

Online Contract Training: Applying Organization Theory to Reconcile Competing Missions within Community Colleges

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Abstract

Community colleges in the United States have become major providers of human resource development services, particularly through offering workforce development training to local employers. The addition of workforce development services to community colleges is a fairly recent phenomenon. Some see workforce development efforts as diluting community colleges' historic mission of providing affordable and accessible opportunities for students to transfer to four-year institutions. The addition of *online* training has created additional stressors, due to increases in costs, opportunities for outsourcing, and increased opportunity for serving those outside of the local community. Using an organizational theory framework, this conceptual article addresses the competing emphases in the community college mission and attempts to understand how various types of institutions overcome internal and external barriers in introducing online workforce development through organizational change initiatives.

Keywords: Online Workforce Development, Contract Training, Organizational Change

Community colleges are major providers of training services in the U.S. As part of their workforce and economic development mission, they offer non-credit courses in a wide range of topics, such as basic software skills, management development, customer service skills, total quality management, and safety skills. However, they also offer highly specialized training in technical fields such as healthcare, manufacturing, and software development. Although participants often enroll directly in such courses, community colleges commonly enter into contracts to provide direct training for employers and other organizations like labor unions and business groups. In this regard, community colleges are among the largest providers of human resource development (HRD) in the United States. HRD, as a field of practice, is dedicated to learning and development for work and workplaces, whether provided for the good of the individual, a particular employer, a nation, or society in general (Jacobs, 2006; Jacobs & Hawley, 2009; Lynham & Cunningham, 2006; McLean & McLean, 2001). Such learning and development takes the form of formal training, informal work-related learning, organization development, and performance improvement efforts. This article focuses on online contract

training, a type of formal training in which community colleges provide HRD services to employers and work-related groups.

Contract Training Overview

For the purposes of this article, contract training is defined as a form of HRD that is arranged with an organization for the development of its employees through non-credit bearing programs delivered on-campus, at the employer's site, or online (Dougherty & Bakia, 2000). Either the content or the delivery modes in these non-credit bearing programs are typically customized in some way to meet a particular employer's needs (Grubb & Stern, 1989) and in some cases, entire courses or programs are developed to meet the needs of local business firms, non-profit organizations, or local government agencies (Bragg & Jacobs, 1993). The result is a widespread perception of the community college as a unique type of institution with the deeply engrained goal of responding to community needs. According to a national study, most state legislators concluded that community colleges are most highly responsive to workforce training needs, when compared with other forms of higher education (Ruppert, 2001).

This responsiveness is evident from the widespread prevalence of non-credit contract training that has expanded the occupational arm of community colleges to include a more explicit connection with workforce and economic development. For instance, Dougherty and Bakia (2000) noted that according to three nationwide surveys of community colleges in 1989, 1992, and 1994 (e.g., Doucete, 1993; Lynch, Palmer, & Grubb, 1991), more than 90% of community colleges offered contract training. Other studies have found that 96% of community colleges reported a direct involvement in contract training (Commission on Workforce and Community Development, 1997) and that 77% of community college faculty were aware that their institutions provide contract training (Brewer, 2000). A recent federal study found that 79% of community colleges offer this type of contact training (GAO, 2004).

This pervasive occurrence of contract training has largely resulted from purposeful state investments. States encourage community colleges to respond to contract training opportunities in order to attract businesses and hence, employment opportunities within the state. According to Oleksiw, Kremidas, Johnson-Lewis, and Lekes (2007), Colorado has made \$2.7 million available through business and industry grants for contract training in community colleges. The state of Kentucky provides \$6 million annually for a workforce training incentive program administered by the Kentucky Community and Technical College System covering up to 65% of the costs of training to a business, with the business contributing the remaining costs (Oleksiw et al., 2007). Similarly, in Oklahoma, the state appropriates funds directly to local technical centers and covers 100% of the cost of training new employees. In fact, Oklahoma's Training for Industry Program (TIP) is called a no-cost or low-cost vehicle that facilitates companies to create new skilled jobs in Oklahoma through contract training (Oleksiw et al., 2007). Moreover, contract training is a significant source of revenue for community colleges. Colleges are seeing continued annual growth of contract training enrollment and revenues (Deegan & Drisko, 1985), with two-year colleges in a national study reporting that 32% of their overall continuing education revenue came from contract training (Pusser, Gansneder, Gallaway, & Pope, 2005).

Mission of Community Colleges

Despite the growth and opportunities for providing contract training, offering such services is challenging as it makes the mission of community colleges more multifaceted. For

most community colleges, their mission includes providing traditional academic transfer courses, credit-bearing occupational courses, continuing education opportunities for personal growth, industry contract training, and developmental education (i.e., remedial and basic skills courses). These widely varying activities have sometimes been seen as competing and causing a dilution of the overall effectiveness of community colleges in an era of declining funding (Cohen & Brawer, 2003; Jacobs & Dougherty, 2006; Kasper, 2003). In particular, the tension between general education/transfer and occupational education has been a consistent point of contention within community colleges (Jacobs & Dougherty, 2006). According to one school of thought, the mission of community colleges is mainly to provide equal access to higher education for people who face economic and social barriers in the community (Eaton, 1994; Cohen & Brawer, 1996). This goal has primarily manifested through the community colleges' focus on preparing students to transfer to four-year colleges and universities. However, since the 1960s, community colleges have begun expanding their focus beyond the original goal of providing transfer education by providing for-credit occupational education (Cohen & Brawer, 1996). A recent national study of community and technical colleges reported 93% of community colleges offering academic or transfer degrees (GAO, 2004) and over 96% offering occupational degree programs (Levesque, et al., 2008; GAO, 2004). Also in the late 1960s, community colleges in the southern United States became involved in offering contract programs to private industry as part of statewide economic development efforts (Bragg & Jacobs, 1993) and it spread to other regions beginning in the 1980s, as a result of the recession.

Although the multifaceted community college mission is now the reality for most institutions, persistent concerns have been raised about the sustainability of this multifaceted approach. Critics of occupational education argue that by advocating a narrow focus on employment, community colleges limit their students' expectations and aspirations to the realities of the labor market (Bailey & Averianova, 1998). Others raise concerns about a potential drain on resources by occupational programs or potential institutional culture divide that may result from contract training faculty who are paid more and have different types of employment arrangements (Dougherty & Bakia, 2000). Despite the financial benefits that both community colleges and communities have derived from workforce and economic development, an ongoing debate exists about whether community colleges can sustain this dual mission of focusing on both academic transfer and occupational education in the long term. The more recent emergence of online contract training further reinforces this debate regarding a potential dilution of institutional mission.

In the last 10-15 years, community colleges have begun offering online courses as part of their workforce development efforts. Community colleges that responded to the Instructional Technology Council's annual survey (2008) indicated an 18% increase in online enrollment over the previous year. Additionally, 67% of survey respondents indicated that they offer non-credit online education courses, up 6% from the previous year. Despite the large number of online courses, the advent of online contract training is posing challenges to the community colleges' mission in terms of increased demands for technology resources, increased potential for outsourcing, and opportunity to serve employers outside the community in which the college is located.

Purpose of the Article

In view of these issues, this article explores the potential conflicts of contract training, especially online contract training, with the institutional mission of community colleges and

discusses the opportunity for enhancing the reach of institutional engagement in community colleges by reconciling competing interests and institutional barriers through organizational change initiatives. The organizational changes discussed for reconciliation of competing interests and barriers are guided by the Astley and Van de Ven (1983) theoretical framework from the organizational theory literature. In particular, we focus on understanding planned, purposeful organizational changes that can be undertaken by institutions with regard to implementing online contract training. In addition, we consider the effects of external factors on colleges' organizational changes efforts with regard to this form of workforce development. This culmination of the article's arguments occurs after the groundwork has been laid for understanding the problems and potentials of online contract training.

Challenges to Offering Online Contract Training

Numerous challenges exist in community colleges managing their multifaceted mission. The offering of online contract training offers another potential complication to the already complicated mission of the community college. Community colleges serve as the dominant providers of online education in the U.S. and are major providers of HRD services to employers. It is important to address the organizational implications for their recent expansion into online training services. Past research has not addressed this important topic in detail. In this section of the article, we address four of the major challenges associated with community colleges offering online contract training to employers and work-related groups.

Technological Challenges

Online contract training requires community colleges to employ a vast array of technological innovations in online instruction and administrative support (Foster, 2004). Although some community colleges successfully develop technical infrastructures to support the latest technologies available for e-learning, other colleges struggle with fiscal constraints and are losing their competitive edge to alternative providers of online workforce development (Dougherty, 2003). Jacobs and Dougherty (2006) notes that beginning in the 1990s, many for-profit institutions (e.g., University of Phoenix, Devry Institute of Technology) have started offering customized degree programs directed at adults in large companies in order to take advantage of company tuition benefits. Moreover, alternative providers such as private consultants, equipment vendors, trade and professional associations, for-profit career colleges, and labor/management joint apprenticeship programs are offering competitive online contract training modules to business organizations. For instance, according to a survey conducted by Frazis, Harvey, Gittleman, Horrigan, and Joyce (1997), more than 37% of finance, insurance, and real estate establishments and about 58% of construction establishments utilize trade and professional organizations as training providers. Since online simulations or equipment for hands-on training in high-tech skills programs require substantial investments, these alternate providers challenge the prominence of community colleges' role in online contract training primarily because they can afford substantial investments to build a technical infrastructure and employ staff members who are trained in specialized up-to-date technical knowledge.

Funding Challenges

Much contract training by community colleges is provided with some government assistance (Dougherty & Bakia, 2000), making this type of training a localized form of government-initiated HRD (Lynham & Cunningham, 2006). Although at least 75% of

institutions receive state funds to subsidize contract training (GAO, 2004), not all institutions attain outside assistance, which helps in buying the latest technology and training their faculty and staff on new technology, techniques, and software (Dougherty, 2003). According to Van Noy and Jacobs (2009), 22 states in the U.S. do not have any form of state funding specifically for non-credit workforce development in community colleges. Institutions in those states must fund contract training from training fees and other types of workforce training grants (Boswell, 2000). Moreover, since government aid tends to favor certain industries like manufacturing and bio-technology, community colleges have little or no state funding for training in industries not favored by government subsidies. Size of an organization is also considered to be a factor that directs state funding allotted for contract training. For instance, Dougherty (2003) notes that a study on state funding for employer-focused job training found that 39% of the funds were given to establishments with more than 250 employees, although they represent only about 1% of all establishments. Additionally, he found that 70% of total funding goes to manufacturing firms, with 28 states favoring specific industries in their awarding of grants (Regional Technology Strategies 1999 as cited in Dougherty, 2003). Thus, community colleges wanting to provide contract training to industries not favored by governments and those organizations that are small in size need to fund online workforce development projects through excess revenues from other projects, attaining specialized grants, or by increasing the cost of non-credit and contract courses. As most of the states lack any statutory limit on what community colleges can charge for non-credit workforce education, they often charge what the market bears for non-credit courses (Van Noy & Jacobs, 2009). Hence, organizations that belong to industries that are less likely to be favored for government subsidized online workforce development can need to pay more for training modules than their counterparts belonging to the industries receiving state funding. The cost issue is especially important when considering training for fledgling start-ups, struggling companies, and non-profit organizations. Depending on the subject matter, the equivalent of a one-day training session generally costs from \$50-300 for one person, while colleges charge \$1000-2000 per day for a contract arrangement where an instructor teaches a group (Githens, Wilson, Crawford, Sauer, & Cumberland, 2010). Some community colleges opt to outsource non-credit, contract online workforce development in order to address some of these cost issues (Bailey, Jacobs, & Jenkins, 2004).

Outsourcing of Instruction

Outsourcing of instruction for online contract training at community colleges is a growing but still limited practice (Bailey, Jacobs, & Jenkins, 2004). Community colleges can use their competitors' resources by contracting with them to provide online training. Such arrangements exist between community colleges and private consultants, equipment vendors, trade and professional associations, and large e-learning companies. Although the vendors could seek clients without community colleges, they engage in such collaboration to get ready access to a large pool of potential customers through the marketing efforts and name recognition of community colleges (Bailey, Jacobs, & Jenkins, 2004). The extent of outsourcing can vary according to the need of the community college. An investigation of 11 community colleges suggests that the colleges contract out instruction when they need instructors with specialized knowledge or when they need an updated technical infrastructure (Bailey, Jacobs, & Jenkins, 2004). Two popular vendors for non-credit online courses are Ed2go and Gatlin Education Services. Ed2go offers instructor-facilitated courses with start and stop dates. The instructors are employees of Ed2go. Gatlin is known for self-study courses that allow self-paced study, with

Gatlin managing the course design, development, and delivery. Outsourcing e-learning allows community colleges to access quality programs, a wider range of delivery modes, and a skilled instructor labor force that colleges might have difficulty developing through training their in-house faculty, particularly in highly-specialized niche areas (Foster, 2004).

However, the fundamental problem of outsourcing instruction for online contract training is the college's loss of control over the instructors and the pedagogical styles used in the online training modules (Bailey, Jacobs, & Jenkins, 2004). Outsourcing can further isolate online contract training from the traditional for-credit academic education function of community colleges by not involving regular community college faculty (Lynch et al., 1991). Thus, such isolation results in contract education being not well integrated into other functions of community colleges and therefore, not being well integrated with the overall mission of community colleges.

Serving Learners Outside Traditional Service Areas

Some community colleges develop their own online non-credit courses, particularly in areas for which the college's contract training division is particularly well known (Githens, Wilson, Crawford, Sauer, & Cumberland, 2010). Colleges offer programs like Six Sigma or Lean Manufacturing training to participants both inside and outside their own service areas. This broader geographical offering of workforce development programs brings into question whether *community* colleges should be providing workforce development services for people and groups outside their service areas. Cox (2005) provides evidence of large, widespread enrollment in credit-bearing online courses by students outside of college districts. In defense of the practice, such offering could provide revenue generation that allows the institutions to provide additional services to their own communities. Niche specialization could also be justified since it allows individual colleges to become experts in specific subject areas rather than duplicating services across a larger geographical region (e.g., within a state or region of the country). Such issues are part of a larger debate about the role of community colleges in serving populations beyond their Communities (Cox, 2005).

In summary, barriers related to technology, funding, outsourcing of instruction, and serving learners outside of traditional service areas provide unique challenges for community colleges that offer online training services. The challenges could provide support for the arguments of the critics of occupational education in community colleges, in illustrating the tension that exists with the academic transfer arm of these institutions. In some cases, these potential problems could appear to support a zero-sum argument in a setting with limited resources. However, in the following section, the application of an organization theory framework demonstrates that this tension can be productive rather than debilitating.

Using an Organizational Change Lens in Implementing Online Contract Training

This portion of the article attempts to address the potentially problematic tensions and challenges raised in the previous section by discussing some approaches to organizational change that can help in reconciling competing interests and institutional barriers when institutions consider the offering of online contract training. This reconciliation is attempted by juxtaposing different schools of thought in organizational theory, as presented by Astley and Van de Ven (1983). We use this framework to provide a lens for understanding how various organizational perspectives can help institutions overcome internal and external barriers in introducing online contract training. Particular emphasis is placed on developing solutions to the problem of

competing resources within institutions, which results from the multifaceted demands addressed in community college missions.

Based on two analytical dimensions: (1) the level of organizational analysis, and (2) the relative importance of deterministic versus voluntaristic assumptions about human and organizational nature, Astley and Van de Ven (1983) provide four organizational perspectives that elicited the contrasting worldviews underlying the major debates in organizational theory. The four basic organizational perspectives are: (1) system-structural view (reactive role), (2) strategic choice view (proactive role), (3) natural selection view (inactive role), and (4) collective action view (interactive role). We have adapted these four perspectives to understand the various ways that community colleges can manage the challenges they face in providing effective online contract training (see Figure 1 the framework we developed for this paper based on Astley and Van de Van's work). We recommend two of these organizational perspectives (collective action view and strategic choice view) as frameworks for proposing organizational changes because unlike the other two perspectives (natural selection view and system-structural view), the collective action view (interactive role) and the strategic choice view (proactive role) can help community colleges to overcome challenges of effective workforce development through online contract training.

Reactive Role

The *reactive, systems-structural perspective* on organizations is based on a deterministic orientation and focuses at the level of individual organizations. The deterministic orientation perceives an individual organization's actions to be reactive and mostly determined by structural constraints present in the context within which the organization exists. According to the reactive perspective, organizations can at best react to external constraints that determine their survival or effectiveness. Such a perspective calls for reactive adaptation to the current challenges faced by community colleges in administration of online contract training, such as increasing tuition and fees to pay for technical upgrades, reducing the number of online contract training services offered, devoting fewer resources to online noncredit workforce education, or scaling back on the offering of expensive occupational programs. We contend that community colleges taking such an approach would largely avoid a planned and systemic process of development for the purpose of improving organizational effectiveness and performance (Cummings & Worley, 1997; Swanson & Holton III, 2009).

Proactive Role

In contrast to the reactive perspective, the *proactive, strategic choice view* focuses on a voluntaristic orientation at the level of individual organizations that involves proactive planning on behalf of the organization. The voluntaristic orientation views individual organizations as autonomous and self-directing agents that can manipulate external constraints in order to survive and be effective. Thus, according to the proactive perspective, community colleges have a choice to control the challenges and even modify them through innovative design of organizational structure and political negotiation through social interactions with the external environment. Examples of such proactive organizational changes in the context of community colleges include articulating noncredit online contract training with credit programs in order to facilitate better integration between the academic and occupational functions, pursuing an integrated organizational structure that allows appropriate movements between non-credit and credit programs in order to avoid the cost of duplication, providing customizable modular training, negotiating better pricing terms with employers, and utilizing entrepreneurial efforts to build funding streams required for providing state-of-the-art online contract training for workforce development (Moltz, 2009; Van Noy & Jacobs, 2009). The convergence of credit-bearing and non-credit courses is particularly helpful when an employer pays for non-credit training and the student decides to pursue a degree. Although this convergence presents organizational and accreditation challenges, it provides an opportunity for more fully integrated missions within institutions. With clearer connections between degree-granting programs and workforce development, the for-credit programs and non-credit workforce development programs can become more integrated.

Another noteworthy organizational change initiative that individual community colleges can take under the proactive perspective involves development of highly customizable modular training, in which participants take very small units of instruction, as they need them. At Kellogg Community College in Michigan, very small modules, worth fractions of a credit hour, are taken at their Regional Manufacturing Technology Center. These programs include reading, taking a written assessment, viewing videos, participating in online simulations, and completing hands-on assessments (Moltz, 2009). Such highly modularized programs can also be offered online or in hybrid formats, if colleges invest in developing the online content. These innovations, approached through the proactive organizational change role, help institutions

overcome challenges associated with technology and/or funding.

Inactive Role

A more macro perspective on organizations that contrasts with both the reactive and proactive perspectives is the *inactive, natural selection view* that focuses on deterministic orientation at the level of multiple organizations. According to this perspective, groups or whole species of organizations (e.g., a whole industry) are at the mercy of the environment because they either fortuitously fit into a niche in that environment or are selected out and fail to develop a unique and competitive position for themselves in that environment. The inactive perspective is especially relevant for explaining the uneven distribution of online contract training by community colleges (Dougherty 2003). Larger urban and suburban community colleges offer more contract training than small rural colleges because small colleges lack the infrastructure and local demand for contract training (Lynch et al., 1991). Thus, according to the inactive perspective, rural community colleges might be selected out of the business of providing contractual training services to corporate organizations as the natural drift of resources (e.g., technical resources, financial resources, demand for online contract training from corporate organizations) is against them. In such case, there might be a return to more focus on traditional academic and credit-bearing occupational courses. Since the inactive perspective prescribes to a deterministic orientation as opposed to a voluntaristic one at the level of multiple organizations, groups of community colleges will tend to be in an inactive mode amidst challenges in the environment according to this view.

However, some colleges take these same challenges and act in interactive ways. For example, some small rural colleges are making efforts to develop collaborative partnerships with corporations. Warren (2000) provides a detailed example of such a rural community college in the Midwest that has successfully collaborated with a local industrial organization for the purposes of providing customized contract training services. Such examples illustrate that irrespective of size and location, it is possible for community colleges to implement organizational changes to manipulate the natural drift of resources required for effective contract training when not existing in an inactive, deterministic manner.

Interactive Role

The *interactive, collective-action perspective* contrasts the inactive perspective by focusing on voluntaristic orientation at the level of multiple organizations. This perspective does not view organizations and institutions as products of environmental evolution; instead, it emphasizes collective survival, which is possible if different sectors and industries of organizations develop symbiotic collaborations with each other. Such collaborations will result in a regulated and controlled social environment that mediates the effects of the natural environment (Astley & Van de Ven, 1983). The interactive perspective is most relevant to explaining how many community colleges are trying to cope with the challenges of online contract training through organizational changes that have led to multiple collaborations with other institutions. Community colleges have increasingly forged formal and informal relationships with industrial corporations, universities, other community colleges across urban and rural locations, and competitors to create collective modules of online contract training programs. For example, 15 community colleges in Iowa formed a partnership called the One Source Training, which provides a central source for Iowa businesses and organizations to purchase contract training (Saylor, 2006). The program offers all types of delivery, including

online options. Many of the individual colleges in Iowa would likely have been unable to offer the wide variety of programs provided through One Source if they were not involved in this collaborative partnership. Such collaborations also allow for administrative cost sharing, creating efficiencies and freeing up money for other expenses. Additionally, this example illustrates how colleges can play a collaborative interactive role in order to overcome the challenges associated with outright outsourcing of instruction to private corporations. In the Iowa example, institutions worked together to build synergy and provide training that could not be provided independently, rather than individually contracting with private companies to provide such training.

Another example of such collective action among multiple community colleges, state, and corporate organizations would be the Michigan Virtual University (MVU) (Cappel & Ahlbrand, 2002). A \$30 million investment from the Michigan Renaissance fund helped the Michigan Economic Development Corporation and several major industries in the state of Michigan to create MVU. The Michigan Virtual Automotive and Manufacturing College is a division of MVU that contracts with manufacturing companies to provide online noncredit contract training. These types of collaborations make it easier for both urban and rural community colleges across and within different states of the United States to overcome barriers of location, cut down on technology costs and to become effective providers of online contract training to industrial corporations. In another state, colleges across the state have niche areas and develop financial arrangements with each other to provide online and hybrid training with other colleges in the state (Githens, Wilson, Crawford, Sauer, & Cumberland, 2010). As mentioned in a previous section, such practices call into question whether colleges should be providing training services for employers outside their traditional service areas. However, institutions collaborating in such a manner enable each other to offer a richer array of expertise than they could offer independently. Some community colleges have also collaborated with the state government and industries as part of states' skills standards boards that monitor the quality of workforce education. The Texas Skill Standards Board (TSSB) is an example of such an organizational change that has resulted in collective quality control (Davis, 2008).

Another possibility of forging collaborations that can help community colleges to manage the challenges of online contract training relates to President Obama's proposal for "open courses" in which modularized courses would be developed for free use by community colleges (Jaschik, 2009). Such an approach would allow for modularized courses to be shared by colleges. Instead of each institution paying to develop highly-specialized and interactive content such as online simulations and interactive activities, institutions would receive financial incentives from the federal government for developing highly successful content to be shared with other colleges.

The examples above exist both in states that have highly centralized community college governance systems and less centralized systems (Lovell & Truth, 2004). In some states, individual colleges operate under locally-elected boards and the state authorities have little control over college operations. In other states, colleges are directly managed by the central office. States with centralized or statewide governance tend to have more uniformity and financial and information systems that enable easier collaboration, which has led colleges in such states to offer more online occupational programs overall (Githens, Crawford, Sauer, 2010). However, colleges in less centralized states have exercised their agency by both offering online contract training and by engaging in creative collaborations among institutions. These examples of collective action and collaboration imply that there is significant potential for community

colleges to implement organizational changes that leverage inter-organizational networks to develop the resources and become more successful and efficient providers of online learning.

Conclusions and Implications for HRD

As online education continues to become more common and popular, a significant percentage of contract training will be delivered through online or hybrid formats, which will inevitably lead to broadening the reach of the workforce development arm of community colleges to include employers and organizations outside of their traditional service areas. This shift to online formats has the potential to increase relevance, scope, and accessibility of the workforce development arms of community colleges, while possibly complicating the mission of the individual institutions. As community colleges grapple with the ever-increasing expectation that they will play a central role in rebuilding the U.S. economy, tensions might continue to grow as resources are diverted away from the traditional academic transfer programs.

In the current economic recovery efforts, President Obama has called on community colleges to be at the center of efforts to educate workers for high tech, high skill jobs (Obama, 2009; President's Council of Economic Advisers, 2009). In Obama's community college proposals, workforce development and online learning are two of the four priorities (Jaschik, 2009; Khadaroo, 2009). Thus, the demand for and opportunity to provide online training is growing and colleges will continue to seek creative organizational changes to efficiently offer such programs. A key component of the federal funding proposal is that funding be competitive and linked to innovations that result in significant outcomes. This article recognizes this growing need and attempts to reconcile the multifaceted dimensions of the community mission by addressing concerns about the costs of providing online contract training through an organizational theory lens.

The article has implications for HRD on several levels. First, the overlapping realms of workforce development and HRD are intertwined in many ways. We provide a conceptual understanding of contract training which is one form of HRD designed to benefit society, funded by both employers and government. Second, community colleges are major providers of online training, a significant form of HRD. We discuss this form of training within community colleges, which is understudied within HRD. Third, we apply organization theory to shed light on what types of organizational changes community colleges can use to address some challenges of online contract training. Application of Astley & Van de Ven's (1983) rich framework provides a tool for use by leaders within community colleges when considering the implementation of organizational changes specifically directed towards overcoming challenges of online contract training. It helps to identify ways for community colleges to be proactive in forging collaborations for the purpose of providing effective online workforce development. In particular, the proactive, strategic-choice and the interactive, collective-action approaches provide means of engaging in internal and external organizational change efforts in community colleges and thus, we recommend these two perspectives as preferable approaches that community colleges should consider in addressing the barriers to providing online contract training.

Moving forward, future research can address this topic by collecting empirical data to address the ongoing tension between institutional mission, internal dynamics, and external pressures within community colleges. Additional research could address the implications of colleges offering online contract training to learners outside of their traditional service area. For example, this framework could be used in an empirical study for considering the internal and

external dynamics associated with such a move. Many communities, particularly rural ones, have significant attachments to their community college. The expansion of rural community colleges into regional, statewide, or national online offerings might interfere with these local relationships (Githens, Wilson, Crawford, Sauer, & Cumberland, 2010). Additional research might address the success of these programs in responding to the real workforce and economic development needs of the local communities. Do expanded online and hybrid offerings allow for greater responsiveness to the needs of employers? This aspect of HRD is ripe for additional research, particularly as we consider the role of HRD in helping to rebuild the economy after the recent recession. Such research will help to advance both theory and practice as community colleges continue to play an increasingly important role in our nation's workforce and economic development.

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