflect its importance and its likely influence on the content of credit programs.

Noncredit Program Outcomes

Since noncredit workforce education is not regulated by the academic rules that govern credit education, the recorded student outcomes from participating in a noncredit program vary and serve different needs. While only a few states have guidelines for including noncredit courses on a transcript, many case study colleges provide transcripts for noncredit workforce courses. The noncredit programs offer a range of industry certifications, but many noncredit offerings are not associated with such certification. The colleges therefore typically rely on external sources of validation to award Continuing Education Units (CEUs) for noncredit courses to meet industry demands. Some states and many case study colleges have guidelines that could facilitate retroactively granting credit for noncredit courses, but their use in colleges is rare. Many states and colleges also reported interest in procedures for articulating noncredit programs with credit programs. The value of various recorded outcomes differs depending on the needs of students and employers.

With respect to reporting requirements, many states tie reporting to funding, and several seek to collect more comprehensive data. State data systems can facilitate data collection for reporting requirements, but they must account for the unique format of noncredit programs. Case study colleges without state noncredit reporting requirements rarely collect these data for their own purposes. The colleges reported several barriers to data collection, including their inability to collect information from some students, the nontraditional time frame of some courses, and poor systems. A fuller understanding of the needs and outcomes of individuals and employers who seek noncredit workforce education is vital to determine which programs and recorded outcomes are of most value for which students.

Recommendations

Noncredit workforce education can play an important role in responding to local labor market demands by addressing employers' workforce needs and students' needs for immediate skills. It can also benefit students by providing access to credit programs, generating meaningful recorded outcomes for a range of needs, and facilitating the long-term pursuit of degrees. Community college noncredit workforce education can have a central role in states that prioritize funding to support career pathways as part of their workforce development agenda by connecting short-term training to programs leading to degrees and credentials. The findings from this study lead to five key recommendations:

1. Provide state funding to support noncredit workforce education with clear and targeted goals that promote workforce development and help students access credit education by cultivating better ties to career pathways.
2. Encourage increased coordination between credit and noncredit programs to benefit both students and employers.
3. Better assess student needs and support efforts to recruit noncredit students into credit programs and to articulate noncredit and credit programs to promote student transfer, when appropriate.
4. Explore the development of nondegree forms of validation for all noncredit workforce education and standard systems to record outcomes that promote the portability of evidence of skills for students and accountability for colleges and state workforce education funds.
5. Collect more information on individuals' and employers' outcomes from noncredit workforce education to assess the contributions of noncredit workforce education for students, employers, and the economy.

Introduction

The available national evidence indicates that postsecondary noncredit education has become increasingly common in recent years. Specifically, the National Household Education Survey (NHES) indicates that the noncredit student headcount grew from 90% of the credit student headcount in 1995 to exceed the credit student headcount by more than 8% in 1999 (National Center for Education Statistics [NCES], 1998, 2003). Various types of noncredit education include workforce instruction, contract training, developmental education, recreational courses, adult basic education (ABE), and English as a second language (ESL) (Voorhees & Milam, 2005). Many community colleges now enroll more noncredit than credit students (Bailey et al., 2003).

Much of the growth of noncredit education in the last two decades has occurred in courses related to workforce education. While noncredit education has been part of community colleges for years, during the 1980s and 1990s community colleges moved toward greater involvement in economic development and workforce training (Doucette, 1993; Dougherty & Bakia, 1999; Grubb, Badway, Bell, Bragg, & Russman, 1997; Levin, 2001). States increasingly provided funding for customized training programs, and the granting of industry certifications, particularly in information technology, increased dramatically. Today, the majority of community colleges offer some form of noncredit workforce education, including courses that lead to specific workforce or professional credentials and contract training for specific employers (Dougherty & Bakia, 1999; U.S. GAO, 2004), and these programs are noted for their important role in responding to shifting workforce demands and providing skills in a way that is flexible and responsive to employer needs (U.S. GAO, 2004).

The growth in community college noncredit workforce education raises fundamental questions that may challenge current policies and practices. They concern the varied needs noncredit workforce education must meet, the extent to which the organizational approaches of community colleges have kept pace with this growth, and the ability of noncredit programs to provide students with a valuable recorded outcome. The questions have important implications for the efficient use of college resources, the accessibility of college programs to all students, and the college's accountability as a public institution.

This report addresses these fundamental questions, shedding light on current noncredit workforce education policies and practices and identifying possible tensions and conflicts. It focuses specifically on noncredit workforce education in community colleges, that is, on workforce instruction and contract training that does not result in institutional credit that can be used to complete a degree, diploma, certificate, or other formal award. This report does not address other important components of noncredit education, such as developmental education, purely recreational offerings, ABE, or ESL, but it does address the issue of awarding credit for noncredit courses. While ABE and ESL have been noted as important for promoting access, this study did not focus on ABE or ESL.

Noncredit Program Roles

The majority of community colleges have a comprehensive mission to serve a wide range of needs in the community. In recent years, their mission has expanded to include increased varieties of programs and broader student populations (Bailey & Morest, 2004). Thus, community colleges now seek to serve local workforce development needs while still providing access to higher education for disadvantaged populations. In noncredit education, this expansion raises questions about whose needs colleges seek to fulfill and how they are balanced, particularly in the context of limited funding.

As employers seek to increase the skills of their workforce, noncredit education is an attractive option: It is flexible, can be based on their needs, and is better suited to adult learners than traditional college courses (Dougherty & Bakia, 1999). Noncredit education is also appealing to students, who may prefer the simplified enrollment procedures and flexible schedules typically associated with noncredit education, as well as the less formal and less intimidating classroom environments (Grubb, Badway, & Bell, 2003; U.S. GAO, 2004). Further, some college administrators find that noncredit education is useful because it allows them to add new programs quickly and then transition some programs to credit-bearing status later (U.S. GAO, 2004; Voorhees & Milam, 2005).

Aside from facilitating workforce development, noncredit workforce education can also serve as a bridge to the credit side of the college. It can be a point of entry into college for those who do not have a degree but are not yet ready to enroll in a credit program (Grubb et al., 2003). Some argue that greater connections to credit education might help more noncredit students gain access to credit degree programs (Biswas, Mills, & Prince, 2005; Pusser et al., 2007). It is unlikely, though, that this type of access will be effective unless educators and policymakers explicitly develop pathways to connect noncredit students to credit programs, or develop mechanisms to award credit for noncredit education (Morest,

2006; Voorhees & Milam, 2005). In fact, some concern exists that noncredit workforce education may pose a barrier to access by limiting opportunities for disadvantaged students who might benefit from the colleges' degree programs (Dougherty, 2003; Morest, 2006).

State policies, particularly those related to funding, may have significant implications for the role of noncredit workforce education, and state-level initiatives have an important function in supporting statewide workforce development efforts (Biswas et al., 2005; Cleary & Fichtner, 2005). State policies may also promote general student access and success in community colleges (Dougherty, Reid, & Nienhusser, 2006), as well as better connections between noncredit and credit programs (Pusser et al., 2007). However, in the context of decreased general funding for higher education and state budget shortfalls since the 1990s, competition for state funds is great (Jones, 2003).

Given limited higher education funding, noncredit workforce education is viewed as a potential source of income for community colleges. Many colleges view noncredit education as an entrepreneurial activity with the potential to generate revenue (Flynn & Bernstein, 2007; Morest, 2006). In particular, contract training may be the primary source of revenue in noncredit workforce education (Yeager, 2007). It is unclear, however, how much revenue noncredit is generating in practice, because colleges may not charge noncredit programs for overhead costs (Morest, 2006).

Noncredit Program Structure

Colleges have traditionally separated noncredit from credit programs, placing them in their own divisions and buildings and staffing them with distinct noncredit administrators and faculty. This differentiated organization of noncredit and credit has a clear logic, as the two programs often serve different markets (Bailey & Morest, 2004). The specific skill goals of adult workers and their employers may be best served by stand-alone courses offered at convenient times that do not match a traditional semester schedule, as well as by more practical hands-on instruction, rather than by general education courses required for formal degrees. By maintaining a clear division between credit and noncredit programs, administrators may have more flexibility in creating and staffing noncredit offerings without the need to engage in state or college-level approval processes. They are also free to hire instructors working in relevant industries who may not have the credentials (often a master's degree in the relevant field) required for accredited credit programs. While credit programs may have some flexibility by offering courses on an experimental basis or in alternative formats, they generally still have more regulation and institutionalized practices than do noncredit programs.

Still, some colleges have recently moved to integrate their noncredit and credit programs (Leibowitz & Taylor, 2004; Morest, 2006; Smith & Meyer, 2003), motivated by two key factors. First, an integrated organizational approach may lead to greater connectedness between noncredit and credit programs, thereby allowing noncredit programs to contribute more to the college internally, potentially enabling the college to take advantage of operational efficiencies and encouraging communication across programs (Brewer & Gray, 1997; Morest, 2006; Voorhees & Milam, 2005). Second, the mobility of students between noncredit programs and credit programs is more likely to take place when the programs are integrated organizationally. Since many low-income students get their first experience at college through noncredit programs, integrating noncredit with credit programs could help them pursue both short-term and long-term goals (Grubb et al., 2003). An integrated organizational approach to noncredit education may, however, also result in the loss of some of the flexibility associated with the separate organizational approach.

Noncredit Program Outcomes

Operating outside of the traditional faculty oversight process, noncredit workforce education also has flexibility in the recorded outcomes it produces. It does not have to follow the traditional academic guidelines associated with issuing credit based on "seat time" in class. This freedom enables noncredit to quickly create new programs to respond to emerging industry needs or to offer programs in alternate formats that are better suited to the needs of students and employers (Haimson & Van Noy, 2003; Voorhees & Milam, 2005). However, without the regulations associated with credit programs, noncredit education may or may not provide students with a recorded outcome of value.

The development of well-conceived recorded outcomes for noncredit workforce education would serve multiple goals. It would provide a transferable and portable way to document the acquisition of skills, thereby allowing for recognition outside of the college's local area. This documentation would have value to both the adult workers who gained the skills and then relocated and to employers who would have more specific information about the skills of applicants or incumbent workers. At the same time, recorded outcomes might help noncredit students transition to credit programs, since a lack of portable outcomes and connections to credit programs may pose barriers to student access (Morest, 2006). A standardized way of measuring outcomes from noncredit education may enable students to gain credit in a degree program for the noncredit courses they completed. Furthermore, producing recorded outcomes may also enhance public accountability. Since fewer standards

are imposed on noncredit than on credit courses within colleges, a perception may exist that noncredit offerings are less rigorous or significant than credit courses (Jacobs & Dougherty, 2006). As part of public institutions, and as sometimes the direct recipient of state funds, noncredit programs may need to demonstrate that they meet a certain level of quality to remain part of the college's offerings.

Some community college leaders have advocated the creation of transcripts for noncredit education to provide documentation of skill acquisition (Flynn, 2004a, 2004b). Both the National Council for Workforce Education and the National Council for Continuing Education and Training (Flynn, 2004a) have argued for systems that include information on achievement in noncredit courses on a student's transcript. In addition, industry credentials, developed by specific industries to certify that people have a particular set of industry-relevant skills, may provide a portable and transferable way to validate the skills associated with noncredit workforce education. This type of credential saw major growth with the development of information technology certificates in the 1990s and may potentially create an alternative education structure to the traditional academic records of transcripts and degrees (Adelman, 2000; Jacobs & Grubb, 2006). Furthermore, some community college leaders have recommended that colleges partner with industry to develop assessments tied to national skills standards that can form credentials for noncredit workforce education (Flynn, 2002).

Organization of the Report

This report describes a study conducted by the Community College Research Center (CCRC) that explores the overarching issues affecting community college noncredit workforce education. The next section explains the methodology of the study, presenting the research questions, the data collection methods, and the analytic strategy; it also provides definitions of terminology. The following three sections address the key issues in noncredit workforce education and their implications. First, the needs that noncredit workforce education seeks to fulfill are explored, including individuals' workforce development and access, workforce preparation for employers, and revenue generation for colleges ("Noncredit Program Roles"). Second, the ways that colleges organize their noncredit workforce education are discussed, with a general description of their organizational approaches and organizational changes associated with noncredit workforce education ("Noncredit Program Structure"). Third, the outcomes from noncredit workforce education are examined, with a discussion of the recorded outcomes associated with noncredit course completion and information on data and reporting ("Noncredit Program Outcomes"). A summary list of the findings reported in these sections appears in Table X. The report concludes with a set of recommendations for community college noncredit workforce education.

Methodology

The leadership of two major community college organizations—the National Council for Workforce Education (NCWE) and the National Council for Continuing Education and Training (NCCET)—sought to collaborate with the Community College Research Center (CCRC) to conduct a study that would illuminate the implications of recent changes in most aspects of noncredit workforce education. These councils represent senior community college administrators nationwide who are responsible for workforce development and have been grappling with their stances on noncredit education and considering which policies to advocate. The one-year study, funded by the Sloan Foundation, focused on the experiences of 20 community colleges. It documents the empirical landscape of noncredit workforce education in terms of state policy and community college practice and identifies significant issues that warrant attention from state policymakers, community college leaders, and policy advocates.

Research Questions and Data Sources

To provide information of practical use, the study specifically examined the following questions:

- To what extent does noncredit workforce education play a role in workforce development, provide disadvantaged groups with access to higher education, and generate revenue for the college? To what extent are there tensions among these roles? How do state policies influence or support these roles for noncredit workforce education?
- How do colleges balance the tradeoffs between the desired flexibility of noncredit education and the integration of noncredit education with credit programs? To what extent is noncredit workforce education changing the community college organizationally?
- To what extent does community college noncredit workforce education provide students with recorded outcomes, such as transcripts or industry certifications? How do state policies influence or support the preparation and use of these recorded outcomes? What data are available on the outcomes of noncredit workforce education?

To address these questions, this research drew on two key sources of information: a review of state policies and case studies of community colleges. A review of state policies

was conducted on the funding and regulation of noncredit workforce education in all 50 states. State policymakers with oversight of noncredit workforce education were identified from a list maintained by the Councils, supplemented by Internet searches. Given the wide range in state governance structures, people were contacted in a variety of state departments, including policymakers in state departments of higher education, education, economic development, and labor, as well as state community college governing boards. In some states, such as Alaska and Hawaii, the oversight for the community college system is located within the 4-year college system. In a few states with no state body with oversight over the community colleges (Arizona, Delaware, Indiana), a representative from the largest community college system in each state was interviewed. (See Appendix A for a list of organizational entities from which people were interviewed.)

Interviews with state policymakers covered the following general topics: state governance structure for community colleges, state funding streams for noncredit workforce education, the tracking and reporting of noncredit workforce education, and academic policies related to noncredit workforce education. Prior to conducting interviews, the Internet searches were conducted to identify any legislation or documents with policy guidelines related to noncredit workforce education. Internet searches also provided context of the state, including its economic climate and governance structure. The semistructured interviews with state policymakers typically lasted a half an hour and were conducted by telephone from June to October 2006.

Case studies of 20 community colleges in 10 states were conducted. The colleges were identified by the study advisory board, which comprised representatives of NCWE and NCCET and state policymakers. The colleges were selected to reflect innovative practices in noncredit workforce education, as well as a range of institutional sizes, locations, and states. Table 1 summarizes their characteristics. This purposeful sampling technique was intentionally used to yield information-rich cases in a broad range of contexts. Thus, it should be noted that the 20 colleges are not nationally representative of all community colleges.

Key respondents at each college included the president, the noncredit and credit administrator(s), and the institutional researcher. The college presidents were first contacted to gain agreement for the institution to participate in the study. Prior to conducting the college interviews, Internet searches were conducted to identify background information on the colleges' program offerings and organization. Interviews with the administrator with oversight for noncredit education were typically one hour, and interviews with the president, the institutional researcher, and the credit administrator (when applicable) were typically for a half hour. These semistructured interviews were conducted via telephone from November 2006 to May 2007. The case studies yielded information on a wide range of topics related to community college noncredit workforce education, including organization of noncredit and credit programs, decisions on the program in which to offer courses, funding, reporting or tracking of noncredit workforce education, academic policies on noncredit workforce education, and the populations served by noncredit workforce education.

Analytic Approach

State policy data were organized under the broad topics used to guide the data collection. Quantitatively oriented data on the existence of state policies were coded as yes or no. Funding policies required more detailed codes to identify the several distinct types of funding used. More detailed data provided greater explanation on the policies within each state and highlighted the variation in the policies across states. (See Appendix B for a summary of policies for all states; see Appendix C for a summary of policies in the case study college states.)

The definitions of key terms in noncredit education played an important role in analyzing state policies. First, the study used a consistent definition for noncredit workforce education across all states. Thus, it did not include ESL and ABE in the definition. Second, states without any state-level governance of their community college system were categorized as having no state policies. For example, Arizona has three large community college systems in the state that directly receive funds from the state legislature and have no state-level body that oversees their operations.

Community college interview data were managed and coded using NVivo qualitative analysis software. The broad topics from the interviews organized the analysis, and data under these topics were analyzed for themes across interviewees. Comparisons of college practices were made across states with different policies and colleges with different organizational structures. (See Appendix D for a description of the case study colleges.)

Draft versions of the report with findings from the state policy review and community college case studies were shared with interviewees to verify the validity of the analysis. CCRC hosted a one-day conference in August 2007 at LaGuardia Community College in Queens, New York, to discuss the findings from the draft report. Participants included state policymakers, community college leaders, researchers, and accreditation agency representatives—all with an interest in noncredit workforce education. They provided feedback on the draft report and raised questions for further analysis.

Definition of Terms

Table 1

Characteristics of Case Study Colleges

State	College	Location	Campus Type	2004–2005 FTE Credit Students[a]
California	City College of San Francisco	large city	multi	20,151
California	North Orange County District	large city	multi	NA
	Cypress College	large suburb	multi	8,929
	Fullerton College	midsize city	multi	12,742
Florida	Gulf Coast Community College	small city	multi	4,310
Florida	Valencia Community College	midsize city	multi	20,727
Maryland	Anne Arundel Community College	large suburb	multi	8,487
Maryland	Hagerstown Community College	midsize suburb	multi	2,220
Nevada	College of Southern Nevada	large suburb	multi	19,105
Nevada	Truckee Meadows Community College	midsize city	single + satellites	6,381
New Jersey	Camden County College	large suburb	multi	10,210
New Jersey	Cumberland County College	small city	single	2,152
North Carolina	Central Piedmont Community College	large city	multi	11,587
North Carolina	Craven Community College	rural	single	2,461
Ohio	Lorain Community College	small city	multi	6,234
Ohio	Washington State Community College	small city	single	1,553
Texas	Cy-Fair College	small suburb	single + satellites	18,198
Texas	Tyler Junior College	small city	multi	6,500
Washington	Bellevue Community College	midsize city	multi	9,101
Washington	Wenatchee Valley College	small city	multi	2,672
Wisconsin	Milwaukee Area Technical College	large city	multi	0,807
Wisconsin	Northeast Wisconsin Technical College	midsize city	multi	4,975

Note. Data are from NCES (2005).

[a]Data on students provide an indication of college size; however, these data do not include noncredit students, and therefore they undercount actual case study college enrollment.

Throughout this report, *noncredit workforce education* refers to education for individuals, contract training, and customized training. States and colleges across the country used a wide variety of terms and definitions. For example, one potentially confusing definitional issue arises with ABE and ESL. While some states categorize ABE and ESL as noncredit workforce education, for the purposes of consistency across states, this study did not include them as noncredit workforce education, although there are some indications that colleges are beginning to combine these areas with occupational training and education (Leibowitz & Taylor, 2004).

For purposes of clarity and consistency, the key concepts discussed in this report are defined as follows:

- *Noncredit education* refers to courses or activities carrying no academic credit applicable toward a degree, diploma, certificate, or other formal academic award at the institution or within the postsecondary educational system. Noncredit education may include workforce instruction, contract training, customized training, developmental education, recreational courses, ABE, and ESL. Many colleges also use the term *continuing education* to refer to noncredit education.
- *Credit education* refers to course work that results in a unit of academic credit measured in semester hours, where one credit hour usually represents one hour of class time per week. These credits can be used to fulfill requirements for a degree or some form of educational credential from the institution. This form of education

can be funded through federal financial aid.

- *Workforce education* refers to courses or activities that prepare people for employment requiring technical skills or enhance incumbent worker skills. It can be customized for a particular company or generalized to a specific technology (such as welding) or a specifically defined occupation (such as physical therapy assistant). It can include credit or noncredit instruction.
- *Noncredit workforce education* refers to courses or activities that provide technical skills for the workplace but carry no institutional credit applicable toward a degree, diploma, certificate, or other formal award. These courses may result in industry-recognized certificates, but do not include ABE, ESL, developmental education, or recreational courses.
- *Contract training* refers to courses or activities conducted for a specific client organization in a range of formats, including credit and noncredit.
- *Customized training* refers to contract training, including credit and noncredit, that is more specifically tailored to the client organization's needs in terms of content or schedule.

The remainder of this report presents a detailed summary of findings and recommendations. See Appendix E for a summary list.

Noncredit Program Roles

Community college noncredit workforce education is distinctly linked to the needs of the local economy. One of its main goals is to respond quickly and flexibly to employers' needs for specific skills training for their employees and to serve people seeking skills for new jobs or advancement in their current jobs. The programs that colleges offer are typically determined by the local labor market composition and, particularly, by the types of employers and industries (Dougherty, 2003; Harmon & MacAllum, 2003). To this end, community college noncredit education may seek to address individual workers' workforce development needs, as well as employers' specific workforce preparation needs. At the same time, community colleges may seek opportunities to generate revenue through these programs to meet their funding needs. This range of noncredit workforce roles is discussed in the following section, illustrated by the findings from the case study colleges.

Individuals' Workforce Development and Access

As a local resource for workforce development, community colleges serve a range of people from the community seeking noncredit workforce education for a variety of reasons. Recognizing this key role for noncredit workforce education, states may directly fund colleges to support it and, in some instances, promote access to workforce training for low-income people. States and colleges may also recognize the potential role for noncredit workforce education in providing access to other college programs to people who would like to pursue a degree or credential in addition to meeting their short-term workforce development needs.

Program focus

The types of noncredit workforce programs provide an indication of the types of people they serve. Nearly all the case study colleges offer noncredit programs in the areas of allied health, information technology, and business—from entry level to more advanced training. Allied health programs include training for occupations such as pharmacy technician, phlebotomist, and nursing aide. More advanced allied health programs train professionals in specific areas such as gerontology or pain assessment and management. Information technology programs include a range of training from basic computer skills to advanced technical skills in specific computer systems and programming languages. Basic computer skills training includes courses in Microsoft Office, basic Web development, and introductory computer repair. More advanced courses cover computer networking connected to industry certification, Visual Basic and C++ programming, and advanced AutoCAD modeling.

Business programs comprise management, leadership, entrepreneurship, and human resources. They include courses on topics such as effective communication skills, managing a diverse workforce, and customer service. In addition to these three common areas, other programs include real estate, manufacturing, construction, nonprofit management, insurance, mortgage loan officer training, veterinary training, child care, and teacher training for substitute teachers and alternative certification. Some of these programs provide entry-level training, such as preparation for real estate licensure and introductory welding, while others provide more advanced professional development.

Characteristics of noncredit students

Data on the specific characteristics of noncredit workforce education students are limited, but interviewees at the case study colleges provided their impressions of the noncredit student body based on their knowledge of the programs, available data at their colleges, and their interactions with the students. Many highlighted the complexity of the student body but noted some common characteristics. At several colleges, noncredit students are, on average, older than credit students, and they are characterized as lifelong

learners or adult learners. Several colleges reported that the age of noncredit workforce students ranges from 36 to 42 years. Many are interested in building skills and gaining certifications, such as those related to specific technologies, in order to transition to a new career or to advance within an existing career. The primary motivation of many noncredit students is to obtain skills or certifications that will help with their career progression, often in the short term.

Career pathways in various occupations often begin with short-term noncredit training for entry-level jobs and provide opportunities to link people to degree programs that may lead to career advancement (Alssid et al., 2002). Whether noncredit students are also interested in obtaining a degree through the college's credit programs may vary by college, however. Several colleges reported that at least some noncredit students are interested in earning a degree or that many of their noncredit students did not possess a college degree. North Orange County District reported that three quarters of its students had a high school diploma or less as their highest level of education. College of Southern Nevada reported that 57% of its noncredit workforce students had a high school diploma or less. Yet, other case study colleges reported that their local population is highly educated, and they suspect that many noncredit students have a college degree. Central Piedmont Community College had specific information on the educational background of its corporate and continuing education program students, apart from its state-funded noncredit workforce education. (In North Carolina, the state-funded noncredit workforce education, "occupational extension," is targeted at training for entry-level jobs.) Among this group, over half had a bachelor's degree; nearly half were enrolled for recreational purposes, while the others sought to gain certifications or update skills (Central Piedmont Community College, 2002). Finally, several case study college leaders reported that they simply did not know how many students enrolled in noncredit programs already had degrees or were interested in obtaining a degree in the future.

In certain workforce areas, such as health care, students may need to pursue additional credentials in order to advance beyond an entry-level position. Thus, connections between noncredit programs and credit programs may provide necessary pathways for students' career advancement. Given the rising economic returns to a college education, developing opportunities to connect with degree programs across all areas of study may be essential for working adults without a college degree. However, more information on the background and goals of noncredit students is crucial to understanding how to best develop programs.

Connections with credit programs

Noncredit programs have been highlighted as part of career pathways to help low-wage workers gain the credentials necessary to progress in the labor market (Alssid et al., 2002; Grubb et al., 2003). Beginning with noncredit workforce courses in a given field, people may obtain entry-level employment and continue their education in certificate or degree programs to advance in the workplace. Some colleges, aware of student migration between noncredit and credit programs, recognize the potential role of noncredit workforce education as a recruitment tool for credit programs. As an interviewee from Camden County College stated, "Noncredit can be seen as a way to bring more people in for degrees. With noncredit, our immediate response is to give students what they need for the workplace, but it is also important to help them continue their education to develop the soft skills, like communication and teamwork, that employers also say are needed in the workplace." Several other interviewees reported that noncredit courses are an important way to ease returning students' anxiety about taking colleges courses.

Alternative modes of offering noncredit programs, including chunking, articulation, and listing courses dually in credit and noncredit programs can support the transition to credit programs. Chunking involves breaking down longer courses or programs, typically credit, into shorter, often noncredit, courses on distinct topics that can be taken separately with flexible scheduling (Dins, 2005). At Lorain County Community College, noncredit education is seen as a source of feeder students; students can take noncredit programs that are chunked versions of credit courses and can use them as a bridge to credit classes. This approach accommodates students who cannot attend for the full academic semester or who may need remedial assistance to master the material and require more time to complete the full course. It also has the benefit of offering students multiple entry and exit points for a class. Similarly, Wenatchee Community College is piloting programs in which noncredit students can pay to attend portions of credit courses.

Articulation can also help support the transition between noncredit and credit programs. Articulation is a process whereby colleges develop guidelines for students to receive credit for completing a noncredit course if they later choose to enroll in a credit degree program (DiChiara-Platt, 2007). Both case study colleges in New Jersey are highly involved in statewide initiatives to create noncredit programs that articulate with credit programs (these initiatives are discussed in more detail later in this report).

Finally, allowing courses to be listed as both credit and noncredit may ease a student's transition from noncredit to credit programs. The North Orange County District allows a certain number of seats in some credit courses to be dually listed. Students may enroll in these courses as noncredit and follow the same syllabus except with no

requirement to complete a final paper or exam. According to an interviewee, this arrangement encourages the migration of noncredit students into credit programs by allowing first-time students to get a taste of college material before actually enrolling in a credit program.

The issues around the movement of students from noncredit to credit suggest the need for advisement to make sure that students who enroll in noncredit courses understand the outcomes of doing so. If they do not have a degree and would like to obtain one, noncredit may be a useful way to help them build confidence in their ability without the pressure of enrolling in a credit course. However, the college must make sure that students are aware that these courses usually do not lead to credit. Tyler Junior College has registration staff in its noncredit division to guide students on the right courses for their needs.

State general funds

Funding for noncredit workforce education from state general funds provides an important signal about the state's vision for community college noncredit workforce education. State general funds refer to those provided by the state directly to community colleges and that can be used to support noncredit workforce education. Such funding may or may not be legislated in official state code; this report reflects reports from state policymakers on the current funding mechanisms in place in their state during the time of the interview and, when possible, is supplemented by references to state code available on state Web sites. This type of state funding may help support a predictable approach to noncredit workforce education by providing a stable source of funding, but it may also reduce the incentive to create entrepreneurial programs that could result from a more profit-driven approach (Voorhees & Milam, 2005). Just over half the states provide funding for noncredit education through state general funds, but the funding methods for noncredit workforce education differ (see Figure 1). States generally use distinct funding mechanisms to support noncredit workforce education: a formula that includes student contact hours, fixed amount funding, and bundled funds that allow for college discretion.

Eleven states provide noncredit workforce education funding based on contact hours as the primary source for determining allocations. Thus, noncredit programs are supported via similar mechanisms as credit programs; they are based on student enrollments and "seat time" in the classroom. (Warford's 2002 study of noncredit funding refers to these mechanisms as based on full-time equivalent (FTE) enrollment. This report refers to them as based on contact hours to reflect the range of ways that states count noncredit enrollments that may be distinct from the way they count credit FTEs.) While many states use this mechanism, only a few fund noncredit education at the same rate as credit (Maryland, Texas, Oregon). Other states fund noncredit education based on a proportion of the credit FTE funding rate. The amounts can vary from half of the credit FTE rate, as in Nebraska, to three quarters of the FTE rate, as in New Jersey and North Carolina. Generally, the current year's funding is determined by the number of noncredit contact hours from the prior year, although states each have unique and detailed funding formulas to fund community colleges and noncredit programs. This type of funding strategy provides the most clearly defined and dependable source of funding for noncredit workforce education, which could encourage programs to become more institutionalized at the colleges.

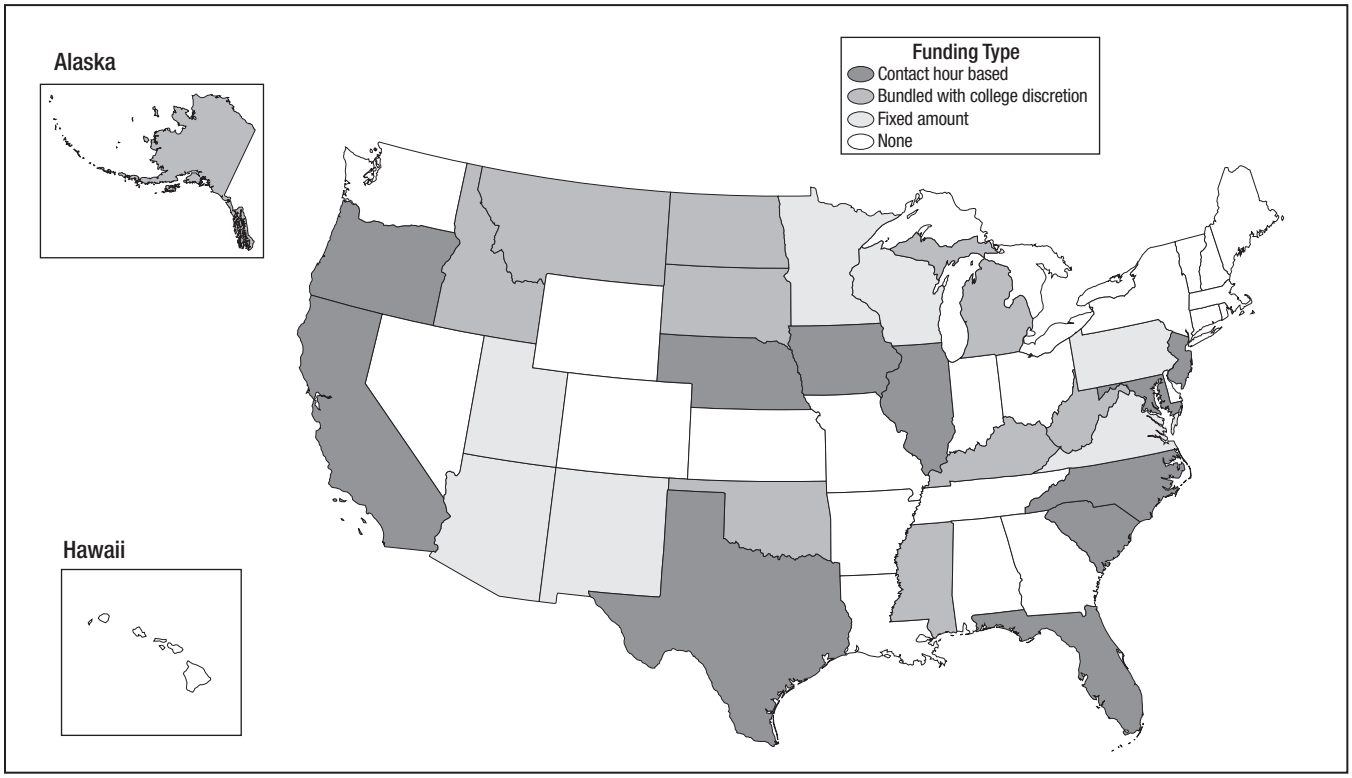
Seven states provide a "fixed amount" of funds to community colleges for noncredit workforce education. Each year the state provides a set allocation dedicated for noncredit workforce education. This fixed amount of funding is often small relative to the amount of funding that the state provides for credit programs. For example, Minnesota provides $11.5 million in funds for noncredit programs out of the state's $550 million budget for community colleges. Likewise, Virginia provides $1 million for noncredit programs and $300 million for credit programs. With its reliance on yearly allocations of funding, this approach may be more prone to fluctuations based on the state's overall budget. Colleges may or may not depend on this source of funding. Given its relatively small amount and potential volatility, colleges may not organize their programs to account for this funding source.

In 10 states, the funding is "bundled with college discretion," that is, the state provides general funding to the colleges, and allows them to decide whether or not to use some of the funds to support noncredit workforce education. This method contrasts with what occurs in other states, where state general funds may not be used to support noncredit workforce education. Therefore, the amount of state general funds used by colleges to support noncredit workforce education may vary across each of the colleges in the state, and, in fact, policymakers in one of the 10 states reported that the size of noncredit programs and the amount of support used varies widely across the colleges.

The remaining 22 states that do not provide funding directly to community colleges for noncredit workforce education report that the colleges' noncredit workforce education is self-supporting through course charges to students and employers and other grants. Colleges in these states may pursue a range of strategies to support noncredit workforce education, including entrepreneurial efforts to generate a range of strategies to support noncredit workforce education, higher tuition levels, and increased pursuit of grants. Alternatively, they may simply devote fewer resources

Figure 1

States Providing General Funding for Noncredit Workforce Education



Note. Illinois provides funding for short-term workforce development courses that cannot be used to complete an associate degree; however, these courses may be used for an applied associate degree.

to noncredit workforce education, or they may attempt to offer more courses in credit that they may prefer to offer in noncredit.

Funding for noncredit workforce education from general funds is changing in some states, often reflecting the role that policymakers see for noncredit education in achieving workforce development and promoting access. In 2006, California passed legislation to increase the funding for noncredit education that promotes career development and college preparation. The new funding rate is 71% of the FTE rate, up from 53%. Policymakers in California are focused on the role of noncredit workforce education in preparing a skilled labor force and in connecting students to the colleges' other programs. Noncredit is seen as having an important role in creating a bridge to the college. In 2005, New Mexico created a new fund to support noncredit education, allocating $300,000 to support community college noncredit workforce programs the first year; that amount increased to $600,000 in the second year because of the high demand for these courses in the state. New Mexico allocates these fixed funds to its colleges based on the number of noncredit contact hours they provide.

Officials in some states are seeking to influence their legislatures to gain state support for noncredit workforce education. In Ohio, state officials are collecting data on noncredit enrollment in order to demonstrate its importance for workforce development and convince the state legislature to provide funding for noncredit education. Likewise, officials in Virginia are making sure that they have adequate data and clear definitions of noncredit education so that in the near future they may request funds from the state's general assembly. They are drawing attention to the connection between workforce development and economic development to show that community colleges have a distinct role relative to 4-year universities in terms of enhancing economic development. For example, the Virginia Community College System commissioned a study of its Workforce Development Service Centers that includes an analysis for the economic benefits of noncredit (Magnum Economic Consulting, 2005).

Implications of state funding for access

The case study colleges vary in the tuition they charge for noncredit courses and in how tuition levels are balanced with the desire to generate revenue. Tuition costs are likely to influence the accessibility of noncredit programs to low-income people (Dougherty, 2003). Colleges in states with

funding for noncredit education tend to have controls on tuition levels. The most stringent controls are in California, where tuition for all workforce-oriented noncredit courses is set at zero and noncredit funding is targeted at specific populations to support career pathways. More expensive training for employers is conducted separately and for a charge. Similarly, the case study colleges in Maryland have low tuition levels for noncredit workforce education: approximately $10 to $12 per credit hour.

In setting tuition, other colleges consider the particular course, its cost to the college, and its target population. Central Piedmont Community College in North Carolina uses state "occupational extension" funds to support noncredit training for entry-level jobs, such as bank teller or nursing aide. Other training courses, which are more advanced and which students can typically afford, are priced at market levels. The case study colleges in Texas, supported by state general funds for noncredit education, all have internal formulas to determine tuition levels, and may include some amount of profit, depending on the course and the population it serves.

Colleges in states without general funds for noncredit workforce education typically charge what the market will bear, based on the cost of the noncredit course. The costs for noncredit courses can range from $50 for a short course to $3,000 for an intensive, long-term technical training course. To the extent that more expensive training courses can provide pathways to well-paying careers, the higher cost could pose a barrier for disadvantaged students who cannot afford the tuition, which federal financial aid does not support. While public training programs, such as those provided through the Workforce Investment Act, can provide support, such funds are often limited and may not always be well connected to community college programs (Visher & Fowler, 2006).

Guidelines for defining noncredit courses

As states fund and collect data on noncredit workforce education, they must define specifically what qualifies as a workforce course. About half the states provide colleges with some definition guidelines (see Figure 2). States with contact hour–based or fixed-amount funding have guidelines for what counts as noncredit workforce education for the purposes of funding; those with bundled funding tend to leave definitions up to the discretion of the colleges. In Texas, where noncredit workforce education is funded at the same level as credit education, the state provides very specific guidelines for what constitutes "workforce education" in a manual that lists academic and workforce education courses. To qualify for reimbursement, a course must be listed in the manual and have the goals of assisting people with getting a job or advancing in the job they have.

Guidelines for what qualifies as noncredit workforce education reflect states' goals for the use of their funds. In Florida, continuing education is explicitly defined in state statute as "instruction that does not result in a technical certificate." It is intended for people who need training to renew licensing, to earn a certificate, or to enhance skills to maintain employment; or for employers that are new or expanding or whose products and services are changing and thus need training for their employees. North Carolina makes the distinction among noncredit workforce education courses that receive state funds, called "occupational extension" intended to make courses affordable to students for entry-level training and those courses that are self-supporting, typically "hot" classes in management or the professions. In Iowa, the state and community college leaders developed specific guidelines for defining all types of noncredit education. These guidelines include categories that encompass noncredit workforce education, such as "employment and business," that are "designed to develop skills needed to obtain and enhance employment." Finally, in California noncredit workforce courses include "short-term vocational programs with high employment potential" that tend to focus more on entry-level employment (Lieu et al., 2006, p. 2).

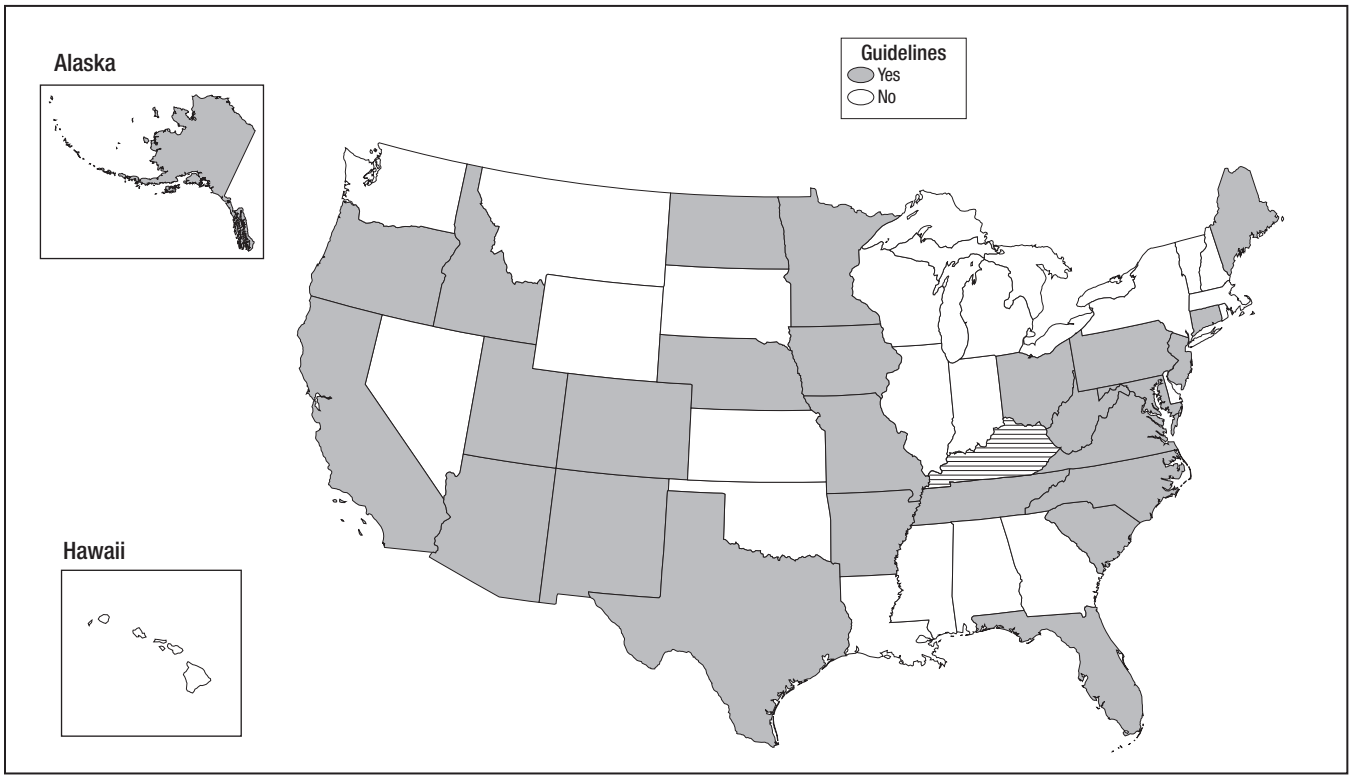
Deciding on credit versus noncredit courses

Colleges in states without general funds for noncredit education may be more likely to consider offering credit rather than noncredit courses to keep tuition levels low. While numerous factors are considered in deciding on a course format, cost is a potentially important factor in colleges without state funding for noncredit programs. One interviewee stated that the "first choice is to offer credit since noncredit is not subsidized." Others reported that, since the state does not pay for noncredit, cost is considered along with the consumers' needs in determining how to offer a particular course.

Colleges also determine the mode of a course depending on current labor market demands. Two colleges recently moved their real estate licensure courses from credit departments to noncredit because the market does not require an associate degree. Since the labor market did not require a degree along with the real estate license, it made sense to locate these programs in the noncredit division. It is not clear, though, how many of the students were interested in pursuing an associate degree while also pursuing real estate licensure, or how many already had a degree. This circumstance points to the importance of ensuring that noncredit programs do not divert interested students from credit programs. Furthermore, it raises the more fundamental issue of how to determine whether to offer a course as credit or noncredit.

Figure 2

States With Guidelines for Defining Noncredit Workforce Courses



Note. Information is not available for Kentucky.

In addition to state funding and labor market demands, the case study colleges reported other considerations when deciding whether to offer a course for credit or noncredit. Institutional issues, such as the "time to market," are a consideration in responding to employer demands. Some colleges report that the quick start-up time for noncredit courses allows for responsiveness to labor market needs. Over time, noncredit administrators can assess the demand for the course and determine whether they should go through the college and sometimes state-level approval process to offer the course for credit. Whether the noncredit course would fit as part of a degree program is also a consideration in offering a course for credit. For example, Cy-Fair College considers whether a course would be part of a program of study as required by its accreditation agency. In addition, the instructional approach is considered. One respondent noted that some characteristics of noncredit classes, such as their short-term nature, open entry-open exit policies, and lack of assessment, represent the key differences between credit and noncredit. There are four factors involved in a college's decision to offer courses in noncredit and credit formats:

- State policy—funding availability and regulations.
- Labor market demand—both individual and employer demand.
- Institutional practice—flexibility and timing of courses, approval process, faculty requirements, time to market, course fit with degree or certificate program, testing new courses, revenue potential, etc.
- Instructional approach—intensity and rigor, need for assessment.

Workforce Preparation for Employers

In addition to serving the workforce development needs of individuals, community college noncredit workforce education serves employers by providing contract and customized training to their employees. State policy may support this role for community colleges through workforce training funds. Through serving employers, community colleges may develop a range of programs that reflect the local labor market needs and take a variety of forms, depending on employer preference.

State workforce training funds

As reflected in their funding policies, states may have a

general philosophy on noncredit workforce education. The majority of state policymakers reported that noncredit education plays an important role in workforce development and economic development efforts by providing workers with specific skills and meeting critical needs of industry. In particular, noncredit education is seen as a way to support the growth of local businesses and entice additional businesses to move to the state. One policymaker commented, "While degree programs and graduate programs are important, noncredit is increasingly important. A company that wanted to hire a Ph.D. scientist can go anywhere to recruit. But, to get technicians, they need to get them in the local workforce." In addition, some state policymakers noted that noncredit workforce education plays an important role in providing access and supporting career pathways.

Previous studies have demonstrated that nearly all states have some type of workforce training funds for the training of workers for business and industry (Boswell, 2000; Simon, 1999). They are often designated for workforce development in targeted industries and to recruit new employers into the state as part of incentive packages offered to businesses. In some cases the funds are restricted to companies that add a specific number of jobs to the economy or pay livable wages. Because training programs are administered in a variety of locations at the state level, these funds are often used to support noncredit training by a variety of providers within the workforce development system, not just community colleges but also private training institutes and community based organizations. Within community colleges, these funds typically support activities conducted through contract training.

Whether funds for training provide for a specified role for community colleges is of key importance to noncredit workforce programs. In 35 states, training funds directly specify the community college as the fiscal agent or the preferred training provider (see Figure 3). This provides a greater chance that the funds will support community college noncredit programs, often via customized training. In fact, these funds may be a central source of support for community colleges in states that do not provide general funds for noncredit education but specify community colleges as the preferred training providers or fiscal agents (i.e., Tennessee, Maine, and Missouri). In contrast, in states that do not specify a particular role for community colleges, employers may choose how to use the funds and may not use noncredit community college programs for training.

Workforce funds tend to fluctuate from year to year. Illinois has had recent decreases in workforce training funds due to a shortage in state-level revenues. Louisiana has not provided any workforce training funds since the Katrina disaster. Conversely, some states have had recent increases in workforce funds or are planning for increases. Because Hawaii is experiencing a significant labor shortage, the Board of Regents of the University of Hawaii plans to request $1.5 million from the state for a rapid response fund to develop and implement noncredit workforce programs.

State workforce training funds may generate innovation among community colleges. Connecticut has adopted the concept of "industry clustering" by connecting related companies and industries within close proximity. Community colleges in the state then bid on contract training. Rhode Island is moving toward sector-based training with a partnership of professional, labor, training, and education organizations. In Pennsylvania, the Job Ready Pennsylvania initiative aligns local workforce spending with state workforce priorities. North Carolina's Focused Industrial Training is closely integrated with the community college system and is designed to serve manufacturing industries, focusing on technology-driven skill changes in the industry. Companies identify training needs and ask colleges to develop and deliver curriculum. New Jersey's Community College Consortium for Workforce and Economic Development acts as a single access point for employers to the state's community college system for noncredit customized training (Nespoli, McDonnell, & Bowman, 2005). The Consortium has several large-scale initiatives with employer groups, including a basic skills training program with the state's business and industry association and a career ladder program for educational support professionals through the state's education association.

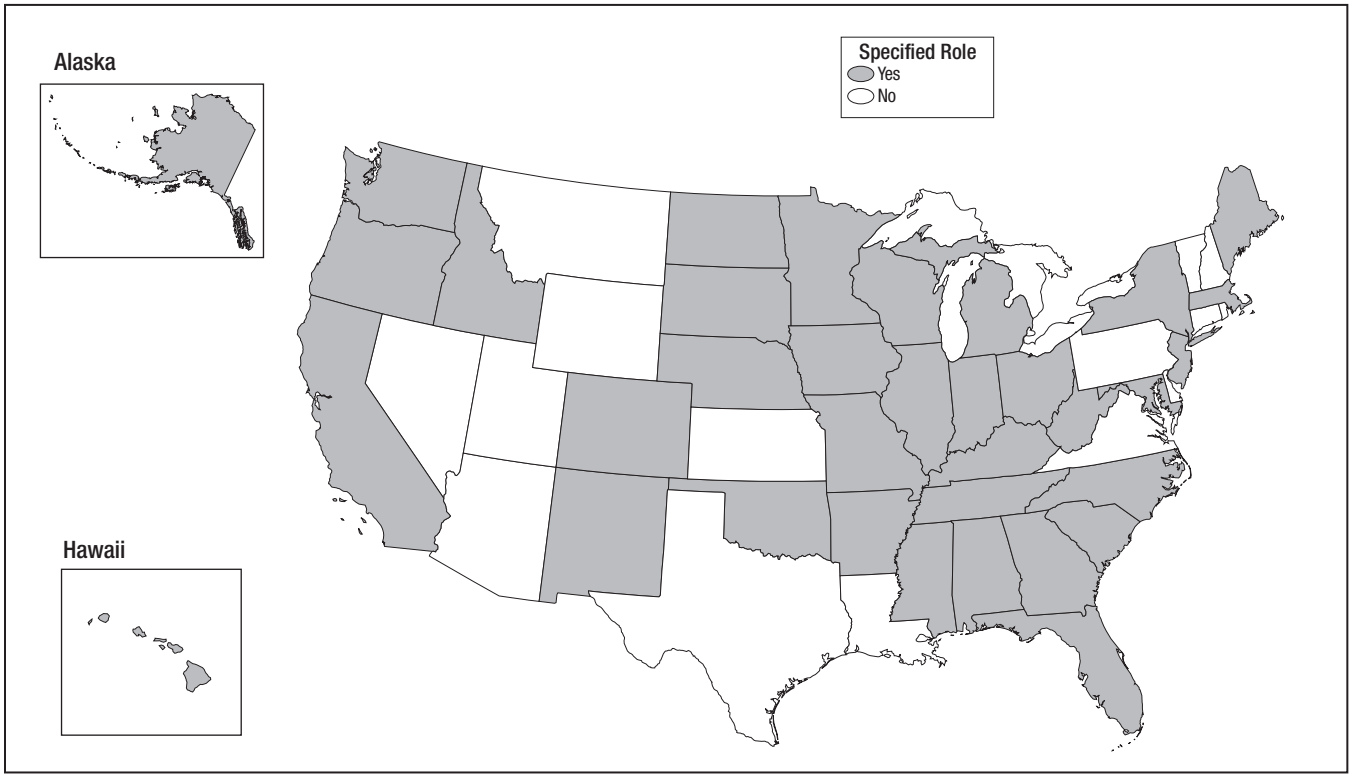
State and local employer needs

State workforce training funds focus on specific noncredit programs to meet specific training needs. Anne Arundel Community College follows state guidelines for working with employers in using state customized training funds. The guidelines specify course characteristics including length and location. The training funds often target specific sectors to attract new industries or to grow existing industries. Several programs in the noncredit division at Valencia Community College are funded through the state's customized training fund. To receive these funds, Valencia must forecast economic trends and training needs and then quickly develop programs in response. Other noncredit program leaders have described themselves as having business sense: the ability to forecast economic trends and training needs in order to get state funding. State workforce funds can serve to align noncredit programs with the state's economic development plans.

The case study colleges reported working with particular employers that reflect the industries in their local labor markets. Valencia Community College, located near Orlando, Florida, and the College of Southern Nevada

Figure 3

States With a Specified Role for Community Colleges in State Workforce Training Funds



in Las Vegas both reported program offerings that reflect their areas' strong tourism industries. Several other colleges reported that they work with a mix of industries, including the public sector. Gulf Coast Community College counted the local fire and police departments, as well as the public school district, as clients for its noncredit programs. Hospitals are also employers that commonly use the college's noncredit education for their employees. Other colleges' programs reflect the changing economic circumstances of their local areas. Tyler Junior College has developed courses to support the service industries that are replacing the declining manufacturing industry in the local area.

Employer demand for credit versus noncredit courses

Employers differ in the types of training they want for their employees. While noncredit programs are often well suited to meet employer needs because of their flexibility, in some instances employers prefer credit courses. Colleges have adapted to these preferences by bringing together credit and noncredit programs in order to move courses between the two formats. Courses at Anne Arundel Community College can be transitioned from credit to noncredit or vice versa based on the needs of the employer. For example, if an employer wants part of a credit course to be offered in a noncredit program, the college will offer just that "chunk" of the course for the employer. Similarly, Wenatchee Community College is piloting programs where it sells seats in credit classes in chunks for noncredit students, thereby enabling the students to enroll in specific noncredit modules of the credit courses. Milwaukee Area Technical College also repackages credit courses to suit employer demands to provide short-term, competency-based courses.

Translating courses from noncredit to credit also occurs. Tyler Junior College's noncredit division worked with a power provider to develop a noncredit course. The company later became interested in credit classes, so the noncredit division worked with the dean of applied science to develop a credit program. In response to a request by a local insurance company, Cumberland County College developed a program to articulate a noncredit insurance course with a business degree. The noncredit program uses a curriculum from the American Insurance Institute and can yield up to 12 credits. The college was able to transfer credit without difficulty because it was certified by the American Council on Education. The program is part of a 2-year sequence that includes several credit courses, such as general business,

business law, and English composition. The company wanted its employees to gain the insurance skills that they need and also to have the opportunity to earn a degree. Its employees' backgrounds vary: Some have a degree; others have some college course work and are trying to finish a degree. The college offered an intensive summer remedial course to help students bring their skills up to the level needed to enroll in the degree program. Washington State Community College is developing an online degree program for chemical operators and is exploring the possibility of packaging this program into 66 modules of 3-week sessions to market nationally. These noncredit modules could be cross-walked into a credit program.

Revenue Generation for Colleges

While serving individuals' and employers' workforce development needs, community colleges may also view noncredit workforce education as an opportunity to generate revenue. In tight budgetary circumstances, it may be a welcome potential source of income to the college. The focus on revenue generation may depend on several factors, including state regulations and the college's attitude toward noncredit workforce education.

Noncredit charges

Many states have guidelines for the amount that community colleges may charge for their credit courses, but few place any limits on charges for noncredit courses (see Figure 4). Eight states reported some type of limit on the cost of noncredit workforce education, but there are variations in how the limits are constructed. At the most extreme, California does not charge for noncredit workforce education courses supported by state funds. (These courses fall under the state's general category of noncredit education; however, some noncredit workforce education courses, referred to as "not-for-credit," are not supported by state funds and charge a market price.) Other states with limits charge some amount for noncredit courses but do not allow the amount to rise above a certain level. In North Carolina, charges for noncredit workforce courses are capped at a certain rate depending on the number of course hours. North Dakota does not have a specified limit on noncredit charges, but, in order to keep costs under control, its colleges must have the charge approved by the state before they offer a course. All the states with limits on charges, except Maine, also provide state general funds to support noncredit workforce education. Because these states help support the operating costs, they can place these limits on tuition.

In contrast, several state policymakers specifically reported that colleges charge "what the market will bear" for noncredit courses. These sentiments are consistent with the view of noncredit workforce education as a self-sufficient or revenue-generating enterprise targeted at workforce development. Charges for noncredit workforce courses may vary greatly given the wide range of equipment and infrastructure necessary for different programs.

Limits on noncredit charges have important implications for colleges in operating noncredit programs. The tuition for noncredit workforce education influences which students the programs attract and how the colleges organize their programs. Lower costs will make colleges' noncredit programs more accessible to low-income people and thus support state efforts to promote access via noncredit education. At the same time, limits, when associated with the use of state funds, may lead colleges to develop separate noncredit programs with higher charges that do not use state funds. In particular, programs that require particularly expensive equipment may be operated outside the system of state-supported programs. Colleges that seek to be highly revenue generating will likely seek to develop noncredit programs outside of this regulation.

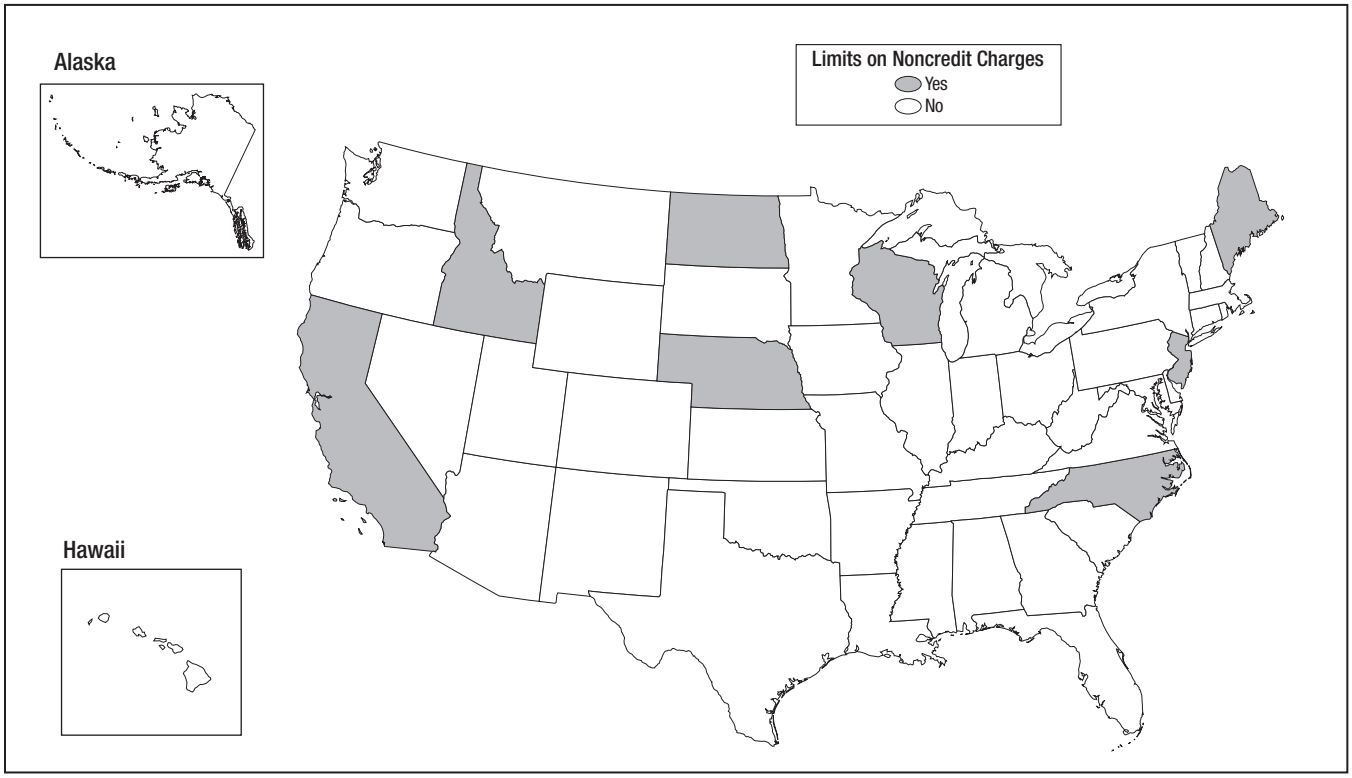
Attitudes toward revenue generation

Several case study colleges reported generating revenue through their noncredit programs that support their costs or result in profit. Since the colleges are nonprofit entities, profit generated by noncredit programs is returned to the college to support noncredit staff or overhead, to develop new noncredit programs, or to support the college's other programs. The colleges that were not yet self-supporting or generating profit reported that they were moving toward doing so. Some are developing business models to determine how to price courses in order to generate revenue. One college has developed a performance-based system where staff members are rewarded for their sales of noncredit training. Some noncredit programs depend on the support of college general funds for overhead and infrastructure, which can create tension within the college because of the perception that they are taking scarce funds.

While colleges in states with general funds for noncredit education might appear to have less incentive to generate profit (Voorhees & Milam, 2005), case study colleges in all states are seeking to generate revenue. A few notable examples highlight this trend. Anne Arundel Community College's Center for Workforce Solutions generates a large portion of its overall budget through its programs to business and industry, customized training, short-term classes, and on-site programs. Tyler Junior College School of Continuing Studies in Texas operates as a self-supporting revenue generating center. It repays the college for all expenses, including salaries, benefits, direct costs plus 40% overhead for use of the facilities and services of the college. At the same time, the noncredit program annually generates

Figure 4

States Imposing Limits on Charges for Noncredit Courses



$50,000 to $300,000 profit plus state reimbursement, which supplements the colleges' annual budget of over $40 million.

Some college leaders viewed noncredit revenue generating activities as an opportunity to gain support from those in the colleges who are skeptical of noncredit education. To counter the perception that noncredit is a drain on the college, they promoted noncredit education as a way to bring in additional resources to the college. One college president reported: "The faculty got on board when they saw that noncredit can bring in more funds to the college. If credit faculty thinks they are taking away funds, it will lead to tension. Noncredit has to be self-sufficient and even bring in funding. This helps to keep credit programs from criticizing noncredit." Another college president reported that in the process of restructuring the college's noncredit program, other divisions were encouraged to work with them to develop programs that could generate funds that would come back to their division. The potential for profit generated interest among other departments. One college leader noted that credit programs can also be entrepreneurial.

Implications of Noncredit Workforce Education's Roles

Community colleges offering noncredit workforce development education must balance multiple roles: They must meet individuals' short-term and long-term educational needs and employers' workforce training needs, while providing a source of income for the college. Placing a greater emphasis on any one of them may risk the success of the others. Successfully serving students and employers while also generating profits is a challenge for community colleges–not an insurmountable one, but one that requires careful thought and consideration. Its resolution has implications for how community colleges organize the noncredit workforce education and the recorded outcomes provided by these programs.

Noncredit Program Structure

Given the multiple roles played by community colleges in the community, the organization of college noncredit workforce education programs may have important implications for how those programs operate and what they achieve. Tension may arise from balancing noncredit workforce education's need to respond quickly to employers with its need to connect and contribute internally to the college overall and to serve students' long-term educational goals. Furthermore, as the nature of noncredit education shifts,

colleges may change their organizational approaches in order to adapt to new priorities and reflect the increasingly important position of noncredit workforce education in the college relative to other programs.

Types of Community College Organizational Approaches

Colleges may develop different approaches to the management of their noncredit workforce education programs. Organizational approaches include the organizational structures of the college, that is, where programs are located and how they are administered within the college, and organizational practices, that is, how programs operate in relationship to other programs in the college.

Models of organizational structure of noncredit programs are defined by their location within the organization of the college. Based on this definition, a separate organizational structure exists when noncredit workforce education is considered a distinct organizational unit within the college; an integrated organizational structure exists when noncredit workforce education is interspersed across the college's academic units by content area. The organizational location of noncredit education may be associated with particular relationships between noncredit and credit programs and between noncredit programs and employers; an integrated program may be more likely to work more closely with credit programs because of their organizational proximity, while a separate program, as a more independent entity, may be more entrepreneurial and more flexible in responding to employer needs.

Among the case study colleges, eight have an integrated organizational structure for noncredit workforce education. That is, their noncredit and credit programs are located within the same department, organized by content area. Some of these colleges also maintain a separate institutional entity primarily to conduct contract training, while others include contract training in their integrated departments. The remaining 12 colleges maintain noncredit programs separate from credit programs. Among them, some combine contract training with other noncredit activities, while others maintain these two noncredit functions in separate organizational units. One unique arrangement is in North Orange County District, where Cypress College and Fullerton College share an organizational entity, the School of Continuing Education, to conduct noncredit workforce education. Figure 5 illustrates the organizational structures of noncredit education used by the colleges.

The organizational structures of the case study colleges may be associated with state funding policies. As shown on Table 2 (page 21), all of the eight colleges with integrated organizational structures, except Lorain County Community College, are located in states that provide general funds to support noncredit education. Furthermore, these states provide funding for noncredit education based on contact hours, and noncredit programs are likely to be funded at parity with credit education. One college leader commented on the effects of state funding on its noncredit program organization: "We have an advantage to have funding for noncredit. The funding removes the need to distinguish the programs and keeps noncredit equal within departments." While these data may not be representative of community colleges, they provide an indication of the role of funding in how colleges organize noncredit workforce education. The existence of funding may provide an opportunity for college leadership to consider organizational change to promote noncredit workforce education.

Not all case study colleges in states with general funds for noncredit education have integrated organizational structures, however. Thus, state funding, particularly funding based on contact hours, may be important but does not entirely determine integration. In some states, colleges have a much greater reliance on local rather than state funding, as in Wisconsin where local taxes are the main source of support for community colleges.

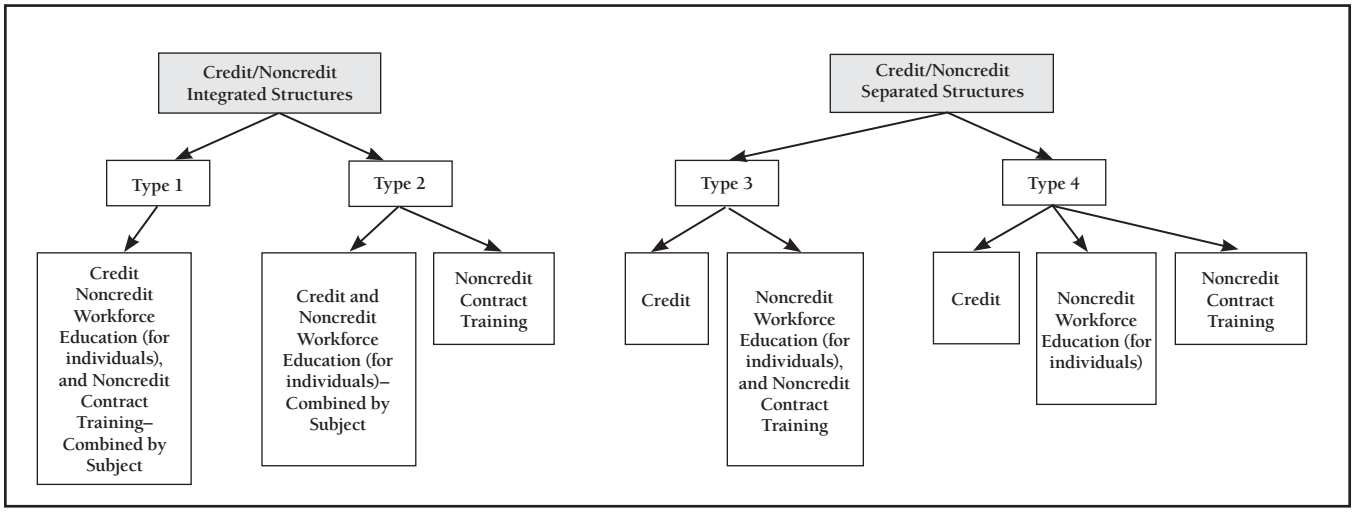
In addition to organizational structure, several other characteristics are important to consider in colleges' overall organizational approach to noncredit workforce education. They include some of the following organizational practices: faculty involvement in noncredit courses, the sharing of facilities by credit and noncredit programs, and flexibility in noncredit operations. Based on these characteristics, integrated programs generally have greater faculty involvement and facility sharing, while separate programs have a higher degree of operational flexibility and independence and would be less likely to have any approval process for noncredit courses. These characteristics may be found in colleges with both integrated and separate organizational structures. Depending on their organizational structure, colleges may need to pursue unique organizational practices that best serve their needs.

Some colleges with separate organizational structures operate noncredit programs with a highly integrated approach. They have a high degree of collaboration between credit and noncredit programs, including faculty involvement and the sharing of facilities with credit programs. For example, both Tyler Junior College and Gulf Coast Community College have separate organizational structures based on the organizational location within the college but have operationally integrated program approaches.

Organizational approaches for separate structures

Figure 5

Types of Organizational Structures for Noncredit Workforce Education



Colleges with separate noncredit programs may need greater coordination efforts to use resources efficiently (Bailey & Morest, 2004). Several case study colleges use a coordinator to foster collaboration and ensure that courses are not duplicated across credit and noncredit programs. Commonly, the leader of the noncredit program regularly meets with other college leaders. At Tyler Junior College the deans of all four schools, including the School of Continuing Studies, meet weekly. They work together to keep the programs integrated and to make decisions jointly on the best format for offering courses. At the College of Southern Nevada, regular communication between the noncredit and credit divisions is encouraged to promote greater alignment of goals and the integration of more academic instruction in noncredit courses. At Gulf Coast Community College, the relationship with the credit programs is informal but very deliberate: The noncredit program never duplicates or competes with the credit programs. Many divisions at the college are very involved in noncredit workforce education, particularly the business department. At Bellevue Community College, the faculty established a credit–noncredit committee to facilitate communication across the programs and to more fully coordinate across the divisions.

Coordination is necessary so that courses are not duplicated and can be moved between noncredit and credit as appropriate. Several interviewees reported that they are mindful to coordinate across programs when planning for a new course to ensure that it does not duplicate an existing credit course. One interviewee stated that the noncredit program works closely with the academic departments to avoid duplicating programs. At Washington State Community College, potential overlaps with courses are identified at the records office when courses are reported to the registrar. While colleges with separate structures reported efforts to coordinate with credit programs, some noncredit programs also reported they valued having control of their programs and direct contacts with employers, particularly for contract training. However, a careful balance is necessary to maintain collaborative efforts when differences in priorities may exist across programs.

Organizational approaches for integrated structures

Flexibility and revenue generation are not necessarily lost with an integrated organizational structure. It is possible to be both integrated and entrepreneurial: flexible, outwardly directed, and employing a business model to bring revenue back to the college programs. Central Piedmont Community College has a Division of Corporate and Continuing Education that conducts noncredit training for individuals and employers. While the college has many noncredit programs integrated in its credit departments, this organizational entity allows it flexibility in working with employers, as well as a team of dedicated sales staff who conduct outreach with local employers. Anne Arundel Community College's Center for Workforce Solutions specializes in conducting training programs for business and industry, including customized training, short-term classes, and on-site programs. The college operates this entity, targeted at employers, in addition to numerous noncredit programs integrated within academic departments.

To avoid potential confusion among employers about which entity to contact at the college and to ensure

Table 2

State Funding of Case Study Colleges by Organizational Structure

State	College	State General Funds
Integrated organizational structure		
California	City College of San Francisco	contact hour: 71%
Maryland	Anne Arundel Community College	contact hour: equal
Maryland	Hagerstown Community College	contact hour: equal
North Carolina	Central Piedmont Community College	contact hour: 75%
North Carolina	Craven Community College	contact hour: 75%
Ohio	Lorain County Community College	no funding
Texas	Cy-Fair College	contact hour: equal
Wisconsin	Northeast Wisconsin Technical College	fixed amount
Separate organizational structure		
California	North Orange County District	contact hour: 71%
Florida	Gulf Coast Community College	bundled
Florida	Valencia Community College	bundled
Nevada	Community College of South Nevada	no funding
Nevada	Truckee Meadows Community College	no funding
New Jersey	Camden County College	contact hour: 75%
New Jersey	Cumberland County College	contact hour: 75%
Ohio	Washington State Community College	no funding
Texas	Tyler Junior College	contact hour: equal
Washington	Bellevue Community College	no funding
Washington	Wenatchee Valley College	no funding
Wisconsin	Milwaukee Area Technical College	fixed amount

coordination internally, some colleges with integrated noncredit programs have one central point of contact with employers. Lorain County Community College's Corporate and Community Outreach Division is centralized in its face to the public through its marketing and sales outreach. Noncredit activities are decentralized across academic departments and are coordinated internally within the college by the division head. Cy-Fair College sought to have a coordinator bring together information on its decentralized noncredit programs offered across the divisions. Each division is responsible for updating course information in the college's data system to promote communication and make information clear and accessible to students. The college also has a dean of new program development and corporate training who is responsible for conducting outreach to corporate clients. Similarly, Craven Community College plans to have a coordinator charged with outreach to employers.

In colleges with an integrated organizational structure, the movement between noncredit and credit programs may occur more naturally, because the divisions between these programs are less visible to students. Leaders from many of the colleges with integrated noncredit programs reported this type of movement of noncredit students (Anne Arundel Community College, City College of San Francisco, Craven Community College, Cy-Fair College, Lorain County Community College, and Northeast Wisconsin Technical College). At City College of San Francisco, 25% of first-time credit students come from the noncredit student population, including those taking basic skills courses. Table 3 summarizes the potential benefits and drawbacks of each organizational structure, as well as potential solutions to these problems as observed in the case study colleges.

Areas of Organizational Change

The role of noncredit workforce education is evolving over

time, and its evolution may prompt changes in the college's organizational approach and models of revenue generation. Along with these structural changes, noncredit workforce education may also lead to changes in the role of full-time faculty members and in the content of academic programs.

Organization of noncredit education

Several of the case study colleges reported some organizational change related to noncredit education in their recent history, usually with college presidents playing a central role in their initiation. A variety of organizational changes elevated noncredit workforce education to a priority within the college. Some college presidents sought to bring together all their noncredit programs into one division. Cumberland County College's noncredit programs are consolidated under one executive director who reports to the vice president of academic affairs. The College of Southern Nevada's separate noncredit programs are brought together in a newly created Division of Workforce and Economic Development under the oversight of the dean of workforce development, who reports directly to the president.

A few other colleges consolidated programs by integrating noncredit within credit departments based on content. In 1993, Central Piedmont Community College began the process of integrating noncredit programs into credit departments and gradually moved in this direction over the years with the goal of unifying the divisions. In a recent reorganization, Craven Community College also integrated noncredit programs into credit departments. The college, in part, sought to increase efficiency by reducing administrative positions and encouraging resource sharing. As a newly founded college, Cy-Fair College had the ability to select an organizational structure without regard to institutional precedent. The college's organizational structure is based on the models of Anne Arundel Community College and Lorain County Community College, which have integrated noncredit and credit programs by subject area.

Several colleges reported organizational changes that elevated the status of noncredit workforce education. Some created new positions or changed the reporting lines to reflect a higher degree of status for noncredit administrators. These positions helped to improve the communication among high-level staff on the operations of noncredit education. Wenatchee Valley College changed the position of director of continuing education to report directly to the president rather than to a dean. Valencia Community College changed its reporting lines so the head of noncredit programs reports directly to the president. In 2000, Anne Arundel Community College created a new position, vice president for learning, to oversee both noncredit and

Table 3

Benefits, Problems, and Solutions Associated With Organizational Structure

Benefits	Problems	Solutions
Integrated Organizational Structure		
• Better response to employers' credit and noncredit needs • All programs involved in workforce development and entrepreneurship • Centralized provision of students services • Facilitate students' movement between programs • Increase in faculty involvement • Save on administrative costs	• Lack of centralized or coordinated marketing and employer outreach • Lack of coordination of program information may confuse students • Difficult process to reorganize	• Have separate entity do outreach and sales and marketing • Carefully coordinate information • Manage change carefully
Separate Organizational Structure		
• Greater focus on profit • Greater focus on transfer mission • Freer hiring of faculty • Greater focus on local labor market needs	• Duplication of credit programs • Little sharing of resources • Some programs not offered • Focus on high-level skills only	• Work together collaboratively • Coordinate meetings regularly

credit. Truckee Meadows Community College changed its governance structure to include the noncredit administrator in the president's extended cabinet meetings in order to present issues directly to the president and deans. This change reflects the positive view toward noncredit that the college leadership has been trying to foster, where noncredit is considered a pillar of their mission and an integral part of their work and service to the community.

Other colleges have sought to focus their noncredit education more exclusively on workforce development and less on recreation and basic skills. One college president stated that a goal of moving away from the provision of recreational courses was to raise the status of the college's noncredit workforce programs. To the extent that noncredit education is associated with the stereotypical "basket weaving" courses, moving away from these courses would make it easier for the college to seriously market its workforce-oriented programs. Valencia Community College's entrepreneurial division for noncredit education, Valencia Enterprises, has moved away from recreational programs, as well as basic skills and GED preparation, intentionally seeking a specific niche and working to build credibility in providing high-end training. The college has abandoned the practice of "tossing schedules on the driveway" in favor of strategic planning, high-end training, and sales and marketing with an eye toward revenue generation.

College presidents in several of the case study community colleges had specific visions for workforce development that motivated these organizational changes. Several presidents had prior experience with workforce development in their careers and a particular interest in such programs. Some had previously taught workforce-oriented courses or had administered noncredit programs. This firsthand knowledge led them to value noncredit workforce education and to see ways to improve its delivery within their college. An interviewee from Valencia Community College reported two general trends in noncredit education: (1) embedding continuing education within the credit programs and (2) using the college's strong brand and relationship with the community to develop its own program. Valencia made the decision to move in an aggressively entrepreneurial direction, tightly connecting its noncredit programs to economic development.

Faculty engagement in noncredit education

To create better relationships between noncredit and credit programs, colleges strive to promote greater faculty engagement with noncredit education. One indication of full-time credit faculty engagement with noncredit workforce education is whether faculty teach any noncredit courses. A potential barrier to teaching noncredit courses is that the course may not count as part of the faculty's teaching load. Thus, if faculty were interested in teaching noncredit courses, they would have to do so as overtime.

Several of the colleges with integrated organizational structures count noncredit courses as part of their faculty load, including City College of San Francisco, Anne Arundel Community College, and Cy-Fair College. As part of its reorganization, Craven Community College is reviewing guidelines to count noncredit courses toward faculty load. Anne Arundel Community College has flexible job descriptions that encourage faculty to assume teaching and contractual opportunities in its noncredit programs. The credentials requiremed for faculty are generally the same, although in some noncredit areas they may choose to select experience over credentials. Credit and noncredit courses at Anne Arundel Community College are on par with each other, and faculty are of comparable competence. In three other colleges with separate organizational structures—Tyler Junior College, Hagerstown Community College, and Camden County College—the dean can assign faculty on a case-by-case basis to teach noncredit courses and have them count as part of their teaching load.

Yet, even allowing full-time credit faculty to teach in noncredit programs as part of their teaching load may not guarantee high faculty involvement with those programs. Nearly all the case study colleges, including those with integrated and separate noncredit organizational structures, reported that only a small number of faculty are engaged in and understand noncredit education. As one interviewee stated, "Noncredit doesn't even hit the radar of most faculty." This sentiment was expressed at several other colleges. Other noncredit leaders commented that not all faculty have the skills or abilities to teach noncredit courses and that they screen faculty carefully to make sure that they can teach the material. Thus, for noncredit programs, operating outside of the typical faculty rules for teaching assignments allows greater flexibility in selecting instructors.

At some colleges, leaders are trying to change faculty attitudes by setting the tone within the college to value noncredit workforce education. One interviewee reported that since leadership "sets the pace," it has sought to demonstrate to faculty the value of noncredit education by developing partnerships and collaborations at the highest level of leadership. Another college leader stated, "Professional and continuing education are part of the college's mission; we need to get faculty to understand [that]." In another college, where "noncredit is a full partner," the head of noncredit education reported that the "president is the biggest champion." Particularly in states without general funds for noncredit education, college leaders are trying to address the sentiment among faculty that noncredit programs are using funds that should otherwise go to support credit programs. Some college leaders have sought to highlight noncredit workforce education as a resource for faculty that can provide new information and ideas from industry or specific expertise

in terms of efficiently running programs.

Connections with the local economy

The case study community colleges with both integrated and separate organizational structures employ various strategies to develop strong links to the local labor market. They have several interrelated goals, and all can benefit the college overall by increasing the depth and breadth of its offerings. The first strategy is to create programs that students will find relevant to their employment and education goals. The second is to meet the growing and changing needs for skilled workers of local employers. The third is to foster economic development more generally by increasing the skill and knowledge level of both the workforce and industry. Indeed, the growth of programs and the growth of local industry are intertwined.

A benefit of noncredit workforce education cited by many colleges is the innovation that it can bring to the whole college. Colleges stated that noncredit is very useful in piloting new courses; they view it as an incubator for testing courses that may later be moved into credit programs. Noncredit can be used as a source of research and development for new programs, testing the attractiveness of courses as well as the viability of specific curricula. Some colleges reported that if there is a demand for the courses after a period of time, they then move them to credit. Colleges reported that they transition courses from noncredit to credit particularly in technological or emerging fields, where courses are eventually adopted in degree programs. This process is especially useful in bringing new technologies and practices into the college, such as information technology certifications. In this way, noncredit workforce education has a larger influence on the college.

Most colleges have a representative on the Local Workforce Investment Board, Economic Development Board, and Chamber of Commerce. Others reported they are part of state-level entities, such as the Workforce Investment Board Steering Committee, Job Corps, or initiatives related to job clusters or career pathways. In addition to their participation in these external groups, the colleges make efforts to gauge the local economy. They conduct surveys and visit local employers to map community needs. One interviewee reported that noncredit education reaches out to employers with "marketing through infiltration"; the program is "the eyes and ears of the [college] community." Case study colleges, regardless of their organizational structure, shared the sentiment that noncredit education is highly connected or "joined at the hip" to economic and workforce development.

State and federal funds have spurred the development of noncredit program offerings in new technologies. Federal funding for high wage, high growth industries is currently targeted at specific programs. Federal grants, as well as state grants, have pushed the noncredit programs into new areas of technology, such as geospatial technology, advanced manufacturing, homeland security, and aerospace. Wenatchee Community College's noncredit program offers instruction in geographic information systems and reports growing into other new technology areas. City College of San Francisco uses state economic development initiative funds to bring advanced manufacturing, such as rapid prototyping and nanotechnology, into the classroom.

Implications of College-Level Organization

Given the lessons from the case study colleges, no single right way exists to organize noncredit workforce education. However, a range of organizational structures and practices can serve the goals of community college noncredit workforce programs. To determine which organizational structure and practices best suit a college will depend on multiple factors, including college leadership, administration, and funding sources, as well as the student, employer, and community needs the college seeks to meet.

An integrated organizational approach connects noncredit programs to the rest of the college through collaboration and coordination. To the extent that employers ask for credit for their employees' training, as they did in several of the colleges, greater integration of curriculum and faculty may help colleges respond more fully. Furthermore, greater integration may provide more awareness of students' longer-term educational goals and provide opportunities for the students to connect to degree programs. As noncredit workforce education evolves, it is creating organizational changes within the community college that reflect its importance and its likely influence on the content of credit programs. Also, the possibility exists that credit programs may adopt some of the more flexible practices of noncredit education.

Noncredit Program Outcomes

Since noncredit workforce education is not regulated by the academic rules that govern credit education, the recorded student outcomes from participating in a noncredit program vary and serve different needs. Understanding the outcomes of noncredit workforce education helps illuminate how well the programs fulfill their goals. Furthermore, the mechanisms that states and colleges use to track noncredit student data and the outcomes of noncredit workforce education have implications for assessing the effectiveness of the various noncredit programs.

Recorded Outcomes

A range of recorded outcomes from noncredit workforce

education may be possible with potentially different purposes. These recorded outcomes may be promoted by state-level policies and guidelines or adopted by colleges to meet the needs of the students and employers they serve.

Transcripts

Nine states currently have different guidelines for including noncredit courses on a transcript to provide students with a record of course completion (see Figure 6). In North Carolina, both credit and noncredit courses appear on students' transcripts, including the course number, title, and grade (a letter grade for credit course; pass or fail for noncredit). Texas mandates that workforce education courses be included on transcripts, using the general number for the course from the state manual. In Virginia, transcripts list noncredit courses, including grades (i.e., satisfactory, nonsatisfactory, withdrawal, or incomplete) if the student chooses to receive a grade. In Pennsylvania, noncredit courses are included on transcripts only if they qualify for transfer to credit. Other states provide transcripts for noncredit courses that are separate from transcripts for credit courses. Montana indicates noncredit courses on a separate page of the transcript. Wisconsin keeps a general record of noncredit courses and can provide the record upon request by business and industry. Georgia issues a separate noncredit transcript and also requires that all noncredit courses be documented with continuing education units (Mills, 2000).

Several states reported that they are considering the development of a state policy on transcripts for noncredit courses. Washington is trying to develop a way to record skills and knowledge to enable credit for prior learning. Maryland is also interested in standardizing a noncredit transcript. Other states mentioned an interest in electronic transcripts or electronic forms that would allow transcripts to travel with a student from high school through college to the job site. While the majority of states do not have guidelines on transcripts for noncredit courses, individual colleges may decide to develop their own policies.

Whether and how noncredit courses are included on a transcript varies across the case study colleges. Only two colleges did not have any form for providing a transcript for noncredit courses. Some of the other colleges that do record noncredit courses on a transcript provide a separate transcript for noncredit courses, while others include the noncredit courses on a credit transcript. The College of Southern Nevada allows students to select whether they want their noncredit courses to appear on the same transcript as credit courses or on a separate workforce development transcript. Gulf Coast Community College combines credit and noncredit course work on one transcript if requested by a student.

Some colleges reported that their data system constrains the way they can record noncredit courses. Cy-Fair College provides students with a separate noncredit transcript because limitations in its district-wide data systems preclude its ability to record noncredit courses on the credit transcript. Furthermore, some interviewees reported that they envision transcripts of a much different format than those currently used. They speculate that transcripts might ultimately move from a reliance on traditional academic credit hours to documenting competencies that reflect what students have learned in their courses. This system would be particularly useful for students who have taken noncredit courses and then later want to convert them to credit.

Industry certifications

Noncredit programs provide the opportunity to prepare for a range of industry certification exams. Almost all case study colleges offer certifications in allied health, including phlebotomy, EKG/cardiovascular, medical interpreting, nursing home medicine aide, MRI, and health-care license renewal. Information technology is another very common area of industry certification, which includes certifications from Microsoft, CompTIA, CISCO, and Oracle. Such certifications increased dramatically in the 1990s and became common in community college noncredit programs nationwide (Adelman, 2000; Haimson & Van Noy, 2003; Jacobs & Grubb, 2006). More recently, colleges have expanded their offerings to include certificate programs in business, which award certifications in specific management techniques, leadership, teamwork, and project management. Industry certifications may be valued by employers in the labor market and may also be translated into credit within degree programs, as has been done with IT certifications (DiChiara-Platt, 2007; Haimson & Van Noy, 2003).

Some certifications are very localized and reflect the specific needs of industry in the college's area. Using funding from U.S. Department of Labor, Milwaukee Area Technical College, with input from local industry, is implementing online skills testing, certification, and training for manufacturing production employees. By creating standardized skill sets for the local manufacturing workforce, the college has a goal of recruiting and training skilled workers, improving productivity, and increasing job portability for individual workers. The assessments require mastery of subjects in a manufacturing context, such as math, science, reading, writing, communications, information technology, problem solving, and teamwork, as well as in basic technical skills. Central Piedmont Community College also works with local employers to develop locally valued certifications for short-term training; it is currently working with banks and in the past has worked with other employers to develop

Figure 6

States With Guidelines for Noncredit Course Transcripts

Note. Information is not available for Arkansas and Colorado.

a certificate of completion in basic computer applications. Through careful study, Central Piedmont seeks to ensure that these locally developed certifications have currency in the local labor market. The certifications are tied to instruction offered in a variety of formats that differ from the traditional credit format.

While the case study community colleges offer a range of industry certifications, these programs often represent only a fraction of their total noncredit offerings. The colleges typically offer numerous noncredit workforce programs that do not have industry certifications associated with them. Some may issue certificates of completion for noncredit classes, but the certificates are generally not a valued or validated way to record student outcomes.

Continuing education units

Continuing Education Units (CEUs) are a standard way to measure participation in continuing education. According to International Association of Continuing Education and Training (IACET) guidelines, one CEU is equal to "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction"(IACET, 2007). Various agencies and organizations may issue CEUs, including IACET and certain professional organizations. CEUs are often required to maintain licensure within a profession, such as in nursing, teaching, and law.

Colleges use a variety of mechanisms to determine how to award CEUs. Several case study colleges use the IACET guidelines. Anne Arundel Community College uses them when developing courses so that all courses have associated CEUs. Other colleges reported that they use the IACET guidelines in the absence of other guidelines for developing CEUs. At the same time, colleges also reported that they follow guidelines from professional organizations and state agencies on awarding CEUs in particular areas. Tyler Junior College reported that it follows guidelines developed by the Southern Association of Colleges and Schools accreditation body, imposing CEU guidelines on all courses and offering CEUs as requested by students. This process is designed to keep quality high, by addressing the overall quality of the course and its faculty competence and experience.

Much of the use of CEUs is industry driven, based on demand. Gulf Coast Community College reported that it frequently changes its courses in response to industry needs; currently, its most common users of CEUs are in health and law enforcement. There can be tension within colleges about how to maintain the value of CEUs. For

example, one college reported that some faculty argue that CEUs should be offered only for workforce courses and that to do otherwise would diminish their value, whereas others say that CEUs should be given to any course related to lifelong learning, including recreational courses. Other colleges offer CEUs but report that there is not a high demand among students for them.

Retroactive credit

Guidelines for granting credit retroactively for noncredit workforce education most typically exist in the form of providing credit for prior learning or life experience credit. While many states do not address this matter, 17 states have some policies pertaining to retroactively granting credit (see Figure 7). Generally, the policies are designed to facilitate retroactive credit by assessing individual students in areas of knowledge, including those covered in noncredit courses. Students may have the opportunity to take an exam to prove their knowledge of course material, but there may be some restrictions based on the faculty who taught the course. In Colorado, noncredit classes can be transferred to credit when taught by accredited faculty, and if a student petitions the college and is tested for knowledge.

Likewise, in Minnesota a policy on "credit for prior learning" is being implemented that addresses the transfer of courses from noncredit to credit. But this policy raises some concern that the course may not be considered valid if credit faculty did not sanction and teach it. In Oregon, noncredit courses, such as private vendor courses like those offered through Microsoft, can transfer to credit if there is a clear match in the content and rigor of the noncredit and credit versions of the courses. Sometimes the student will need to do extra work or pay the difference in costs in order to receive credit. Maryland offers life experience credits but limits the number that can be used and also prohibits the granting of credit for noncredit courses. New York's state education department houses the National Program on Noncollegiate Sponsored Instruction, which facilitates the conversion of learning experiences into college credit.

Credit for prior learning in noncredit courses may also entail exemption credit, which allows students to move on to the next course in a sequence without having to take one or more prerequisite courses. South Carolina has a state policy that allows students who take challenge exams to receive exemption credit. In Arkansas, where noncredit education is viewed as a bridge to credit course work, students can take a challenge exam to get credit from a noncredit course. The idea is that such an opportunity can "ease people into the credit mode."

The absence of a state policy relative to granting retroactive credit may signal a lack of support for such mechanisms or a desire that this issue be locally decided. For example, Florida does not have a policy on awarding life experience credits, suggesting that colleges should locally determine their policies. However, the state does not encourage this nontraditional mechanism for awarding credit within the public higher education system. In contrast, California is supportive of mechanisms to allow students to gain academic credit from noncredit courses but leaves this decision up to the local colleges.

Many of the colleges reported that they have procedures for awarding credit for prior learning. They are often applied on a course-by-course basis or determined by an individual academic department. Sometimes the procedure involves a student's portfolio, a prior learning assessment, or a challenge exam or competency test. Milwaukee Technical College offers credit for prior learning if it can be linked to an existing class and is taught by faculty who teach credit classes. It also offers life experience credit as part of a college-wide program where students present portfolios to obtain credit through academic divisions. Fullerton Community College provides life experience credit for veterans and credit by examination. While many colleges have a policy on awarding credit for prior learning, most also reported that few students take advantage of it, due either to low interest or unfamiliarity.

Several colleges reported that they are exploring the development of college-wide policies on life experience credits. Anne Arundel Community College is working on establishing policies for life experience credit where credit would be awarded for incumbent worker training if the course guidelines of a credit class are followed, including prerequisites and placement testing. At Bellevue Community College, the credit–noncredit committee will soon examine the issue of prior learning assessment. Furthermore, the committee is creating a mechanism for interested students to take noncredit courses for credit, beginning with a project management course, for which they have already expressed interest in obtaining credit. The College of Southern Nevada reported that its current structures could be developed further to support the transfer from noncredit to credit; it currently translates contact hours from its apprenticeship program into credit hours. Central Piedmont Community College is also currently examining mechanisms for articulation between noncredit and credit to develop a collegewide policy.

Noncredit–credit articulation

Guidelines for articulating noncredit and credit programs are designed to create stronger connections between the two. Such connections could allow students to move between programs in a seamless way, potentially gaining credit for noncredit courses. These types of guidelines are rare, but many state policymakers reported that their states are interested in discussing or developing guidelines to

Figure 7

States With Guidelines for Granting Credit Retroactively

articulate noncredit programs with credit programs. They are seen as a possible strategy to support the development of career pathways.

Kentucky is well known for articulating noncredit and credit programs. Colleges can offer courses customized to specific business or industry needs in small course modules. To create these modules, faculty review noncredit courses with the intention of offering workforce development programs with multiple entry and exit points and embedded certificates. Noncredit offerings are aligned with credit offerings and are competency based, focused on evaluating and documenting competencies, especially in technical areas. The state system is moving to eliminate the distinction between noncredit and credit within its community colleges, and has recently hired a system director of modularization to focus on building noncredit programs that rebundle college-level competencies appropriate for credit. A policymaker in Kentucky said of this approach: "It is almost criminal not to offer credit, so there is no wasted time, particularly for low-income students."

In New Jersey, the state's Community College Consortium for Workforce and Economic Development is currently involved in developing programs that articulate noncredit courses with credit programs. These programs include formal mechanisms to translate noncredit courses that employers seek for their employees to credit courses in specific areas. Some career ladder programs with transitions between noncredit and credit have been developed in specific areas, including social services and education. State policymakers in New Jersey reported that they are finding interest in this model where credit is awarded for noncredit work when the student enrolls in or completes some course work in a related credit program. The state community college association is currently involved in developing statewide guidelines on articulating noncredit and credit courses and is seeking to develop recommendations that may be used by colleges around the state (DiChiara-Platt, 2007). Both case study colleges in New Jersey, Cumberland County College and Camden County College, offer a program for state human services workers developed and offered statewide that consists of a 200-hour, five-module, noncredit sequence, including modules on diversity and customer service. If the modules are completed and the student continues with a certification or degree, the sequence can translate into nine credits. Because social service faculty had been involved in its development, this program was easily approved by the faculty senate. As previously discussed, Cumberland County College has a program to articulate a noncredit insurance course with a business degree.

In numerous states, policymakers reported that they are

interested in or are currently developing noncredit course modules. Alabama is breaking training programs into small components; for example, the 18-month training for welding may be offered in components so that students may take one or more 4-week training modules in specific areas. California has been examining the issue of articulation and the alignment of noncredit programs within the system through a year-long study commissioned by the state system office (Morison & Forbes, 2006). One of the key recommendations is to "strengthen noncredit instruction through improved curriculum development, articulation, program review and approval processes." North Carolina would like to develop career pathways and move toward modularization with entry and exit points in the educational system. In Oregon, state officials are looking into the relationship between noncredit and credit programs, including the transition from noncredit to credit bearing courses. In Ohio, some employers, particularly car manufacturers, are interested in having more of their workers obtain degrees, and they are requesting that credit be transferred from noncredit.

Some states reported barriers to implementing guidelines on articulating noncredit and credit programs. One state official we interviewed stated that articulation "raises hackles with faculty." Another state reported that it had some discussion about the relationship between credit and noncredit courses, but, in general, it has "been going in circles" on this issue. One state reported that the colleges were unlikely to move in this direction without a push from the state, but there were no state policies on record or discussion at the state level.

Not all states are interested in developing these policies. For example, one state reported that there is no interest in encouraging linkages between noncredit and credit; rather, students are encouraged to enroll in credit courses if they are interested in degrees. The state is concerned about academic quality and the perception that its institutions could be seen as "diploma mills" if it is too generous in granting credit for nontraditional modes of education, such as noncredit workforce education.

Likewise, some colleges are simply not interested in the articulation of noncredit and credit courses. At Gulf Coast Community College, once a noncredit course is taken it cannot be applied as a credit course. This stance is influenced by the state-level perspective that encourages a more traditional position on awarding academic credit. Craven Community College does articulate from noncredit to credit because of accreditation issues related to instruction and program outcomes. Its focus is on certification and industry testing, and it is also examining ways to approach curriculum modularization, but accreditation is the main barrier to articulating noncredit to credit courses.

Multiple issues must be balanced in determining an approach to articulating noncredit and credit courses. Policies may help support the progression of students along career pathways but must also be mindful of potential concerns over quality and accreditation. As colleges develop ways to articulate between noncredit and credit programs, they will also need to address issues of remediation as students seek to bring their skills up to required levels to enroll in degree programs. However, given the expansion of noncredit programs, such policies may be necessary to provide students with another way to obtain a valued outcome from noncredit courses.

A review of accreditation agencies' guidelines explicitly related to noncredit education shows that few have many significant guidelines that would impact these processes. The one exception is the Middle States Region, which specifies in its description of noncredit offering that "if non-credit courses are potentially applicable to for-credit programs at the institution, academic oversight should assure the comparability and appropriate transferability of such courses" (Middle States Commission on Higher Education, 2006). However, as noncredit workforce education grows, it may gain more attention from accreditation agencies.

Individuals and employer needs for recorded outcomes

Two key characteristics of noncredit workforce students provide important distinctions associated with their needs and the types of recorded outcomes that best serve them. First, educational attainment, that is, whether the students have a college degree, will determine whether they are interested in bridging into a credit program and potentially gaining academic credit for their noncredit studies. Even if their short-term goals are to acquire specific skills, students may also value the opportunity to connect to a more long-term educational goal. Second, their employment status, that is, whether they are job seekers (including new entrants to the labor market, displaced workers, and career changers) or incumbent workers, may also determine the extent to which students value gaining a recorded outcome. While all workers may gain from having their skills certified in a portable manner, those who are currently seeking employment are more likely to value such a record than those who are currently employed.

Table 4 illustrates the potential goals in noncredit workforce education held by different student populations. The groups have very different needs in terms of connections to degree programs that may be facilitated through articulation and credit for prior learning. They all, however, may potentially share interest in gaining a valuable recorded outcome. Employers may also value a range of recorded

outcomes, depending on the extent to which they value immediate skill gains and longer-term education.

Data and Reporting

Aside from recorded outcomes to benefit individuals and employers, information on students and employers would provide an understanding of the populations served by noncredit and their needs. However, little standard data may be available to document the participation and outcomes of noncredit workforce education (Voorhees & Milam, 2005). Some information may be collected by states through their reporting requirements and supported by their data systems. Colleges may also have some mechanisms to report and collect data on noncredit workforce education.

Reporting requirements

The majority of states require reporting on some aspect of noncredit workforce education. In 38 states, community colleges are required to report some information on their noncredit programs (see Figure 8). Interestingly, several states that do not fund noncredit workforce education require colleges to report on it. Most states with reporting requirements request data on the total number of students enrolled. New Mexico collects information on the number of noncredit offerings, participants, and employers served. The state also collects contact hours, which are used to allocate funds for the forthcoming year. In contrast, Wyoming does not fund noncredit workforce education but requires data reporting in order to document the contributions of community colleges to the state's workforce development. Some states seek other information, however, such as the number of courses, as in Wisconsin, or the amount of revenue generated, as in New Hampshire.

More specifically, states that provide general funds for noncredit workforce education also require data on noncredit students. Since Maryland requires reporting on all students, Anne Arundel Community College collects data on all noncredit students. Central Piedmont Community College in North Carolina also reports data on students in all noncredit programs, including those not supported by state funds, because the system office is interested in information on all programs in the state's colleges. Cumberland County College submits two major reports annually to the New Jersey Council of Community Colleges. As in North Carolina, the colleges report information on all noncredit programs regardless of whether they receive state funding. To meet Florida's reporting requirements, both Gulf Coast Community College and Valencia Community College collect information on all noncredit students in state-funded programs; they collect data on student enrollments but not outcomes, as they do for credit students. With the new increase in state funding for noncredit education, City College of San Francisco will need more information on its noncredit students to demonstrate that noncredit education is part of a career ladder for students.

Colleges without state noncredit reporting requirements rarely collect noncredit data for their own purposes. At Bellevue Community College, the institutional research office collects limited information on noncredit students, while the noncredit department independently collects information. The College of Southern Nevada has an identifier for noncredit students, but these data are not typically analyzed because of lack of state funding. It does have similar information available on noncredit students from applications, including demographics and educational intent.

Several state policymakers expressed concern that the data collected under existing reporting requirements undercount the number of students enrolled in noncredit workforce

Table 4

Potential Goals of Noncredit Workforce Education and Students Most Interested

Potential Goals	Most Interested Students	Recorded Outcome
Skills for immediate use with no recorded outcome	Incumbent workers with college degrees	none
Skills with portability in the labor market	Job seekers or those with no college degree, including both job seekers and incumbent workers	industry certification
Professional development	Incumbent workers in specified professions	CEUs
Skills for immediate use, as well as a degree	People with no college degree, including both job seekers and incumbent workers	Articulation or credit for prior learning

education. For example, in New Jersey, the numbers reported to the state are only partial counts of students: only students enrolled in noncredit courses that receive state funding are counted, although the state's colleges also offer noncredit courses that are self-supporting. The state association for community colleges does periodic surveys to estimate the number of students in self-supporting classes. Likewise, Missouri has reporting requirements for noncredit education that include training hours, duplicated and nonduplicated enrollment reports, and "after-the-fact surveys" of employers that must be submitted to the state every year and that are related to funding.

Some states are seeking to improve noncredit reporting or make it a requirement. The Minnesota State Colleges and Universities system implemented a comprehensive noncredit education reporting requirement in 2002. Institutions are required to use the same integrated student information system for credit and noncredit students and courses and have been working to improve the completeness of data on noncredit student demographic characteristics. Other states are moving to create policies to require reporting on noncredit workforce education. Collecting information on noncredit education is one of Montana's current goals. As previously discussed, both Ohio and Virginia recently enacted reporting requirements with the goal of gaining state funds for noncredit education by documenting the demand for it. New Jersey also recently enacted reporting on noncredit enrollments in all sectors of higher education, starting with a pilot effort in FY 2007.

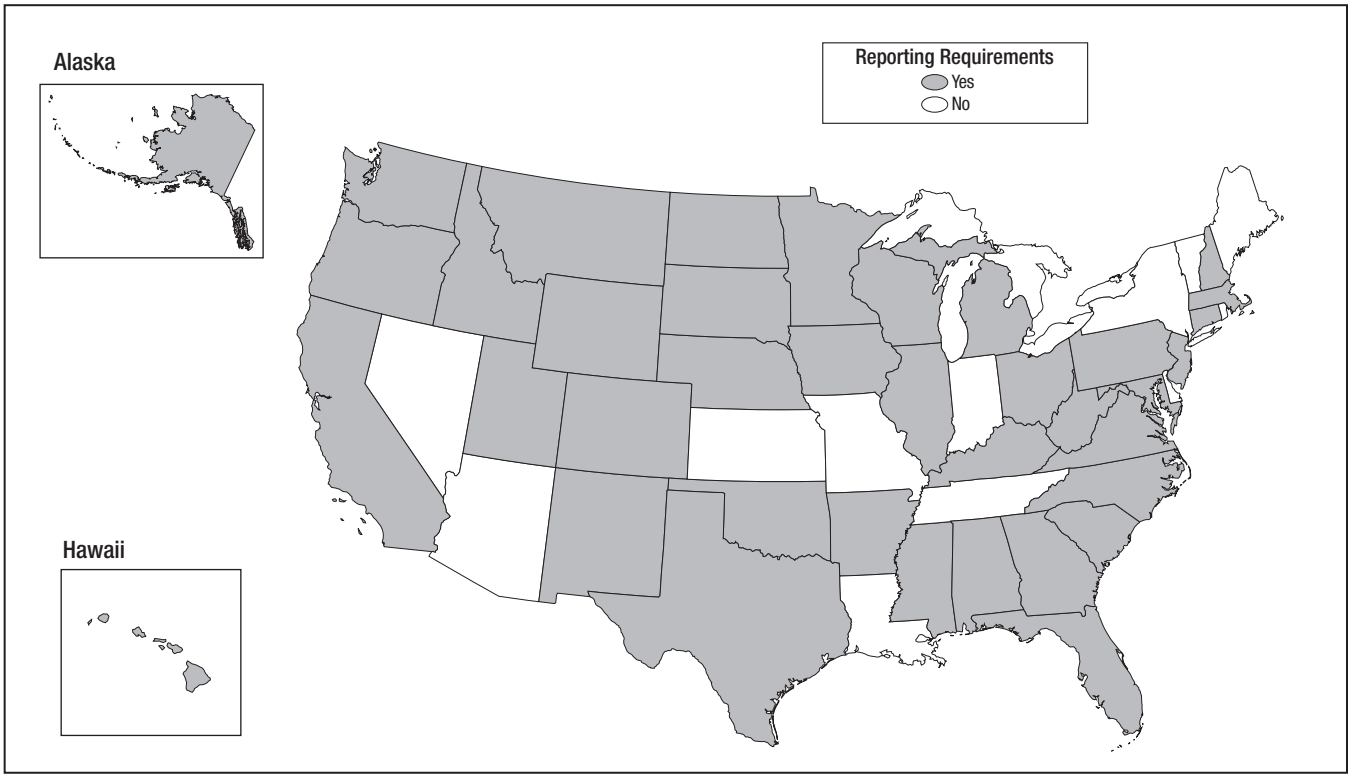
State data systems

Various data systems are associated with reporting requirements. Systems may have been created with the goal of facilitating data collection for reporting requirements, or their existence may allow the state to establish reporting requirements. All 14 states with data systems that include noncredit education also have reporting requirements for such education (see Figure 9). However, 24 states have reporting requirements but no state-level data system for noncredit education; in these states, individual colleges must develop ways to track information on their own.

The degree of sophistication of state data systems varies. Florida, for example, is noted for its sophisticated reporting system. In order for noncredit courses to receive state funding, they must be in the state data system and included in reporting. Even contract training, which seeks to be self-supporting, has some contractual reporting requirements. Other states noted complications with their data reporting systems. In particular, the systems may not accommodate the scheduling needs of noncredit programs and may request more data than students are willing to

Figure 8

Reporting Requirements



provide. Colleges may end up manually entering data for reporting. The use of these systems may be required as part of receiving state funds.

Some states are seeking to improve their data collection by developing new data systems for noncredit education. Ohio's recently developed data system includes only noncredit programs and was implemented within the past two years to help collect quality data to document the demand for noncredit education. Wyoming also just implemented a reporting system for noncredit education in the past year; the state has used it to generate reports on workforce training, including enrollments by course category, the number of industries served, and the number of partners in training.

Some other states indicated that they are exploring ways to improve their data systems to collect information on noncredit workforce education. In Connecticut there is a discussion about adopting a comprehensive tracking system similar to Florida's that would track students in all educational programs from preschool through higher education. New Mexico is also considering how it might merge its various data and data systems with its current state system that tracks only credit courses.

When considering new data systems or reporting requirements, states need to be aware of their current systems and their limitations. One state policymaker noted that noncredit programs often have their own separate, sometimes Web-based, data systems with abbreviated data requirements. Colleges typically maintain limited records that do not get reported to the state and might resist collecting additional data to meet state reporting requirements. This concern is particularly salient in noncredit programs operated as a separate unit within the college.

Barriers to data collection

Case study colleges reported several barriers to data collection. Some reported that students are reluctant to provide information, particularly social security numbers, and especially if they are taking just one course. Tyler Junior College is, in fact, moving to eliminate the use of social security numbers and to use a student identification number instead. Other colleges mentioned that they could not collect or report data on undocumented immigrants. Another barrier to collecting data is that because the noncredit format is different from the credit format (with its open-entry open-exit courses and different time frames and schedules for courses), systems must collect and report data differently. Finally, a common barrier reported by colleges is a poor data system; some colleges still capture a lot of information on paper or through other inefficient formats. As with state data systems, community college data systems are often designed for credit programs and do not accommodate the more flexible needs of noncredit programs. Furthermore, noncredit data reporting may rely primarily on class-level reporting systems rather than individual unit systems (Voorhees & Milam, 2005).

A few colleges seek to measure student outcomes from noncredit programs through program reviews. Northeast Wisconsin Technical College conducts program reviews every 5 years, engaging local employers, conducting surveys, and discussing trends and competencies. Central Piedmont Community College also regularly engages in a state-mandated program review process, viewing this process as an opportunity to develop meaningful ways to measure outcomes. In addition, to start a new program, the college has a program development model that includes four stages: market research, development, delivery, and evaluation. Central Piedmont is also working on conducting better evaluations of its existing programs. Milwaukee Technical College is working to develop stronger ways to measure noncredit student outcomes and is trying to get better information on whether its students are satisfied and if its courses help them in the workforce.

Unlike credit programs that are required to track and report on their students, noncredit programs are not consistently required to collect data. Much of what they do is unmeasured and therefore unseen, which supports the notion of noncredit education as the "hidden college" (Voorhees & Milam, 2005). In general, as is the norm elsewhere, the case study colleges collect and tabulate data on student enrollment only when required by the state, and data on student outcomes are limited.

Implications of Noncredit Workforce Education Outcomes

A fuller understanding of the nature and needs of individuals and employers who seek noncredit workforce education is vital to determine which programs and recorded outcomes are of most value for which students. In addition, more data on the value of noncredit workforce education for students are needed, and new research should elicit information on the utility of various recorded outcomes for different student populations. Similarly, a better understanding of the outcomes employers value could provide guidance to local programs. Finally, the experiences of students moving from noncredit to credit programs and the use of mechanisms to translate noncredit to credit, such as articulation and credit for prior learning, are particularly important areas for research because of their implications for students' access to degree programs.

Recommendations

Figure 9

States With Data Systems for Noncredit Workforce Education

Noncredit workforce education can play an important role in responding to local labor market demands. It can serve the workforce needs of employers and the needs of individual students for immediate skills. This type of education can also benefit students in other ways: It provides access to credit programs, especially for disadvantaged populations; generates meaningful recorded outcomes for a range of student needs; and facilitates the long-term pursuit of degrees.

Community college noncredit workforce education can have a central role in states that choose to prioritize funding to support career pathways as part of their workforce development agenda. Community colleges have the unique ability to connect short-term training to long-term educational programs leading to degrees and credentials, and they can ensure access to workforce training programs for disadvantaged populations. State policies on funding and reporting requirements and on college-level organizational structures have important implications for the delivery of community college noncredit workforce education. The findings from this study lead to five key recommendations, as were listed on page 3 and are discussed in further depth here.

1. Promote State Funding

States that provide general funds for noncredit workforce education promote workforce development and help students to access credit education by cultivating better ties to career pathways. The case study colleges located in states with state general funds for noncredit workforce education were more likely than colleges without such funding to integrate noncredit programs with credit programs, to connect noncredit students to degree programs, and to have some full-time credit faculty involvement in noncredit programs. While state general funds are associated with greater regulation, the colleges provide little indication that regulations diminish the freedom or innovation of noncredit workforce education.

State funds can help ensure that workforce development programs are accessible to low-income people. For states that prioritize supporting career pathways as part of their workforce development agenda, community college noncredit workforce education can play a unique role by connecting students to degree programs. Furthermore, since community colleges may seek to offer noncredit workforce education to generate profit, states should support noncredit programs that are necessary but might not be offered to generate profit. Both California and North Carolina have funding policies consistent with this approach.

State workforce training funds for employers may also need to be more closely connected to community colleges' noncredit workforce education. Since many states view noncredit workforce education as important to their workforce development goals, increasing the skill level within local communities and promoting economic growth may be considered a public good. At the same time, training funds can also be connected to longer-term educational programs for workers who need them, thus satisfying employers' immediate training needs and also helping workers accrue valuable educational experience. New Jersey's Community College Consortium for Workforce and Economic Development's efforts provide an example of this approach.

2. Encourage Increased Coordination

Greater coordination allows colleges to connect programs in innovative and meaningful ways to benefit students and employers. Indeed, regardless of whether they use integrated or separate organizational structures for managing their credit and noncredit programs, the case study colleges sought to achieve an integrated organizational approach by balancing the tradeoffs associated with each structure type. They encouraged collaboration and sharing of innovative programs ideas. Moreover, noncredit workforce education can act as a research and development arm of the college by identifying program components that can also be effective for credit programs.

States may encourage credit–noncredit relationships by requiring colleges to report on the ways that noncredit workforce education innovations are shared within the college or by including funding incentives to encourage collaboration between noncredit and credit programs. By promoting awareness of noncredit workforce education, and its role in supporting and enhancing the college's overall mission, more college leaders can initiate this type of organizational change. Furthermore, documenting specific successful organizational practices will help promote better alignment of noncredit and credit programs among community college staff.

Integrated organizational structures may be somewhat more likely to help connect noncredit students to credit programs and to involve faculty members more directly in noncredit education. Therefore, when possible, and particularly when colleges are supported by state general funds, moving toward an integrated organizational structure may help colleges better serve their noncredit students. The organizational change to integrate noncredit and credit programs requires an investment of institutional resources, however, and may not be right for all colleges. Thus, efforts to increase coordination and promote an integrated organizational approach without restructuring can be a useful strategy to promote connections among programs, faculty, and students. Ultimately, regardless of organizational structures, more integrated organizational approaches do not necessarily curtail noncredit activities; the case study colleges demonstrate that flexibility and responsiveness can be maintained and that profit generation can still be pursued.

3. Improve Recruitment and Articulation

States and colleges would do well to examine how noncredit workforce education fits into a larger system of career pathways. While not all noncredit students need or want to pursue a degree, some do. For them, noncredit workforce education can provide an entry to a career pathway that allows for advancement. States and community colleges can implement mechanisms that create better ties between noncredit workforce education and credit degree programs, whereby noncredit program students can serve as an internal market for credit programs. Such mechanisms include marketing credit programs to noncredit students and developing procedures to transfer from noncredit to credit programs. In addition, colleges should develop clear criteria for deciding whether a course should be offered in a noncredit or credit format. In some instances courses may be more productively located in credit programs if they can be integrated into a degree program.

Mechanisms to support career pathways, particularly procedures to articulate noncredit and credit education, raise fundamental questions about the definition of "college-level credit" and the difference between credit and noncredit courses and programs. Faculty determine credit courses that lead to an academic credential through an institutional process authorized by an accreditation agency. With noncredit workforce education, documentation of a student's learning may come from an outside entity, such as an industry or professional association, or from processes internal to the college, such as credit for prior learning. The way that accreditation agencies will view procedures for defining noncredit and articulating it with credit is only beginning to become evident.

In contrast with other types of training providers, community colleges can provide pathways that allow students to gain specific workforce skills with immediate value and, also, to pursue a college degree with broader labor market value. Evidence from the case study colleges indicates that such pathways would meet the needs of some noncredit students. Thus, assessing students' short- and long-term education needs, with the goal of guiding policy and program development, is an area for further research.

4. Develop Nondegree Forms of Validation and Systems to Record Outcomes

Noncredit courses vary greatly in the amount and intensity of their content, and some result in an external validation, such as an industry certification or state licensure. Many colleges issue some form of student transcript that includes information about noncredit workforce education. However, they differ about whether they include noncredit courses on the same transcript as credit courses and about the information they include regarding noncredit courses on transcripts.

Because of all these differences, the development of a standardized system for recording outcomes from noncredit workforce education might be needed. It would document noncredit workforce education for the purposes of allowing the portability of evidence of skills for students and accountability for college and state workforce education funds. This system would externally validate noncredit workforce education in order to meet acceptable standards as defined by industry. To this end, some consensus on the system would be needed among private industry associations, vendors, and companies that create and maintain external systems of validation, such as industry certification. Specifically, the largest associations that maintain certifications might come together to discuss a way to consistently record the completion of credentials on a common student record or transcript that would be of value to industry.

5. Collect More Information on Outcomes

More information is needed on student outcomes to assess fully the contributions of noncredit workforce education to students, employers, and the community. State reporting requirements can yield a better understanding of the community college's role in state workforce development efforts by motivating colleges to collect and tabulate data on noncredit students, thereby bringing the "hidden college" of noncredit workforce education to light. While some case study colleges reported barriers to collecting and reporting data, those in states with reporting requirements have developed successful ways to collect and report on their noncredit students. Additional resources and assistance may be necessary to help colleges overcome barriers to collecting and reporting on noncredit students.

More information is crucial to document the value of noncredit workforce education for individuals. It is not clear which of the recorded outcomes possible for people have the most value in which occupation, industry, and labor market, nor is it clear how employers assess the value of education for their workforce. Some states and colleges have attempted to document the value of noncredit workforce education (see, e.g., Central Piedmont Community College, 2002; Magnum Economic Consulting, 2005). These efforts need to be supported, and the documentation refined, to provide real information and feedback to colleges and to justify continued funding for noncredit programs. These efforts would also enable individuals and employers to make informed decisions about their investments of time and resources in noncredit workforce education.

To illuminate program effectiveness from a different perspective, more information is needed about how well community colleges are serving the full range of local employers' needs, about what employers value in noncredit workforce education, and about employers' experiences with program participants. Research on the perspectives of employers could help inform the way that community colleges develop, target, and operate their noncredit workforce programs. The case study colleges indicated that employers seek locally based solutions from community colleges and, thus, may value a range of outcomes based on their labor market and specific needs. However, the presence of state funds to support industry- and sector-based initiatives highlights the importance of these solutions at the state and regional levels. Since noncredit programs operate in a wider context of workforce development programs that include the reporting requirements of the Workforce Investment Act, which demands a greater amount of data on outcomes, more information is needed on which outcomes best reflect the contributions of noncredit workforce education in the economy overall.

Furthermore, as states fund noncredit workforce education and develop more reporting requirements, they can seek to promote and support better collection and use of data to evaluate outcomes. States can also benefit from coordinating their data reporting requirements with each other, which would allow them to learn from other states and make cross-state comparisons. State reporting and evaluation efforts must be conducted in close collaboration with local colleges, however, since their programs can reflect very localized needs and should be evaluated in the context of those needs. Colleges need to use their internal resources to generate appropriate data on outcomes for their specific programs. State resources can help support these efforts.

Given the lack of basic data even on enrollments in community college noncredit workforce education, obtaining information on outcomes will require great effort. As states and colleges invest more resources in noncredit workforce education, outcome data will help to determine whethe their programs are meeting the needs of students and employers and adequately addressing broad state workforce and economic development needs. Follow-up on students' performance in the workplace will also be necessary to provide information on the longer-term labor market

outcomes of noncredit workforce education.

References

Adelman, C. (2000). *A parallel postsecondary universe: The certification system in information technology*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Alssid, J., Gruber, B., Jenkins, D., Mazzeo, C., Roberts, B., & Stanback-Stroud, R. (2002). *Building a career pathways system: Promising practices in community college-centered workforce development*. New York, NY: Workforce Strategy Center.

Bailey, T. R., Leinbach, D. T., Scott, M., Alfonso, M., Kienzl, G. S., Kennedy, B., & Marcotte, D. (2003). *The characteristics of occupational sub-baccalaureate students entering the new millennium*. New York, NY: Columbia University, Teachers College, Community College Research Center.

Bailey, T. R., & Morest, V. S. (2004). *The organizational efficiency of multiple missions for community colleges*. New York: Columbia University, Teachers College, Community College Research Center.

Biswas, R. R., Mills, J., & Prince, H. (2005). *Building skills, increasing economic vitality: A handbook of innovative state policies*. Boston: Jobs for the Future.

Boswell, K. (2000). *State funding for community colleges: A 50 state survey*. Denver: Education Commission of the States, Center for Community College Policy.

Brewer, D., & Gray, M. (1997). *Connecting college and community in the new economy? An analysis of community college faculty-labor market linkages*. CA: National Center for Research in Vocational Education.

Central Piedmont Community College (CPCC). (2002). *Results from the spring 2002 Corporate and Continuing Education Student Survey*. Charlotte, NC: CPCC Department of Planning and Research.

Cleary, J., & Fichtner, A. (2005). *Deploying community colleges to strengthen state economic development: A national study*. New Brunswick: Rutgers University, Bloustein School, John J. Heldrich Center for Workforce Development.

DiChiara-Platt, L. (2007). *Noncredit to credit articulation: Best practices and guidelines for creating statewide career ladder programs in the New Jersey community college sector*. Report submitted to the New Jersey Council of County Colleges, Academic Officers Association and the Senior Continuing Education Officers. Mount Laurel, NJ: L.D. Platt Associates.

Dins, K. (2005). *Chunking professional-technical programs to create pathways to degree completion in community colleges*. Unpublished dissertation, Oregon State University, Portland.

Doucette, D. (1993). *Community college workforce training programs for employees of business, industry, labor, and government: A status report*. Phoenix: AZ: League for Innovation in the Community Colleges.

Dougherty, K., Reid, M., & Nienhusser, H. K. (2006). *State policies to achieve the dream in five states: An audit of state policies to aid student access to and success in community colleges in the first five achieving the dream states*. New York: Columbia University, Teachers College, Community College Research Center.

Dougherty, K. (2003, March). The uneven distribution of employee training by community college: Description and explanation. *Annals of the American Academy of Political and Social Science*, *586*(1), 62–91.

Dougherty, K., & Bakia, M. (1999). *The new economic development role of the community college*. New York: Columbia University, Teachers College, Community College Research Center.

Flynn, W. J. (2002). *More than a matter of degree: Credentialing, certification and community colleges*. Carlsbad, CA: National Council for Continuing Education and Training.

Flynn, W. J. (2004a, April/May). The case for revitalizing the traditional academic transcript. *Community College Journal, 74*(5), 27–35.

Flynn, W. J. (2004b).Why not assess and document all learning? *Learning Abstracts, 7*(3). Retrieved January 27, 2006, from http://www.league.org/publication/abstracts/learning/lelabs0403.html

Flynn, W. J., & Bernstein, L. T. (2007). *Profit is not a dirty word: What community colleges must do for a sustainable future* [Executive brief]. Carlsbad, CA: National Council for Continuing Education and Training and VisionPoint. Retrieved June 25, 2008, from http://www.visionpoint.com/assets/articles/vp_profit%20paper%20012307.pdf

Grubb, W. N., Badway, N., & Bell, D. (2003, March). Community colleges and the equity agenda: The potential of noncredit education. *Annals of the American Academy of Political and Social Science*, *586*(1), 218–240.

Grubb, W. N. (2002). Learning and earning in the middle: Part 1. National studies of pre-baccalaureate education. *Economics of Education Review, 21*(4), 229–321.

Grubb, W. N., Badway, N., Bell, D., Bragg, D., & Russman M. (1997). *Workforce, economic and community develop-*

ment: The changing landscape of the entrepreneurial community college. Phoenix, AZ: League for Innovation in the Community College, National Center for Research in Vocational Education and National Council on Occupational Education.

Haimson, J., & Van Noy, M. (2003). *Developing the IT workforce: Certification programs, participants, and outcomes in high schools and two-year colleges*. Princeton, NJ: Mathematica Policy Research, Inc.

Harmon, R., & MacAllum, K. (2003). *Documented characteristics of labor market-responsive community colleges and a review of supporting literature*. Washington DC: U.S. Department of Education, Office of Vocational and Adult Education.

International Association of Continuing Education and Training. (2007). *Continuing education units*. Retrieved July 16, 2007, from http://www.iacet.org/about/ceu.htm

Jacobs, J., & Dougherty, K. (2006). The uncertain future of the community college workforce development mission. In B. Townsend & K. Dougherty (Eds.), *Community college missions in the 21st century* (pp. 53–62). San Francisco: Jossey-Bass.

Jacobs, J., & Grubb, N. (2006). The limits of "training for now": Lessons from information technology certification. In T. Bailey & V. S. Morest (Eds.), *Defending the community college equity agenda* (pp. 132–154). Baltimore: The Johns Hopkins University Press.

Jones, D. (2003). *State shortfalls projected throughout the decade: higher ed budgets likely to feel continued squeeze* [Policy alert]. San Jose, CA: The National Center for Public Policy and Higher Education.

Leibowitz, M., & Taylor, J. C. (2004). *Breaking through: Helping low skilled adults enter and succeed in college and careers*. Boston: Jobs for the Future.

Lieu, M. W., Crane-McCoy, C., Gilbert, G., Hanna, K., Sibley-Smith, A., Smith, B., & Murillo, A. (2006). *The role of noncredit in the California community colleges*. Sacramento, CA: The Academic Senate for California Community Colleges.

Levin, J. (2001). Public policy, community colleges and the path to globalization. *Higher Education, 42*(2), 237–262.

Magnum Economic Consulting. (2005). *How the VCCS Workforce Development Service Centers contributed to Virginia's economy in 2004-05*. Richmond, VA: Virginia Community College System.

Middle States Commission on Higher Education. (2006). *Characteristics of excellence in higher education*. Philadelphia: Author.

Mills, H. (2000). *Utilization of the Continuing Education Unit (CEU) within the university system of Georgia*. Atlanta: Board of Regents, University System of Georgia.

Morest, V. S. (2006). Double vision: How the attempt to balance multiple missions is shaping the future of community colleges. In T. Bailey & V. S. Morest (Eds.), *Defending the community college equity agenda* (pp. 28–50). Baltimore: The Johns Hopkins University Press.

Morison, B., & Forbes, M. (2006, October). *A learner-centered curriculum for all students: The report of the Noncredit Alignment Project*. Sacramento, CA: California Community Colleges.

National Center for Education Statistics. (1998). *National household education survey, 1995* [Data file]. Washington, DC: U.S. Department of Education.

National Center for Education Statistics. (2003). *National household education survey, 1999* [Data file]. Washington, DC: U.S. Department of Education.

National Center for Education Statistics. (2005). *Integrated postsecondary education data system (IEDS) fall enrollment survey, 2005* [Data file]. Washington, DC: U.S. Department of Education.

Nespoli, L., McDonnell, E., & Bowman, R. (2005, June/July). When commitment to community hurts community colleges. *Community College Journal*, *75*(6), 42–45.

Pusser, B., Breneman, D., Gansneder, B., Kohl, K., Levin. J. S., Milam, J. H., & Turner, S. (2007). *Returning to learning: Adults' success in college is key to America's future*. Lumina Foundation for Education New Agenda Series. Indianapolis: Lumina Foundation.

Simon, M. (1999). *A comprehensive look at state-funded, employer-focused job training programs*. Washington, DC: National Governors Association.

Smith, M. A., & Meyer, A. L. (2003). Institutionalizing the commitment to learning: Evolution, not revolution. *Learning Abstracts World Wide Web Edition, 6*(6). Retrieved January 27, 2006, from http://www.league.org

U.S. Government Accountability Office. (2004). *Public community colleges and technical schools: Most schools use credit and noncredit programs for workforce development*. Washington, DC: Author.

Visher, M., & Fowler. D. (2006). *Working it out: Community colleges and the Workforce Investment Act*. Berkeley: Institute for the Study of Family, Work, and Community.

Voorhees, R. A., & Milam, J. H. (2005). *The hidden college: Noncredit education in the United States*. Winchester, VA: HigherEd.org.

Warford, L. J. (2002). Funding lifelong learning: A national priority. *Community College Journal, 72*(3), 15–18.

Yeager, K. (2007). Benchmarking workforce development, *Catalyst*, *36*(1), 14–17.

Appendix A

Departments and Additional Resources Consulted

AL	(1) Department of Economic and Community Affairs (2) Department of Postsecondary Education • Policy 801.04 Admission noncredit students
AK	University of Alaska • Enrollment stats: http://www.alaska.edu/swoir/publications/uar_docs/main.xml
AZ	Maricopa Community College, Center for Workforce Development
AR	Arizona Association of Two Year Colleges
CA	California Community College Chancellors Office • *Noncredit Instruction: A Portal to the Future,* Board of Governors, California Community Colleges
CO	Colorado Community College System • Policies and Procedures for Statewide Extended Studies, Colorado Commission on Higher Education • Credit for Prior Learning Policy: www.cccs.edu/EdServices/Transfer.html • Student Guide to Credit for Prior Learning
CT	Connecticut Community College System
DE	Delaware Community and Technical College
FL	Department of Education, Office of Workforce Education • Definition of CE: FL Statute 1004.04: www.firn.edu/doe/apprenticeship/cwe_homepage.htm • FL Statutes 1004.02, 1011.80: operating funds for workforce ed.; 1009.22: workforce ed. student fees
GA	University System of GA, Office of Economic Development, GA Leads (2) Dept. of Technical and Adult Ed. • *Utilization of CEU Within the University System of Georgia,* Board of Regents University System of Georgia CE Unit • Georgia Business Expansion and Support Act, Executive Summary • Summary Report of C.E.U. Activities, University System of Georgia, Annual Report, May 2004–April 2005
HI	Community Colleges of the University of Hawaii System
ID	Idaho Division of Professional-Technical Education
IL	Illinois Community College Board • ICCB MIS Manual, Noncredit Course Enrollment • Annual Student Enrollments and Completions in the Illinois Community College System, FY 2006
IN	Ivy Tech Community College, Department of Workforce and Economic Development
IA	Department of Education, Division of Community Colleges and Workforce Preparation • IA Academic Code: Ch. 21, pp. 2, 281–21.45 (260C)
KS	Kansas Board of Regents
KY	Kentucky Community and Technical College System • 2006–2008 KCTCS Biennial Budget Request
LA	(1) State Board of Regents (2) Community and Technical College System
ME	Maine Community College System
MD	Maryland Higher Education Commission
MA	Massachusetts Community Colleges Executive Office
MI	Department of Labor and Economic Development • Michigan Community Colleges Activities Classification Structure, 2004–05 Data Book & Companion
MN	Minnesota State Colleges and Universities
MS	Workforce, Career and Technical Education, Mississippi State Board for Community and Junior Colleges
MO	Missouri Department of Higher Education

Departments and Additional Resources Consulted

MT	Office of the Commissioner of Higher Education • State Policy Manual: noncredit transfer policy
NE	(1) Central Community College (2) Metropolitan Community College
NV	Nevada System of Higher Education
NH	New Hampshire Community College System
NJ	New Jersey Council of Community Colleges • Statement for Auditing and Accounting Standards for County Colleges—recommended for use by Dept. of Treasury
NM	New Mexico Association of Community Colleges • Workforce Funding Strategy Proposed for New Mexico's Community Colleges, Status Report Nov. 2006 • Non-credit Workforce Funding, Accountability Report Contents with Methodology
NY	Department of Education, Office of College and University Evaluation • www.nationalponsi.org: *Guidelines for Awarding Academic Credit for Knowledge Gained from Work and Life Experience*
NC	North Carolina Community College System
ND	Bismarck State College
OH	Ohio Board of Regents • www.regents.state.oh.us/hei/datasubdoc/ncfile.html: *Higher Education Information System Non-Credit Data Submissions; Frequently Asked Questions: Questions regarding the Non-Credit Course Enrollment (NC) File Submission*
OK	Oklahoma State Board of Regents
OR	Department of Community Colleges and Workforce Development
PA	Pennsylvania Commission for Community Colleges • PA Code 335.21: Noncredit courses; 335.22: Standards for reimbursable noncredit courses at community colleges • *Making an Impact: Economic and Workforce Development Contributions of Pennsylvania's Community Colleges,* March 2004
RI	Community Colleges of Rhode Island, Division of Life Long Learning
SC	South Carolina Technical College System • Procedure 3-2-105.1: Grading System and Standards of Student Progress
SD	State Board of Education, Office of Career and Technical Education
TN	TN Board of Regents
TX	Higher Education Commission • Ch.9F. Workforce Continuing Education Courses: Continuing Education (CE)/Workforce Training, Frequently Asked Questions; Skills Development Fund, Frequently Asked Questions; Guidelines for Instructional Programs in Workforce Education
UT	Utah System of Higher Education
VT	Vermont State Colleges
VA	Virginia Community College System • *Workforce Development Services Annual Report, July 1, 2005–June 30, 2006, Instructions for Part 1* • *How the VCCS Workforce Development Service Centers Contributed to Virginia's Economy in 2004–05,* Magnum Consuling
WA	State Board for Community and Technical Colleges • SBCTC Policies, Ch. 4, Instructional Program and Course Development
WV	West Virginia Council for Community and Technical College Education
WI	Wisconsin Technical College System Board • Policy 323, Credit for Prior Learning
WY	Wyoming Community College Commission

Appendix B

State Policies on Noncredit Workforce Education

State	Funding						Regulations/Guidelines				
		Type of general funds									
	State gen. funds	Contact hr. based	Bundled	Fixed amt.	CC role in funds	Limit on charges	Reporting required	Data system	Noncredit definition	Transcripts	Retroactive credit
AL					X		X				
AK	X		X		X		X			X	X
AZ	X			X					X		X
AR					X		X		X		X
CA	X	X			X	X	X	X	X		
CO					X		X		X		X
CT							X		X	X	
DE											
FL	X	X			X		X	X	X		
GA					X		X	X		X	
HI											
ID	X		X		X	X	X		X		
IL	X	X			X		X	X	X		
IN					X						
IA	X	X			X		X	X	X		X
KS											
KY	X		X		X		X				X
LA											
ME					X	X			X		
MD	X	X			X		X		X		X
MA					X		X				
MI	X		X		X		X	X			
MN	X			X	X		X		X		X
MS	X		X		X		X				
MO					X				X		
MT	X		X				X	X		X	X
NE	X	X			X	X	X		X		
NV											
NH							X	X			
NJ	X	X			X	X	X	X	X		X
NM	X			X	X		X		X		
NY					X						
NC	X	X			X	X	X	X	X	X	

State	Funding						Regulations/Guidelines				
		Type of general funds									
	State gen. funds	Contact hr. based	Bundled	Fixed amt.	CC role in funds	Limit on charges	Reporting required	Data system	Noncredit definition	Transcripts	Retroactive credit
ND	X		X		X	X	X		X		
OH					X		X	X	X		
OK	X		X		X		X				
OR	X	X			X		X	X	X		X
PA	X			X			X		X	X	X
RI											
SC	X	X			X		X		X		X
SD	X		X		X		X				
TN					X				X		
TX	X	X					X		X	X	X
UT	X			X			X	X	X		
VT											
VA	X			X			X		X	X	
WA					X		X	X			X
WV	X		X		X		X		X		
WI	X			X	X	X	X		X	X	X
WY							X				
Total	**28**	**11**	**10**	**7**	**35**	**8**	**38**	**14**	**27**	**9**	**16**

Appendix C

State Policies on Noncredit Workforce Education in Case Study College States

With respect to the implications of state noncredit policy on community colleges, the 20 case study colleges reflect a range of state policy environments. They are located in 10 states with different funding mechanisms and regulations (see Table 2). Of the 10 states, 5 provide general funds based on contact hours at a range of levels relative to credit education, one provides bundled funding, one provides a fixed amount of funding, and three provide no funding for noncredit workforce education. The states also vary in whether there is a specified role for community colleges in their workforce training funds (8 states), a limit on noncredit tuition (4 states), guidelines on defining noncredit (8 states), reporting requirements (8 states), a state data system (3 states), and guidelines for transcripts (3 states). As institutions embedded in this overall state policy context, community colleges are likely to respond to state policies by how they organize and operate their noncredit programs.

State	State Policy						
	State general funds	CC role in training funds	Noncredit tuition limit	Reporting	State data system	Noncredit definition	Transcript guidelines
CA	contact hour: 71%	X	X	X		X	
FL	bundled	X		X	X	X	
MD	contact hour: equal	X		X		X	
NV	no funding						
NJ	contact hour: 75%	X	X	X		X	
NC	contact hour: 75%	X	X	X	X	X	X
OH	no funding	X		X	X	X	
TX	contact hour: equal			X		X	X
WA	no funding	X					
WI	fixed amount	X	X	X		X	X

Appendix D

Description of Case Study Colleges

City College of San Francisco, CA

Program organization. From the student's view point, City College of San Francisco (CCSF) is one system; resources such as faculty and staff time are shared among credit and noncredit programs. There is a vice chancellor of instruction with oversight over both credit and noncredit education, and departments that offer both credit and noncredit classes are managed by the same department chair. There is a separate contract education division that promotes customized training by entering into contracts with business and industry in the region.

Funding. Funding for noncredit education will be brought closer to parity with credit in identified programs through legislation passed by the state legislature in 2006. Short-term vocational courses with "high employment potential" are an example of such programs. Noncredit education has no tuition; most noncredit programs, outside of contract education instruction, do not need to be self-supporting or revenue generating.

Academic policies. There is consistency in course outlines between credit and noncredit courses, and all course outlines are reviewed by the college curriculum committee. There is extensive use of contextualized academic noncredit courses at the college, with ESL most adept at this type of instruction. An increasing number of noncredit bridge programs leading to credit classes are being set up through sector-driven initiatives. Decisions about whether or not a course is credit-bearing are made at the department level.

Tracking and reporting. Due to the recent funding changes, the tracking and reporting of noncredit students and activities will increase. CCSF has an open entry/open exit policy, which makes it hard to track enrollment. Thus, the college tracks persistence numbers in selected programs. All students have their academic history entered into the Banner system, a suite of applications in a database used by community colleges. There is tracking of movement from noncredit to credit programs and from one academic level to another.

Population served. The bulk of noncredit students are immigrants, with the shift occurring in the country of origin. The biggest need among the noncredit students is language and literacy; the college has to develop more vocational ESL courses to address language issues and more math courses to address remediation needs among the noncredit students. Business courses, ESL, and transitional, or pre-GED, studies are most popular among noncredit students. Twenty-five percent of credit students have previously been enrolled in noncredit courses. Because the Business Department offers free computer skills training, many students enroll in those courses. A small subset of students with degrees enrolls in noncredit courses.

General context. Sustaining strong noncredit programs is a strategic priority for CCSF. There is a strong belief in equity funding and support services for the whole student population, with noncredit education funded at the same levels as credit; noncredit education is viewed as a doorway to greater career and educational mobility. The large number of student services makes noncredit programs effective by increasing the connectivity between the credit and noncredit programs and encouraging movement from noncredit to credit. An optimal situation would be one where the faculty move back and forth between credit and noncredit courses and there is a more dynamic working relationship among the faculty for both.

Cypress College and Fullerton College— School of Continuing Education, North Orange County District, CA

Program organization. The School of Continuing Education (SCE), which serves 65,000 students, is the noncredit college in the North Orange County district and is affiliated with Fullerton and Cypress Colleges. SCE's provost reports directly to the chancellor of the district. Three deans of instruction from different geographical regions of the district report to the provost; program managers and registrars report to the deans. A collaborative relationship exists among the School of

Continuing Education and the two primarily credit colleges; the college presidents and the SCE provost sit on the chancellor's staff. SCE contains all noncredit, fee-based, contract education, and customized education courses. There are some joint programs with the credit colleges, but SCE handles all registration and record keeping for the noncredit program and receives the funds from the state. There is quite a bit of sharing with Cypress College; SCE's building is located on the Cypress campus, and SCE uses Cypress' classrooms and shares the time of several deans, including the vocational dean. There is some overlap with faculty, particularly adjunct faculty, and generally there is a very cooperative relationship between the two units. Fullerton sees itself more as a transfer school.

Funding. Funding for noncredit education comes from state apportionment. Enhanced noncredit funding is directed toward programs that provide a certificate and are aligned with the local economy. The Training and Development Institute is the center for customized training and revenue generation. It writes grants for the provision of customized training and partners with the Employment Development Department. The SCE stays solvent by keeping class enrollment up in order to pay for the course. Community service type classes are tuition based and pay for themselves.

Academic policies. SCE has a seat on the curriculum committee for credit classes, and the credit division has a seat on the noncredit curriculum committee. The noncredit programs include certificates of completion and transcripts and have their own faculty of 22 full-time teachers and four counselors. They offer CEUs through the Training and Development Institute when they partner with other universities.

Tracking and reporting. SCE will have an Institutional Research Office next year, but now contracts with an outside researcher. Students are not followed once they leave the college. SCE uses Banner, and the system is integrated with the credit program. Transcripts are maintained for students, whether they attend credit or noncredit classes.

Population served. Anecdotally, there are fewer white students, more older students, fewer with high school diplomas, and more unknowns (people who did not provide their ethnicity) in noncredit education. There is a huge immigrant population in Anaheim of Korean, Vietnamese, Iranian, and Hispanic descent looking for immediate skill improvement and ESL courses. SCE does a fair amount of customized training for industries on site, including medical, travel, and hospitality. The college mapped out the location of sites using GIS data to determine where the most underserved population is, and then moved its programs to the urban area, home of a large immigrant population with low college achievement.

General context. Meeting student needs is not dictated by structure but by the ability to work together; thus, infrastructure is subordinate to relationships. The college director seeks to build partnerships where noncredit students can access credit resources, faculty, and campuses, and travel a pathway from noncredit to credit. Students in the noncredit division receive student services, which help break down the division between credit and noncredit participation.

Gulf Coast Community College, Panama City, FL

Program organization. Gulf Coast Community College (GCCC) operates in a multicounty district with a total population of 300,000. This is a very dynamic region, and there is ongoing growth and expansion of business with a low unemployment rate. The college's noncredit program has an enrollment of 25,000 students, which gives an indication of the popularity, breadth, and depth of its programs. Noncredit education is a separate unit that reports to the academic vice president. The coordinators in the noncredit division work with the credit division in some areas, like health, but in other areas the two divisions are not as close. The noncredit division does what the credit division requests, and noncredit staff work hard to develop and maintain good relationships with the credit side of the college. The noncredit division shares curriculum and program development with the credit programs; however, they each maintain a separate database system and do not share facilities and other resources. Nevertheless, the system is seen as being very integrated.

Funding. State funding in Florida is bundled for noncredit education so the college can determine the amount to give to continuing education. The noncredit division charges fees for its programs and is able to return revenue to the college, operating under a partial cost recovery plan.

Academic policies. The college system is very regulated by state policies. There is common course numbering around the state and articulation agreements with 4-year colleges. Noncredit courses, once taken, cannot be applied for credit. GCCC frequently changes course in response to economic development needs.

Tracking and reporting. Florida has a very extensive tracking system, and all students who enroll at GCCC are entered into the college's database. GCCC reports the FTE enrollment for both credit and noncredit students to the state. It tracks the number of students who enroll in the college through a student database and a personnel database to ensure that there is a match between student enrollment and faculty in the classroom. It has an integrated database system, and noncredit courses

can be identified as such. The college is also able to track students who entered into the workforce and make a link between their job and the courses they took at the college.

Population served. Noncredit students tend to be older, although the average age of the credit students is 27. Members of the fire and police departments, and teachers, all come to the college for noncredit programs set up by the Office of Lifelong Learning. The noncredit students differ from credit students in that they may take all their classes at work and never come to campus.

General context. The college is seen as belonging to the community and is considered community space. Located in a small rural region, it has a big footprint and is quick to respond to changes in its area. The general outlook at GCCC is that the credit and noncredit programs support one another, open doors, and build bridges to students, which is the role of a community college. The faculty have respect for the credit and noncredit programs, and are involved in both arenas.

Valencia Community College, Orlando, FL

Program organization. Three years ago there was a reorganization of reporting lines for Valencia Community College's noncredit programs; now the Chief Operating Officer (COO) of the noncredit division reports directly to the college president. All noncredit course offerings are delivered through Valencia Enterprises, which is a division of the college located in a separate facility, not in a traditional campus location, with its own database. There is little need to connect with the credit side of the college as Valencia Enterprises does not offer credit. However, the academic vice president is on the same leadership team as the COO of Valencia Enterprises and they work closely together "out of natural habit." Valencia Enterprises does strategic planning, high end training, and sales and marketing with the goal of generating revenue. It works with only high yield programs where there is a margin of profit and where courses can address higher level skills. It has discontinued recreational programs, and offerings such as CPR training, where there is no profit margin. There are two general trends in noncredit education: embed it within the credit programs or use the strong brand and relationship with the community to develop an independent program, which is the direction in which this college went.

Funding. Funds are bundled and sent to Florida community colleges, and each college must separate them and fund its noncredit programs. Noncredit education gets additional funding through tuition, fees from corporate contracts, and U.S. Department of Labor grants. There are no limits on the amount that can be charged for tuition.

Academic policies. Valencia Enterprises is reviewing how it can offer more courses and certificates which would be in line with the degree offerings of the college that would provide an expanded market for continuing education. Faculty in noncredit education tend to be subject matter experts and do not necessarily have advanced degrees. There is no curriculum committee for the noncredit courses.

Tracking and reporting. While there are numerous state reporting requirements, the noncredit division documents student completions but not student outcomes. Noncredit education open enrollment is reported to the state, whereas contract agreements, which do not directly reflect enrollments are not reported to the state, although they are reported to the management team at the college for planning purposes. The Institutional Research Department has a limited role in the noncredit program.

Population served. Noncredit students are adults, older than the general college population. They have not so much an expectation for certificates but for CEUs and licensure. The college does not see much migration from noncredit to credit programs at this time.

General context. Staff felt that the noncredit programs fit in well with the college's mission. There is strong leadership from the president, who supports workforce training and economic development; support exists for both credit and noncredit programs. The noncredit division has the ability to develop and deliver short-term training, align scheduling, offer online courses, and generally be more responsive to the needs of business and industry.

Anne Arundel Community College, Arnold, MD

Program organization. Anne Arundel Community College has integrated its credit and noncredit programs very intentionally. There is extensive sharing of resources and no dedicated credit or noncredit space; both share facilities. Since the funding is

equivalent for both programs, it is easier to give equivalent value to credit and noncredit programs in terms of enrollment and decision making. The faculty are flexible and often willingly agree to participate in noncredit programs. They have "faculty flexible" job descriptions that encourage them to assume teaching and contractual opportunities in the noncredit arena.

Funding. Funding comes from three sources: FTEs, funded at equal amounts as the credit program; tuition; and county money. However, noncredit education can be entrepreneurial and generate its own revenue, which the college calls enterprise money. Tuition is regulated by the board of trustees, which does not like to increase it. There are state funds to support customized training from the Partnership for Workforce Quality funds. Noncredit education generates profit that is returned to the college's general fund. The noncredit division is aggressively entrepreneurial.

Academic policies. There is consistency in course outlines between the credit and noncredit divisions, with the credit model as the standard for course outlines. Courses are reviewed, added or eliminated as needed, and a new schedule is published three times a year. The five instructional deans meet biweekly; they review enrollment and management issues across all the departments, review the needs of the community, and then make decisions about the nature of the courses that need to be offered. State regulations, student demand, and workforce and industry demands are the key factors in making decisions about what courses to offer and whether or not they should be for credit. The college also conducts environmental scanning on a regular basis and includes the findings in the decision-making process.

Tracking and reporting. The college's transcripts include both credit and noncredit courses. Therefore, an academic history exists for students who switch from noncredit to credit education. Everything is tracked; there are reporting requirements and performance indicators. The Institutional Research Department is involved in tracking data on noncredit students and submits reports to the state.

Population served. The public sector is the greatest user of the college's noncredit programs. The noncredit division has a very aggressive marketing program that includes a Web site, printed material, mailed course schedules, a sales staff, and Chamber of Commerce involvement. This college operates in a well-educated region, and many of its students already have degrees. Employers are interested in certificates of completion, more so than the students.

General context. More and more, credit and noncredit education are on par with one another. Anne Arundel is a comprehensive community college, and the fiscally sound relationship between its credit and noncredit divisions allows for a flourishing dialogue, with faculty teaching in both credit and noncredit programs. The noncredit programs provide funding, new opportunities, and new initiatives for the credit programs.

Hagerstown Community College, MD

Program organization. Hagerstown Community College is a one-college system where the credit and noncredit divisions work together on programs. The director of continuing education oversees five major areas that include both vocational and nonvocational education. Five program managers report to him, develop courses, and work with faculty at the college. Five schedules of programs and customized training are sent out each year. There is some overlap with the credit side of the college, particularly in areas like allied health, information technology, and business. There is also some sharing of faculty, and occasionally programs get moved into the credit division. Each division has a separate budgeting structure. They share some equipment, but sharing is not the norm.

Funding. Hagerstown has FTE-based funding for noncredit programs; tuition, fees, state funds, and FTE funding combine to enable the college to run its programs. Tuition is set at what the market can bear, generally $10 to $15 per contact hour. State funds for customized training go straight to the businesses, which can choose their training provider, so less than 40% ends up going to the college.

Academic policies. Generally, credit faculty must have a master's degree. For noncredit faculty, experience is at least as valuable as a degree. Noncredit program managers pitch a class that they want to teach, and if it attracts students, they are generally able to offer it. There is no curriculum committee role in this process. Customer demands and market trends and analysis are all drivers in which courses to develop. Noncredit courses transition to credit when they are shown to be strong over a period of time. If there appears to be an advantage to offering a program in the credit division, the college goes through an exploration process with the Maryland Higher Education Division to approve the program. Offering courses in the credit division enhances the financial aid opportunities for students. Most of the noncredit programs are somewhat customized, but existing programs can be modified to meet customization needs.

Tracking and reporting. CEUs are used with certain programs; they must be strong vocational programs and there must be a request to award them, which happens most frequently in medical, dental, and information technology areas. The

Institutional Research Department tracks noncredit students and generates reports on contract training and certifications and licensures. Attendance is tracked by week, month, quarter, and year. The college uses the Datatel system, a suite of applications similar to Banner, which is used for tracking and reporting data at higher education systems; data are shared between the credit and noncredit divisions.

Population served. The population is more female and older than the credit students, with an average age of 40. The college does not track the movement of noncredit students to credit.

General context. As described by the director of continuing education, the attitude of the college toward the noncredit division is considered favorable, and has changed for the better. The college president considers all the college's programs as heavily connected to local economic development efforts. The credit and noncredit systems do not compete with one another; they stay focused on the entities that hire them, rather than the issue of credit.

College of Southern Nevada, Las Vegas

Program organization. The College of Southern Nevada reorganized its noncredit programs about two years ago to create the Division of Workforce and Economic Development. The goal was to increase the focus on business training and to combine efforts of business and industry, local government, and educational institutions in the development and implementation of new programs and services. It also created a new dean position for the purpose of overseeing the noncredit division of the college; this is a high profile position for which the college conducted a national search. The Division is a part of Academic Affairs and the dean reports to the vice president of academic affairs. Three directors—Technical & Industrial Education Programs, Business & Community Services and Healthcare Programs, and Special Projects—as well as 11 site coordinators report to the dean.

The noncredit division, called the Division of Workforce and Economic Development, was changed to make both the division and the people within it performance based. The staff are focused on developing contracts with clients for customized training, which has a high profile position within the college. The noncredit division is doing outreach to the community and building long-term relationships with local businesses. Further, information in the college newsletter about the division's activities has helped change the perception of the noncredit division within the college and attract new interest in it. Because some of these changes were coming from the top, they signaled a shift in the value of noncredit programs—they are now considered fully part of the college.

Funding. The noncredit division, mostly focused on contract training, has been self-supporting for one year. It does not receive state funds. The division provides quarterly reports to the president on its progress. Staff complete a worksheet for all training courses that includes expenses and administrative costs and calculate the tuition levels.

Academic policies. Courses may move from noncredit to credit based on the demand for, and growth of, the course. The division wants to add opportunities for noncredit students to move into credit programs.

Tracking and reporting. Noncredit students are tracked in a separate database from the credit students, with an identifier indicating a noncredit course of study. The state does not reimburse the college for noncredit students. Division tracking and reporting are done for the following key performance measures: number of contracts generated, revenues generated, new program development, customer satisfaction surveys, and course evaluations.

Population served. The noncredit students are quite varied and many are nontraditional. They include people with master's and doctoral degrees, as well as those who seek to work on basic skills, ESL, or GED. The student population consists of both many young people starting out in service occupations and a number of older people who want to enter a new career or upgrade. The majority of the division's clients are small businesses.

General context. The workforce division is encouraged to get involved in the community. Division staff work with local businesses and community organizations as well the service and hospitality industries. The dean sits on several workforce boards and councils in the community. A great deal of division staff time is spent out of the office conducting outreach with businesses; developing and maintaining partnerships, program assessments, and curriculum development; and participating in economic and workforce development groups.

Truckee Meadows Community College, Reno, NV

Program organization. The noncredit and credit programs of Truckee Meadows Community College are very separate,

although the college president has included noncredit and workforce education prominently in the college's new mission statement and has worked hard to make noncredit education a part of the academic affairs of the college. The noncredit division pilots and tests the viability of new courses. If the courses are successful, they tend to get moved into the credit division, and are eligible for reimbursement by the state, whereas noncredit courses are not.

Funding. Not state-funded, the noncredit division must be self-supporting to survive. It seeks out grants and uses tuition and fees to support its programs. The college supports the noncredit staff with some general funds, but the staff's job is to bring in their own funds through grants and training to cover all direct costs.

Academic policies. If a faculty member wants to develop a course, and the administration finds that there is interest in the local community for it, the course might start as noncredit, get piloted, and eventually be moved into the credit division.

Tracking and reporting. The Institutional Research Office does not track noncredit students; the credit and noncredit divisions maintain separate data systems. Noncredit courses taken by credit students do not appear on the students' transcripts. The noncredit division conducts evaluations at the end of its courses but does not follow up any further.

Population served. Noncredit students are older and more likely to be female. There is a university close to the college, so the college has many younger transfer students. Although Truckee Meadows offers workforce education in the noncredit division, it does not describe its noncredit population in terms of incumbent workers. There has been an increase in immigration, so the division is seeing more first-generation college students and is offering more ESL courses.

General context. The term "stepchild" came up in the interview with the noncredit team in response to a request to describe the division's relationship to the college. Other respondents were more positive about the role of the noncredit division, reporting that the college president has worked hard to bring it closer into the mission of the college. The bulk of the work at the college is in the credit program, but the community knows about the college from the noncredit program. Noncredit education is seen as a bridge to college, and with a growing immigrant population, many students start with noncredit ESL courses and transition to the credit programs.

Camden County College, NJ

Program organization. The organizational structure of Camden County College comprises three academic divisions on the credit side: business and technology; math, science, and health; and arts and social science. One vice president is in charge of noncredit education, which includes avocational and recreational courses, and business and industry training. The college has served over 16,700 people in its noncredit division, making it one of the largest noncredit programs in the state. Members of the general public often do not know the difference between the divisions at the college when they take a course. Some faculty members teach noncredit classes, seeing it as an opportunity for development and to make more money.

Funding. Funding for the noncredit division comes from several sources, including individual enrollment, company payments, state grant funds, and other specific grants. The total revenue for the division ranges widely, as there are always fluctuations with state and federal funds. Certain funding streams are very constant, but they are for avocational programs and GED education. There is not as much credit training done for employers as previously because companies prefer short-term training. The college develops initial relationships that will lead to customized training using state grant programs. The tuition is generally priced at what the market will bear, with a formula and some general guidelines on pricing.

Academic policies. Many of the college's general interest courses earn CEUs, but there is not a large demand for them. The college is starting to create a noncredit transcript. It is involved in the statewide initiative to articulate noncredit with credit programs. Noncredit education is seen as a way to bring more people in for a degree program, although the college's short-term goal is to give students what they need for the workplace. By taking some noncredit courses that are structured for employers, the students are able to get comfortable with education and not be intimidated. In contrast with the more traditional model of semester-length credit programs, noncredit courses can be adapted more quickly and offered in intensive blocks of instruction.

Tracking and reporting. The college needs to collect more data to determine whether its goals are being achieved. Its data tracking system, written by Datatel, is called Colleague. About 60–70% of the colleges in New Jersey use this system, but it has some limitations for the purposes of noncredit education.

Population served. The college is in the midst of the largest training program conducted to date. Its average customer has 70–100 employees—the typical number to have a critical mass for training. Their student population cares about skill attainment first, then about credentials in the form of industry certificates.

General context. Noncredit education is a critical part of the community college mission, which offers individuals

and employers the services that they want and need. The college views itself as serving the entire community in workforce development. All academic programs are about workforce development, tying into the workforce and various markets. Through both its credit and noncredit divisions, the college also provides educational services to people who are outside of the workforce, especially those who are poor and with low literacy skills.

Cumberland County College, Vineland, NJ

Program organization. The current president of Cumberland County College has consolidated all noncredit programs under one staff person who reports to the vice president of academic affairs, with the elevated rank of executive director. The division is proving its value to the rest of the college by bringing in money and managing programs more efficiently than previously. Still, noncredit education has lower priority in accessing facilities than credit programs. The noncredit division relies primarily on part-time adjunct faculty, as few full-time faculty are interested in or have the skills and current knowledge of the workplace needed to teach in these programs.

Funding. The majority of funding for the noncredit division comes from state grants to support workforce development and contracts with employers. The first year that the division was its own cost center it broke even; last year it generated a profit, with the majority of the income coming from contract training. The college does not use the state FTE funds very much because it was reported that it is difficult to identify which courses are eligible for these funds.

Academic policies. The college has some notable examples of articulation between noncredit and credit programs. It has developed a program to articulate a noncredit insurance course with a business degree using a curriculum from the American Insurance Institute that is certified by the American Council on Education. It is part of a two-year sequence along with several credit courses, including a general business course, business law, and English composition. It is also involved in statewide initiatives, such as the Department of Human Services' professional training program, which offers participants, upon completion, the opportunity to translate the program into nine credits towards an associate degree in social services. In general, the division tries to offer programs that are connected to industry and professional certifications.

Tracking and reporting. The data systems for the noncredit division are designed for credit programs and do not meet the program needs. The Institutional Research Department does not have a lot of involvement with the noncredit division. The division is working with the Information Technology Department to gain access to extracts of data on Excel spreadsheets to allow for better management of the information.

Population served. The students enrolled in noncredit classes evidence a range of needs. Employees who are involved in customized training tend to be in manufacturing and production. The need for credentials among noncredit students is varied.

General context. Cumberland County is located in a rural part in Southern New Jersey. The primary industry in the area is health care, with some glass manufacturing and food production. The college leadership feels that the more continuing education moves away from leisure courses, the more it will be understood by academics within the institution and the community. Many of the leisure-type classes are offered elsewhere; the college believes that noncredit education should focus on workforce development, and the college's mission should be about making connections to the workforce.

Central Piedmont Community College, Charlotte, NC

Program organization. The leadership of Central Piedmont Community College has encouraged an integrated model of organizing credit and noncredit programs. About one third of the college's noncredit programs are now integrated within academic departments. The other noncredit programs are located in the corporate and continuing education (CCE) division, which is overseen by the dean of business and industry. CCE serves more than 28,000 students among its self-supporting, state-supported, and grant-supported programs. There is a dedicated facility for the CCE programs, with most noncredit instructors working part time for the program; faculty also work in the field that they teach and are involved in program development on the noncredit side. The college has a centralized enrollment function, and students can register online or via

a telephone.

Funding. The college's noncredit program is self-sufficient; it receives federal and state funds and has many contracts with local businesses. It is highly involved in outreach to over 3,000 local businesses. State FTE funds (occupational extension) are used primarily for courses taken by students who can least afford to pay tuition, such as certified nursing assistant, and bank teller training. Tuition for noncredit instruction is based on what the market will bear, but allows the program no more than a 20% profit (based on state guidelines).

Academic policies. There is more of a demand for short-term certifications than for two-year degrees; therefore, the college offers courses providing CEUs and works with professional associations and state commissions. Further, it tailors classes to help students prepare to take industry exams and works with local employers to develop certifications that have meaning and value for employers. The college decides whether to offer a course as noncredit or credit based on business needs, as well as on student demand and what the market will bear. The noncredit programs participate in program reviews assisted by the Institutional Research Department; the reviews help administrators measure outcomes and evaluate their programs. The college does not have any formal mechanisms in place for articulation between noncredit and credit programs, but would like to have them and is considering articulation models at other colleges.

Tracking and reporting. All noncredit students complete the same enrollment forms as credit students, allowing the college to collect adequate information on CCE students to report to the state. Student transcripts include noncredit courses along with academic courses. About 1,800 students per year enroll in both credit and noncredit courses during the course of a semester; the IR staff attribute this crossover to decisions by credit students to enroll in noncredit courses (which can include recreational noncredit courses).

Population served. Sixty percent of the students in CCE have some college experience, from a few courses up to a bachelor's degree, and 20% have a master's degree. There is no precise information on the employers that the noncredit program serves, but it does considerable work with the financial services industry since it is a big part of the local economy. The program also works with some high-tech manufacturing companies and with hospitals.

General context. CCE is a full partner in the college, and the academic deans work closely with the business and industry dean. The college has grown tremendously in the past 15 years, from one campus to six. Its corporate training center has 12 state-of-the-art classrooms.

Craven Community College, New Bern, NC

Program organization. Noncredit programs at Craven Community College serve approximately 10,000 students; credit programs serve 3,000 students. The noncredit programs have been going through tremendous changes. The college's new president introduced a major restructuring of the noncredit programs, integrating them into the college's credit programs. Part of the motivation was to reduce the amount of administration in the college. Other goals were for the noncredit programs to help with recruiting students into credit courses and for more full-time faculty to become involved in teaching noncredit courses. The college is still working on several issues related to the noncredit division, including changing perceptions within the college about the value of noncredit education. It is also dealing with issues of space and location; the noncredit programs have been in separate buildings and will remain there until a new facility is built.

Funding. Noncredit programs draw significantly on FTE funds from the state, although reimbursement is not at parity with credit education. As noncredit gets increased funding and reduces the differential with credit, it will be given a higher priority and valued more by credit faculty. While the noncredit programs are profit oriented, administrators see their goal as serving the community as well as not losing money. Most noncredit programs are self-supporting.

Academic policies. Most noncredit courses can be added using the state's existing master list of courses. The state has an approval process for starting a new noncredit course that takes about a month. The college does not have any mechanisms for transferring noncredit courses to credit courses or for articulating both types of courses.

Tracking and reporting. The college collects a lot of data through enrollment forms, but does little tabulation on the information; the information remains on paper. The college planned to switch to a new data system in July 2007.

Population served. The students served in the noncredit programs are preparing for jobs or upgrading their skills. Many are sent by employers, particularly manufacturers. The noncredit programs also serve a growing population of retired persons.

General context: The college has gone through some extensive changes in its administrative structure over the last several years, reducing the number of administrative positions and increasing the number of full-time faculty. The

president addressed the disconnect between credit and noncredit education, which was seen as diminishing the educational opportunities for students and the college's ability to serve the community.

Lorain Community College, Elyria, OH

Program organization. The vice president of academic affairs oversees both the credit and noncredit programs of Lorain Community College (LCC). The director of the Corporate and Community Outreach Division has direct access to the college president, since he reports to both the president and the vice president. The college has a very integrated system, not in funding but in its education delivery system. The noncredit system is decentralized vis à vis the academic areas but centralized to the public in terms of sales and marketing. Credit faculty are engaged in noncredit education, but are often assigned classes as an overload or part-time assignment. Some customized programs are credit bearing; there is not a clean separation, but, rather, an education continuum. The Corporate and Community Outreach Division is spinning off an Entrepreneurship Innovation Institute, a one-stop resource to support the successful development of entrepreneurs, employers, business startups, and nonprofit organizations. It will include both credit and noncredit programs. The economy of LCC was narrowly based in manufacturing and collapsed during the last decades. Now the economy is based on new startups and is more focused on entrepreneurship and innovation.

Funding. Ohio does not fund noncredit education on an FTEs basis but does provide up to $15 million through Job Challenge, a funding source in support of noncredit job-related training. LCC does a disproportionate amount of noncredit training and tends to get a disproportionate amount of this funding as well. The directors are using their Six Sigma institute to examine their own business practices and cost structure. In order to achieve revenue growth, they are managing open enrollment more efficiently and developing a business plan that will return profit to the college rather than just operating in a cost recovery climate.

Academic policies. The academic divisions of LCC that provide corporate training have noncredit program developers; departments such as business recognize the revenue opportunity from online noncredit education and are willing participants in it. Noncredit courses do not go through the curriculum committee. Program developers watch for course duplication, and if there is none the course is recorded at the college and included in the schedule of available courses.

Tracking and reporting. Certificates earned do not appear on student transcripts but the college tracks the number of certificates awarded. There is no single data system for noncredit education since the credit system determined the way that the database was set up. Jobs Challenge funds require an integrated database, so the system is being modified to include noncredit fields.

Population served. LCC is the only public institution of higher education in the county and is strongly embraced by its residents; it is seen as the "go to" place in the county. It is a major resource in an area populated by residents with associate degrees but who are last in the state with bachelor's degrees. Noncredit students are seen as feeder students for the credit program.

General context. The college takes a more global view of issues rather than looking through the credit or noncredit lens. The advantage from blending credit and noncredit education is that silos are broken down and skill sets overlaps. Noncredit education is seen as a showcase for the college, part of a seamless continuum of educational opportunities and a source of feeder students.

Washington State Community College, Marietta, OH

Program organization. Washington State Community College (WSCC) is small and does not support a large administration. The chief academic officer has oversight over all credit programs and also serves as dean of the arts and sciences division. Noncredit education is housed within the Center for Business and Technology and has its own director. There are two reporting lines, one from credit education and one from noncredit. The college attaches credit to programs as much as possible because it receives reimbursement only for credit courses.

Funding. Ohio, according to the respondents, is really suffering with respect to funding for noncredit education; the state has been hurt by the downturn in manufacturing and people are turning to the community college for solutions. There has not been a focus on people who cannot or do not want to sit a classroom for 20 hours a week for the purpose of

earning a degree. Funds for the noncredit division come from grants, such as the Targeted Industry Grant, which is aimed at manufacturing and health. The college also goes out on its own to procure as many contracts as it can. The state sets limits on how much tuition can be increased: 6% yearly at most.

Academic policies. The Center for Business and Technology has access to and can hire both full-time credit and adjunct faculty. Faculty must show competency in the subject matter and have 10 years of experience in the field in order to be hired. The curriculum committee for new classes uses a six-month process. It makes a decision about whether a course is to be credit or noncredit based on what makes more sense to the consumer and what serves the consumer better. Noncredit classes have moved to credit but it is rare for credit courses to become noncredit. Eighty-five to 90% of the Center's courses are credit; noncredit is offered as a feeder to the college or to sell seat time in classes that did not meet criteria to qualify as a credit class.

Tracking and reporting. The state board of regents required reporting enrollment numbers from noncredit courses starting in July of 2005. The college's Institutional Research Office has no interaction with the noncredit division in terms of gathering data. A student can request a transcript of noncredit classes; it constitutes a separate transcript from the credit transcript and shows a grade.

Population served. WSCC focuses on the adult learner, age 25 and older. According to the coordinator of the noncredit programs, students are recruited into the credit program by bringing them onto the campus for noncredit courses. The chief academic officer confirmed that a good percentage of students in noncredit take credit classes as well.

General context. Noncredit education is seen as a critical role of the community college, one of five missions of WSCC. Two thirds of the college is concerned with economic development and preparing people for the workforce. The college is well connected to advisory committees and business and industry leaders; its president sits on the Port Authority Council, which develops and tries to respond to economic forecasts.

Cy-Fair College, Cypress, TX

Program organization. Since Cy-Fair College is new, it had great latitude in how to structure its noncredit programs. It created a structure where the noncredit and credit programs are integrated within departments by content area, with the intention of creating collaboration and better meeting the full spectrum of student needs. The college created a position for a dean of new program development and corporate training to handle work with corporations and serves as the continuing education liaison responsible for coordinating the continuing education program managers from across the departments. There are five main divisions that are overseen by deans who report to the college vice president of student learning. Each dean is responsible for academics, workforce continuing education, and avocational continuing education. There is also a satellite center managed by a dean or executive director who reports to the college president.

Funding. The state provides support for both credit and noncredit education. The college sets its noncredit tuition level and has an agreement to keep it at the same level as other colleges in the district (which is about 1,400 square miles). There is some debate within the district over how much profit to make on the noncredit courses; some colleges would prefer to keep charges lower so that they can develop relationships with businesses.

Academic policies. Whether a course is offered as workforce noncredit or leisure is determined by the state guidelines in the Workforce Education Course Manual (WECM). It is relatively easy for the college to offer a new noncredit course. No approval is needed; the college just needs to notify others in its district. In contrast, a new course in the credit division must be part of a program of study. It takes at least one year to get a program approved. It is common for courses to change from noncredit to credit. Since the timeline to add courses in the credit division is so long, courses are sometimes offered first as noncredit. Students can transfer and articulate credit from noncredit courses using a prior learning assessment, which is possible on a case-by-case basis.

Tracking and reporting. Noncredit courses appear on a transcript that is separate from the credit transcript. The college gives certificates for each course successfully completed and is moving toward providing certificates for completing a series of courses. The district office, which is comprised of five community colleges, seven satellite centers, and the University Center, handles all of the state reporting. It collects a great deal of data in its data system, but does not regularly prepare many reports on the college's noncredit programs. It has the capacity, however, to review information on noncredit education broken out by leisure, workforce, ESL, and even to the subject level.

Population served. There are three types of continuing education students: retirees; immigrants seeking ESL instruction; and the workforce, both incumbent workers and employers. However, the population is so diverse that it is hard to

distinguish a pattern.

General context. The college has less "siloing" and less of a "stepchild" attitude toward noncredit education than other colleges because of the way that the leadership defines the role of noncredit programs in the college.

Tyler Junior College, TX

Program organization. Tyler Junior College's School of Continuing Studies (SCS) is one of the five schools within the college; four are credit schools, SCS is noncredit. There is a very close working relationship among the schools, and the deans meet together weekly. The college is closely connected to the regional workforce system, including the Chamber of Commerce, the Workforce Investment Boards, and the Tyler Economic Development Council. It uses its noncredit programs to both serve the economy of the region and provide a pathway for students not yet ready to enroll in its credit programs. In addition, the college's dean for SCS is the current chair of the Tyler Area Chamber of Commerce and member of the Tyler Economic Development Board, which further facilitates this close community tie. SCS is very aggressive in its marketing. There is a fair amount of sharing of resources and faculty, mostly among the vocational faculty.

Funding. Tuition and fees are the source of funding for noncredit education. The SCS operates as a full cost recovery model and generates revenue for the college. It receives general funds from the college in the form of a loan which is repaid with an additional 40% overhead as rent. It tries to set tuition rates at a reasonable level, but needs to recover costs and have enough to pay for the development of new classes.

Academic policies. The state maintains a centralized bank of curriculum and the college curriculum committee process has waned during the years. If a course is not available from the bank, the SCS will develop a special topics course which may eventually get turned into a regular course. Faculty teaching in noncredit education and credit workforce education courses need an associate degree or significant work experience in the field. The college uses CEUs as a quality control device; the CEU guidelines set standards of excellence that the SCS follows for all courses. The college has a "piggyback" system; students in noncredit can take a credit course and follow the same syllabus and assessment requirements, an arrangement for students who are not ready to enter the credit mode and want to use noncredit courses as a bridge to credit.

Tracking and reporting. If an industry requires a series of courses, the college offers a certificate of completion to students who take them. The certificate includes information on competencies and learning objectives. Every course provides learning objectives to be placed on the back of the certificate, which also lists all the topics covered by the course. The college is implementing the Banner system, which will be an integrated database system for all parts of the college.

Population served. Tyler has dormitories, so it is more like a small liberal arts college, which increases the division between the credit and noncredit students. There is an attempt to migrate noncredit students into the credit program if doing so fits their personal interest, and the "piggyback" classes are seen as the most effective way to do this.

General context. The college is an educational broker and strives to meet all the educational needs of its service area in Texas. The closer that faculty is to the mission of vocational education the more they connect with and understand the SCS. The faculty involved in the transfer mission tend to be less aware of, and less involved with noncredit education, with some significant exceptions. There is strong support from the leadership of the college for the SCS.

Bellevue Community College, WA

Program organization. The dean of the continuing education division of Bellevue Community College (BCC) reports to the vice president of workforce development, who reports directly to the college president. Most of the noncredit classes are workforce related, although there are some recreational courses. The vice president of workforce development has used her position to bridge the gap between credit and noncredit programs. There is an annual planning cycle during which content is coordinated between the credit and noncredit programs. BCC Continuing Education has over 26,000 annual enrollments in its self-support classes. There is a dedicated facility for the noncredit programs, with most noncredit instructors working part time for the program; There is some sharing of faculty and resources in equipment-intensive programs, such as the CISCO training, a decision driven primarily by cost of the equipment in the program.

Funding. Revenue for noncredit education was $8.2 million in 2001 but dropped abruptly to $7.5 million a year later,

following the decline of dot-com companies. Now revenue is at $6.2 million, including $950,000 in contract training to local corporations with the biggest contracts coming from Microsoft. Bellevue's noncredit program is a total cost recovery model; it makes money back for the college through student tuition. There is no FTE reimbursement and the noncredit division does not often seek grant funds as this would be seen as competing against the credit programs and other initiatives at the college.

Academic policies. The curriculum committee reviews all course proposals and looks closely at noncredit programs for duplication. A credit–noncredit committee was established by the faculty to facilitate and smooth communication. Faculty see noncredit education as an incubator; if there is a demand for noncredit classes they will be moved to the credit division.

Tracking and reporting. The noncredit program has started setting up its own data management system, which will be integrated into the college's existing database system. Reports are generated at the state level and noncredit students are aggregated with the credit students. The college does not record the completion of noncredit courses on student transcripts unless it is required by the contractor. The college maintains a fair amount of data. College leadership believes that the college should transcript competencies rather than units, thereby looking at what a student learns. This approach would particularly benefit students who have taken noncredit classes and want them converted to credit.

Population served. Noncredit education serves dislocated workers from companies such as Boeing and Microsoft, which are the biggest employers in the area. The region served by the community college has a fairly high socioeconomic status and is well educated. The students are older, and may include homemakers looking for a new career. Noncredit students respond well to certifications and would like to get them at the end of the program.

General context. The college is located in a robust community with strong job growth. It has close relationships with business and industry and participates in forecasts, environmental scans, and focus groups. The college is well known and well respected in the area; it uses skill standards in setting up new training in emerging areas and has a strong sales force that attracts business and provides training on a cost basis.

Wenatchee Community College, WA

Program organization. Reporting lines for Wenatchee Community College's noncredit program changed with the arrival of a new college president. Now the noncredit director has a reporting line directly to the college president, parallel with the vice president of credit instruction. The noncredit director is focused on being more responsive to the industry, providing more incumbent worker training, developing market driven programs, and setting up multiple listening points through surveys, focus groups, and other outreach activities. The academic dean and college president are both in favor of increased workforce activities within the noncredit division and a robust sharing of resources and faculty between the credit and noncredit programs. Three years ago the noncredit program moved off campus into a new technology center.

Funding. The state does not reimburse noncredit teaching; therefore, continuing education is intended to be self-supporting. General funds support the staff that run the division until these programs can be fully self-supporting. Teaching costs are covered by tuition, which is now in the process of being increased as the college expands into new areas of technology. The state is providing a tax refund to businesses that need training; the college is the fiscal agent for these funds, which expands opportunities within the noncredit division.

Academic policies. The noncredit division does not use the curriculum committee for its courses; the process for credit curriculum takes about a year for approval. Noncredit education has its own system that works very separately and has a quicker response time. It was developed to fit employer needs or generally accepted professional standards. Instructors are recruited from facility, adjunct facility, private providers, and experienced professionals.

Tracking and reporting. The college tracks only enrollment in noncredit programs; credit students, conversely, are tracked for six months after graduation. Noncredit students are considered a more fluid population and harder to track. Completed noncredit courses are not recorded on credit transcripts, but students can request a noncredit transcript. The noncredit division must manually transfer data between its own customer operated registration system and the college's system, which is connected to statewide reporting.

Population served. The college is located in a large agricultural area and there is a large immigrant population with basic skill needs. The goal of many noncredit students is not getting credit but building skills. Credentials are not the driver in noncredit education, other than in the health areas. The college does not see much migration from noncredit into credit as the students in each comprise different populations.

General context. Noncredit education fits into the college mission well. However, the relationship between continuing education and the college was described by college administrators as being not deep enough, not well integrated, not

enough sharing of resources, not providing enough opportunities, but a relationship is falling into place slowly. The fact that noncredit education is not funded by the state influences class pricing.

Milwaukee Area Technical College, WI

Program organization. Milwaukee Area Technical College (MATC) has reengineered its contract training division in order to operate more efficiently and effectively. As a result the program went from just over $300,000 in revenue in 2004 to over $1 million in 2007 (with a profit margin).There are 1,200 FTEs in the noncredit program, fewer than 10% of the total enrollment. The college is very large and the noncredit division has good relations with the academic divisions from business, trade, and industry. There has not been a significant amount of training done through the liberal arts and health occupations divisions, but that is improving. The noncredit division does not have dedicated facilities or faculty, but shares them with the academic divisions. There is an increasingly supportive relationship in this area, but the noncredit division acknowledges the colleges that are most successful in contract training have their own facilities and faculty. There is now a statewide shared curriculum bank with access to many course outlines and outcome summaries. The noncredit division is demand driven and offers classes in response to business and industry demand. It chunks courses so that students can take only part of a course and offers competency-based modules. Faculty are "owned" by the academic divisions but teach for the noncredit division in both full-time and part-time assignments, all of which are driven by contract language seniority. Because MATC is one of only three college transfer schools in the state, faculty are required to have a master's degree in their subject area; the noncredit division allows for more leniency but, except in specialty areas, the noncredit division maintains the master's degree criteria as part of its hiring process.

Funding. The noncredit division's main source of funding comes from the college's general funds, but the college is required to recover all costs associated with the delivery of contract training. The college also helps companies subsidize their training costs by applying for state grants earmarked for customized training. They use these funds to focus on customized training delivered to companies rather then on individual students. Companies decide whether they want credit or noncredit classes; credit classes are more expensive and most often companies want shorter term competency-based courses, so the college repackages and repurposes the credit courses to suit the client.

Academic policies. Deans are alert to growing interest in certificates and the college awards certificates for programs, even those that have not been approved by the state. The college sees CEUs as a value added opportunity, and offers life experience credit as well as credit for prior learning under specific conditions; all are handled through the academic division and are very much guided by state policies and statutes.

Tracking and reporting. The college records the completion of noncredit courses on student transcripts. It is now exploring the inclusion of competencies on the transcripts as well. The Institutional Research Department has not been very involved in tracking data for noncredit students, but is now interested in doing so, as the growth rate of this college segment increases. The OCL follows up on student outcomes in situations where the company who is paying for the course requests it. The contract division uses the same database system used by the college (Datatel), but must keep parallel records on the system as Datatel was not designed to accommodate contract training activities.

Population served. The student base is very diverse. It includes a large percentage of African-American students, many of whom are first-time college goers in their family; their employers put them through the first round of training and subsequently they begin to sign up for credit classes. Migration into credit from noncredit is a political issue; there is interest in trying to tell the story of about the migration of students from the adult high school into MATC.

General context. Noncredit education has not been a high priority for the college since there are not enough FTEs to make it significant, but the situation is changing now with the shortage of skilled labor beginning to create a real need for workforce education. There is a huge mismatch between jobs and workers; companies cannot always wait for workers to complete degree programs. There was a downturn in the manufacturing economy but now that it is picking up again employers are finding that there is a shortage of skilled workers. Noncredit education is linked to the mission of the college.

Northeast Wisconsin Technical Community College, Green Bay

Program organization. A reorganization at Northeast Wisconsin Technical Community College 10 years ago changed

reporting lines and reinvigorated the noncredit workforce programs. With area deans responsible for both credit and noncredit education, the college has an integrated organizational structure. There is one face to the public, one registration system, and one costing unit; noncredit education is part of a continuum of learning. There are 8,600 open enrollment students and 2,700 contract enrollment students in the noncredit programs. The dean of workplace learning services reports to the vice president of learning and has equal status with the academic deans. Workplace Learning Services (WLS) targets incumbent and dislocated workers and is organized as an enterprise that includes both credit and noncredit courses. Faculty can bid on teaching courses in both credit and noncredit areas, but the college also makes extensive use of adjunct faculty with subject matter expertise.

Funding. Property tax is the main source of funding; the state provides the least. Tuition covers 25% of costs. WLS sells customized training, and is paid on the basis of hours of instruction. Its goal is to become cost neutral within five years. Both credit and noncredit programs are tied to the economic development of the region.

Academic policies. Eighty percent of the college enrollment is in the credit division. The college works to be very responsive to the needs of the students and industry, using credit or noncredit courses based on a client's needs. WLS faculty develop course content by going to work sites and assessing employer needs. There is no curriculum committee for even the credit courses, but there is a state approval process. WLS uses environmental scans to determine economic development needs and then allocate resources to address them. There has been a decline in noncredit enrollment and a growth in credit; based on interviews, there may be a conscious shift to offer more credit-bearing programs and to increase articulation with the university system. Career ladder programs are credit bearing, as are 80% of the programs within the academic areas.

Tracking and reporting. The college records the completion of noncredit courses on transcripts and documents outcomes from students enrolled in those courses. Grades for noncredit classes are turned in; the noncredit division has its own database and the college is required to report enrollment and revenue to the state.

Population served. There is a mix of incumbent as well as dislocated workers in the noncredit programs. There is also a mix of open enrollment students and contract enrollment students. The latter are incumbent workers and companies pay the total cost of training them. The open enrollment students include ESL and basic skill students on a career ladder pathway into the credit division.

General context. WLS was described by administrative leaders as a system that is working well, with a lot of support from the college leadership. There has been a doubling of training during this past year. There was a sense among all people interviewed that the college is doing a good job of meeting workforce needs of their students.

Appendix E

Summary of Findings and Recommendations

Noncredit Program Rules

Individuals' Workforce Development and Access

- Case study colleges' noncredit programs reflect a similar, wide range of occupations and industries with a range of skill levels.
- Noncredit students in the case study colleges tend to be older and interested in gaining skills; they have a wide range of educational backgrounds with an unknown number interested in eventually earning a degree.
- Case study colleges' noncredit programs use a variety of program features to bring students interested in pursuing a degree into credit programs.
- More than half of the states provide general funds for noncredit workforce education, but they use different funding mechanisms with potentially different implications for community college programs.
- State funding can help colleges support access for individuals by maintaining lower levels of tuition and supporting entry-level training.
- Guidelines for defining what qualifies as a noncredit workforce course exist in half of the states and reflect states' goals for noncredit education.
- In deciding whether to offer courses in credit and noncredit formats, case study colleges consider multiple factors, including state funding, labor market needs, institutional practice, and instructional approaches.

Workforce Preparation for Employers

- Most states have workforce training funds to support workforce and economic development, and just over half specify a direct role for community colleges as fiscal agents or preferred providers.
- Case study colleges' noncredit programs seek to meet specific employer needs at the state and local levels.
- Some case study colleges have developed flexible ways to offer courses in both credit and noncredit formats in response to employer demand.

Revenue Generation for Colleges

- Because few states place limits on the amount they may charge for noncredit workforce courses, community colleges are free to charge what the market will bear.
- The goal of revenue generation is common; many case study college noncredit programs are, or plan to become, self-supporting or profit-generating in order to add value to the college and secure broader support within the college.

Noncredit Program Structure

Types of Community College Organizational Approaches

- The case study colleges use a range of organizational approaches for noncredit workforce education, including both integrated and separate organizational structures.
- Noncredit programs with separate organizational structures coordinate their activities through regular meetings and communication throughout the college to encourage collaboration, avoid duplication, and allow movement between noncredit and credit programs as appropriate.
- Noncredit programs with integrated organizational structures maintain an organizational entity to conduct entrepreneurial outreach, maintain flexibility, and act as a central point of contact with employers.

Areas of Organizational Change in Community Colleges

- Several case study college presidents have recently changed the organization of noncredit education to consolidate programs, elevate noncredit education, and promote workforce development.
- Most case study community colleges are working to engage faculty and increase their appreciation of noncredit workforce education.
- Noncredit workforce programs in the case study colleges bring innovation to credit programs by connecting with the local economy.

Noncredit Program Outcomes

Recorded Outcomes

- While only a few states have guidelines for including noncredit courses on a transcript, many case study colleges provide transcripts for noncredit workforce courses.
- Case study college noncredit programs offer a range of industry certifications in health care, information technology, business, teaching, and other fields, but many noncredit offerings are not associated with industry certification.
- Case study colleges typically rely on external sources of validation to award continuing education units for noncredit courses to meet industry demands.
- Some states and many case study colleges have guidelines that could facilitate granting of credit for noncredit courses retroactively, but their use in colleges is rare.
- Numerous states and case study colleges are interested in developing guidelines for articulation of noncredit and credit courses to help support career pathways.
- Ultimately, recorded outcomes and their value may vary depending on the needs of individuals and employers.

Data and Reporting

- Many states have reporting requirements for noncredit workforce education in conjunction with funding, and several are seeking to collect more comprehensive data.
- State data systems can facilitate data collection for reporting requirements, but they must account for the unique format of noncredit programs.
- Case study colleges identified a variety of barriers to data collection.

Recommendations

1. Provide state funding to support noncredit workforce education with clear and targeted goals that promote workforce development and help students access credit education by cultivating better ties to career pathways.
2. Encourage increased coordination between credit and noncredit programs to benefit both students and employers.
3. Better assess student needs and support efforts to recruit noncredit students into credit programs and to articulate noncredit and credit programs to promote student transfer, when appropriate.
4. Explore the development of nondegree forms of validation for all noncredit workforce education and standard systems to record outcomes that promote the portability of evidence of skills for students and accountability for colleges and state workforce education funds.
5. Collect more information on individuals' and employers' outcomes from noncredit workforce education to assess the contributions of noncredit workforce education for students, employers, and the economy.

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