

ACADEMIC CAPITALISM AND THE COMMUNITY COLLEGE

by

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ABSTRACT

Profit-generating entrepreneurial initiatives have become increasingly important as community colleges look for alternative revenue to support escalating costs in an environment characterized by funding constraints. Academic capitalism was used as the conceptual framework to determine whether community colleges have become increasingly market focused. Already externally driven as a consequence of their broad missions, many community colleges become involved in academic capitalism ranging from financial partnerships with local corporations to the lease and operation of conference center facilities. Although community colleges are not identical and may differ significantly from one another, revenue from external sources is both an opportunity as well as a challenge for all. This study sought to examine the types of revenue-generating initiatives occurring on community college campuses and the factors that may facilitate or impede a community college's success.

The study utilized quantitative methods. A survey was sent to a national sample of 537 rural, suburban, and urban community college presidents yielding a response rate of 29.3%. Survey responses were categorized and a proxy variable was created based on the institutional characteristics of academic capitalism as described in the literature.

Community colleges in this study identified contract training as the most frequently utilized revenue-generating initiative. The revenue generated represents a very small contribution to a college's operating budget and college presidents are ambitious in terms of expectations for future revenue. Academic units are not perceived as being entrepreneurial. Revenue-generating units report to the academic vice president who rises from academic unit rank. Expectations

regarding future funding allocations do not seem to drive an entrepreneurial thrust. Based on responses to this survey, large rural, suburban, and urban institutions behave the same.

Given the decline in government support and the revenue potential of successful market focused initiatives, further studies are warranted to better understand how to ease the constraints on pursuing academic capitalism in the community college sector.

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CHAPTER 1

INTRODUCTION

As we move through the beginning decade of the 21st century, changes in our economy created new realities for higher education. These new realities include technology-driven distance education; the continued emergence of global institutions; privatization as evidenced by the growth of the for-profit sector; escalating operational costs, particularly in the form of healthcare and retirement benefits; governmental calls for the assessment of institutional effectiveness and financial accountability; persistent declines in state appropriations; and increasing concerns regarding higher education's ability to maintain access and affordability, and sustain growth. Facilitated by rapid technological advances, physical proximity is no longer a consideration in course content delivery, and higher education is now a competitive global enterprise. The rapid proliferation of for-profit education providers is creating intense competition, especially in the more lucrative fields of graduate and executive education (Newman, 2004). Few sectors in higher education have a secure market any longer, and resting on reputation and traditional ways of operating no longer prove sufficient. This is the new environment in which higher education finds itself (Roueche & Jones, 2005).

Financial concerns have escalated in response to declines in government funding over the past 25 years. These concerns have created a need for institutions to explore new revenue strategies to maintain affordability and sustain growth in a climate of fiscal uncertainty. In the context of these concerns, profit-generating opportunities have become viewed as increasingly important. Academic capitalism is the term that has been coined to describe market-like and/or

market behaviors that institutions and the professorate engage in to garner external money and return a profit to the college (Slaughter & Leslie, 1997).

In higher education, revenue-seeking activities can take many forms (Hearn, 2003). Johnstone (1998) proposed three possible solutions to higher education's financial woes: (1) advocate the importance of higher education to get more public revenue, (2) cut the underlying cost of higher education, and (3) obtain revenue from alternative sources. Revenue-seeking activities can be characterized as being of various types: increases in tuition to shift the burden from public financing toward increased private funding, increased grants and loans, increased philanthropy for endowment as well as scholarship, and entrepreneurship (Johnstone, 1998). Entrepreneurialism is defined as innovation that allows for the creation of a new enterprise or innovation that benefits an existing enterprise, and economic theory cites entrepreneurship's importance to economic development in a capitalist economy (Cornwall & Perlman, 1990). Importantly, entrepreneurship is a continuous process that allows institutions to survive and prosper in an uncertain economic environment.

Academic capitalism is an ideology that pursues profit-generating endeavors. In pursuing a marketplace focus and partnering with government, business, and industry, higher education's profit motivated initiatives can include technical services and personnel exchanges, high demand specialized training, the expansion of e-learning offerings both in number and in scope, space and facilities rental, and the redirection of resources from stagnant activities to ones that are more productive and efficient (Gumport, 2000; Slaughter & Rhoades, 2004; Tarance, 2002). Academic capitalism encourages higher education decision-makers to become market conscious and bottom-line oriented in the allocation of institutional resources from conventional instructional activities toward revenue-generating activities, thus creating a climate of increased

institutional competition for resources (Slaughter & Rhoades, 2004). The notion of a capitalist academy is controversial because it is seen as challenging traditional academic leadership by redirecting institutional resources toward revenue-generating activities therefore shifting institutional focus and influencing the nature of academic work (Hanley, 2005; Slaughter & Rhoades, 2004).

Outcomes of academic capitalism may include blurred boundaries between non-profit and profit-seeking institutions, increased inter- and intra-competition among institutions, and mission conflict and mission creep as institutions aggressively pursue market dollars. Conflict and governance issues arise when business-like values replace or compete with the altruistic values of the traditional academy. Many fear that academic capitalism has the potential to permanently transform higher education from its historical role as a public good to a profit driven market commodity (Gumport, 2000; Deem, 2001; Olssen & Peters, 2005; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004).

Statement of the Problem

During the 1990s, not only did the government have less money to allocate to higher education, but government priorities shifted to healthcare, prisons, highways, and K-12 education (Levine, 1997). Declining state support forced higher education to find new and creative ways to cut costs, operate more efficiently, and find alternative sources of revenue (Slaughter & Leslie, 1997). Declining state support also resulted in a restructuring of institutions, whereby resources were being shifted to “units and departments close to the market; that is, those relatively able to generate external grants and contracts or other sources of revenue” (Slaughter

& Leslie, 1997, p. 8). According to Brawer (1998), “decreasing finances present the most salient reason for the involvement of higher education institutions in commercial endeavors” (p. 1).

While controversy and debate swirled regarding the encroachment and expansion of academic capitalism in the academy, there was little doubt that colleges and universities could benefit. Partnerships among scientific and technological disciplines provided opportunities for students and faculty in the form of private funding and research partnerships. The commercialization of teaching and research could revitalize financially strapped institutions, just as deregulated capitalism had revitalized the overall economy (Newfield, 2003). “Business came to the university bearing three gifts: the management of complexity, financial control, and entrepreneurial opportunity” (Newfield, 2003, p. 6).

Entrepreneurship requires both the recognition and pursuit of opportunity (Roueche & Jones, 2005). It includes the ability to see opportunities and to capitalize on them, and includes any endeavor that seeks to identify new opportunities or leverage resources in innovative ways. Partnering with business is a logical entrepreneurial avenue for community colleges; in their occupational training role, the sector has been involved in addressing the needs of business and industry via contract training, small business development, local and regional workforce development, and economic planning. While community colleges continue to measure success in workforce development by “the number of companies served and by net revenue generated for the college” (Flynn, 2007, p. 4), ongoing funding concerns have created a situation whereby the colleges need to move beyond cost recovery to profit realization. While their economic role is a historically complex mix of traditional occupational education, growing business demand, governmental pressures, and the values and self-interests of community colleges themselves

(Dougherty, 1994), insufficient public support makes an emphasis on the market increasingly important (Eckel, 2006).

While American higher education has been competitive in the higher education marketplace, shifts in public policies, an increase in the number and reach of competitors, and persistent fiscal constraints further intensify the competition (Eckel, 2006). Combined with a competitive marketplace, the lack of sufficient state and local funding is putting pressure on community college presidents to become better entrepreneurs (Roueche & Jones, 2005). In their examination of 11 entrepreneurial community colleges, Roueche and Jones (2005) identified characteristics common in entrepreneurial institutions. These characteristics include the following: the ability to build successful partnerships and strategic alliances; an awareness of the institution's competitive advantage, which allows them to understand their competition and position themselves successfully within the marketplace; a foundation office that operates as a separate 501(c)(3) nonprofit corporation focusing not just on raising money but on making money; and a top-down culture that supports and rewards innovation.

When community college presidents attending the American Association of Community Colleges 2006 annual convention were surveyed regarding their most pressing concerns, funding was listed as the top issue among 86% of respondents (Fliegler, 2007). "As historically academic institutions, community colleges traditionally do not have a bottom-line focus, much less a culture geared toward managing for true bottom-line results" (Flynn, 2007, p. 4). Gone are the days of defining fiscal health as cost recovery, now community colleges must actively plan for profit (Flynn, 2007).

Changing political, economic, and social pressures can facilitate the need for community colleges to redefine their institutional missions and their expression, "and different college

constituencies support different missions, depending on their idea of what higher education should be and what role community colleges should play in the educational system” (Townsend & Dougherty, 2006, p. 1). While most community colleges position themselves to fulfill their underlying functional missions (transfer education, vocational or technical education, remedial education, and community service), the colleges’ ability to deliver its broad mission depends on various internal and external forces (Dougherty & Townsend, 2006). Whether or not a community college aggressively pursues profit-generating initiatives may be a function of the extent to which the college values its core mission and transfer function, its vertical mission as defined in part by how closely the college is linked to the 4-year sector, and its horizontal mission and opportunities present in the local economy (Dougherty & Townsend, 2006). The weight of importance that these determinants carry varies by geographic region and may also be linked to the key performance indicators that regional accrediting bodies assess.

Like their 4-year counterparts, community colleges are beginning to engage in entrepreneurial activities that are profit motivated (Roueche & Jones, 2005). These activities may include online courses with innovative delivery systems, niche-oriented degree programs created for an industry partner, private sector educational alliances designed to meet business and industry workforce demands, small business incubators, human resource compensation initiatives for entrepreneurship, leasing and/or rental of college facilities, and profit-sharing arrangements with privatized auxiliary enterprises (Hearn, 2003; Liu, 2007).

In their leadership role, college presidents must create an organizational structure and a culture that is effective and sustains innovation (Roueche & Jones, 2005). This is often difficult given that higher education is steeped in bureaucratic processes where decision making is based on hierarchical chains of command and entrenched power structures (Birnbaum, 1988). If a

college is going to be successful at becoming entrepreneurial, presidents must cultivate an entrepreneurial spirit throughout the institution (Phelan, 2005). An entrepreneurial college president is visible, bold, and often risks being controversial (Fisher, 1984). The influence of the presidency is primary in infusing an entrepreneurial spirit, and has been identified as important in successfully leading a college and forging ties with the external environment (Calder, 2000; Crawford, 1983; Roueche & Jones, 2005).

In their external partnerships, colleges confront a variety of external factors that create conditions of risk and uncertainty. External change (changes in funding allocations, increased competition from competitors, and changes in demand for the educational product and/or service) creates uncertainty for an institution. Moving forward in an environment of uncertainty entails a level of personal and professional risk for the institutions. The colleges may lose money in the marketplace with the possibility of damaging existing public support (Kozeracki, 1998). Yet business-industry partnerships provide colleges with a number of benefits. The opportunity to keep faculty and curricula up-to-date with current business trends, opportunities for students in regard to jobs upon completion of their studies, and opportunities to bring contract training employees to the campus are among some of the institutional benefits that community partnerships can create for a college (Powers, Powers, Betz, & Aslanian, 1988). In addition to bringing more enrollments and revenues, business-industry partnerships have the potential to yield greater political support for the colleges, which might prove useful when positioning for higher state appropriations or local tax incentives (Newfield, 2003).

The conversation on academic capitalism poses the same challenges for community colleges as it does for 4-year institutions. There is a danger that community colleges, in their pursuit of external partnerships and revenue, will lose sight of their traditional role. The time and

resources necessary to implement and administer remedial education programs and vocational curricula may instead be diverted to forging stronger connections with business and industry.

Purpose of the Study

This study used academic capitalism as a conceptual framework. It examined where, how, and the extent to which an environment of academic capitalism exists in the community college sector, and the factors that may influence a community college's ability to successfully pursue profit-generating revenue. Community colleges, finding themselves in an environment of growing demand for services and an overall decrease in funding, pursue revenue-generating activities by engaging in entrepreneurial activities (Roueche & Jones, 2005). To date, studies on academic capitalism have centered on large 4-year institutions, primarily those with research centers engaged in patent development and copyrighting through technology transfer centers, creating new businesses through the commercialization of applied research. Small 4-year colleges and community colleges have been overlooked. While their missions differ, the colleges are facing similar needs for supplemental revenue streams.

Two significant trends are driving the need for alternative revenue sources in the community colleges--the inability of state appropriations to meet institutional demands and the simultaneous growth in student enrollments. Whether or not a community college aggressively pursues profit-generating initiatives may be a function of the culture, the political environment, the extent to which leadership supports entrepreneurialism, expectations regarding the future of state and local support, how closely the college is linked to the 4-year sector and the extent to which the college values its transfer function, and opportunities present in the local economy (Dougherty & Townsend, 2006). Additionally, influencing faculty who are not receptive to what

they perceive as business practices in the academy, especially in unionized campuses, has been cited as the biggest barrier to embracing an entrepreneurial culture (Birnbaum, 1992).

Utilizing the responses of community college presidents from across the country, this study examined ways in which community colleges increase revenue, generate profit, and become less dependent on traditional revenue sources. The role of the president is complex, and many college presidents currently find themselves in the difficult position of trying to reconcile competing forces. Institutions are confronting increased governmental demands for accountability and improved institutional performance, “with particular attention to how well higher education is meeting public goals while under pressure to keep costs low” (Eckel, 2006, p. iii). At the same time, increased competition and decreasing public support make the market increasingly important (Eckel, 2006). Governance issues and assurances of academic integrity are additional concerns. The rules of the marketplace are dictating one set of behaviors while the concerns of legislators and public policy leaders dictate a different course of action (Eckel, 2006).

In light of the institution’s mission and priorities the president must set the tone for entrepreneurialism (Slater & Doig, 1985). Presidents must become more collaborative in partnering with public and private sector entities in the community and capitalize on these relationships so as to provide opportunity to their revenue producing units (Fliegler, 2007; Flynn, 2007). Equally important is that leaders be market conscious in trying to anticipate change, identify opportunities, and ensure flexibility (Peck, 1984). Previous work in the field of entrepreneurship has assumed that financial incentives were paramount; less attention has been given to non-economic factors (relationship building, political positioning, goodwill) that may drive attitudes towards entrepreneurial behavior (Valliere, 2006).

The multiple missions of community colleges make the sector increasingly complex. As the external environment undergoes profound change, community colleges encompass in single comprehensive institutions the missions of junior colleges, technical colleges, and for-fee education providers. It is in this context of pressures and counter-pressures associated with economic change that this study examined revenue generation, profit realization, and the pulse of academic capitalism as it currently exists in our nation's largest community colleges.

Significance

In the pursuit of revenue, many community colleges develop successful partnerships with their external environment (Roueche & Jones, 2005). The economic incentive of such partnerships extends beyond revenue and can include such things as promoting public and/or private entrepreneurial initiatives, actively influencing their locality's response to economic and social trends, the opportunity to identify emerging economic trends and practices, and the opportunity to position themselves to effectively compete for faculty, students, public favor, and prestige (Eckel, 2006; Viniar & Steffinius, 2006). Yet there are inequalities in the revenue-generating abilities of colleges, and "disparities exist between institutions in cosmopolitan areas and in small cities" (Liu, 2007, p. 36). Disparities in culture, revenue sources, students, and pedagogy also exist between market-oriented departments with specialties more closely linked to the private sector and traditional academic departments. While these differences can facilitate healthy competition and dialog, the result is too often the creation of a deep cultural and organizational divide within community colleges (W. N. Grubb, Badway, Bell, Bragg, & Russman, 1997).

Facilitating and supporting these partnerships is the college president. Through frequent engagement with the external community, the president has the ability to build support for the college and define the role that the college can play in economic development. It is within the context of seeking new sources of revenue for the college that the role of the president has changed from that of academic leader to entrepreneur (Rankin, 2002).

As the similarities of leading a business and leading a college have grown in recent years, comparisons have been most keenly noted in community college, technical college, and junior college environments (Pope & Miller, 2005). The rationale has been attributed to the need for these colleges to be more responsive to market demands.

There is also the general emphasis of 2 year colleges that places priority on curricular relevance to serve particular needs, ranging from transfer education, to employment, to remediation, and to adult literacy. The recent historical growth of the community college also demonstrates the need for strong entrepreneurship, a quality often encouraged in the private sector. (Pope & Miller, p. 746)

Paradox of scope, an observation that opposing and competing forces operate simultaneously, offers insight into the challenges confronting entrepreneurial units in community colleges (Collis, 2002). Originally described by business strategists, the paradox observes that the traditional core of many companies is shrinking (activities such as IT and manufacturing), while the periphery of these companies is simultaneously expanding through the proliferation of alliances, joint ventures, and external partnerships (Collis, 2002). Collis extended the argument by stating that the same phenomenon is occurring in higher education. He contends that the traditional core of the university--full-time faculty, liberal arts and scientific education, student services that act in loco parentis, the library--is declining while at the same time the periphery of the institution--outsourcing partnerships, corporate training, vocational courses, sponsored research, entrepreneurial activity such as license and patent development, and non-traditional

students--is expanding (Collis, 2002). While the decision-making opportunities with which academic campus constituencies have expertise are shrinking, the set of unfamiliar constituencies that must be managed are growing (Collis, 2002). In community colleges, state funding formulas encourage leaders to become focused on credit enrollment and retention (seat-time funding), while financial stability is often found in the success of revenue-generating noncredit community partnerships (Flynn, 2007).

Higher education attempts to build relationships and partnerships with the external community. While community colleges typically emphasize noncredit training and retraining, 4-year institutions more often focus on degree-granting training programs and technical assistance to business (Powers et al., 1988). Research universities typically provide adequate resources to units that are more closely aligned or have easier access to the external environment. They understand that access is critical to grant and contract opportunities (Slaughter & Rhoades, 2004). Community colleges often place less institutional attention on the units that provide workforce development and corporate training, thus reinforcing institution-wide perceptions that these units are on the periphery of the institution (Jacobs & Dougherty, 2006).

There is a sense of urgency regarding the need for better market collaboration across the community college sector. Local political and business leaders are demanding that community colleges become more responsive and assume greater responsibility in addressing economic concerns in the communities they serve (Flynn, 2007). The old 1/3–1/3–1/3 funding model is no longer a viable target, and competition is increasing across sectors for funding dollars (Voorhees, 2001). A small yet visible public policy trend is being implemented in states, including Texas, Maryland, Massachusetts, Ohio, Colorado, and Virginia, that reflects the need for a better market orientation, more entrepreneurial behavior, the commercialization of knowledge, and a greater

reliance on private dollars (Eckel, 2006). State support for community colleges may well continue to decline, and, as colleges are forced to compete with K-12, social services, and healthcare, revenue generation becomes a top priority (Phelan, 2005). If community colleges are to sustain their multiple missions and their commitment to access and affordability, sustaining financial support through market activities must be explored (Brumbach, 2005).

Opponents of academic capitalism cite familiar concerns. Some stakeholders fear that in the pursuit of revenue, community colleges will begin behaving more like private enterprises than public entities. Already at the whim and mercy of state and local purse-holders, community colleges may begin to shift from viewing students as the primary concern to viewing employers as the primary client, much like for-profit institutions (Farnsworth, 2006). Education may become increasingly “vocationalized” as the sector becomes dominated by institutional decision makers who increasingly give more attention to the needs and demands of an intensely competitive market (W. Norton Grubb & Lazerson, 2005).

Critics of academic capitalism fear that America’s community colleges may begin to betray their traditional values, mission, and historical legacy. What may appear as “conservatism and entrenchment is often allegiance to prevocational ideals” of learning for its own sake rather than for practical reasons (Grubb & Lazerson, 2005, p. 14). Many faculty fear the notion that resources are shifted to fields perceived as having greater market potential (Deem, 2001; Gumport, 2000; Olssen & Peters, 2005; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). Academic capitalism may put the focus on different disciplines, and curricula may be increasingly developed with employers in mind, at the expense of the social sciences and the humanities. Some claim that the entrepreneurial thrust may influence the moral education of students when they see professors invest more time in commercial activities than in teaching, and

delaying scholarly publications for business reasons (Liu, 2007). Faculty may become so focused on opportunities to generate additional monies through commercial ventures that they will neglect their teaching responsibilities and “influence graduate students to do research that could be more valuable commercially than scientifically” (Powers et al., 1988, p. 163). Resource allocation and hiring decisions may no longer be based on transfer agreements and traditional merit, but rather on perceived market potential (Rhoades, 2006). Colleges may begin to explore productivity-based compensation models with an emphasis and expansion on distance learning as well as larger class sizes (Slaughter & Rhoades, 2004).

Serving the business community and generating profit is not incompatible with the larger mission of a community college, and many community college presidents would agree that academic capitalism can have direct institutional benefits (Flynn, 2007). As operational costs rise each year, and general education costs continue to rise, public and private sector partnerships are an underutilized financial resource that can be used to generate profit to support the mission (Newfield, 2003). Colleges that are engaged in industry-business partnerships and collaborations often receive more private sector attention, and this attention can facilitate contributions of scholarship which can increase access, particularly for economically disadvantaged students. College-industry relationships can provide incentives for students to remain in college programs, and partnerships with research laboratories can provide students with internships and valuable hands-on experience. The opportunity to gain job-related experience while pursuing a degree and an opportunity for job placement after graduation are attractive incentives for current students and potential students alike. In addition, relationships that encourage industry professionals to teach help many community colleges assure current and relevant curricula and can reduce

student/faculty ratios and class size, which enhances instructional quality (Newfield, 2003; Powers et al., 1988).

Community college presidents understand the importance of being responsive to business and industry's workforce training needs so as to be a player in the highly competitive field of contract training (Brumbach, 2005). This requires flexible college processes that allow easy access for business employees and faculty and staff willing to incorporate industry practices into academic curriculum (Campbell & Williams, 2005). The internal pressure is frequently on the periphery (noncredit, workforce, and contract training units) to generate profit to subsidize the traditional core activities in light of the decline in state funding (Collis, 2002).

The institution's governance system is important because it can facilitate or impede a community college's ability to be responsive to state and local needs, and in community colleges the governance challenges are significant (Birnbaum, 1980). As community colleges face greater internal and external pressures to become more entrepreneurial, effective and productive, shared governance becomes an even more important concern.

Conclusion

Comprehensive community colleges aspire to serve a multitude of functions, and as a result try to be as efficient, as mission driven, as strategic in their planning, and as conflict-free as possible. Community colleges offer hope to students seeking an affordable path to a 4-year degree, adults seeking success in an increasingly technological workforce, the recently unemployed preparing for new careers, and those wanting training to gain a competitive edge in the workplace. They are strong economic engines for the states in which they reside. In order for community colleges to sustain growth and fulfill an entrepreneurial imperative, an

entrepreneurial strategy must be developed and implemented. This is often a challenge as environmental factors as well as organizational structures and processes can limit the choice of an appropriate entrepreneurial strategy (Cornwall & Perlman, 1990).

Comprehensive community colleges have multiple missions. The horizontal mission of the community college includes reaching out to the community and being responsive to the external environment, the same external environment that is frequently the means of their financial well-being. It is a core component of their mission, and, in large part, the reason for their existence. Successful partnerships with business and industry facilitate the view of the entrepreneurial college president as the generator of new sources of profit (Newfield, 2003). Rather than criticize the encroachment of academic capitalism, entrepreneurial institutions and their presidents are to be commended for their diligent pursuit of profit that acts to buffer their reliance on state and local funding. The future of community colleges is tied to the skill that college leaders, particularly the president, has in identifying areas of market opportunity (Roueche & Jones, 2005).

CHAPTER 2

LITERATURE REVIEW

Using academic capitalism as a conceptual framework, this study examines the extent to which community colleges are engaging in profit-generating initiatives as reported by the college president. This chapter reviews the relevant literature on community colleges, their governance, and the emergence of the entrepreneurial community college president. It uses entrepreneurship as the lens through which to explore the evolution of academic capitalism. The purpose of the literature review is to provide an understanding of the previous research in these areas as well as provide a rationale for the choice of variables explored in the present study.

Community Colleges

As the scrutiny of higher education intensifies, community colleges are positioned to mediate revenue-generating educational services, creating value for both the college and the private sector. Community colleges now educate approximately 45% of all undergraduates in addition to assisting their communities with workforce training and economic development initiatives (Ashburn, 2006). Scrutiny comes from many factions--accrediting bodies, legislators, the federal government, parents, and the private sector (Ashburn, 2006), while access and affordability hinge on adequate funding. The following review of the literature on community colleges focuses on the aspects most relevant to academic capitalism, from early vocationalism to workforce development to recent moves toward entrepreneurialism.

The American Community College and Vocationalism

The American community college system has evolved from one Illinois institution, Joliet Junior College founded in 1901, to over 1250 institutions nationwide (Phillippe & Sullivan, 2005). Its history begins with the conclusion of the Civil War, when equal opportunity for public education grew along side the drive for social equality and the growth in the democratic concepts of civil rights and women's rights (Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994). As public high schools across the country began extending schooling beyond the early grades and graduated tens of thousands, America's elite colleges were too expensive or exclusive to meet the needs of these new graduates (Witt et al., 1994). While federally funded land grant universities were established to prepare students for careers in agriculture, engineering, and military science (Phillippe & Sullivan, 2005), they were frequently too far from the small towns and farms where most Americans lived (Witt et al., 1994). Additionally, several prominent university presidents of the time were concerned with the large numbers of students that might ensue; their solution was for the universities to abandon freshman and sophomore classes "and relegate the function of teaching adolescents to a new set of institutions, to be called junior colleges" (Cohen & Brawer, 1996, p. 6).

From their earliest beginnings, community colleges suffered an identity crisis as some college and university presidents looked to the German University system as an alternative model to accommodate first and second year students (Zoglin, 1976). Each group of early supporters had a different mission in mind:

Some wanted them to emulate the German gymnasias so that Stanford or Michigan might become a second Heidelberg; others hoped they would continue the public school philosophy of offering varying programs for students of varying abilities; and still others expected the junior colleges--as they were called then--to be just what their name implied: a truncated version of a 4-year institution. (Zoglin, 1976, p. 4)

The decision of the 4-year colleges and universities to continue offering the first 2 years of a college education, in spite of the development of 2-year colleges, had major significance (Cohen & Brawer, 1996). In the early decades of the 20th century, the necessity to train workers coupled with the growing importance of science and technology gave impetus to the establishment of 2-year colleges that combined transfer education with vocational instruction (Phillippe & Sullivan, 2005). A national network of public 2-year colleges became the solution to addressing the increasing social demands placed on schools and to making higher education available to the masses (Cohen & Brawer, 1996; Thelin, 2004).

Junior colleges became widespread. In the 1930s there were more than 200 public and 300 private 2-year colleges across the nation offering vocational education as well as general education (Cohen & Brawer, 1996). These institutions became important lifelines for people unemployed during the Great Depression (Phillippe & Sullivan, 2005). In the years that followed the Great Depression, enrollments in public junior colleges grew as did the demand for educational programs that would prepare people for jobs (Townsend, 2001). Vocational education was viewed as “preparation for occupations” and these students were not expected to pursue further education, “hence the phrase terminal education” (Townsend, 2001, p. 64). Vocational education became more prominent post-World War II, as 2-year colleges scrambled to accommodate returning soldiers, supported through the 1944 GI Bill, who needed to prepare for civilian employment.

The 1947 Truman Commission on Higher Education advocated the expansion of the GI Bill to include public postsecondary education for all Americans and recommended that a national network of community colleges be established to provide affordability and access to college (Coulter, 2007; Thelin, 2004). “As the junior college evolved into the community college

during the 1950s and 1960s, terminal education, tied almost exclusively to the vocational function, became increasingly important, stimulated partly by federal monies for vocational education” (Townsend, 2001, p. 64).

The 1960s were a period of tremendous growth for the community college sector. Vietnam War draft deferments for full-time students caused community college enrollments to soar (Phillippe & Sullivan, 2005). During the 1960s and 1970s more than one million students attended the more than 700 two-year colleges that had sprung up around the country, and during these decades more than 450 new colleges opened their doors (Phillippe & Sullivan, 2005).

It was during these years that the concept of the comprehensive community college gained prominence. Although vocational programs taught in 2-year colleges were considered by many to be inferior to more traditional academic curriculum (W. N. Grubb, 1996), others suggested that vocationally-oriented job training had no place in an institution that called itself a college (Witt et al., 1994). Vocational training joined transfer education and cultural enrichment courses as primary offerings. Eventually three types of degrees were offered: Associate in Arts, Associate in Sciences, and Associate in Applied Sciences. The first two prepared students for transfer to 4-year institutions, vocational programs of study were granted the Associate in Applied Sciences which focused on preparation for entry-level employment (Phillippe & Sullivan, 2005).

During the 1970s and 1980s community college enrollments grew, and by the end of the 1980s 1200 community colleges had been created with an enrollment of over 4 million students (Cohen & Brawer, 1996). During the late 1970s, doubts began to be voiced regarding the educational effectiveness of community colleges. Double-digit inflation, state revenue shortfalls, and escalating energy costs gave rise to academic accountability issues (Thelin, 2004). The

“false promises” of postsecondary vocational programs offered by community colleges became a widespread argument (W. N. Grubb, 1996). Community college revenues per FTE declined 13% between 1979 and 1983, and degree-credit enrollments at public 2-year colleges dropped between 1981 and 1985 (U.S. National Center for Education Statistics, 1994). The broad mission of the comprehensive community college, the increased emphasis on remedial education for underprepared students, vocational curricula, and the growth in continuing education for those already employed became suspect to concerns from the 4-year sector regarding the economic worth of a sub-baccalaureate degree (W. N. Grubb, 1996).

During the 1990s, community colleges began to shift their mission from serving the needs of their local community to enhancing the market needs of the global economy (W. Norton Grubb & Lazerson, 2005; Levin, 2001). In the technology driven global environment, the community colleges of the new millennium have become more focused on meeting the economic development and workforce training needs of business and industry (Levin, 2001).

Workforce Development and Contract Training

Vocational education has been an integral part of community college education since the early 20th century (Bragg, 2001). The vocational curriculum at community colleges became increasingly useful during the economic downturn of the early 1980s. Community colleges gained national prominence in 1982 when the Dislocated Worker Program was funded under the Job Training Partnership Act (JTPA) (Katsinas, 1994). This major federally sponsored employment and training program, funded at approximately \$250 million dollars, allowed community colleges to actively participate in workforce development programs for the temporarily unemployed (Katsinas, 1994). Workforce development is defined as formal and

informal education and training programs for those individuals wishing to enter the workforce (Bragg, 2002; Grubb, 1996; Katsinas, 1994). While community colleges had relationships with business and industry prior to 1982, they had historically “not been involved in workforce development policy formation at either the federal or state levels” (Katsinas, 1994, p. 11). Recent policy related to community colleges, at both the national and state levels, has been dominated by workforce development (W. N. Grubb & Associates, 1999).

Accordingly, declines in enrollments and funding stimulated community colleges to pursue both workforce development and contract training (Dougherty & Bakia, 2000). Besides bringing much needed enrollments and revenue, these activities could yield greater political support and enhance connections to political and economic elites (Dougherty & Bakia, 2000). Propelled by a need to generate additional sources of revenue to subsidize diminishing state allocations, business-education partnerships in contract training have become increasingly important and account for a growing percentage of community college enrollments in recent years (Bragg, 2002).

Over 90% of community colleges offer contract training, but it is unevenly distributed, ranging from a few students to 55,000 students as reported in a 1993-1994 national survey (Dougherty & Bakia, 2000). Contract training focuses on job skills, and is often defined in the following way:

Short-term programs ranging from a couple of hours to several days, for employees of specific companies that pay a substantial share of the cost. Because individuals in contract education [courses] are already employed, the education is almost always upgrade training rather than initial education or retraining. (Grubb, 1996, p. 185)

Because workers’ ability to master advanced job skills often depends on their basic academic skills, community colleges frequently provide literacy and mathematics skills as part of the training program (Dougherty & Bakia, 2000). Although contract training is considered firm

specific, in that a particular company contracts for the training, students in contract training courses learn skills that are often transferable from company to company and from industry to industry (Dougherty & Bakia, 2000).

Contract training differs from traditional occupational education in that the employer (public or private), rather than the student, is the client. The employer contracts with the college for a specific course or group of courses, determines the course content, selects the students from the employee pool, and defines what constitutes success. Because the specifics of these partnerships are often unique to a particular employer, the courses are usually customized to the employer's specific requirements, either in content or in course delivery. Often contract training is offered independent of the academic calendar, offered on-site, and taught using the employer's choices as instructors (Bragg & Jacobs, 1991; Dougherty & Bakia, 2000; W. N. Grubb et al., 1997). Contract training can bolster the community college's long-established role of offering training incentives to attract and encourage local economic development (Batt & Osterman, 1993). Economic development initiatives often depend on providing industry with community college graduates with the appropriate technical education, and this is important in attracting relocating companies and encouraging existing companies to stay in the local area (Batt & Osterman, 1993).

Monies made available for workforce development and contract training are competitive and can result in large amounts of money flowing to the colleges; \$5 billion was spent in 2005. While a small portion of the overall amount comes from the private sector, from local corporations with unique training needs, the majority of money comes through federally funded US Department of Labor workforce development grants and regional (public-private partnership) economic development grants.

In July 2009, the community college sector was once again recognized for its pivotal workforce development role. Speaking at Macomb Community College in Warren, Michigan, President Obama announced a plan to infuse \$12 billion into community colleges to boost graduation rates, improve facilities, and retrain displaced workers for high demand careers (Kellogg & Tomsho, 2009). Of the funding, \$9 billion will be awarded as grants to encourage partnerships between community colleges and businesses to train America's workforce in the skills needed to compete in the global economy.

The Entrepreneurial College President

College presidents fulfill a number of complex roles in an effort to communicate the college's mission to internal and external constituencies and, given the importance of the presidential role, they have been well studied (Fisher & Koch, 2004). Hundreds of publications have been written on the attributes, demographics, career paths, behaviors, ideals, and values of college presidents; the audience being graduate students, aspiring administrators, university professors, and even presidents themselves (Pierce & Pederson, 1997).

Like businesses, higher education institutions confront a variety of external factors that create conditions of risk and uncertainty. The impact of external change (changes in funding allocations, increased competition from competitors, and changes in demand for the educational product and/or service) create uncertainty. Responding in an environment of uncertainty entails a level of personal and professional risk, characterized in terms of valuable, and oftentimes scarce, management time and reputation (Cornwall & Perlman, 1990).

College presidents must possess the vision and the knowledge to respond quickly and appropriately to changes in the environment (Pierce & Pederson, 1997). While a college's

resources may come from a variety of sources, institutional success in times of change demand strong and consistent leadership abilities (Pierce & Pederson, 1997). Leaders must create both an organizational structure and a culture that is effective and sustains innovation (Roueche & Jones, 2005). If a college is going to be successful at becoming entrepreneurial, presidents must infuse an entrepreneurial spirit throughout the institution (Phelan, 2005). Yet higher education is steeped in bureaucratic institutions where decision making is based on hierarchical chains of command and entrenched power structures (Birnbaum, 1988). An entrepreneurial spirit has been identified as important in successfully leading a college (Calder, 2000; Crawford, 1983; Roueche & Jones, 2005).

The traditional path to the community college presidency is through academic administration (Pope & Miller, 2005; Vaughan & Weisman, 1998), and academic administrators are not typically viewed as agents of change (Fisher, 1997). Traditionally it was believed that the only way to understand and work within the culture of higher education was by personal experience in the tenure and promotion process (Pope & Miller, 2005). As we move into the 21st century, more emphasis is being placed on finding college presidents who have the managerial skills reflective of business and are able to build external relationships outside of the college (Twombly, 1988; Vaughan & Weisman, 2001).

Given the omnipresent funding concerns, community college presidents are becoming increasingly interested in developing new sources of revenue (Kezar & Eckel, 2002; Kisker & Carducci, 2003; Roueche & Jones, 2005; Spangler, 2002), and the ability to develop alternative funding streams is going to become critical (Gaskin, 1997). Internal and external pressures impact presidential initiatives (Astin & Astin, 2000). College presidents focus the attention of the campus on their initiatives in different ways depending on their frame of reference (Eddy, 2003).

Governance

Governance is defined as the decision-making authority for an organization (Lovell & Trough, 2002). Along with basic cultural and value differences between the private sector and higher education, governance structures may differ greatly (Brawer, 1998). While the issues related to managing a college may be similar to the issues of managing any organization, the lack of a well-defined hierarchical structure makes a major difference in the way in which it is governed (Cyert, 1979). Higher education has been characterized by its heterogeneity and decentralization in decision-making (Bolman & Deal, 2003), and is traditionally governed in part by faculty “through a web of fairly autonomous collegial bodies” (Lustig, 2006, p. 150).

The American Association of University Professors’ 1967 “Statement on Government of Colleges and Universities” (AAUP, 1967) formally articulated and legitimized the faculty role in academic governance (Birnbaum, 1980). Since then, shared governance continues to be one of the most widely discussed and misunderstood topics in higher education (Alfred, 1998; White, 1998). California became the only state to mandate shared governance with the passage of California Assembly Bill 1725, legislating a move from “participative” to “shared” governance in California’s community colleges in 1988 (Alfred, 1998; White, 1998). The goal was to define shared governance as a system in which internal campus constituencies collaborated in making decisions, the foremost internal constituency being the faculty.

Assembly Bill 1725 listed eleven areas of governance in which the president and local board either rely primarily upon, or consult collegially with, the faculty. Examples include curriculum development, including degree and certificate requirements; grading policies; institutional planning and budget development; and selection, evaluation, and retention of faculty. (Gaskin, 1997, p. 82)

Shared governance is open to multiple interpretations; as collegial decision making, where faculty and administration make decisions jointly and consensus is the goal; as

consultative decision making, where opinion and advice is sought but authority remains with senior administration and the board of trustees; or as distributed decision making, where discrete groups are responsible for making decisions on specific issues (Euben, 2003). Institutions adopt different decision-making models depending on the issues, constituents, and environmental conditions (Kater & Levin, 2005), and need to recognize the role of collective bargaining in governance (Lahti, 1979), while providing for the broadest shared governance that is consistent with institutional accountability (Lucey, 2002).

As described by Clark (1998), collegial entrepreneurialism is found in institutions where a culture of innovation and risk-taking is balanced with respect for faculty's role in governance. A market orientation presents challenges to traditional governance structures as it may diminish traditional academic decision making and may necessitate a more efficient centralized decision-making structure (Buchbinder, 1993).

State and Local Governance

In regard to community college governance, the locus of control is determined by the state in which it is located (Zoglin, 1976). States may operate their community colleges directly or assign this responsibility to a unit of local government. Early in their history, most 2-year colleges were governed as an extension of the K-12 public school system. "According to legend, Mark Twain once remarked, first God practiced on idiots, then he created school boards" (Zoglin, 1976, p. 51).

Community college governance evolved over time as the colleges were separated from the public school districts and responsibilities shifted to local community college governing boards and state coordinating boards (Gaskin, 1997; Richardson & de los Santos, 2001). Prior to

the mid-1970s, state coordinating boards were focused on managing the explosive growth in community college enrollment (Richardson & de los Santos, 2001). Beginning in the late 1970s, however, coordinating boards were called on to primarily administer legislative interventions and budget cuts, resulting in a marked deterioration of relationships between institutional boards and administrators (Glenny, 1979).

The function of presidents and boards change depending on whether governance emanates from the local or the state level (Gaskin, 1997). In recent years, politics and political players, including lobbyists, have become increasingly involved in the appointment of public college Boards of Trustees, and, by extension, in the administration of the institutions. In California, for example, changes in governance occurred with the passage of Proposition 13 in 1979, which moved community college funding from a strong local base to a strong state base (Gaskin, 1997). In New Jersey the opposite was true, as the deregulation of public higher education in the mid-1990s gave local governing boards sweeping authority over essential matters concerning the administration of their institutions. Proponents reasoned that the elimination of burdensome state oversight and accompanying bureaucracy would launch publicly funded institutions into an era of creativity and innovation.

Collective Bargaining

In institutions where faculty are unionized many aspects of governance change, and many community colleges across the country are unionized (Cyert, 1979). In 2001, unions represented 51% of full-time faculty at public 2-year institutions and 27% of part-time faculty (National Center for Education Statistics, 2001).

The history of faculty unions goes back to the 1930s and began with an attempt to allow predominately blue collar workers some say in the terms of their employment. By the mid-1930s, unions had reached out to white collar groups, and by the end of World War II the effort of the labor movement had centered on organizing workers in America's factories, mills, and mines (Carr & VanEyck, 1973). A pivotal point in the history of the labor movement was the passage of the Taft-Hartly Act in 1947, which allowed professional employees to engage in collective bargaining separate from the large unions of non-professional workers. Taft-Hartly led the way for the subsequent emergence of collective bargaining by faculties in the latter half of the 1960s. The 1966 agreement between faculty at Henry Ford Community College and the school board in Dearborn, Michigan, marked the formal beginning of collective bargaining in American higher education (Carr & VanEyck, 1973; Kemerer & Baldrige, 1975; Rhoades, 1998). Desiring an input in education-related and non-education-related matters, community college faculties began considering unionization in the late 1970s and early 1980s.

Although there were logical reasons for its appearance during and immediately following the tumult of the 1960s, collective bargaining's foothold in academe is still uncertain (Carr & VanEyck, 1973). Faculty unions, particularly at the university level, have been controversial since their inception (Kater & Levin, 2005). The professional nature of teaching and research, with its emphasis on autonomy, independent thought, and self-governance is contradictory to the centralized decision-making inherent in collective bargaining (Rhoades, 1998). Unionization changes the relationship of faculty from that of an independent entrepreneur to one of an employee whose duties are outlined and roles are described as part of the labor contract. Conflict can arise under unionization because the authority of the administration becomes not as important as the provisions of the contract (Cyert, 1979; Kemerer & Baldrige, 1975).

Conceptual Framework

The literature on academic capitalism centers on the inclusion of profit-generating practices and the amount of influence the external environment currently and potentially exerts on the culture, structure, and core missions of the institutions (Gumport, 2000; Deem, 2001; Olssen & Peters, 2005; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). The dilemma is that as funding concerns intensify and institutions face rising operational costs, new revenue streams are needed (Voorhees, 2001). Concerns are voiced that the boundaries between the university and the market are becoming increasingly blurred by pursuing monies available in the external environment and, as boundaries blur, higher education begins to act more like a profit seeking organization operating in a knowledge marketplace (Bok, 2003; Slaughter & Rhoades, 2004). Jockeying for limited state and federal dollars, status, and academic standing threaten to transform productive educational institutions into self-aggrandizing competitors to the detriment of all. Academic capitalism, while driven by the demands to generate revenue, describes the increasing authority of market-like practices, roles, and ideologies within the academy and looks at entrepreneurial activities that are profit motivated (Hanley, 2005).

The responsiveness of higher education to the needs and rewards of the marketplace has been viewed as incompatible with higher education's social compact and democratic interests (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). Indeed, the most cherished values of the academy have little in common with the stock exchange (Rhodes, 2001). Yet organizational responsiveness to economic pressures can be viewed as impressive as well as troublesome (Gumport, 2000). Responsiveness is impressive because "adaptive responses just may help public higher education survive an era of unprecedented competition and public scrutiny," while institutional responsiveness is troublesome "because of the potential damage to public higher

education as an intellectual enterprise, the further erosion of knowledge as an end in itself, and the narrowing of academic offerings for different segments of student populations (Gumport, 2000, p. 69). Vught (1999) contends that problems exist with these positions. The first is an underestimation of the environmental conditions with which institutions are being confronted; the second is an overestimation of the value of traditional academic culture and structure.

Beginning as study of the profit motive, the academic capitalism literature has expanded to describe the shift “from a public good knowledge/learning regime to an academic capitalist knowledge/learning regime” (Slaughter & Rhoades, 2004, p. 8). The regime metaphor is used to illustrate the change from the traditional academic values of institutional autonomy and knowledge as a public good to a “capitalist knowledge regime,” which values knowledge privatization and profit making (Slaughter & Rhoades, 2004).

Market Encroachment and Faculty Concerns

A market orientation calls for a unified, centrally controlled organization designed to achieve the goal of profit and coordinated from the top down by administration (Lustig, 2006). Privatization, which refers to the turning of public nonprofit activities into private, for-profit activities, usually paid for with public monies, focuses on market principles rather than professional principles as a way of organizing the work, governance, and delivery of education (Bok, 2003; Persell, 2001). One of the primary differences between the academic environment and the business environment is the decision-making process (Pope & Miller, 2005). The private sector typically follows a chain of command whereas in higher education decision making is broad and diffuse (Pope & Miller, 2005).

Institutional tension is created by the threat of imposing a corporate model of governance, a model where faculty members are perceived as skilled workers (Birnbaum, 1980). Faculty fear losing their role in a system of shared governance to a centralized bureaucracy, where they are on “the receiving end of directives they had no role in making, subject to impersonal rules, and governed by the manipulative methods of technical reason rather than by the persuasive, substantive rationality developed in communicative interaction with peers” (Lustig, 2006, p. 151).

From the faculty perspective, top-down corporate type decision-making threatens the core values of academe (Gerber, 2001) and is in direct conflict with faculty standing as professionals with professional autonomy (Birnbaum, 1980). Faculty may fear that academic capitalism will fuel the so-called corporatization of higher education, putting new and unfamiliar economic pressures on the nature of academic work as it has been traditionally defined (Rhoades, 2005). If carried too far, academic capitalism may alter the primary teaching and research mission of a university (Newman, 2000; Slaughter & Rhoades, 2004). Faculty may be influenced to move toward applied research with small scientific value in lieu of basic research when applied research can yield substantial monetary gains. Questions arise regarding the relative value of applied research versus basic research, and whether a faculty member’s success in securing private sector funds for applied research should be considered as important in promotion and tenure decisions as success in securing funds for basic research (Powers et al., 1988). Since 1980 when Congress passed the Bayh-Dole Act, universities and faculty have capitalized on royalties for patents discovered courtesy of public funds (Newfield, 2003). Assisting the university generate revenue via commercially successful products may influence

promotion and tenure decisions, not only regarding the inventor but regarding other faculty whose ideas have not been commercially successful (Powers et al., 1988).

The entrepreneurial thrust may influence the moral education of students when they see professors invest more time in commercial activities than in teaching, and delaying scholarly publications for business reasons (Liu, 2007). Faculty may become so focused on opportunities to generate additional monies through commercial ventures that they may neglect their teaching responsibilities and, more importantly, influence graduate students to do research that could have commercial value (Powers et al., 1988). Shared governance, rooted in the notion of collegiality, expertise, and professionalism, ensures that faculty share authority in specific areas of college activity and that decisions related to promotion and tenure, as well as teaching and curriculum, are made on the basis of academic criteria, not on the basis of external pressures (White, 1998). Percell (2001) looked at distinctions between market principles and a professional orientation; results are summarized in Table 1.

Table 1

Faculty Distinctions between Market Principles and Professional Orientation

	Market Orientation	Professional Orientation
Orientation toward students	Customer	Learner
Basis for decision-making	Customer want	Professional standards
Goal of institution	Profit	Quality, successful outcome
View of service	Private consumer good	Both a private and a public good
Recourse	Choice, alternatives, exit	Due process

Note. Modified from Persell (2001)

Academic capitalism encourages higher education decision makers to become market conscious and bottom-line oriented in the allocation of institutional resources toward revenue-

generating activities, creating a climate of increased competition for money (Slaughter & Rhoades, 2004). Gumport (2001) suggests that concerns raised regarding academic capitalism's influence on resource allocation and institutional planning may well reverberate around the chasm between individual and collective interests, and that faculty, as well as administrators, need to move away from the historical internal focus toward an external focus.

Faculty concerns center around the curriculum where faculty hold advisory rather than property rights (Pope & Miller, 2005). Constituents in such traditional academic areas as the liberal arts do not want to compete for internal resources at colleges that are increasingly marketplace focused. Faculty and staff often resent attention directed toward workforce development efforts, fearing that it may have the potential to change institutional values (Dougherty & Bakia, 2000). From this perspective, academic capitalism is viewed as a problematic encroachment of the profit motive into the domain of academia (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004).

Many of these issues are found in the community college sector. The debate is often no less heated, the difference lies in the fact that community colleges have yet to assume the language of academic capitalism. Instead of denouncing academic capitalism, community college constituencies point to an increasing focus on the demands of the external environment and the resources directed to the peripheral, externally focused units.

Academic capitalism may be viewed not only as a change in revenue-generating patterns but as a change in institutional expenditure patterns as well (Slaughter & Leslie, 1997). Critics of academic capitalism fear that institutional resources will begin to shift in favor of disciplines perceived to have greater market potential (Slaughter, 1998; Rhoades, 2006), and that changes in institutional revenue allocation patterns may increasingly sacrifice the social sciences and

humanities in favor of departments better able to collaborate with the private sector (Leslie, 2003; Slaughter, 1998). Not only must institutions compete more aggressively for funding dollars, but the academic departments within institutions must, too, compete for increasingly scarce resources. Interestingly, the extent to which organizations respond to the external marketplace and the potential organizational conflict caused by responding may facilitate academic capitalism, as both faculty and institutions become competitive “prestige maximizers” (Pfeffer & Salancik, 1978; Slaughter & Leslie, 1997). Academic capitalism may be an opportunity to improve higher education (Barrow, 1996). Decreased funding and pressures from the external environment to meet market demand, instead of being viewed as a negative, create a strategic opportunity for academic areas to restructure, eliminating outdated programs and effectively “downsizing” to effectively meet the needs of the new economy (Barrow, 1996).

The Private Sector

Business brings not only money to higher education, but innovation and speed in addressing changing and evolving fields (Levine, 2001). What business lacks is the “reputation, accreditation, and inbuilt certification-granting ability of higher education (Levine, 2001, p. 143). Profit is the motivator for the private sector’s interest in higher education.

The private sector sees higher education as a very lucrative and poorly run industry . . . higher education is a \$225 billion industry with a reputation for low productivity, poor management, high cost, and low use of technology. (Levine, 2001, p. 135)

The surge in for-profit institutions continues to generate concerns regarding a move toward increased privatization of higher education, which is defined according to the context in which one uses the term. For instance, shifts toward privatization can be seen in the financing of education, the operation of schools, and the emergence of for-profit institutions (Levin, 2001).

Cooperation and partnerships between industry and higher education is not new. The Morrill Land Grant Acts of 1862 and 1890 created land-grant institutions funded, in large part, to engage in government sponsored research projects (Thelin, 2004). Beginning in the mid-1970s, United States economic development became characterized by two shifts: the emergence of global competition and the shift from an industrial to a post-industrial information economy (Barrow, 1996). While industry support for higher education had been occurring for 100 years, the 1980s brought to prominence organizations creating new strategic alliances between business, government, and higher education (Barrow, 1996), and community colleges became active participants in these partnerships. The underlying philosophy was that industry-university collaboration can enhance the competitiveness of the American economy (Fairweather, 1988).

Before the 1980s, science faculties at major research universities were primarily concerned with conducting research and authoring papers for publication and scientific meetings (Fairweather, 1988; Slaughter & Leslie, 1997). Since the passage of the 1984 Patent and Trademark Law Amendments, commonly known as the Bayh-Dole Act, universities and industries have been collaborating for their mutual benefit and universities became empowered to develop, own, and profit from patents developed with federal money (Slaughter & Leslie, 1997). Since that time, American universities have been profiting from the federally funded research performed by their faculty primarily in the physical sciences and engineering (Slaughter & Rhoades, 2004). While Federal policy efforts to improve the global competitiveness of the United States encouraged increased cooperation between higher education and the private sector, the goal of the partnerships were clearly capitalist (i.e., to give business the opportunity to reap financial benefit from the intellectual capital available on the university campus and to bring new products and processes to market; Slaughter & Leslie, 1997).

Examples of academic commercialization are widespread, such as the privatization of curriculum and instruction in the distance education and online learning markets, growth in the number of new products being brought to the market, and the increase in new start-up companies. Additionally, colleges and universities have begun to solicit corporate sponsorship in funding buildings, classrooms, departmental chairs and instructional programs (Hanley 2005). Many community colleges participate in similar endeavors, focusing primarily on the sale of instructional and non-instructional services (Deckelbaum, 1994).

The size of the market is impressive. The United States nonmilitary learning market, including corporate education, postsecondary, and K-12, is a \$735 billion dollar market (Tarance, 2002). Given the general decline in state appropriations for higher education in the past 25 years, community colleges are seeking new revenue sources. A 2000 survey looking at Canadian community colleges found that over 75% of the college presidents surveyed responded that they were trying to reduce their dependence on government allocations by working with the private sector to seek out new sources of revenue (Calder, 2000). The extent to which these private sector partnerships are successfully occurring in US community colleges remains unknown.

Entrepreneurship and Partnerships

Current issues exert pressure on higher education to respond more quickly to environmental change. These issues include, but are not limited to, overall decreases in state funding, global competition, the increase in and competition from for-profit institutions, technological change, and increased student demand. Yet throughout its history, higher education

has been viewed as slow to respond to changes in the environment; and has been primarily considered a passive contributor to the economy (Fairweather, 1988; Kezar & Eckel, 2002).

Community colleges have been engaged in responding to the needs of the external marketplace since their inception. Although primarily emphasizing the teaching of college transfer and vocational education over service to the community, responding to the external pressures of the marketplace is a core component of the mission of the contemporary community college. In the current environment of reduced financial resources, many community colleges have forged new partnerships with private industry looking for supplemental sources of revenue. Colleges that actively engage in contract training partnerships (offering training as either credit-bearing or as noncredit programs through continuing education) have been described as entrepreneurial community colleges (W. N. Grubb et al., 1997).

Entrepreneurial initiatives and firm-specific contract training are growing because “they enhance college revenues, bring greater visibility to the college in the community and the region, and meet learner needs for certification and immediate employment” (Bragg, p. 31). Concerns have been raised that economic pressures may impact the community college, changing it from a community responsive social institution to a privately driven profit-oriented industry vulnerable to private sector agendas (Bergquist, 1998). Opponents voice concern that an increase in industry-higher education alliances creates a profit driven market consciousness that stands to undermine the traditional values of the academy (Bok, 2003; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). Advocates of such partnerships believe that higher education should, through grants, contracts, and entrepreneurship, play an increasingly active role in economic development (Clark, 1998; Kisker & Carducci, 2003; Spangler, 2002).

Those who undertake and develop a new enterprise, incurring some risk of failure, are referred to as entrepreneurs (Ammer & Ammer, 1986). “Although the words innovator, proprietor, and capitalist are used in the same sense, there are subtle differences” (Ammer & Ammer, 1986, p. 150). Entrepreneurship, as defined by the economist Joseph Schumpeter in 1934, is a continuous process which involves innovation that allows an institution to prosper in a changing economic environment (Cornwall & Perlman, 1990). While not the only reward, profit is the entrepreneur’s reward for innovation and risk-taking. Discussed for decades in the business literature, entrepreneurship is a natural compliment to any discussion of academic capitalism, and as such has gained recent prominence in the higher education literature (Barrow, 1996; Bok, 2003). Slaughter and Leslie (1997) preferred the term “academic capitalism” over “academic entrepreneurship” as they believed that entrepreneurship “failed to capture fully the encroachment of the profit motive into the academy” (p. 9).

Higher education is not typically viewed as entrepreneurial, and the entrepreneurial approach is usually not welcome (Kozeracki, 1998). The quest for truth, considered the legitimate function of higher education, often conflicts with the search for invention, which is considered an inappropriate focus on those ideas that have primarily practical and therefore commercial applicability (Louis, Blumenthal, Gluck, & Stoto, 1989). “A commitment to tradition and a disdain of commerce, especially for thinking of students as clients or customers, often dominates the thinking of faculty members” (Kozeracki, 1998, p. 1). Some in higher education fear that incorporation of a more business-like culture will emphasize improving efficiency by looking at results given the resources (Levin, 2001). This fear is increasingly facilitated by the inclusion of assessment standards by college accreditation agencies. The

overall culture of higher education, focused on teaching, basic research, and governance by peers,” conflicts with the business-like values of entrepreneurship.

The major difference between academicians and entrepreneurs in the private sector is the difference in values (Brawer, 1998). The value differences between faculty and private sector entrepreneurs can be characterized by two sets of value differences: values individuals have for their work and values they have for their lifestyle. In higher education faculty work involves a relatively narrow discipline, while in the private sector work is a collective experience routinely involving linkages between resources and opportunities (Brawer, 1998). This may partially explain the resistance to entrepreneurialism in higher education.

Entrepreneurship requires both the recognition and pursuit of opportunity (Roueche & Jones, 2005). It includes the ability to see opportunities and to capitalize on them, and includes any endeavor which seeks to identify new opportunities or leverage resources in innovative ways. In their examination of 11 entrepreneurial community colleges, Roueche and Jones (2005) identified characteristics common in all, these characteristics include the following: the ability to build successful partnerships and strategic alliances; an awareness of the institution’s competitive advantage, which allows them to understand their competition and position themselves successfully within the marketplace; a foundation office that operates as a separate 501©(3) nonprofit corporation focusing not just on raising money but on making money; and a top-down culture that supports and rewards innovation.

Though the majority of research conducted on entrepreneurialism has been conducted in the private sector, traditional higher education organizations have many characteristics that typically inhibit entrepreneurialism. These characteristics include compartmentalization (tasks and information are limited to specific job areas and specific job descriptions); a discouraging

culture where information is not readily available and exchange of ideas is not supported; coalitions across the organization that are difficult, if not impossible, to put together; uncertainty as to where one stands and whether one has genuine support; a culture whereby failure can be at great personal risk; and a generalized skepticism and opposition to change (Kanter, 1983).

Research from the non-profit sector has identified internal and external barriers to entrepreneurialism in the public sector. These barriers can be classified into three types of factors: environmental, internal, and factors that are a result of both the external environment and the organization's structures and processes (Cornwall & Perlman, 1990). Environmental factors include the following: (1) less market exposure, which results in less incentive to reduce costs, to operate efficiently, and to be an effective performer (note that high visibility typically creates overly cautious behavior); (2) multiple constituencies that thwart risk taking and the generation of new ideas; (3) public accountability and greater public scrutiny; and (4) multiple missions and ambiguity of goals. Entrepreneurial strategy is made difficult because of multiple interpretations of the organization's primary mission and purpose (Cornwall & Perlman, 1990).

Factors internal to the organization include management choice, skills and values; limited management autonomy and high potential interference; skewed reward systems and fear of failure, which can effect reelection, funding, and support and exacerbate a short-term perspective (Cornwall & Perlman, 1990; Ramamurti, 1986). Finally, factors impeding entrepreneurial behavior that are a result of both external and internal structures and processes include a culture where risk-taking is avoided and inconsistencies in the definition of institutional success and effectiveness (Cornwall & Perlman, 1990). Table 2 summarizes the barriers to entrepreneurship in higher education.

Table 2

Barriers to Entrepreneurship

Barrier	Impact	Solution
Multiplicity and Ambiguity of goals	Conflict/Paralysis	Exploit ambiguities
Potential Interference	Limited autonomy	Reduce external financial dependence Build political support
High visibility	Overly cautious behavior	Reward risk taking
Skewed reward systems	Discourages risk taking	Reduce personal risks
Short term orientation	Discourages large scale innovative strategic planning	Begin with short-term successes
HR Restrictions (Collective bargaining)	Reduces presidents ability to motivate subordinates and implement programs	Exploit the power of personal example

Note. Adapted from Ramamurti (1986), "Public Entrepreneurs: Who They Are and How They Operate."

In a study of five highly successful European universities, Clark (1998) identified elements common among successful entrepreneurial institutions. He used the term "imbalance thesis" to describe institutions that are able to respond to the demand-response imbalance whereby the demands on universities are larger than their capacity to respond. The imbalance results from a combination of more and different types of students, more segments of the labor force demanding education, as well as the increase in accountability and the proliferation of information (Faris, 1998). Unlike opponents of a marketplace ideology, Clark believes that an entrepreneurial response by universities, which form "environment-university relationships," gives these universities a better chance to control their own destiny (Clark, 1998). Five characteristics were identified in successful entrepreneurial universities: a strong steering core with a heightened sense of autonomy; peripheral units that relate to the external environment; a diversified funding base that spread their revenue across government, industry and private sources; academic units with a strong entrepreneurial culture; and an institution-wide

entrepreneurial culture that embraces change (Clark, 1998). The extent to which these characteristics exist in the community college sector, as well as the sector's successful negotiation of demand-response imbalance, may be important determinants of long-term financial solvency.

“Intersect organizations” are defined as having diffuse boundaries (Bergquist, 1998). These hybrid organizations have features found in both public and private organizations, and are characterized by mission ambiguity. “Many contemporary community colleges exemplify the intersect organization . . . [they] operate on behalf of the public and receive tax revenues from local, state, and even federal sources” (Bergquist, 1998, p. 96). Community colleges must now operate like for-profit businesses, and, in paradox of scope fashion, revenue garnered from sales, service, and contract training is increasing while funding allocations are decreasing (Bergquist, 1998).

While academic capitalism opponents cite reasons to avoid financial partnerships with the market, entrepreneurial institutions recognize the many benefits. Entrepreneurial benefits include a potential source of revenue, a mechanism for demonstrating responsiveness to state economic development agendas, increased visibility and prestige among/for students and faculty, and enhanced community “town-gown” relationships.

The 1980s were called the decade of the business/university partnership (Fairweather, 1988). During this time, leaders of academic institutions in need of additional revenue, private industry looking for a competitive advantage, and state and federal governments “attempt[ed] to restore economic vitality [that] resulted in dramatic growth in these relationships and in advocacy for them” (Fairweather, 1988, p. 1). All varieties of academic institutions engage in partnerships with business and industry, “from major research universities to comprehensive

colleges and universities to 2-year colleges and proprietary institutions” (Fairweather, 1988, p. 27).

It is in this environment of growing demand for services and an overall decrease in funding that national attention has been turned to entrepreneurial efforts in community colleges (Roueche & Jones, 2005). Entrepreneurship is associated with proactive management where institutions actively seek opportunities that extend beyond their current capabilities (Clark, 2001). Entrepreneurial colleges do not wait to be molded by environmental forces; instead they work to shape their environments by being proactive and innovative in responding to community needs. Entrepreneurship requires both the recognition and pursuit of opportunity (Roueche & Jones, 2005). It includes the ability to see opportunities and to capitalize on them, and includes any endeavor that seeks to identify new opportunities or leverage resources in innovative ways.

Entrepreneurial community colleges are often recognized by their stable or growing enrollments, sustained partnerships with businesses and community organizations, involvement with local school districts, and flexible and innovative coursework (Cushman, Cervone, & Rowley, 2003). Moving beyond the traditional notion of cost recovery is the pursuit of profit. Whether or not a community college aggressively pursues profit-generating initiatives may be a function of the extent to which the college values its transfer function, how closely the college is linked to the 4-year sector, and opportunities present in the local economy (Dougherty & Townsend, 2006). The weight of importance that these determinants carry varies by geographic region and may also be linked to the key performance indicators that regional accrediting bodies assess.

CHAPTER 3

METHODOLOGY

The purpose of this study was to investigate the ways in which large community colleges are utilizing entrepreneurialism to maximize revenue generation, and the extent to which profit realization is occurring. To this purpose, a survey questionnaire was designed (Appendix A) for mailing to the college presidents. The population of colleges is those identified by the Carnegie Classification as large, associates' degree conferring, rural, suburban, and urban public 2-year institutions. This chapter describes the research methodology used in this study.

The chapter begins with a rationale for the study. The aim is to use academic capitalism as a conceptual framework and to examine and interpret the study through the academic capitalist lens. Because the researcher recognized from initial interviews that the term “academic capitalism” is unfamiliar to the sector, the goal of profit realization was couched in terms of entrepreneurialism and the revenue collected by the colleges as a consequence of entrepreneurial initiatives. The chapter continues with a discussion of the research questions and research design including how the sample population was chosen (site selection and subject selection rationale.) The data collection strategy and method of data analysis is described. The chapter concludes with a discussion of the limitations of the study.

Rationale for the Study

The study discusses the examination of various entrepreneurial initiatives and subsequent profit motivated institutional behavior occurring at community colleges as reported by community college presidents. The study also examines factors that may facilitate a community college's ability to pursue profit as well as factors that facilitate a culture of entrepreneurialism. As noted in a review of the literature, discussion regarding academic capitalism has centered on universities, and primarily on those with research centers engaged in patent development and copyrighting, technology transfer, and sponsored research. Slaughter and Leslie (1997) described these organizations as seeking to maximize and stabilize revenue that was needed for its survival (p. 68). These universities also pursue the "prestige objective," viewing revenue generation as a means of both achieving prestige for the institution and securing resources necessary to conduct future research (Slaughter & Leslie, 1997). It is an environment of growing demand for services and an overall decrease in funding that has led to a focus on revenue-generating activities by community colleges (Roueche & Jones, 2005), and therefore to this research idea.

The president of an institution must set the tone for entrepreneurialism in light of the institution's mission and priorities (Slater & Doig, 1985). Beliefs of college presidents are important, equally important is for leaders to be market conscious in trying to anticipate change, identify opportunities, and ensure flexibility (Peck, 1984). While creative revenue-generating initiatives are a necessity in the current environment of funding constraints, escalating costs, increased competition, and governmental calls for greater accountability, higher education is not usually viewed as entrepreneurial (Kozeracki, 1998). This is because a disdain of commerce dominates the culture of higher education as private sector values clash with a culture of teaching, basic research, and governance by peers. Previous studies in the field of

entrepreneurship have assumed that financial incentives were paramount; less attention has been given to noneconomic factors that may drive attitudes towards entrepreneurial behavior (Valliere, 2006).

The multiple missions of community colleges make them increasingly complex (Cohen & Brawer, 1996). As the external environment undergoes profound change, community colleges encompass in single comprehensive institutions the missions of junior colleges, technical colleges, and for-fee education providers. It is in this context of pressures and counter pressures associated with economic change that I am examining a national sample of community colleges. No previous studies have been identified that explore factors which may explain the prevalence of academic capitalism as reported by community college presidents.

Research Questions

The following research questions were answered in this study:

1. What entrepreneurial efforts are community colleges utilizing to maximize revenue-generating opportunities?

2. Do community colleges differ based on the college's Carnegie classification as rural, suburban, or urban?

3. What factors may influence a community college's involvement in academic capitalism?

Does growth diminish concerns about having an entrepreneurial culture?

Do expectations regarding future state appropriations matter?

Do size and percentage of credit and noncredit students matter?

Does unionization result in less of an entrepreneurial emphasis by the college?

Does the governance structure inhibit an institution's ability to take risks and be responsive to its environment?

Does a large percentage of tenured faculty result in a diminishment of concern with the entrepreneurial thrust?

Research Design

This study used quantitative research methods. Quantitative research techniques are used to describe current conditions and investigate relationships among variables (Fay & Wallace, 1987; Muijs, 2004). The study was applicable to a quantitative approach because its goal was to provide a baseline of information from a large number of respondents. The study utilized a survey instrument developed by the researcher, the 33 survey questions were developed based on previously published research findings. As discussed by Muijs (2004), survey research is “particularly suited for canvassing opinions and feelings about particular issues” (p. 45). The goal was to assess the current status of revenue-generating initiatives in the community college sector. The survey responses were used to examine the relationships that may exist between a community college's market focus and a community college's connection to its community, its entrepreneurial culture, its enrollment status, and presidential funding expectations. The survey questions also probed faculty participation in governance, unionization, composition of student body, relationship with 4-year institutions, and demographic questions regarding the presidents' gender, age, and length of service as president. The study also looked at the college's Carnegie classification as rural, urban, or suburban and whether that designation had any impact on the presence of academic capitalism.

The research questions in the study were answered using descriptive research design. Descriptive research involves consciously identifying a topic or a problem, reviewing the literature, selecting an appropriate sample of participants, collecting data, analyzing the data, and reporting conclusions (Gay & Airasian, 2003).

Validity

Validity of a survey instrument addresses whether or not the instrument is measuring what it was intended to measure (Muijs, 2004). Concern for internal validity was demonstrated by the care given in conducting the survey, the attention given to what was and was not measured, and the use of alternative explanations for any causal relationships that emerged. Whether the results may be generalized is a measure of external validity (Huitt, 1998). Face validity was established through the review process by an expert panel and following a presentation to 20 community college administrators at a large suburban community college.

Reliability

Reliability refers to the extent to which research findings can be consistently replicated (Muijs, 2004). Reliability of a survey implies that survey items are free from confusing or multiple interpretations. Reliability of the survey was supported by the panel review process.

Population and Sample

Site Selection and Rationale

In order to garner responses from a diverse national sample of community colleges, a survey was sent to 537 community college presidents included in the following five Carnegie Classification of Community Colleges (Associate's Colleges) groups:

Public, Rural serving large	143
Public, Suburban single campus	110
Public, Suburban multi-campus	100
Public, Urban single campus	32
Public, Urban multi-campus	152
Total Rural	143
Total Suburban	210
Total Urban	184

Of the 1,669 institutions that offer associates degrees, these 537 public institutions are of the greatest interest. Institutions included in the Carnegie classification system of Associate's colleges are based on 2003-2004 IPEDS data and list the associate's degree as the highest degree conferred. If bachelor's degrees are conferred they account for less than 10% of all degrees. None of these institutions are eligible to be classified as Tribal Colleges or Special Focus Institutions. The following Carnegie criteria determined category assignment:

1. Rural, suburban or urban: Urban and suburban institutions are located in areas with populations exceeding 500,000 according to the 2000 Census. Institutions in geographic areas with a lower population or not in a Metropolitan Statistical Areas were classified as rural.

2. Institutional size: Based on full year unduplicated credit headcount as reported to IPEDS for 2003-2004. Average enrollment of colleges in each of the five categories selected exceeds 7,500, which Carnegie classifies as large. Large institutions were chosen as they were expected to have greater capacity to achieve efficiencies (Dowd, 2004).

3. Single campus, multi-campus: Single campus is defined as one primary physical campus that provides all courses required to complete an associate's degree. These institutions may offer courses at other sites that do not offer comprehensive programs and services. Multi-campus institutions have more than one primary physical campus or they are part of a system comprising multiple institutions.

The five Carnegie groups have been collapsed into three groups: the rural colleges, the suburban colleges, and the urban colleges. As a data entry safeguard, surveys were color-coded based on these three categories. Surveys sent to the rural colleges were on pink paper, suburban college surveys were blue, and urban college surveys were goldenrod.

Subject Selection and Rationale

Because of the demand-response nature of community colleges, the organizational response to external demands, and the fact that community colleges enroll almost half of all undergraduate students in American higher education, community college presidents are of particular interest (Eddy, 2005), and the complexity of the community college president's job has been well-documented (Vaughan & Weisman, 1998, 2001). As the institutional leader, the college president's beliefs and actions regarding profit seeking institutional behavior is becoming of paramount importance. Community college presidents are becoming increasingly interested in developing new sources of revenue (Kezar & Eckel, 2002; Kisker & Carducci, 2003; Roueche & Jones, 2005; Spangler, 2002) and studies have demonstrated that more emphasis is being placed on finding college presidents who are able to build external relationships outside of the college (Twombly, 1988; Vaughan & Weisman, 2001).

Data Collection

As noted by Muijs (2004), “the most popular (quantitative) research design in the social sciences is survey research” (p. 34). A survey questionnaire was designed to elicit the entrepreneurial climate in the institution as a whole and among various constituencies; the types of entrepreneurial initiatives engaged in; and any obstacles to success (including governance and union issues.) The 33-question paper questionnaire was sent via mail to each college’s president accompanied by a cover letter (see Appendix B). The cover letter includes an explanation of the purpose of the study and assurances that individual participation is voluntary. Presidents were assured that only aggregate data would be reported and that confidentiality would be maintained. The surveys were numbered so that only the researcher could maintain records on respondents. Contact information was verified from the *2006 Higher Education Directory*. Each college president received the following:

1. A cover letter outlining the purpose of the study and requesting the president’s participation. Included with the cover letter was the 33-question survey instrument.
2. A postage-paid preaddressed envelope in which to return the completed survey to the researcher.
3. An opportunity for respondents who complete and return the survey to request a summary of the research findings.

Data Analysis

An adequate response rate was of primary importance. Standards for acceptable return rates differ and are shaped by the subject being investigated (Hager, Wilson, Pollak, & Rooney, 2003). The survey instrument was sent to 537 community colleges. Two Louisiana colleges were

closed as a consequence of Hurricane Katrina, the survey letters were returned unopened to the researcher with a postal stamp “address unknown.” Of the remaining 535 institutions, 157 community college presidents responded yielding a response rate of 29.3%. This return rate was considered acceptable based on literature that cites that surveys mailed to organizations typically receive lower return rates, with 15% a level of acceptability for organizational surveys and 25% to 30% as typical (Baldauf, Reisinger, & Moncrief, 1999). Surveys delivered to workplaces are returned at lower rates given the preoccupation with work, concerns regarding organizational policies, and issues regarding confidentiality (Greer, Chuchinprakarn, & Seshadri, 2000).

Table 3

Breakdown of Response Rates and Representation

	Rural colleges	Suburban colleges	Urban colleges
Response rate	31.5%	28.6%	28.6%
Percentage of total respondents	28.7%	38.2%	33.1%

The data collected from the presidents was entered on an Excel spreadsheet. The surveys were coded so that only the researcher could determine the identity of the respondents. The spreadsheet was developed whereby each column held a survey question response. SPSS 15.0 was used as the statistical tool. Crosstab tables were generated displaying frequencies and percentages for all survey responses. Chi-square was used to evaluate possible statistically significant differences between independent variables and to look for any statistically significant differences between rural, suburban, and urban institutions. Chi-square analysis was also used to look at the relationships between several predictor (independent) variables and the dependent

variable academic capitalism. The dependent variable academic capitalism (coded AcCap) was created after initial analysis of the data as a proxy for the presence of academic capitalism.

Creation of the academic capitalism variable. For the purpose of this study, academic capitalism is defined as an externally-oriented market approach to maximizing revenue via participation in profit-generating activities. While revenue generation is discussed, the focus is on institutional activities which generate sufficient revenue as to garner profit for the colleges. In order to distinguish those institutions that participate in academic capitalist activities from those who do not, a dummy variable for academic capitalism was created. An explanation for the creation of the dummy variable (labeled AcCap) follows.

Guided by the literature, colleges that engage in joint ventures and/or partnerships with the private sector, specialized training, technical services, and personnel exchanges with public and private sector organizations were viewed as pursuing a marketplace focus. Respondents assessed each initiative as new, traditionally used, planned for the future, or not applicable. The variable (AcCap) was coded as present when an institution reported engaging in these endeavors at any level (new initiative or traditionally used). The yes/no dichotomy allowed for comparisons between institutions and use of the Chi-square statistic.

Initially, the presence of all four initiatives occurring at the college (survey items 7, 8, 9, and 10, at any level of use) were chosen to create the academic capitalism variable. The presence of all four initiatives was found in approximately one-third (33.1%) of the colleges.

Table 4

Capitalism: Four Variables

		<i>f</i>	%	Valid %	Cumulative %
Valid	Yes	52	33.1	33.1	33.1
	No	105	66.9	66.9	100.0
	Total	157	100.0	100.0	

By eliminating one initiative from the group (initiative 8, personnel exchanges) 74.5% of the institutions are captured. Colleges that were labeled as having the academic capitalist variable engaged in technical services to business and/or industry, training for business and/or industry, and joint ventures and/or partnerships with the private sector.

Table 5

Cap-item8: Three Variables

		<i>f</i>	%	Valid %	Cumulative %
Valid	Yes	117	74.5	74.5	74.5
	No	40	25.5	25.5	100.0
	Total	157	100.0	100.0	

Colleges that display the academic capitalism variable are evenly represented by rural, suburban, and urban institutions. Institutions that do not display the academic capitalism variable are comprised of slightly fewer rural and slightly more suburban institutions.

Table 6

*Utilizing Three Variables (Cap-item8): Institution Type * Capitalism Crosstabulation*

			Academic Cap		Total
			Yes	No	
Institution Type	Rural	Count	36	9	45
		% within Cap-item8	30.8%	22.5%	28.7%
	Subur	Count	43	17	60
		% within Cap-item8	36.8%	42.5%	38.2%
	Urban	Count	38	14	52
		% within Cap-item8	32.5%	35.0%	33.1%
Total	Count		117	40	157
	% within Cap-item8		100.0%	100.0%	100.0%

Research Question 1: Data Source and Statistical Analysis

What entrepreneurial efforts are community colleges utilizing to maximize revenue-generating opportunities? How successful are these community college entrepreneurial initiatives?

- a) Technical services to business/industry Survey Q.7
- b) Personnel exchanges with business/industry Survey Q.8
- c) Training programs for business/industry Survey Q.9
- d) Joint ventures and/or partnerships Survey Q.10
- e) College offered distance-learning Survey Q.11
- f) Vendor offered distance-learning Survey Q.12
- g) Profit sharing with auxiliary services Survey Q.13
- h) Lease/rent facilities and/or equipment Survey Q.14
- i) Retail sales of institutional resources Survey Q.15
- j) Most financially successful endeavor Survey Q.16
- k) Contribution to operating budget Survey Q.17
- l) Public sector revenue generation Survey Q.18
- m) Private sector revenue generation Survey Q.19
- n) Current revenue expectation Survey Q.20
- o) Three-year revenue expectation Survey Q.21

Research Questions 2 and 3: Data Source and Statistical Analysis

Do community colleges differ based on the college's Carnegie classification as rural, suburban, or urban?

What factors may influence a community college's involvement in academic capitalism?

p) Presidential experience in years	Survey Q.1
q) President's age	Survey Q.2
r) President's gender	Survey Q.3
s) Institution's credit enrollment	Survey Q.4
t) Institution's noncredit enrollment	Survey Q.5
u) Expectation of future allocations	Survey Q.6
v) Percentage of tenured faculty	Survey Q.22
w) Collective bargaining environment	Survey Q.23
x) Faculty participation, shared governance	Survey Q.24
y) Academic units are entrepreneurial	Survey Q.25
z) Incentives for entrepreneurialism	Survey Q.26
aa) Faculty responsiveness	Survey Q.27
bb) Governing board	Survey Q.28, Survey Q.29
cc) Composition of student body	Survey Q.30
dd) Transfer agreements with four-year	Survey Q.31
ee) Resource allocation	Survey Q.32
ff) Organizational structure	Survey Q.33

Assumptions and Limitations of the Study

Several assumptions were made during the development of this study which has implications for the study's results and interpretation. First, it was assumed that the survey would provide sufficient data to answer the research questions adequately. Secondly, college presidents responded to the survey questions based on their knowledge and opinions, it was assumed that their responses regarding their institutions were accurate. Additionally, it was assumed that the items on the survey were interpreted similarly by all respondents. For the purposes of this study, respondents' use of the terms revenue generation and profit realization are considered. This study

used self-reported survey data and data analysis was limited by the response rate and accuracy of the participant's responses.

The study was limited to rural, suburban, and urban public 2-year associates' degree conferring institutions with an unduplicated credit head count of 7,500 or greater. Additional and/or different findings may emerge from a study that looks exclusively at rural colleges, suburban colleges, urban colleges, or single versus multiple campus colleges. The economic climate in which the colleges find themselves varies considerably, and a study that focuses on a particular geographic area may yield results that differ from those found in a heterogeneous national sample.

Opportunities and constraints on entrepreneurialism may be a consequence of differing governance structures. While some states offer college governing boards more autonomy for the effective operation of institutions, some states believe that strong centralized statewide coordination is necessary to ensure that "post-secondary institutions and systems work collectively toward the state interest" (Lovell & Trough, 2002, p. 92). This study includes colleges in states with varying degrees of autonomy, from highly centralized to highly decentralized. The freedom to act with autonomy from a statewide governance system may influence a community college's motivation and ability to pursue profit.

An additional limitation is that this study explored community college revenue and profit pursuits from a holistic perspective. In colleges it is typically the continuing education units that are characterized by innovation and responsiveness (Downey, Pusser, & Turner, 2006). These typically noncredit divisions are more entrepreneurial and a study focusing on these units alone may have yielded different results. Finally, academic entrepreneurialism is mindful of the balance between a culture of innovation and respect for faculty's role in safeguarding the

academic integrity of an institution (Clark, 2000). While this study included faculty questions such as the role of shared governance and faculty incentives as they relate to entrepreneurialism, a study of community college faculty exploring their perspective on entrepreneurial initiatives may yield different results.

Conclusion

The purpose of this study was to identify and examine ways in which large community colleges are utilizing entrepreneurialism to maximize revenue generation, and the extent to which profit realization is occurring. This study was completed using a survey developed by the researcher. Survey responses were collected from community college presidents at large rural, suburban and urban institutions. The data were analyzed using descriptive and non-parametric statistical procedures. Demographic data were also collected and analyzed. This chapter outlined the research questions, procedures, and methods used to complete and interpret the study, discussing research design, site and subject selection, data collection, data analysis, and limitations of the study.

CHAPTER 4

FINDINGS

Introduction

A growing body of literature supports the existence of an academic capitalist environment in large public research universities (Bok, 2003; Buchbinder, 1993; Slaughter & Rhoades, 2004). Academic capitalism is a new notion for the community colleges and as such has not been studied adequately (Downey et al., 2006; Roueche & Jones, 2005). This study describes the profit motivated behavior that exists in the 2-year sector. Across the country, community colleges find themselves struggling with declines in government funding while facing significant enrollment growth and consequential increasing operational costs. To offset this decline in financial support, community colleges became creative in finding ways to support growth, subsidize increasing operational costs as a result of the growing demand for services, and still remain affordable for the disproportionately large number of economically disadvantaged students that they serve.

This study explores the extent of traditional revenue-generating activities and profit motivated initiatives taking place at the colleges as well as institutional variables that may facilitate or impede success. The responses were from the perspective of the college president. The study surveyed community college presidents because of their primary importance in institutional decision making and priority setting, resource allocation, and their role in creating and sustaining a culture of entrepreneurialism. The survey instrument sought to provide a means

to examine traditionally used and new institutional initiatives used to generate revenue, their financial success, institutional characteristics, and stakeholder expectations.

This chapter presents findings that were derived from an analysis of national survey data. Since it is the college president who determines institutional priorities, Part 1 describes the presidents and their beliefs and expectations regarding revenue. Part 2 looks at entrepreneurial activity at the colleges and the extent of success. The construction of the dependent variable academic capitalism (AcCap) is explained. The variable's absence or presence, as well as its relationship with various institutional characteristics, are examined. Part 3 describes institutional characteristics as they relate to the presence of academic capitalism and a culture of entrepreneurialism. Findings are reported for the national sample at large and across institutional type (rural, suburban, and urban). The results are primarily descriptive and as such create a baseline for further research in this area.

Findings

Part 1: The Presidents

College presidents who responded to this study have held the position of president an average of 9.44 years. It is not known if they achieved the presidency via the traditional “up through the academic ranks” route or if some achieved a presidency from previous positions in development, finance, other nonprofit entities, or the for-profit sector. The mean value for presidential tenure at urban colleges is the longest at approximately 11 years.

Table 7

Years as President

Institution Type	<i>M</i>	<i>N</i>	<i>SD</i>
Rural	8.72	39	7.705
Suburban	8.75	53	9.085
Urban	10.93	43	7.314
Total	9.44	135	8.166

Age. Half (49.7%) of the community college presidents reported their age as being between 51 and 60, with an additional 39.4% between 61 and 70 years of age. Combined, 89.1% of presidents were between 51 and 70 years of age. Age was consistent across institutional type.

Table 8

Age

		<i>f</i>	%	Valid %	Cumulative %
Valid	Under40	3	1.9	1.9	1.9
	41-50	11	7.0	7.1	9.0
	51-60	77	49.0	49.7	58.7
	61-70	61	38.9	39.4	98.1
	over70	3	1.9	1.9	100.0
	Total	155	98.7	100.0	
Missing	System	2	1.3		
Total		157	100.0		

Table 9

*Age * Institution Type Crosstabulation*

		Institution type				
		Rural	Suburban	Urban	Total	
Age	Under40	Count	1	2	0	3
		% within institution type	2.2%	3.4%	.0%	1.9%
	41-50	Count	4	3	4	11
		% within Institution Type	8.9%	5.1%	7.8%	7.1%
	51-60	Count	23	26	28	77
		% within institution type	51.1%	44.1%	54.9%	49.7%
	61-70	Count	15	27	19	61
		% within institution type	33.3%	45.8%	37.3%	39.4%
	over70	Count	2	1	0	3
		% within institution type	4.4%	1.7%	.0%	1.9%
Total		Count	45	59	51	155
		% within institution type	100.0%	100.0%	100.0%	100.0%

Gender. Seventy percent (70.1%) of respondents are male. Of the 30% who are female, half were presidents at urban colleges.

Table 10

Gender

		<i>f</i>	%	Valid %	Cumulative %
Valid	male	108	68.8	70.1	70.1
	female	46	29.3	29.9	100.0
	Total	154	98.1	100.0	
Missing	System	3	1.9		
Total		157	100.0		

Table 11

*Gender * Institution Type Crosstabulation*

			Institution type			Total
			Rural	Suburban	Urban	
Gender	male	Count	35	44	29	108
		% within institution type	79.5%	75.9%	55.8%	70.1%
	female	Count	9	14	23	46
		% within institution type	20.5%	24.1%	44.2%	29.9%
Total	Count		44	58	52	154
	% within institution type		100.0%	100.0%	100.0%	100.0%

Expectations regarding state allocations: presidential view. In the aggregate, nearly half (47.1%) of college presidents expect state allocations to the community college sector in their state to remain the same. The remaining half is split into those who expect allocations to increase (27.1%) and those who expect allocations to decrease (25.8%). There are no significant differences between the expectations of rural, suburban, and urban presidents with regard to future funding expectations. Male and female presidents deviate with regard to funding expectations, with male presidents twice as likely to expect state allocations to increase (31.8% vs. 15.2%).

Table 12

Expectations: State Allocations

		<i>f</i>	%	Valid %	Cumulative %
Valid	increase	42	26.8	27.1	27.1
	decrease	40	25.5	25.8	52.9
	remain the same	73	46.5	47.1	100.0
	Total	155	98.7	100.0	
Missing	System	2	1.3		
Total		157	100.0		

Table 13

*State Allocations * Institution Type Crosstabulation*

			Institution Type			
			Rural	Suburban	Urban	Total
State Allocations	increase	Count	12	14	16	42
		% within institution type	27.3%	23.7%	30.8%	27.1%
	decrease	Count	9	17	14	40
		% within institution type	20.5%	28.8%	26.9%	25.8%
	remain the same	Count	23	28	22	73
		% within institution type	52.3%	47.5%	42.3%	47.1%
Total	Count		44	59	52	155
	% within institution type		100.0%	100.0%	100.0%	100.0%

Table 14

*State Allocations * Gender Crosstabulation*

			Gender		
			Male	Female	Total
State Allocations	increase	Count	34	7	41
		% within Gender	31.8%	15.2%	26.8%
	decrease	Count	26	14	40
		% within Gender	24.3%	30.4%	26.1%
	remain the same	Count	47	25	72
		% within Gender	43.9%	54.3%	47.1%
Total	Count		107	46	153
	% within Gender		100.0%	100.0%	100.0%

Part 2: Entrepreneurial Activity at the Colleges

For the purpose of this study, entrepreneurship is defined as an intentional private market approach to managing institutions, identified by the presence of institutional initiatives with a revenue generation objective. The research questions examined in this section address entrepreneurial initiatives and the extent to which these initiatives are successful.

The survey instrument lists nine potential revenue-generating institutional initiatives and asks presidents to indicate if and to what extent each initiative is being used at their institution. The request is to check one box among four choices: new initiative, traditionally used initiative, planned for the future, or not applicable. Additionally, presidents were asked to rate the success of each initiative as either new to the institution or traditionally used. Table 12 summarizes the initiative status data. Table 15 summarizes the extent to which these revenue-generating initiatives are successful.

Table 15

Entrepreneurial Institutional Initiatives

Initiative	New initiative %	Traditionally used %	Planned for future %	Not applicable %
Technical services to business/industry (<i>n</i> = 150)	8.0	73.3	4.7	14.0
Personnel exchanges (<i>n</i> = 150)	5.3	22.7	10.0	62.0
Contract training (<i>n</i> = 152)	3.3	92.8	3.3	0.7
Joint ventures and/or partnerships (<i>n</i> = 152)	15.1	63.8	13.8	7.2
Distance learning/internal (<i>n</i> = 153)	10.5	83.7	3.9	2.0
Distance learning/vendor (<i>n</i> = 148)	11.5	23.0	19.6	45.9
Profit sharing with food service, bookstore (<i>n</i> = 149)	5.4	64.4	1.3	28.9
Lease/rent facilities/equipment (<i>n</i> = 154)	3.9	75.3	5.2	15.6
Sale of institutional resources (<i>n</i> = 152)	2.0	5.9	11.2	80.9

Note. *n* = number of respondents.

The most frequent traditionally used initiative is contract training (92.8%). Among all respondents, one half (50.3%) of the colleges report the average public sector contract training amount to be greater than \$10,000, with approximately one-quarter (23.5%) of colleges reporting the average yearly contract training amount as \$50,000 or greater.

Table 16

Public Sector Contract Training: Institutional Type

			Institution Type			Total
			Rural	Suburban	Urban	
Item 18	< \$10K	Count	25	28	23	76
		% within institution type	55.6%	48.3%	46.0%	49.7%
	\$10K-25K	Count	9	10	9	28
		% within institution type	20.0%	17.2%	18.0%	18.3%
	\$25K-50K	Count	1	7	5	13
		% within institution type	2.2%	12.1%	10.0%	8.5%
	\$50K-100K	Count	3	3	5	11
		% within institution type	6.7%	5.2%	10.0%	7.2%
	\$100K-500K	Count	6	6	5	17
		% within institution type	13.3%	10.3%	10.0%	11.1%
	\$500K or more	Count	1	4	3	8
		% within institution type	2.2%	6.9%	6.0%	5.2%
Total		Count	45	58	50	153
		% within institution type	100.0%	100.0%	100.0%	100.0%

Contract training agreements with private sector institutions generate slightly more revenue for the colleges. Roughly two-thirds of the colleges (65.6%) report the average private sector contract training amount to be greater than \$10,000, with 15.5% reporting average amounts as \$100,000 or greater.

Table 17

Private Sector Contract Training

			Institution Type			
			Rural	Suburban	Urban	Total
Item 19	< \$10K	Count	16	22	15	53
		% within institution type	35.6%	37.3%	30.0%	34.4%
	\$10K-25K	Count	15	13	12	40
		% within institution type	33.3%	22.0%	24.0%	26.0%
	\$25K-50K	Count	4	5	8	17
		% within institution type	8.9%	8.5%	16.0%	11.0%
	\$50K-100K	Count	4	9	7	20
		% within institution type	8.9%	15.3%	14.0%	13.0%
	\$100K-500K	Count	5	7	7	19
		% within institution type	11.1%	11.9%	14.0%	12.3%
	\$500K or more	Count	1	3	1	5
		% within institution type	2.2%	5.1%	2.0%	3.2%
Total		Count	45	59	50	154
		% within institution type	100.0%	100.0%	100.0%	100.0%

Distance learning programs offered within the existing organizational structure represent the second most frequently used institutional initiative (83.7%). The data suggests an expansion of traditional fee for service contract training to include collaborative joint ventures and/or partnerships with the private sector. Almost 80% (78.9%) of presidents cite joint ventures and/or partnerships with the private sector as a new or traditionally used initiative, with an additional 13.8% identifying these initiatives as being planned for the future.

In an effort to capitalize on the availability of institutional resources, lease and/or rental of college facilities and equipment is being utilized for revenue generation in 79.2% of the colleges. Profit sharing agreements with food service, bookstore, and other auxiliary services are being utilized by 69.8% of the colleges.

The majority of college presidents (62%) cite personnel exchanges with business-industry as not applicable, almost one-half of respondents cite distance learning in partnership with a

vendor as not applicable (45.9%), and roughly 30% of respondents cite profit sharing agreements as not applicable (28.9%). Eighty percent (80.9%) of presidents cite the sale of institutional resources as not applicable.

Success of initiatives. Presidents were asked to comment on the financial success of initiatives that were currently being used. Table 15 lists the extent to which participation in these revenue-generating initiatives is viewed as successful.

Table 18

Success of Entrepreneurial Initiatives

Initiative	High %	Moderate %	Minimal %	Not successful %
Technical services to business and/or industry (n =116)	50.9	43.1	6.0	0.0
Personnel exchanges (n =51)	43.2	33.3	7.8	15.7
Contract training (n =143)	69.2	27.3	3.5	0
Joint ventures and/or partnerships (n =119)	59.7	33.6	5.9	0.8
Distance learning/internal (n =135)	68.9	27.4	3.7	0
Distance learning/vendor (n =47)	36.2	46.8	6.4	10.6
Profit sharing with food service, bookstore (n =105)	52.4	30.5	13.3	3.8
Lease/rent facilities/equipment (n =121)	38.0	45.5	14.9	1.7
Retail sales (n =22)	9.1	36.4	18.2	36.4

Note. n = number of respondents.

Among the colleges that engage in these endeavors, approximately 70% of presidents cite contract training programs and distance learning (internal) as the most highly successful institutional initiatives (69.2% and 68.9%). For those colleges that engage in joint ventures

and/or partnerships and technical services to business and/or industry, presidents report these as very successful college initiatives (94% and 93.3%). Profit sharing agreements with auxiliary services and the lease and/or rental of college facilities or equipment are also successful revenue-generating activities as reported by the presidents (82.9% and 83.5%, respectively).

Almost all of the colleges (96%) are engaged in relationships with public and private business and industry. Additionally, 86% are currently, or soon to be, engaged in providing technical services, and 78.9% are in joint ventures and/or partnerships with the private sector. Seventy percent (69.8%) of the colleges are engaged in profit sharing, and 79.2% in lease/rental opportunities. When asked which activity generates the most revenue for the college, excluding credit bearing tuition and fees, 39.2% of presidents cite contract training and 26.8% cite noncredit courses. Online courses are the largest revenue generator in 19% of the colleges.

Table 19

Revenue-generating Initiative

		<i>f</i>	%	Valid %	Cumulative %
Valid	Fee based	41	26.1	26.8	26.8
	contract training	60	38.2	39.2	66.0
	online courses	29	18.5	19.0	85.0
	consulting	1	.6	.7	85.6
	space and facility rental	17	10.8	11.1	96.7
	other	5	3.2	3.3	100.0
	Total	153	97.5	100.0	
Missing	System	4	2.5		
Total		157	100.0		

Almost three fourths (71.9%) of presidents cite the revenue generated by their most successful initiative as representing less than 10% of the yearly operating budget. Among the

institutional types, the most successful revenue-generating activities represent a larger percentage of the operating budget at suburban and urban institutions.

Table 20

Contribution to Budget

			Institution Type			Total
			Rural	Suburban	Urban	
Item 17	0-9%	Count	37	39	34	110
		% within institution type	82.2%	68.4%	66.7%	71.9%
	10-14%	Count	4	10	7	21
		% within institution type	8.9%	17.5%	13.7%	13.7%
	15-19%	Count	2	2	6	10
		% within institution type	4.4%	3.5%	11.8%	6.5%
	20% or more	Count	2	6	4	12
		% within institution type	4.4%	10.5%	7.8%	7.8%
Total		Count	45	57	51	153
		% within institution type	100.0%	100.0%	100.0%	100.0%

Presidents were asked to share their most optimistic view of business-industry revenue envisioned for the current fiscal year. Almost 70% (67.9%) of presidents envision revenue of \$100,000 or greater in this fiscal year, this does not vary by institutional type.

Table 21

Revenue Expectations: This Fiscal Year

		<i>f</i>	%	Valid %	Cumulative %
Valid	< \$50K	22	14.0	14.1	14.1
	\$50K-100K	28	17.8	17.9	32.1
	\$100K - 250K	26	16.6	16.7	48.7
	\$250K - 500K	24	15.3	15.4	64.1
	\$500K - 1M	28	17.8	17.9	82.1
	1M or more	28	17.8	17.9	100.0
	Total	156	99.4	100.0	
Missing	System	1	.6		
Total		157	100.0		

Table 22

*Revenue Expectation: This Fiscal Year * Institution Type Crosstabulation*

			Institution Type			
			Rural	Suburban	Urban	Total
Item 20	< \$50K	Count	5	10	7	22
		% within institution type	11.1%	16.7%	13.7%	14.1%
	\$50K-100K	Count	8	13	7	28
		% within institution type	17.8%	21.7%	13.7%	17.9%
	\$100K - 250K	Count	9	12	5	26
		% within institution type	20.0%	20.0%	9.8%	16.7%
	\$250K - 500K	Count	8	7	9	24
		% within institution type	17.8%	11.7%	17.6%	15.4%
	\$500K - 1M	Count	10	9	9	28
		% within institution type	22.2%	15.0%	17.6%	17.9%
	1M or more	Count	5	9	14	28
		% within institution type	11.1%	15.0%	27.5%	17.9%
Total		Count	45	60	51	156
		% within institution type	100.0%	100.0%	100.0%	100.0%

Almost two thirds (65.6%) of presidents envision revenue of \$250,000 or greater in three years. Responses to a 3-year outlook do not differ based on expectations of future funding or institutional type. Urban institutions appear to have more optimistic goals, with 48% of urban respondents anticipating business-industry partnership revenue to reach \$1 million or more in the next 3 years.

Table 23

Revenue Expectations: In 3 Years

		<i>f</i>	%	Valid %	Cumulative %
Valid	< \$50K	13	8.3	8.4	8.4
	\$50K-100K	16	10.2	10.4	18.8
	\$100K - 250K	24	15.3	15.6	34.4
	\$250K - 500K	19	12.1	12.3	46.8
	\$500K - 1M	27	17.2	17.5	64.3
	1M or more	55	35.0	35.7	100.0
	Total	154	98.1	100.0	
Missing	System	3	1.9		
Total		157	100.0		

Table 24

*Revenue Expectations: In 3 Years * Institution Type*

Item			Institution Type			Total
			Rural	Suburban	Urban	
21	< \$50K	Count	2	6	5	13
		% within institution type	4.5%	10.0%	10.0%	8.4%
	\$50K-100K	Count	5	7	4	16
		% within institution type	11.4%	11.7%	8.0%	10.4%
	\$100K - 250K	Count	8	12	4	24
		% within institution type	18.2%	20.0%	8.0%	15.6%
	\$250K - 500K	Count	9	8	2	19
		% within institution type	20.5%	13.3%	4.0%	12.3%
	\$500K - 1M	Count	7	9	11	27
		% within institution type	15.9%	15.0%	22.0%	17.5%
	1M or more	Count	13	18	24	55
		% within institution type	29.5%	30.0%	48.0%	35.7%
	Total	Count	44	60	50	154
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 25

*Revenue Expectations: In 3 Years * State Allocations*

			State Allocations			
			Increase	Decrease	Remain the same	Total
Item 21	< \$50K	Count	3	5	5	13
		% within State Allocations	7.1%	13.2%	6.9%	8.6%
	\$50K-100K	Count	3	4	9	16
		% within State Allocations	7.1%	10.5%	12.5%	10.5%
	\$100K - 250K	Count	9	3	11	23
		% within State Allocations	21.4%	7.9%	15.3%	15.1%
	\$250K - 500K	Count	3	5	11	19
		% within State Allocations	7.1%	13.2%	15.3%	12.5%
	\$500K - 1M	Count	6	9	12	27
		% within State Allocations	14.3%	23.7%	16.7%	17.8%
	1M or more	Count	18	12	24	54
		% within State Allocations	42.9%	31.6%	33.3%	35.5%
Total		Count	42	38	72	152
		% within State Allocations	100.0%	100.0%	100.0%	100.0%

Associations with the academic capitalism variable. Tables 26 and 27 describe the extent to which each revenue-generating initiative is utilized by colleges having the academic capitalism variable. Distance learning utilizing internal resources such as existing faculty, staff, and web support (Table 26) is a traditionally used revenue-generating initiative regardless of whether institutions display the academic capitalism variable. Distance learning utilizing an external educational vendor (Table 27) is cited as not applicable in 65.7% of institutions not displaying academic capitalism. Of colleges with the academic capitalism variable, 40% cite offering distance learning through an outside vendor as not applicable. By virtue of their entrepreneurial nature, colleges displaying academic capitalism may discount going to an outside source if internal sources can be made available.

Table 26

*Distance Learning (Internal) * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 11A	New Initiative	Count	12	4	16
		% within Cap-item8	10.3%	11.1%	10.5%
	Traditionally Used	Count	97	31	128
		% within Cap-item8	82.9%	86.1%	83.7%
	Planned for the Future	Count	6	0	6
		% within Cap-item8	5.1%	.0%	3.9%
	Not Applicable	Count	2	1	3
		% within Cap-item8	1.7%	2.8%	2.0%
Total	Count		117	36	153
	% within Cap-item8		100.0%	100.0%	100.0%

Table 27

*Distance Learning (Vendor) * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 12A	New Initiative	Count	15	2	17
		% within Cap-item8	13.3%	5.7%	11.5%
	Traditionally Used	Count	29	5	34
		% within Cap-item8	25.7%	14.3%	23.0%
	Planned for the Future	Count	24	5	29
		% within Cap-item8	21.2%	14.3%	19.6%
	Not Applicable	Count	45	23	68
		% within Cap-item8	39.8%	65.7%	45.9%
Total	Count		113	35	148
	% within Cap-item8		100.0%	100.0%	100.0%

Profit sharing with auxiliaries such as the bookstore and food services (Table 28) and the lease/rental of facilities (Table 29) is more frequently seen in institutions displaying the academic capitalism variable.

Table 28

*Profit Sharing * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 13A	New Initiative	Count	6	2	8
		% within Cap-item8	5.3%	5.6%	5.4%
	Traditionally Used	Count	76	20	96
		% within Cap-item8	67.3%	55.6%	64.4%
	Planned for the Future	Count	2	0	2
		% within Cap-item8	1.8%	.0%	1.3%
	Not Applicable	Count	29	14	43
		% within Cap-item8	25.7%	38.9%	28.9%
Total	Count		113	36	149
	% within Cap-item8		100.0%	100.0%	100.0%

Table 29

*Lease/Rent * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 14A	New Initiative	Count	6	0	6
		% within Cap-item8	5.2%	.0%	3.9%
	Traditionally Used	Count	85	31	116
		% within Cap-item8	73.3%	81.6%	75.3%
	Planned for the Future	Count	8	0	8
		% within Cap-item8	6.9%	.0%	5.2%
	Not Applicable	Count	17	7	24
		% within Cap-item8	14.7%	18.4%	15.6%
Total	Count		116	38	154
	% within Cap-item8		100.0%	100.0%	100.0%

Retail sales of institutional resources such as computer lab time and internet access by the hour appear to be unacceptable mechanisms for generating revenue in the community college sector. Perhaps it is because community colleges function very often as community resource

centers funded by local taxpayers that this notion of selling the resources of the college is distasteful.

Table 30

*Sale of Resources * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 15A	New Initiative	Count	3	0	3
		% within Cap-item8	2.6%	.0%	2.0%
	Traditionally Used	Count	7	2	9
		% within Cap-item8	6.0%	5.6%	5.9%
	Planned for the Future	Count	16	1	17
		% within Cap-item8	13.8%	2.8%	11.2%
	Not Applicable	Count	90	33	123
		% within Cap-item8	77.6%	91.7%	80.9%
Total	Count		116	36	152
	% within Cap-item8		100.0%	100.0%	100.0%

Part 3: Institutional Characteristics

Revenue-generating activities are largely extraneous to the core mission of the community college. In this section, institutional characteristics are considered for their possible effect on entrepreneurial behavior and academic capitalism.

Credit enrollment. Roughly one half (49.0%) of institutions have an unduplicated headcount credit enrollment of 10,000 or more. Roughly one quarter (24.8%) of the institutions report a credit headcount of 15,000+. Urban institutions have the largest credit enrollment among the responding institutions, with 53.8% of urban institutions reporting credit enrollment of 15,000+. Interestingly, almost 15% of respondents, primarily suburban institutions, report a credit enrollment of less than 5,000 students.

Chi square analysis verifies that there is no relationship between the size of the institution's credit enrollment and an institution's participation in academic capitalism.

Table 31

Credit Enrollment

		<i>f</i>	%	Valid %	Cumulative %
Valid	under 5000	23	14.6	14.6	14.6
	5000-10000	57	36.3	36.3	51.0
	10000-15000	38	24.2	24.2	75.2
	15000+	39	24.8	24.8	100.0
	Total	157	100.0	100.0	

Table 32

*Credit Enrollment * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Credit Enrollment	under 5000	Count	2	17	4	23
		% within institution type	4.4%	28.3%	7.7%	14.6%
	5000-10000	Count	23	22	12	57
		% within institution type	51.1%	36.7%	23.1%	36.3%
	10000-15000	Count	11	12	15	38
		% within institution type	24.4%	20.0%	28.8%	24.2%
	15000+	Count	9	9	21	39
		% within institution type	20.0%	15.0%	40.4%	24.8%
Total		Count	45	60	52	157
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 33

*Credit Enrollment * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Credit Enrollment	under 5000	Count	17	6	23
		% within Cap-item8	14.5%	15.0%	14.6%
	5000-10000	Count	42	15	57
		% within Cap-item8	35.9%	37.5%	36.3%
	10000-15000	Count	28	10	38
		% within Cap-item8	23.9%	25.0%	24.2%
	15000+	Count	30	9	39
		% within Cap-item8	25.6%	22.5%	24.8%
Total		Count	117	40	157
		% within Cap-item8	100.0%	100.0%	100.0%

Noncredit enrollment. Noncredit student enrollment is consistent across institutional type, with 42.3% of institutions having a noncredit enrollment of 10,000 or greater. Institutions with very small noncredit student populations (< 1,000 students) are statistically less likely to engage in academic capitalist initiatives. Unlike credit enrollment, there is a relationship between noncredit enrollment and the presence of the academic capitalism variable; $\chi^2(4, N = 156) = 11.167, p < .05$.

Table 34

Noncredit Enrollment

		<i>f</i>	%	Valid %	Cumulative %t
Valid	under 1000	21	13.4	13.5	13.5
	1000-5000	38	24.2	24.4	37.8
	5000-10000	31	19.7	19.9	57.7
	10000-15000	28	17.8	17.9	75.6
	15000+	38	24.2	24.4	100.0
	Total	156	99.4	100.0	
Missing	System	1	.6		
Total		157	100.0		

Table 35

*Noncredit Enrollment * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Noncredit Enrollment	under 1000	Count	4	10	7	21
		% within institution type	8.9%	16.7%	13.7%	13.5%
	1000-5000	Count	11	14	13	38
		% within institution type	24.4%	23.3%	25.5%	24.4%
	5000-10000	Count	12	9	10	31
		% within institution type	26.7%	15.0%	19.6%	19.9%
	10000-15000	Count	8	14	6	28
		% within institution type	17.8%	23.3%	11.8%	17.9%
15000+	Count	10	13	15	38	
	% within institution type	22.2%	21.7%	29.4%	24.4%	
Total	Count	45	60	51	156	
	% within institution type	100.0%	100.0%	100.0%	100.0%	

Table 36

*Noncredit Enrollment * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Noncredit Enrollment	under 1000	Count	10	11	21
		% within Cap-item8	8.5%	28.2%	13.5%
	1000-5000	Count	30	8	38
		% within Cap-item8	25.6%	20.5%	24.4%
	5000-10000	Count	27	4	31
		% within Cap-item8	23.1%	10.3%	19.9%
	10000-15000	Count	21	7	28
		% within Cap-item8	17.9%	17.9%	17.9%
15000+	Count	29	9	38	
	% within Cap-item8	24.8%	23.1%	24.4%	
Total	Count	117	39	156	
	% within Cap-item8	100.0%	100.0%	100.0%	

Table 37

Chi-Square Test: Noncredit Enrollment

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.167(a)	4	.025
Likelihood Ratio	10.335	4	.035
Linear-by-Linear Association	2.149	1	.143
N of Valid Cases	156		

Note. (a) = 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.25.

Collective bargaining. The majority (62.2%) of presidents report faculty as unionized on their campuses. This does not vary significantly by institution type. There is a significant relationship between the percentage of full-time tenure track faculty and the presence of a unionized campus; $\chi^2(3, N = 154) = 44.148, p < .05$. The larger the percentage of full-time faculty, the more likely there is a union presence on campus.

Table 38

Collective Bargaining

		f	%	Valid %	Cumulative %
Valid	Yes	97	61.8	62.2	62.2
	No	59	37.6	37.8	100.0
	Total	156	99.4	100.0	
Missing	System	1	.6		
Total		157	100.0		

Table 39

Collective Bargaining Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 23	Yes	Count	29	38	30	97
		% within institution type	64.4%	63.3%	58.8%	62.2%
	No	Count	16	22	21	59
		% within institution type	35.6%	36.7%	41.2%	37.8%
Total	Count		45	60	51	156
	% within institution type		100.0%	100.0%	100.0%	100.0%

Table 40

*Collective Bargaining * Full-time Faculty Crosstabulation*

			Full-time faculty				Total
			< 20%	25-40%	45-60%	> 65%	
Item 23	Yes	Count	2	10	51	33	96
		% within Item 22	7.4%	58.8%	75.0%	78.6%	62.3%
	No	Count	25	7	17	9	58
		% within Item 22	92.6%	41.2%	25.0%	21.4%	37.7%
Total	Count		27	17	68	42	154
	% within Item 22		100.0%	100.0%	100.0%	100.0%	100.0%

Table 41

Chi-Square Test: Collective Bargaining

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	44.148(a)	3	.000
Likelihood Ratio	46.599	3	.000
Linear-by-Linear Association	36.014	1	.000
N of Valid Cases	154		

Note. (a) = 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.40.

Unionization has been associated with less entrepreneurialism given the adherence to a rigid interpretation of the terms and conditions of employment (Bok, 2003). This study finds no relationship between academic capitalism and unionization at the colleges.

Table 42

*Collective Bargaining * Cap-item8 Crosstabulation*

		Academic Cap		Total	
		Yes	No		
Item 23	Yes	Count	70	27	97
		% within Cap-item8	60.3%	67.5%	62.2%
	No	Count	46	13	59
		% within Cap-item8	39.7%	32.5%	37.8%
Total		Count	116	40	156
		% within Cap-item8	100.0%	100.0%	100.0%

Shared governance. Greater than half (58.2%) of the respondents cite strong shared governance on their campuses. A strong shared governance environment is less evident in rural institutions (47.7%) and more evident in suburban institutions (65%). The level of shared governance does not influence the presence of academic capitalism.

Table 43

Governance

		<i>f</i>	%	Valid %	Cumulative %
Valid	Strong Shared governance	89	56.7	58.2	58.2
	Informal Shared governance	36	22.9	23.5	81.7
	shared governance on specific issues	28	17.8	18.3	100.0
	Total	153	97.5	100.0	
Missing	System	4	2.5		
Total		157	100.0		

Table 44

*Governance * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 24	Strong shared governance	Count	21	39	29	89
		% within institution type	47.7%	65.0%	59.2%	58.2%
	Informal shared governance	Count	17	7	12	36
		% within institution type	38.6%	11.7%	24.5%	23.5%
	Shared governance on specific issues	Count	6	14	8	28
		% within institution type	13.6%	23.3%	16.3%	18.3%
Total	Count		44	60	49	153
	% within institution type		100.0%	100.0%	100.0%	100.0%

Table 45

*Governance * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 24	Strong shared governance	Count	63	26	89
		% within Cap-item8	55.8%	65.0%	58.2%
	Informal shared governance	Count	28	8	36
		% within Cap-item8	24.8%	20.0%	23.5%
	Shared governance on specific issues	Count	22	6	28
		% within Cap-item8	19.5%	15.0%	18.3%
Total	Count		113	40	153
	% within Cap-item8		100.0%	100.0%	100.0%

Faculty status. The majority (71.5%) of colleges' report 45% or more of their faculty as full-time tenure track and tenured, with 27.3% reporting greater than 65% of their faculty as full-time tenure track and tenured. This is consistent across institutional type. The percentage of full-time tenure track faculty does not influence the presence of the academic capitalism variable.

Table 46

Faculty

		<i>f</i>	%	Valid %	Cumulative %
Valid	< 20%	27	17.2	17.5	17.5
	25-40%	17	10.8	11.0	28.6
	45-60%	68	43.3	44.2	72.7
	> 65%	42	26.8	27.3	100.0
	Total	154	98.1	100.0	
Missing	System	3	1.9		
Total		157	100.0		

Table 47

*Faculty * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 22	< 20%	Count	8	10	9	27
		% within institution type	18.2%	16.9%	17.6%	17.5%
	25-40%	Count	4	4	9	17
		% within institution type	9.1%	6.8%	17.6%	11.0%
	45-60%	Count	19	26	23	68
		% within institution type	43.2%	44.1%	45.1%	44.2%
	> 65%	Count	13	19	10	42
		% within institution type	29.5%	32.2%	19.6%	27.3%
Total		Count	44	59	51	154
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 48

*Faculty * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 22	< 20%	Count	22	5	27
		% within Cap-item8	19.1%	12.8%	17.5%
	25-40%	Count	14	3	17
		% within Cap-item8	12.2%	7.7%	11.0%
	45-60%	Count	48	20	68
		% within Cap-item8	41.7%	51.3%	44.2%
	> 65%	Count	31	11	42
		% within Cap-item8	27.0%	28.2%	27.3%
Total		Count	115	39	154
		% within Cap-item8	100.0%	100.0%	100.0%

Entrepreneurialism in the academic units. In order for an institution to be successful at entrepreneurship, the academic units must display a strong entrepreneurial culture. Only 17.4% of presidents view the academic units at their institution as entrepreneurial. Roughly one-half (52.9%) believe that there is recognition of the need to be entrepreneurial yet little is happening at the academic unit level. Almost a third of the college presidents believe that there is little recognition of the need to be entrepreneurial at the academic unit level (29.7%). The vast majority of institutions (82.6%) have academic units that do not appear to be entrepreneurial. This is consistent across institutional type.

Table 49

Academic Units

		<i>f</i>	%	Valid %	Cumulative %
Valid	Units are very entrepreneurial	27	17.2	17.4	17.4
	Recognition of need but little happening	82	52.2	52.9	70.3
	Little recognition of need	46	29.3	29.7	100.0
	Total	155	98.7	100.0	
Missing	System	2	1.3		
Total		157	100.0		

Table 50

*Academic Units * Institution Type Crosstabulation*

		Institution Type				
		Rural	Suburban	Urban	Total	
Item 25	Units are very entrepreneurial	Count	8	9	10	27
		% within institution type	17.8%	15.0%	20.0%	17.4%
	Recognition of need but little happening	Count	21	35	26	82
		% within institution type	46.7%	58.3%	52.0%	52.9%
	Little recognition of need	Count	16	16	14	46
		% within institution type	35.6%	26.7%	28.0%	29.7%
Total		Count	45	60	50	155
		% within institution type	100.0%	100.0%	100.0%	100.0%

While 17.4% of college presidents view their academic units as entrepreneurial, among colleges displaying the academic capitalism variable that number rose to 21.7%. This is in comparison to a level of 5% in institutions without the academic capitalism variable. Conversely, “little recognition of need” is more than doubled (50% versus 22.6%) in colleges that are not entrepreneurial. The table below reflects the relationship between academic unit entrepreneurial status and the presence of the academic capitalism variable. There is a relationship between academic unit entrepreneurialism and the presence of the academic capitalism variable; $\chi^2(2, N = 155) = 12.913, p < .05$.

Table 51

*Item 25 * Cap-item8 Crosstabulation*

		Academic Cap		Total	
		Yes	No		
Item 25	Units are very entrepreneurial	Count	25	2	27
		% within Cap-item8	21.7%	5.0%	17.4%
	Recognition of need but little happening	Count	64	18	82
		% within Cap-item8	55.7%	45.0%	52.9%
	Little recognition of need	Count	26	20	46
		% within Cap-item8	22.6%	50.0%	29.7%
Total		Count	115	40	155
		% within Cap-item8	100.0%	100.0%	100.0%

Table 52

Chi-Square Test: Academic Units

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.913(a)	2	.002
Likelihood Ratio	13.462	2	.001
Linear-by-Linear Association	12.595	1	.000
N of Valid Cases	155		

Note. (a) = 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.97.

Incentives to reward entrepreneurialism. The majority (56.8%) of colleges offer no incentive to faculty for participation in profit motivated initiatives. Of the remaining institutions, 18.7% offer release time, 20.6% offer stipends, and 3.9% make consulting opportunities available. Stipends are used more frequently at suburban institutions while release time is more frequently used at urban institutions. Colleges with and without the academic capitalism variable are similar in regard to the presence or lack of incentives. The lack of incentive does not appear to be a deterrent to the existence of entrepreneurial behavior.

Table 53

Compensation for Entrepreneurial

		<i>f</i>	%	Valid %	Cumulative %
Valid	No	88	56.1	56.8	56.8
	Yes, release time	29	18.5	18.7	75.5
	Yes, stipends	32	20.4	20.6	96.1
	Yes, consulting opportunities	6	3.8	3.9	100.0
	Total	155	98.7	100.0	
Missing	System	2	1.3		
Total		157	100.0		

Table 54

*Compensation for Entrepreneurial * Item 26 Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	1.00
Item 26	No	Count	27	33	28	88
		% within institution type	61.4%	55.0%	54.9%	56.8%
	Yes, release time	Count	8	7	14	29
		% within institution type	18.2%	11.7%	27.5%	18.7%
	Yes, stipends	Count	8	15	9	32
		% within institution type	18.2%	25.0%	17.6%	20.6%
	Yes, consulting opportunities	Count	1	5	0	6
		% within institution type	2.3%	8.3%	.0%	3.9%
Total		Count	44	60	51	155
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 55

*Compensation for Entrepreneurial * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 26	No	Count	63	25	88
		% within Cap-item8	54.8%	62.5%	56.8%
	Yes, release time	Count	21	8	29
		% within Cap-item8	18.3%	20.0%	18.7%
	Yes, stipends	Count	26	6	32
		% within Cap-item8	22.6%	15.0%	20.6%
	Yes, consulting opportunities	Count	5	1	6
		% within Cap-item8	4.3%	2.5%	3.9%
Total	Count		115	40	155
	% within Cap-item8		100.0%	100.0%	100.0%

Faculty responsiveness. Less than 20% (18.2%) of presidents report faculty as being responsive to college partnerships developed to generate a profit for the college. Of presidents who responded, 63% cite some faculty interest but overall faculty disinterest, while 18.8% of presidents' report that most faculty members would not engage in these types of initiatives. Rural faculty is the most responsive, suburban faculty is the least responsive to participation in profit-generating endeavors. Presidential responses regarding faculty differ significantly in the colleges with the academic capitalism variable and the colleges without. Not surprisingly, there is a strong relationship between faculty responsiveness and the presence of the academic capitalism variable, $\chi^2(2, N = 154) = 20.112, p < .05$.

Table 56

Faculty Responsiveness

		<i>f</i>	%	Valid %	Cumulative %
Valid	Most faculty responsive	28	17.8	18.2	18.2
	Some faculty responsive, overall disinterested	97	61.8	63.0	81.2
	Most faculty would not engage in activities	29	18.5	18.8	100.0
	Total	154	98.1	100.0	
Missing	System	3	1.9		
Total		157	100.0		

Table 57

*Faculty Responsiveness * Item 27 Crosstabulation*

Item			Institution Type			Total
			Rural	Suburban	Urban	
Item 27	Most faculty responsive	Count	10	9	9	28
		% within institution type	22.7%	15.3%	17.6%	18.2%
	Some faculty responsive, overall disinterested	Count	29	35	33	97
		% within institution type	65.9%	59.3%	64.7%	63.0%
	Most faculty would not engage in activities	Count	5	15	9	29
		% within institution type	11.4%	25.4%	17.6%	18.8%
Total		Count	44	59	51	154
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 58

*Faculty Responsiveness * Cap-item8 Crosstabulation*

		Academic Cap			
		Yes	No	Total	
Item 27	most faculty responsive	Count	24	4	28
		% within Cap-item8	21.1%	10.0%	18.2%
	some faculty responsive, overall disinterested	Count	78	19	97
		% within Cap-item8	68.4%	47.5%	63.0%
	Most faculty would not engage in activities	Count	12	17	29
		% within Cap-item8	10.5%	42.5%	18.8%
Total		Count	114	40	154
		% within Cap-item8	100.0%	100.0%	100.0%

Table 59

Chi-Square Test: Faculty Responsiveness

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.122(a)	2	.000
Likelihood Ratio	18.156	2	.000
Linear-by-Linear Association	14.716	1	.000
N of Valid Cases	154		

Note. (a) = 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.27.

Among institutions that have entrepreneurial academic units, approximately one-half (55.6%) report faculty as responsive to participating in profit motivated initiatives. While chi square could not be calculated accurately due to the absence of data, there is a correlation between faculty responsiveness to profit motivated initiatives and entrepreneurial academic units.

Table 60

*Faculty Responsiveness Item 27 * Item 25 Crosstabulation*

		Item 25			Total
		Units are very entrepreneurial	Recognition of need but little happening	Little recognition of need	
Item 27	Most faculty responsive	Count %	15 55.6%	10 12.5%	3 6.5%
		within Item 25			18.3%
	Some faculty responsive, overall disinterested	Count %	12 44.4%	61 76.3%	23 50.0%
		within Item 25			62.7%
	Most faculty would not engage in activities	Count %	0 .0%	9 11.3%	20 43.5%
		within Item 25			19.0%
Total		Count	27	80	46
		% within Item 25	100.0%	100.0%	100.0%

Table 61

Correlation: Faculty Responsiveness/Academic Units

		Item 25	Item 27
Item 25	Pearson Correlation	1	.502(**)
	Sig. (2-tailed)		.000
	N	155	153
Item 27	Pearson Correlation	.502(**)	1
	Sig. (2-tailed)	.000	
	N	153	154

** Correlation is significant at the 0.01 level (2-tailed).

Governing boards. Almost two-thirds (65.4%) of presidents cite strong agreement among the governing board in regard to goals and objectives related to profit-generating initiatives. Less than a third of presidents (29.4%) cite some agreement, and very few (5.2%) cite a lack of

agreement on the part of the board regarding goals and objectives. This is consistent across institutional type.

There is a high level of agreement (84%) in institutions displaying the academic capitalism variable. Conversely, there is a high level of disagreement (62.5%) in institutions that do not display academic capitalism. A lack of agreement among the governing board members in regard to profit-generating initiatives may inhibit institutional display of the academic capitalism variable. Lack of data precluded the ability to use chi square; correlation describes a positive association between governing board agreement on institutional goals and the presence of the academic capitalism variable.

Table 62

Institutional Goals

		<i>f</i>	%	Valid %	Cumulative %
Valid	Strong agreement	100	63.7	65.4	65.4
	Some agreement	45	28.7	29.4	94.8
	Lack of agreement	8	5.1	5.2	100.0
	Total	153	97.5	100.0	
Missing	System	4	2.5		
Total		157	100.0		

Table 63

Institutional Goals Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 28	Strong agreement	Count	32	35	33	100
		% within institution type	72.7%	60.3%	64.7%	65.4%
	Some agreement	Count	10	19	16	45
		% within institution type	22.7%	32.8%	31.4%	29.4%
	lack of agreement	Count	2	4	2	8
		% within institution type	4.5%	6.9%	3.9%	5.2%
Total		Count	44	58	51	153
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 64

*Institutional Goals * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 28	Strong agreement	Count	84	16	100
		% within Item 28	84.0%	16.0%	100.0%
	Some agreement	Count	29	16	45
		% within Item 28	64.4%	35.6%	100.0%
	Lack of agreement	Count	3	5	8
		% within Item 28	37.5%	62.5%	100.0%
Total	Count		116	37	153
	% within Item 28		75.8%	24.2%	100.0%

Table 65

Correlation: Board Agreement/Academic Capitalism

		Cap-item8	Item 28
Cap-item8	Pearson Correlation	1	.293(**)
	Sig. (2-tailed)		.000
	N	157	153
Item 28	Pearson Correlation	.293(**)	1
	Sig. (2-tailed)	.000	
	N	153	153

** Correlation is significant at the 0.01 level (2-tailed).

Revenue expectations. With regard to the governing boards' agreement on revenue expectations from profit motivated initiatives, 39.3% of college presidents report strong agreement, 50.7% report some agreement, and 10% report a lack of agreement on revenue expectations. This is consistent across institutional type and, unlike goals and objectives, does not garner a statistically significant result regarding the presence of the academic capitalism variable.

Table 66

Revenue Expectations

		<i>f</i>	%	Valid %	Cumulative %
Valid	Strong agreement	59	37.6	39.3	39.3
	Some agreement	76	48.4	50.7	90.0
	lack of agreement	15	9.6	10.0	100.0
	Total	150	95.5	100.0	
Missing	System	7	4.5		
Total		157	100.0		

Table 67

*Revenue Expectations * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 29	Strong agreement	Count	16	24	19	59
		% within institution type	37.2%	42.1%	38.0%	39.3%
	Some agreement	Count	23	27	26	76
		% within institution type	53.5%	47.4%	52.0%	50.7%
	Lack of agreement	Count	4	6	5	15
		% within institution type	9.3%	10.5%	10.0%	10.0%
Total		Count	43	57	50	150
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 68

*Revenue Expectations * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 29	Strong agreement	Count	48	11	59
		% within Cap-item8	42.1%	30.6%	39.3%
	Some agreement	Count	57	19	76
		% within Cap-item8	50.0%	52.8%	50.7%
	Lack of agreement	Count	9	6	15
		% within Cap-item8	7.9%	16.7%	10.0%
Total		Count	114	36	150
		% within Cap-item8	100.0%	100.0%	100.0%

Student body. Roughly one half (53.9%) of presidents report the college's student body to be primarily AA and AS degree-seeking students on track to transfer to a 4-year institution. One-

fifth (20.1%) of presidents report their student body to be primarily vocational, AAS, and certificates. One-fifth (19.5%) of college presidents report having a student body comprised of equal numbers of transfer students and vocational students. This is consistent across institutional type.

Table 69

Student Status

		<i>f</i>	%	Valid %	Cumulative %
Valid	Primarily on track to transfer to 4 year	83	52.9	53.9	53.9
	Primarily vocational, AAS and certificates	31	19.7	20.1	74.0
	Primarily noncredit	2	1.3	1.3	75.3
	Even	30	19.1	19.5	94.8
	All	8	5.1	5.2	100.0
	Total	154	98.1	100.0	
Missing	System	3	1.9		
Total		157	100.0		

Table 70

*Student Status * Institution Type Crosstabulation*

Item		Count	Institution Type			Total 1.00
			Rural	Suburban	Urban	
30	Primarily on track to transfer to 4 year		22	35	26	83
		% within institution type	51.2%	58.3%	51.0%	53.9%
	Primarily vocational, AAS and certificates		8	13	10	31
		% within institution type	18.6%	21.7%	19.6%	20.1%
	Primarily noncredit		1	0	1	2
		% within institution type	2.3%	.0%	2.0%	1.3%
	Even		8	9	13	30
		% within institution type	18.6%	15.0%	25.5%	19.5%
	All		4	3	1	8
		% within institution type	9.3%	5.0%	2.0%	5.2%
Total		Count	43	60	51	154
		% within institution type	100.0%	100.0%	100.0%	100.0%

Of the 31 colleges that are comprised of primarily vocational, AAS students, almost all (93.5%) display the academic capitalism variable.

Table 71

*Student Status * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 30	primarily on track to transfer to 4 year	Count	54	29	83
		% within Item 30	65.1%	34.9%	100.0%
	primarily vocational, AAS and certificates	Count	29	2	31
		% within Item 30	93.5%	6.5%	100.0%
	primarily non credit	Count	1	1	2
		% within Item 30	50.0%	50.0%	100.0%
	even	Count	23	7	30
		% within Item 30	76.7%	23.3%	100.0%
	all	Count	8	0	8
		% within Item 30	100.0%	.0%	100.0%
Total		Count	115	39	154
		% within Item 30	74.7%	25.3%	100.0%

Of the 39 colleges that do not display the academic capitalism variable, almost three-quarters (74.4%) of them have a student body primarily consisting of AA/AS transfer students.

Table 72

*Student Status * Cap-item8 Crosstabulation*

		Academic Cap		Total	
		Yes	No		
Item 30	primarily on track to transfer to 4 year	Count	54	29	83
		% within Cap-item8	47.0%	74.4%	53.9%
	primarily vocational, AAS and certificates	Count	29	2	31
		% within Cap-item8	25.2%	5.1%	20.1%
	primarily non credit	Count	1	1	2
		% within Cap-item8	.9%	2.6%	1.3%
	even	Count	23	7	30
		% within Cap-item8	20.0%	17.9%	19.5%
	all	Count	8	0	8
		% within Cap-item8	7.0%	.0%	5.2%
Total		Count	115	39	154
		% within Cap-item8	100.0%	100.0%	100.0%

Relationship with 4-year schools. The colleges have an excellent relationship with neighboring 4-year institutions regardless of institutional type or the presence of academic capitalism.

Table 73

*Relationship 4-year * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 31	Excellent	Count	40	49	49	138
		% within institution type	88.9%	81.7%	96.1%	88.5%
	Fair	Count	5	10	2	17
		% within institution type	11.1%	16.7%	3.9%	10.9%
	Poor	Count	0	1	0	1
		% within institution type	.0%	1.7%	.0%	.6%
Total		Count	45	60	51	156
		% within institution type	100.0%	100.0%	100.0%	100.0%

Table 74

*Relationship 4-year * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 31	Excellent	Count	101	37	138
		% within Cap-item8	87.1%	92.5%	88.5%
	Fair	Count	14	3	17
		% within Cap-item8	12.1%	7.5%	10.9%
	Poor	Count	1	0	1
		% within Cap-item8	.9%	.0%	.6%
Total		Count	116	40	156
		% within Cap-item8	100.0%	100.0%	100.0%

Resource allocation. When asked if they believe in allocating institutional resources toward institutional activities with a greater revenue-generating potential, 39.6% of presidents strongly agree, 51.3% agree somewhat, and 9.1% would have many concerns and generally disagree. This is consistent across institutional type.

Table 75

Resource Allocation

		<i>f</i>	%	Valid %	Cumulative %
Valid	Strongly agree	61	38.9	39.6	39.6
	Somewhat agree	79	50.3	51.3	90.9
	Have many concerns and disagree	14	8.9	9.1	100.0
	Total	154	98.1	100.0	
Missing	System	3	1.9		
Total		157	100.0		

Table 76

*Resource Allocation * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburban	Urban	
Item 32	strongly agree	Count	13	23	25	61
		% within institution type	28.9%	39.0%	50.0%	39.6%
	somewhat agree	Count	27	30	22	79
		% within institution type	60.0%	50.8%	44.0%	51.3%
	have many concerns and disagree	Count	5	6	3	14
		% within institution type	11.1%	10.2%	6.0%	9.1%
Total		Count	45	59	50	154
		% within institution type	100.0%	100.0%	100.0%	100.0%

Presidential responses are fairly similar when looking at colleges with and without academic capitalism (Table 77). When looking at the respondent categories (Table 78), 80.3% of respondents who strongly agree to reallocating resources are in institutions displaying the academic capitalism variable.

Table 77

*Resource Allocation * Cap-item8 Crosstabulation*

			Academic Cap		Total
			Yes	No	
Item 32	Strongly agree	Count	49	12	61
		% within Cap-item8	43.0%	30.0%	39.6%
	Somewhat agree	Count	59	20	79
		% within Cap-item8	51.8%	50.0%	51.3%
	Have many concerns and disagree	Count	6	8	14
		% within Cap-item8	5.3%	20.0%	9.1%
Total		Count	114	40	154
		% within Cap-item8	100.0%	100.0%	100.0%

Table 78

*Resource Allocation * Cap-item8 Crosstabulation*

		Academic Cap		Total	
		Yes	No		
Item 32	Strongly agree	Count	49	12	61
		% within Item 32	80.3%	19.7%	100.0%
	Somewhat agree	Count	59	20	79
		% within Item 32	74.7%	25.3%	100.0%
	Have many concerns and disagree	Count	6	8	14
		% within Item 32	42.9%	57.1%	100.0%
Total		Count	114	40	154
		% within Item 32	74.0%	26.0%	100.0%

Organizational structure. Almost half (46.7%) of presidents responded that their revenue-generating units report to the chief academic officer. Of the remaining half, 16% of the colleges cite that revenue-generating units report to a vice president of external affairs, another 10% to other vice presidents. At 18% of the colleges, the units report directly to the president. This is consistent across institutional type and does not differ among institutions that display the academic capitalism variable.

Table 79

Reporting Lines

		<i>f</i>	%	Valid %	Cumulative %
Valid	Report to VP Academic Affairs	71	45.2	46.7	46.7
	Report to VP Admin Services	14	8.9	9.2	55.9
	Report to VP External Affairs	24	15.3	15.8	71.7
	Report directly to President	28	17.8	18.4	90.1
	Other	15	9.6	9.9	100.0
	Total	152	96.8	100.0	
Missing	System	5	3.2		
Total		157	100.0		

Table 80

*Reporting Lines * Institution Type Crosstabulation*

			Institution Type			Total
			Rural	Suburb	Urban	
Item 33	Report to VP Academic Affairs	Count	22	27	22	71
		% within institution type	51.2%	45.8%	44.0%	46.7%
	Report to VP Admin Services	Count	5	6	3	14
		% within institution type	11.6%	10.2%	6.0%	9.2%
	Report to VP External Affairs	Count	5	13	6	24
		% within institution type	11.6%	22.0%	12.0%	15.8%
	Report directly to President	Count	7	9	12	28
		% within institution type	16.3%	15.3%	24.0%	18.4%
	Other	Count	4	4	7	15
		% within institution type	9.3%	6.8%	14.0%	9.9%
Total		Count	43	59	50	152
		% within institution type	100.0%	100.0%	100.0%	100.0%

Conclusion

The research questions that guided this study explored the extent to which community colleges are engaging in profit motivated entrepreneurial behavior (academic capitalism), the success of these behaviors, and some institutional characteristics that may facilitate or inhibit their success. This chapter explored the extent to which we are observing these phenomena in the community college sector, its financial success, and also explored institutional variables that may facilitate or impede a college's ability to pursue and implement profit-generating initiatives.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSIONS

The purpose of this chapter is to discuss the implications of the study and recommendations for future research. This study examined whether or not community colleges have become increasingly market focused in an environment characterized by two trends: the inability of state appropriations to meet institutional demands and the simultaneous growth in student enrollments. It sought to determine whether colleges are capitalizing on their strong ties to their communities and forging ties to local business and industry in an effort to generate additional sources of revenue to supplement funding shortfalls. It also explored if the community college sector was engaging in any of the academic capitalist activities more traditionally seen in the 4-year sector.

Community colleges are, in many ways, unique creatures in the higher education landscape. This is in part because of their multiple missions. For a community's underprepared and nontraditional students, community colleges provide educational opportunity. For traditional undergraduate students, community colleges provide a cost effective general education equivalent to the first 2 years of a postsecondary education. As the primary source of workforce development in their communities, community colleges address workforce training needs with vocational and occupational training. Facilitating and supporting these efforts is the college president. Through frequent engagement with the community, the president has the ability to define the role that the college will play in the higher education landscape and in local economic development. While colleges push for more funding, legislators press for more efficiency on the

part of the colleges. It is in this environment that the old cost recovery component of workforce development is slowly changing to profit realization as colleges recognize the revenue potential and price their services competitively.

While community colleges have a mission that includes responding to community needs, deciphering whether or not they are consciously capitulating to the marketplace in a proactive manner in the pursuit of profit has become an arduous task. Though they have a common history, generalizations about community colleges can be difficult as the colleges are largely products of their local environments and their geographic location. Not only is the institution's ability to recognize and pursue opportunity important but the ability to leverage the necessary resources becomes equally important.

The purpose of this chapter is to discuss the implications of the study, some recommendations for practice, and suggested future research directions. The chapter is divided into two sections. Section one will discuss the implications of the results and how the findings may be of importance to community college practitioners. The second section will discuss the limitations of the research and identify recommendations for future research.

Analysis of a survey sent to 535 community college presidents yielded answers to the research questions. Research Question 1 explored the entrepreneurial efforts community colleges are utilizing to maximize revenue-generating opportunities. Contract training, developed to meet specific industry needs, continues to be the most frequently utilized revenue-generating initiative in the sector. Colleges are reporting an expansion from traditional contract training to an enhanced form of contract training, which includes both joint ventures and partnerships with the private sector. More engaged college-business-industry relationships may be the result of increased competition in the training arena from for-profit providers as well as the growth in

community college consortia efforts. While the academic capitalism literature discusses personnel exchanges with private industry as an occurrence in the 4-year sector, this initiative does not appear to have transitioned to the community college sector. In addition to generating revenue through training, approximately 85% of community colleges are currently or soon to be engaged in the lease and/or rental of college facilities and college equipment. This may be due to a strategic emphasis on community outreach, growth in the number of community college conference centers, theaters, and other community usage facilities, and/or the realization of the revenue-generating capability of these institutional assets. Interestingly, sales of institutional resources (for example an hourly fee for computer lab usage or a for-fee faculty speaker's bureau) appear to be less acceptable, with 80% of college presidents citing that the sale of institutional resources was not applicable.

The second research question addressed the success of these community college initiatives. Regarding expectations for future funding from their respective states, 47% of the college presidents expect state allocations to remain the same. The remaining 50% were split almost evenly. Male presidents were more likely to expect allocations to increase, female presidents less likely to expect increases. The revenue-generating initiatives taking place at the colleges are financially successful (except for retail sales), with contract training and distance learning the most successful. The average private sector training amount is only slightly higher than the average public sector training amount, half of institutional respondents report that most public sector training generates less than \$10,000 per year, with private sector training generating slightly more. In terms of dollars, contract training, noncredit course offerings, and distance learning are the top three money makers. Distance learning is the second most frequently used revenue-generating institutional initiative in the community college sector. This

is not surprising, as online learning has been touted as having the potential to reap huge revenues, with online course enrollment projected to grow to \$53.3 billion by 2013 (Zemsky, 2009). A study published by the Sloan Consortium found that close to 20% of all college students were taking at least one online course in the fall semester of 2006 (Allen & Seaman, 2007). Growth in online education is highest in the community college sector (Allen & Seaman, 2007). Online education's popularity with organizations as a training vehicle, as well as its popularity with working adult students, facilitates its use as a revenue-generating initiative.

As predicted by the literature, entrepreneurial revenue amounts to less than 10% of the operating budget in 71.9% of the colleges surveyed. Nonetheless, the college presidents have high revenue expectations, with 68% envisioning revenue of \$100,000 in a year's time. While 62% of respondents cite personnel exchanges as not applicable, it is in fact successful for the 51 institutions that engage (one-third of the respondents).

Research Question 3 examined the extent to which community colleges differ based on the college's Carnegie classification as rural, suburban, or urban. The literature speaks to differences between rural community colleges and their suburban and urban counterparts (Eddy, 2007; Hardy & Katsinas, 2007). In addition to differences in mission, culture, and constituencies, differences in economies exist as well (Leist, 2007). Urban community colleges have historically served the diverse populations of America's cities with populations that exceed 50,000 (Witt et al., 1994). With a higher population density, urban community colleges face a greater demand for public services yet have lower levels of financial support (Rury & Mirel, 1997). Suburbia can be characterized as small politically autonomous towns with populations in the range of 40,000 to 50,000 generally located on the fringes of large cities (Harrigan & Vogel, 2003). Urban and suburban colleges are viewed as having more in common with each other than with rural

colleges (Eddy & Murray, 2007). This study found the colleges to be remarkably alike in regard to their entrepreneurial efforts. No significant differences exist in the initiatives that the colleges use to generate revenue, their success at it, or the extent to which an entrepreneurial culture exists. Research findings may have been different if this study chose to survey faculty or other internal or external constituencies.

Research Question 4 explores the factors that may influence a community college's involvement in academic capitalism. In order for an institution to be successful at entrepreneurship the academic units must display a strong entrepreneurial culture and an institution-wide entrepreneurial culture must exist that rewards innovation (Clark, 1998). This survey discovered that regardless of institutional type, 83% of presidents cite the lack of entrepreneurial behavior at the academic unit level. Concurrently, greater than one-half (56.8%) of colleges offer no financial or release time incentives for faculty engaged in entrepreneurial initiatives. Nonetheless, the majority of the colleges are entrepreneurial, even if 54.8% of colleges with the academic capitalism variable do not offer any incentive to faculty.

The success of market ventures depends heavily on the institution's resources and the ability of the entrepreneurial units to leverage those resources, and faculty buy-in is often the precursor to faculty cooperation in strong collective bargaining environments. While faculty have traditionally been suspicious of the profit motive in higher education, a few faculty unions have accepted the shift toward a more corporate culture as necessity and have refocused their efforts toward the guarantee of intellectual property rights (Bousquet, 2008). The researcher questioned whether tenure would diminish the entrepreneurial thrust. This study found no statistically significant relationships between the percentage of full-time tenured faculty and the level of entrepreneurial initiatives or the number of new initiatives planned for the future.

Implications and Recommendations for Practice

The purpose of this study was to examine the extent to which profit-generating activities are taking place in community colleges around the country and to document any perceivable shift toward the occurrence of academic capitalism in the sector. Community colleges are not presented in the literature on academic capitalism even though they, like other public higher education institutions, are forced to find alternative sources of revenue. Universities, while engaging in many revenue-generating initiatives, specifically focus on research collaborations with government and industry (Kozeracki, 1998). Community colleges use entrepreneurship as their primary means of securing additional revenue (Roueche & Jones, 2005).

While contract training fits nicely with the community college mission, this finding does not paint a robust entrepreneurial picture of what is occurring on the campuses. For one, conventional revenue-generating initiatives such as contract training is limiting given that it is typically a cost recovery model and not focused on profit realization. While the literature states that the old cost recovery component of workforce development is slowly changing to profit realization as colleges recognize the revenue potential and price their services competitively (Downey et al., 2006), the notion of profit realization is yet to be fully embraced. This is evident based on “not applicable” responses to more aggressive profit-generating initiative survey questions as well as qualitative data gathered during interviews with community college administrators.

An institutional emphasis on traditional contract training is good news for employers as it underscores the continued historical community college commitment to supporting local business and industry in the evolving 21st century. It also assists colleges in building support; the colleges are seen as responsive and getting things done for local government. Business probably

values the institutions that provide training programs to workers and the workers and community members probably value the colleges that provide varied educational opportunities. Decision makers on both sides recognize that the growth of a college and its community is dependent on collaborative effort and reciprocal interactions. In an environment characterized by increased competition for market dollars, more engaged institutions with greater resources to share may have a distinct advantage (Smith & Bender, 2008). Additional institutional findings from this research are summarized as follows.

Demographic analysis shows average presidential tenure is 9.5 years. One-half (49.7%) of the presidential respondents are between 51-60 years old. The majority of presidents are male (70%). Of the female presidents, 50% are at urban community colleges. Greater than one-half (51.9%) of community college presidents have held a presidency 7 years or less. This is consistent with the findings of a 2002 survey, which found that the average length of service for college presidents was 6.6 years (Corrigan, 2002).

Greater than 70% of institutions report 45% or more of their faculty are tenure track and/or tenured. Greater than 60% of responding institutions are unionized. While the shared governance ideology is well-represented in the sector, 18.3% of presidential respondents cite shared governance only in regard to specific institutional issues.

As the financial stewards of their institutions, governing boards appear to be in agreement with regard to entrepreneurial revenue expectations. Disagreement among the governing board in regard to the goals and objectives of externally focused profit-generating initiatives seems to inhibit institutions. Presidents report a lack of agreement on revenue-generating goals and objectives among the governing board in 62.5% of institutions that do not display capitalist behavior.

The revenue-generating units predominately report to the vice president of academic affairs (46.7%), with fewer than 20% of the institutions citing revenue-generating units that report directly to the college president (18.4%). As the office directly responsible for the traditional academic offerings of the institution, the academic vice president (or vice president of academic affairs) may be in a challenging situation if he is responsible for both the revenue-generating unit/s and the units most at odds with the revenue-generating units--the traditional academic units of the institution. The tension between the college's educational mission and the college's workforce training mission continues to be a point of contention. Economies of scale and greater institutional resources appear to play a part in a college's ability to be entrepreneurial. The larger institutions engage in academic capitalist initiatives to a greater extent than institutions with fewer credit and noncredit students.

In this study, the researcher was interested in funding expectations. Survey respondents were asked to identify whether they anticipated next year's state allocations to increase, decrease, or remain the same. The findings are somewhat surprising. Approximately one-half of the presidents expect their state allocations to remain the same. The remaining one-half is almost equally split with one-quarter expecting an increase and one-quarter expecting a decrease. The study failed to reveal any significant relationship between the anticipation of next year's funding allocations and the number of successful entrepreneurial initiatives. When presidents believe that state allocations will remain the same or decrease (72.9%), institutions may react in one of two ways. Either there will be recognition of a greater need to engage in entrepreneurial activities or there will be reluctance to engage in any entrepreneurial risk taking. Conversely, a more optimistic outlook whereby allocations are anticipated to remain flat or increase (74.2%) may diminish the entrepreneurial thrust.

This data was collected in January of 2008 and is reflective of a pre-recession environment. The current recession may have changed internal and external forces that constrain or foster an academic capitalist climate on many college campuses. In order to capitalize on their full potential, community college leaders need to leverage their community ties and view themselves as economic development partners. Exercising leverage requires strategic partnerships among businesses, elected officials, educational systems, and cultural and civic organizations. These partnerships take time and are often not easily built, especially in economic downturns and scarce resources.

With reductions in state funding, faculty may be more occupied with boosting enrollment in their courses than with entrepreneurship. Because state funding formulas are generally based on enrollment patterns, faculty may not respond positively to administrative encouragements that the academic units seek collaboration with the private sector and engage in entrepreneurial efforts citing “the lack of any connection to resource allocation”(Leslie, 2003, p. 76).

In 2010 everyone seems to be worried about the financial impact that the economy is having on their institutions. If this study were to be done today, presidential responses may be strikingly different in terms of funding expectations. Whether the colleges have become more adept at garnering alternative revenue is unknown.

Academic entrepreneurship is critical yet historically difficult for the colleges (Roueche & Jones, 2005). This study found that only 17.4% of presidents view the academic units at their institution as entrepreneurial. Almost one-third (29.7%) believe that their faculty do not recognize a need to be entrepreneurial. Less than 20% (18.2%) of presidents report faculty as responsive to profit-motivated initiatives. The vast majority of institutions (82.6%) have academic units that are not considered entrepreneurial.

More research needs to be done before drawing any conclusions. Academic units are strong in their belief that instruction is their primary task, and they adjust their time as necessary to staff their courses and meet departmental demands (Leslie, 2003). Perhaps on community college campuses there is no stature or perceived power to be gained with being labeled an entrepreneur. Or perhaps, because there is not an overt research requirement imposed on community college faculty, entrepreneurial behavior is not perceived as an aid in the promotion and tenure process. Whatever the underlying reasons, the community college sector needs to do better in cultivating a culture of entrepreneurialism. As Zemsky (2009) reminds us, market forces are here to stay, and faculty may do well to ponder “where the funds to pay their salaries are likely to come from in an age of declining public appropriations for higher education “(p. 42).

Entrepreneurialism is more likely to exist, and persist, if the culture supports it. This study found that the majority (56.8%) of institutions do not offer incentives (financial incentives, release time) to reward and encourage entrepreneurialism. Many entrepreneurial efforts are carried out by the peripheral units of a community college (continuing education, contract training units), and expectations for these units differ. Entrepreneurial activity that exists on the fringe is often unknown to the core constituency. Future research is needed to explore institutions where entrepreneurial units are full partners in the institution and whether a more egalitarian culture elicits more robust entrepreneurial success. Dismantling institutional silos, which frequently exist between revenue-generating units and more traditional academic units, will help to integrate an entrepreneurial culture throughout the institution and minimize the segregation of the externally-focused areas of the college.

The president plays a critical role in the definition and articulation of institutional goals, including what constitutes effective practice and what matters most. Barriers to academic

entrepreneurship may include the multiplicity, ambiguity, and, at times, conflicting nature of institutional goals. While this study did not look at institutional goal setting, this study does reveal that disagreement among governing boards regarding entrepreneurial goals and objectives occurs more often in institutions not characterized as engaging in an academic capitalist manner.

The relationship between entrepreneurial practices and the president's academic background and career pathway to the presidency have not been well-studied in the community college sector. One hypothesis that the researcher hoped to test was that of presidential longevity and the entrepreneurial thrust. The thought was that, as a consequence of experience, a president with greater longevity would be able to forge a better relationship with the faculty and governance structure and may be better able to facilitate an entrepreneurial culture. The study failed to reveal any significant relationship between length of time as a community college president and the number of successful entrepreneurial initiatives.

This is probably not surprising when one considers the most likely path to a community college presidency. In his book on community college presidents, Vaughan (1986) states that the primary path to the presidency is through the academic pipeline. If the majority of community college presidents were past faculty who rose to academic administration, and faculty/academic administrators are not typically entrepreneurial, then we can assume that presidents come into their role lacking an entrepreneurial emphasis. Longevity in the presidential office may be inconsequential in terms of entrepreneurialism.

Slaughter and Leslie (1997) suggest that in institutions displaying academic capitalist behaviors, resources are frequently reallocated to units closest to the market. When presidents in this study were asked their feelings regarding allocating resources toward institutional activities with greater revenue potential, 40% strongly agreed, 50% somewhat agreed, and 10% disagreed.

While the study found no significant relationship between resource allocation and institution type, urban college presidents were more likely to strongly agree to reallocating institutional resources toward those activities with greater revenue potential than their counterparts in rural or suburban institutions. The ability to raise entrepreneurial revenue depends on the environment. A college in or close to a major metropolitan area may have more opportunity to be entrepreneurial given the robust and diverse nature of its community.

The literature tells us that organizational structure changes when institutions operate in an academic capitalist environment (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). This study confirmed that the revenue producing units report to the academic vice president in approximately one-half of the colleges. While this is not necessarily problematic, it does not address the tension that exists between the academic side of the house and the predominately noncredit entrepreneurial side of the house. Administrators simultaneously gain power and lose power as multiple and competing institutional groups struggle to respond to pressures created by changes in the external environment (Raines, 2003). This study did not address the extent to which community college academic vice presidents are able to manage this situation.

Governance has historically included three primary internal stakeholders: trustees, administrators, and full-time faculty (Birnbaum, 1992). This study found that in regard to governing boards, disagreement regarding entrepreneurial revenue expectations was twice that of disagreement regarding entrepreneurial goals and objectives. An exploration of administrative/faculty consultation regarding entrepreneurial activity becomes more complicated. Buchbinder (1993) contends that traditional models of shared governance are no longer adequate in a marketplace ideology characterized by the need for quickness. Because of the preponderance of lengthy faculty debate that delays a quick response to the market, colleges with a market focus

are characterized as having a centralized decision-making structure, less democracy, and less collegiality (Buchbinder, 1993; Clark, 1998). Shared governance and collective bargaining are strange bedfellows. Collegial attempts at shared governance may be the overall practice in the community college sector, yet the marketplace may dictate a different set of behaviors. Sixty-two percent of the institutions function in a collective bargaining environment. More than half of the institutions (58%) reported strong shared governance. While faculty have traditionally been suspicious of the profit motive in higher education (Birnbaum, 1992), a few faculty unions have accepted the shift toward a more corporate culture as necessary and have refocused their efforts toward the guarantee of intellectual property rights (Bousquet, 2008). The study found no significant relationships among collective bargaining, shared governance, and/or the presence of the academic capitalism variable.

Limitations and Recommendations for Future Research

While this study examined presidential survey results, more detailed qualitative research is needed to better understand the subtle differences between institutional revenue generation and intentional profit realization. While the researcher's preliminary qualitative research with community college stakeholders demonstrated that the term "academic capitalism" is unknown to the sector, the term "entrepreneurial" is equally problematic. Entrepreneurial can be defined as meaning "inventive" or it can be defined as meaning "for profit." What constitutes entrepreneurial behavior on the part of respondents may well be open to interpretation.

The community colleges surveyed in this study include some of the largest community colleges in the country and as such are very complex organizations. The assumption that the president can accurately describe the number of and scope of institutional initiatives may be

overly optimistic. A case study approach where conversations with multiple institutional constituents are explored may yield more robust information.

Additionally, more research needs to be done to better understand the revenue producing peripheral units. These units often have their own mission and vision statements and their revenue/budget models vary greatly. Qualitative studies exploring these units and their relationship to the academic units would be very helpful to better understand the sectors ability to function in an academic capitalist manner.

Critiquing this study through the lens of academic capitalism led to some broad generalizations about the state of profit realization in the community college sector. The study has shown that the “immorality of profit” sentiment is alive and well and there exists a need to diminish this sentiment. Future research is needed to explore whether embracing the entrepreneurial units as full partners in the institution by funding the entrepreneurial units at the level of financial support needed for entrepreneurial success will send an adequate institutional message. Dismantling institutional silos, which frequently exist between revenue-generating units and more traditional academic units, will help to integrate an entrepreneurial culture throughout the institution and minimize the segregation of the externally-focused areas of the college.

In a community college environment characterized by collective bargaining and shared governance, faculty buy-in is critical to revenue-generating success. Stimulating the academic side of the house by offering ample financial incentives over and above uniform compensation will attract faculty who are open to working on profit-motivated initiatives. Colleges that do this will be in a stronger position to attract the personnel that are motivated to pursue private markets; this should become an institutional priority. Additionally, reevaluating and expediting the

processes by which institutional support is granted to both faculty and staff for participation in profit-generating initiatives will help to institutionalize the importance of a collective need for profit that can be used to subsidize the core teaching function of the college. A president must be able to build an inspired and energetic team in order to reach profit goals, and a president cannot do the job alone, no matter how entrepreneurial he or she is.

Lastly, it is important for community college practitioners to remember that budget crises create opportunity. While recruiting new students and increasing an institution's enrollment may be one way to support a sagging budget, entrepreneurial enterprises exist as possible sources of revenue. Success depends on the governing board's willingness and ability to support the entrepreneurial approach. Declining governmental support for higher education along with rising operational costs leaves few options other than to actively pursue new sources of revenue. These financial pressures may facilitate an expansion of the institution's periphery to encourage and support the entrepreneurial spirit.

Conclusion

Public colleges have seen their budgets sapped by shrinking government aid, changing demographics, and a recent recession. In order to meet the diverse needs of the community in which it is located, community colleges require adequate revenue to contend with increasing enrollments and operating expenses. Government support for higher education has declined and is expected to continue to decline, primarily as a result of a diminished revenue base and the increasing need to support health care, social service programs, and K-12 education. With funding concerns ever looming, the fate of the sector depends heavily on the direction of the current transformation, the transformation to a market enterprise.

This study examined revenue generation and the state of entrepreneurialism in a national sample of community colleges, as reported by the college president. It looked for a culture of entrepreneurialism and a subsequent move toward profit realization. This study has not discussed any negative implications of an academic capitalist environment. It has not looked at possible blurred boundaries between the colleges and the local market, any increased inter- and intra-institutional competition, possible compromises on the level of teaching, or challenges to institutional resource allocation decisions. This study was descriptive and as such forms a baseline for further research in the field.

The study found that the colleges continue to rely on contract training and distance learning as their primary revenue-generating tools. The colleges are reporting an expansion from traditional contract training to an enhanced form of contract training, which includes joint ventures and partnerships with the private sector. Personnel exchanges with private industry, discussed in the academic capitalism literature, are not an occurrence in the community college sector. While entrepreneurial initiatives are taking place, the overwhelming majority of presidents agree that the academic units at their colleges are not entrepreneurial. This finding raises questions and concerns, and warrants further research. If the colleges are engaging in entrepreneurial activities--and the academic units are not entrepreneurial--does the entrepreneurialism reside in the peripheral units? Though many college presidents may have an entrepreneurial vision for their institutions, their ability to create a culture of entrepreneurialism is important, merely communicating the vision is not sufficient.

Though they have a common history, generalizations about contemporary community colleges can be difficult. The colleges are largely products of their local environments, their geographic location, how they have been managed financially, and the vision and priorities of

their governing bodies. The colleges that participated in this study are our country's largest community colleges. Not surprisingly, the largest engage in academic capitalist activities to a greater extent than institutions with fewer credit and noncredit students.

REFERENCES

- Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning: Sloan Consortium*. Needham, MA:, Sloan Consortium.
- Allen, M. (Ed.). (2007). *The next generation of corporate universities: Innovative approaches for developing and expanding organizational capabilities*. San Francisco: Pfeiffer.
- Ammer, C., & Ammer, D. S. (Eds.). (1986). *Dictionary of business and economics*. New York, NY: The Free Press.
- Ashburn, E. (2006, October 27). Living laboratories: 5 community colleges offer lessons that have produced results. *The Chronicle of Higher Education* (p. B1).
- Astin, A., & Astin, H. (2000). *Leadership reconsidered: Engaging higher education in social change*. Battle Creek, MI: Kellogg Foundation.
- Baldauf, A., Reisinger, H., & Moncrief, W. C. (1999). Examining motivations to refuse in industrial mail surveys. *Journal of the Market Research Society*, 41, 345-353.
- Barrow, C. W. (1996). The strategy of selective excellence: Redesigning higher education for global competition in a postindustrial society *Higher Education*, 41(4), 447-469.
- Batt, R., & Osterman, P. (1993). *A national policy for workplace training: Lessons from state and local experiences* Washington, DC: Economic Policy Institute.
- Bergquist, W. (1998). The postmodern vchallenge: Changing our community colleges. In J. S. Levin (Ed.), *Organizational change in the community college: A ripple or a sea change?* (pp. 87-98). San Francisco: Jossey-Bass.
- Birnbaum, R. (1980). *Creative academic bargaining: Managing conflict in the unionized college and university*. New York: Teachers College, Columbia University.
- Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership*. San Francisco: Jossey-Bass.
- Birnbaum, R. (1992). *How academic leadership works: Understanding success and failure in the college presidency*. San Francisco: Jossey-Bass.
- Bok, D. C. (2003). *Universities in the marketplace: The commercialization of higher education*. Princeton, NJ: Princeton University Press.

- Bolman, L. G., & Deal, T. E. (2003). *Reframing organizations: Artistry, choice, and leadership*. San Francisco: Jossey-Bass.
- Bousquet, M. (2008). *How the university works: Higher education and the low-wage nation*. New York: NYU Press.
- Bragg, D. D. (2001). Opportunities and challenges for the new vocationalism in American community colleges. In D. D. Bragg (Ed.), *The new vocationalism in community colleges* (pp. 5-15). San Francisco: Jossey-Bass.
- Bragg, D. D. (2002). Contemporary vocational models and programs: What the research tells us. In T. H. Bers & H. D. Calhoun (Eds.), *New directions for community colleges* (pp. 25-34). San Francisco: Jossey-Bass.
- Bragg, D. D., & Jacobs, J. (1991). *A conceptual framework for evaluating community college customized training programs*. Berkeley, CA: National Center for Research in Vocational Education.
- Brawer, F. B. (1998). *Academic entrepreneurship in higher education*. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Brumbach, M. A. (2005). Sustaining financial support through workforce development grants and contracts. *New Directions for Community Colleges*, 132, 49-58.
- Buchbinder, H. (1993). The market oriented university and the changing role of knowledge. *Higher Education*, 26(2), 331-347.
- Calder, B. (2000). *A survey report on college CEOs: Their challenges, career contract and lifestyle issues*. Ottawa: Association of Canadian Community Colleges.
- Campbell, D., & Williams, K. (2005). Futures focus: Proposed solutions for the cyclic workforce. *Community College Journal of Research and Practice*, 29, 663-669.
- Carr, R. K., & VanEyck, D. K. (1973). *Collective bargaining comes to the campus*. Washington, DC: American Council on Education.
- Clark, B. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation*. Oxford/New York: Pergamon Elsevier Press.
- Clark, B. (2000). Collegial entrepreneurialism in proactive universities: Lessons from Europe. *Change*, 32(2), 10-19.
- Cohen, A. M., & Brawer, F. B. (1996). *The American community college* (3rd ed.). San Francisco: Jossey-Bass.
- Collis, D. J. (2002). The paradox of scope: A challenge to the governance of higher education. In W. G. Tierney (Ed.), *Competing conceptions of governance: The paradox of scope* (pp. 61-64). Baltimore, MD: Johns Hopkins University Press.

- Cornwall, J. R., & Perlman, B. (1990). *Organizational entrepreneurship*. Boston, MA: Richard D. Irwin.
- Corrigan, M. (2002). *The American college president* (2002 ed.). Washington, DC: American Council on Education.
- Coulter, E. (2007). Let us create a new vision. *Community College Journal*, 77, 6.
- Crawford, A. L. (1983, April). *Skills perceived to lead to success in higher education*. Paper presented at the American Educational Research Association, Montreal, Canada.
- Cushman, K., Cervone, B., & Rowley, L. (2003). *A future that works: First person accounts of community colleges that change lives*. Boston, MA: Met Life Foundation.
- Cyert, R. M. (1979). Governance and administration of the university. In C. C. Walton & F. D. Bolman (Eds.), *Disorders in higher education* (pp. 90-117). Englewood Cliffs: NJ: Prentice-Hall.
- Dougherty, K. J. (1994). *The contradictory college: The conflicting origins, outcomes, and futures of the community college*. Albany, NY: State University of New York Press.
- Dougherty, K. J., & Bakia, M. F. (2000). Community colleges and contract training: Content, origins, and impact. *Teachers College Record*, 102(1), 197-243.
- Dougherty, K. J., & Townsend, B. K. (2006). Community college missions: A theoretical and historical perspective. *New Directions for Community Colleges*, 136, 5-13.
- Dowd, A. C. (2004). Community college revenue disparities: What accounts for an urban college deficit? *The Urban Review*, 36(4), 251-270.
- Dowd, A. C., & Grant, J. L. (2007). Equity effects of entrepreneurial community college revenues. *Community College Journal of Research and Practice*, 31, 231-244.
- Downey, J. A., Pusser, B., & Turner, J. K. (2006). Competing missions: Balancing entrepreneurialism with community responsiveness in community college continuing education divisions. In B. K. Townsend & K. J. Dougherty (Eds.), *Community college missions in the 21st century* (pp. 75-82). San Francisco: New Directions for Community Colleges.
- Eckel, P. D. (2006). *Toward higher ground: Reclaiming public confidence in a competitive environment*. Washington, DC: American Council on Education.
- Eddy, P. L. (2003). Sensemaking on campus: How community college presidents frame change. *Community College Journal of Research and Practice*, 27, 453-471.
- Eddy, P. L. (2005). Framing the role of leader: How community college presidents construct their leadership. *Community College Journal of Research and Practice*, 29, 705-727.

- Eddy, P. L. (2007). Grocery store politics: Leading the rural community college. *Community College Journal of Research and Practice*, 31(4), 271-290.
- Eddy, P. L., & Murray, J. P. (2007). Strategizing for the future. *New Directions for Community Colleges*, 137, 99-106.
- Euben, D. (2003, October). *Some legal aspects of collegial governance*. Paper presented at the Governance Conference of the American Association of University Professors, Washington, D.C.
- Fairweather, J. S. (1988). *Entrepreneurship and higher education: Lessons for colleges, universities, and industry*. Washington, DC: Association for the Study of Higher Education.
- Faris, S. K. (1998). *Community colleges: Innovators of entrepreneurial Spirit*. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Farnsworth, K. A. (2006, October 27). The 4 lessons that community colleges can learn from for-profit institutions. *The Chronicle of Higher Education*, pp. B17-B18.
- Fay, C. H., & Wallace, M. J. (1987). *Research-based decisions*. New York: Random House.
- Fisher, J. L. (1984). *Power of the presidency*. New York: Macmillan.
- Fisher, J. L. (1997). Who will lead higher education's transformation? *Planning for Higher Education*, 26(1), 50-54.
- Fisher, J. L., & Koch, J. V. (2004). *The entrepreneurial college president*. Westport, CT: Praeger.
- Fliegler, C. M. (2007). The right stuff. *University Business*, 10(9), 39-43.
- Flynn, W. J. (2007). Embracing a profit mentality. *Community College Week*, 20(3), 4-5.
- Gaskin, F. (1997). At the millennium. In I. M. Weisman & G. B. Vaughan (Eds.), *Presidents and trustees in partnership: New roles and leadership challenges* (pp. 81-86). San Francisco: Jossey-Bass.
- Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and application* (7th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Gerber, L. G. (2001). Inextricably linked: Shared governance and academic freedom. *Academe*, 87, 22-24.
- Glenny, L. (1979). The state budget process: Roles and responsibilities. In F. F. Hlarclerod (Ed.), *Financing post-secondary education in the 1980s* (pp. 35-45). Tucson, AZ: Center for the Study of Higher Education.

- Greer, T. V., Chuchinprakarn, R., & Seshadri, S. (2000). Likelihood of participating in mail survey research: Business respondents' perspectives. *Industrial Marketing Management*, 29, 97-109.
- Grubb, W. N. (1996). *Working in the middle: Strengthening education and training for the mid-skilled labor force*. San Francisco: Jossey-Bass.
- Grubb, W. N., & Associates. (1999). *Honored but invisible: An inside look at teaching in community colleges*. New York: Routledge.
- Grubb, W. N., Badway, N., Bell, D., Bragg, D. D., & Russman, M. (1997). *Workforce, economic, and community development: The changing landscape of the "entrepreneurial" community college*. Berkeley, CA: University of California, National Center for Research in Vocational Education.
- Grubb, W. N., & Lazerson, M. (2005). Vocationalism in higher education: The triumph of the education gospel. *The Journal of Higher Education*, 76(1), 1-25.
- Gumport, P. (2000). Academic restructuring: Organizational change and institutional imperatives. *Higher Education*, 39, 67-91.
- Hager, M. A., Wilson, S., Pollak, T. H., & Rooney, P. M. (2003). Response rates for mail surveys of nonprofit organizations: A review and empirical test. *Nonprofit and Voluntary Sector Quarterly*, 32(2), 252-267.
- Hanley, L. (2005). Academic capitalism in the new university. *Radical Teacher*, 73, 3-7.
- Hardy, D. E., & Katsinas, S. G. (2007). Classifying community colleges: How rural community colleges fit. In P. L. Eddy & J. P. Murray (Eds.), *Rural community colleges: Teaching, learning, and leading in the heartland* (pp. 5-17). San Francisco: Jossey-Bass.
- Harrigan, J. J., & Vogel, R. K. (2003). *Political change in the metropolis* (7th ed.). New York: Addison-Wesley.
- Hearn, J. C. (2003). *Diversifying campus revenue streams*. Washington, DC: American Council on Education.
- Huitt, W. G. (1998). Internal and External Validity. Retrieved June 5, 2009, from <http://www.valdosta.peachnet.edu/~whuitt/psy702/intro/valdgn.html>.
- Jacobs, J., & Dougherty, K. J. (2006). The uncertain future of the community college workforce development mission. *New Directions for Community Colleges*, 136, 53-62.
- Johnstone, D. B. (1998). *The financing and management of higher education: A status report on worldwide reforms*. Washington, DC: World Bank.
- Kanter, R. M. (1983). *The change masters*. New York: Simon and Schuster.

- Kater, S., & Levin, J. S. (2005). Shared governance in the community college. *Community College Journal of Research and Practice*, 29, 1-23.
- Katsinas, S. G. (1994). Community colleges and workforce development in the new economy. *Catalyst*, XXIV(1), 1-19.
- Kellogg, A. P., & Tomsho, R. (2009). Obama plans community college initiative. *The Wall Street Journal*. Retrieved February 8, 2010, from <http://online.wsj.com/article/SB124753606193236373.html>.
- Kemerer, F. R., & Baldrige, J. V. (1975). *Unions on campus: A national study of the consequences of faculty bargaining*. San Francisco: Jossey-Bass.
- Kezar, A., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education. *Journal of Higher Education*, 73(4), 435-460.
- Kisker, C. B., & Carducci, R. (2003). Community college partnerships with the private sector: organizational contexts and models for successful collaboration. *Community College Review*, 31(3), 55-74.
- Kozeracki, C. (1998). Institutional entrepreneurship in higher education. (ERIC Document Reproduction Service No. ED435338).
- Lahti, R. E. (1979). Management and governance in the two-year college. *Community College Review*, 7, 12-16.
- Leist, J. (2007). "Ruralizing" presidential job advertisements. *New Directions for Community Colleges*, 137, 35-46.
- Leslie, L. L. (2003). Motivating individuals: Incentives, staff reactions, and institutional effects. *Higher Education Management and Policy*, 15(3), 69-88.
- Levin, H. M. (2001). Studying privatization in education. In H. M. Levin (Ed.), *Privatizing education: Can the marketplace deliver choice, efficiency, equity, and social cohesion?* (pp. 3-19). Cambridge, MA: Westview Press.
- Levine, A. (1997, January 25). Higher education's new status as a mature industry. *The Chronicle of Higher Education*, p. A48.
- Levine, A. (2001). Privatization in higher education. In H. M. Levin (Ed.), *Privatizing education: Can the marketplace deliver choice, efficiency, equity, and social cohesion?* (pp. 133-148). Cambridge, MA: Westview Press.
- Liu, Y. (2007). Revenue diversification: A comparison of Russian and Chinese higher education. *Higher Education in Review*, 4, 21-42.

- Louis, K. S., Blumenthal, D., Gluck, M. E., & Stoto, M. A. (1989). Entrepreneurs in academe: An exploration of behaviors among life scientists. *Administrative Science Quarterly*, 34(1), 110-131.
- Lovell, C. D., & Trouth, C. (2002). State governance patterns for community colleges. In T. H. Bers & H. D. Calhoun (Eds.), *New directions for community colleges* (pp. 91-100). San Francisco: Jossey-Bass.
- Lucey, C. A. (2002). Civic engagement, shared governance, and community colleges. *Academe*, 88, 27-31.
- Lustig, J. (2006). From art to alienated labor: The degradation of academic work. In C. Lehane (Ed.), *Thought & Action* (Vol. 22). Washington, DC: National Education Association.
- Muijs, D. (2004). *Doing quantitative research in education with SPSS*. London: Sage.
- Newfield, C. (2003). *Ivy and industry*. Durham, NC: Duke University Press.
- Newman, F. (2000). Saving higher education's soul. *Change*, 33(5), 16-23.
- Newman, F. (2004). *The future of higher education: Rhetoric, reality, and the risks of the market*. San Francisco: Jossey-Bass.
- Peck, R. (1984). Entrepreneurship as a significant factor in successful adaptation. *Journal of Higher Education*, 55(2), 269-285.
- Persell, C. H. (2001). Teachers and privatization. In H. M. Levin (Ed.), *Privatizing education* (pp. 279-300). Cambridge, MA: Westview Press.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper and Row.
- Phelan, D. J. (2005). The changing role of the president as a fiscal leader. *New Directions for Community Colleges*, 132, 87-98.
- Phillippe, K. A., & Sullivan, L. G. (2005). *National profile of community colleges: Trends & statistics*. Washington, DC: Community College Press.
- Pierce, D. R., & Pederson, R. P. (1997). The community college presidency: Qualities for success. *New Directions for Community Colleges*, 98, 13-19.
- Pope, M. L., & Miller, M. T. (2005). Leading from the inside out: Learned respect for academic culture through shared governance. *Community College Journal of Research and Practice*, 29, 745-757.
- Powers, D. R., Powers, M. F., Betz, F., & Aslanian, C. B. (1988). *Higher education in partnership with industry: Opportunities and strategies for training, research, and economic development*. San Francisco: Jossey-Bass.

- Raines, P. J. (2003). *The economic institutions of higher education: Economic theories of university behavior*. Northampton, MA: E. Elgar.
- Ramamurti, R. (1986). Public entrepreneurs: Who they are and how they operate. *California Management Review*, 28(3), 142-158.
- Rankin, R. R. (2002). The entrepreneurial role of the community college president: Opportunities and challenges. Unpublished Doctor of Arts. George Mason University, Fairfax, VA.
- Rhoades, G. (1998). *Managed professionals: Unionized faculty and restructuring academic labor*. New York: State University of New York Press.
- Rhoades, G. (2005). Capitalism, academic style, and shared governance. *Academe*, 91(3), 38-42.
- Rhoades, G. (2006). The higher education we choose: A question of balance. *The Review of Higher Education*, 29(3), 381-404.
- Rhodes, F. H. T. (2001). *The creation of the future: The role of the American university*. Ithaca, NY: Cornell University Press.
- Richardson, R. C., & de los Santos, G. E. (2001). Statewide governance structures and two-year colleges. In B. K. Townsend & S. B. Twombly (Eds.), *Community colleges: Policy in the future context* (pp. 39-55). Westport: Ablex.
- Roueche, J. E., & Jones, B. R. (Eds.). (2005). *The entrepreneurial community college*. Washington, DC: American Association of Community Colleges.
- Rury, J. L., & Mirel, J. E. (1997). The political economy of urban education. *Review of Research in Education*, 22, 49-110.
- Slater, R., & Doig, J. (1985). Leadership in education: Issues of entrepreneurship and environment. *Education and Urban Society*, 20(3), 294-301.
- Slaughter, S., & Leslie, L. L. (1997). *Academic capitalism: Politics, policies and the entrepreneurial university*. Baltimore, MD: Johns Hopkins University Press.
- Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy*. Baltimore, MD: Johns Hopkins University Press.
- Smith, W., & Bender, T. (2008). *American higher education transformed 1940-2005: Documenting the national discourse*. Baltimore: MD: The Johns Hopkins University Press.
- Spangler, M. S. (2002). Concluding observations on successful partnerships. *New Directions for Community Colleges*, 119, 77-80.

- Tarance, Z. (2002). A view from the outside in: Community colleges as entrepreneurial community learning centers. League for Innovation in the Community College: Retrieved June 18, 2007, from <http://www.league.org/publication/abstracts/leadership/labs1102.html>.
- Thelin, J. R. (2004). *A history of American higher education*. Baltimore, MD: Johns Hopkins University Press.
- Townsend, B. K. (2001). Blurring the lines: Transforming terminal education to transfer education. In D. D. Bragg (Ed.), *The new vocationalism in community colleges* (pp. 63-71). San Francisco: Jossey-Bass.
- Twombly, S. B. (1988). Administrative labor markets as a test of the existence of internal labor markets in two-year colleges *Journal of Higher Education*, 59, 668-689.
- Valliere, D. (2006). Consequences of growth: Shaping entrepreneurial attitudes. *Entrepreneurship and Innovation*, 7(3), 141-148.
- Vaughan, G. B. (1986). *The community college presidency*. New York: Macmillan.
- Vaughan, G. B., & Weisman, I. M. (1998). *The community college presidency at the millennium*. Washington, DC: Community College Press.
- Vaughan, G. B., & Weisman, I. M. (2001). *The community college presidency 2001*. Washington, DC: American Association of Community Colleges.
- Veblen, T. (1918). *The higher learning in America*. New York: B.W. Huebsch.
- Viniar, B., & Steffinius, M. (2006, February). *The entrepreneurial president*. Paper presented at the The Entrepreneurial President, Institute for Community College Development, Cornell University, Fort Lauderdale, FL.
- Voorhees, R. (2001). Financing community colleges for a new century. In M. B. Paulsen & J. C. Smart (Eds.), *The finance of higher education: Theory, research, policy & practice*. New York: Agathon Press.
- White, K. B. (1998). Shared governance in California. In J. S. Levin (Ed.), *Organizational change in the community college: A ripple or a sea change?* (pp. 19-29). San Francisco: Jossey-Bass.
- Witt, A. A., Wattenbarger, J. L., Gollattscheck, J. F., & Suppiger, J. E. (1994). *America's community colleges: The first century*. Washington, DC: Community College Press.
- Zemsky, R. (2009). *Making reform work: The case for transforming American higher education*. New Brunswick, NJ: Rutgers University Press.
- Zoglin, M. L. (1976). *Power and politics in the community college*. Palm Springs, CA: ETC.

APPENDIX A

PRESIDENTIAL SURVEY

Please answer the following survey questions with the one most appropriate answer:

1. Number of years as a college president, including this year ____
2. Age: ____ Under 40 ____ 41-50 ____ 51-60 ____ 61-70 ____ Over 70
3. Gender: ____ Male ____ Female
4. What was your institution's credit enrollment (unduplicated headcount) last year?
 ____ Under 5,000 ____ 5,000-10,000 ____ 10,000-15,000 ____ 15,000+
5. What was your institution's noncredit enrollment (unduplicated headcount) last year?
 ____ Under 1,000 ____ 1,000-5,000 ____ 5,000-10,000 ____ 10,000-15,000 ____ 15,000+
6. Do you anticipate next year's state allocations to community colleges in your state to:
 ____ Increase ____ Decrease ____ Remain the same

This section lists potential institutional initiatives. For each initiative, please mark (X) in the appropriate box in Block A and Block B.

Initiative	Block A				Block B			
	New Initiative	Traditionally Used	Planned for the Future	Not Applicable	Very Successful	Moderately Successful	Minimally Successful	Not Effective
7. Technical services to business/industry								
8. Personnel exchanges with business/industry								
9. Training programs for business/industry								
10. Joint ventures and/or partnerships with private sector								
11. Distance-learning programs within existing organizational structure								
12. Distance-learning programs in partnership with private sector enterprises								
13. Profit-sharing with food service, bookstore or other auxiliary services								
14. Lease/rent college facilities and/or equipment								
15. Retail sales of institutional resources, e.g. computer time, internet access								

16. Of the following and excluding tuition and fees, which one activity generates the most revenue for your college?
 ____ Fee based educational activities offered to the community at large
 ____ Public and private sector contract training
 ____ Online courses (E-learning/Distance Ed)
 ____ Consulting to business and industry
 ____ Space and facility rental
 ____ Other - please specify _____
17. What percent of your total operating budget do these revenue-generating activities represent?
 ____ 0-9% ____ 10-14% ____ 15-19% ____ 20% or more
18. What is the average public sector contract training amount?
 ____ Less than \$10,000 ____ \$10,000-25,000 ____ \$25,000-50,000
 ____ \$50,000-100,000 ____ \$100,000-500,000 ____ \$500,000 or more

19. What is the average private sector contract training amount?
 Less than \$10,000 \$10,000-25,000 \$25,000-50,000
 \$50,000-100,000 \$100,000-500,000 \$500,000 or more
20. What is the most optimistic level of college-business-industry partnership revenue that you envision this fiscal year?
 Less than \$50,000 \$50,000-100,000 \$100,000-250,000
 \$250,000-500,000 \$500,000-1,000,000 1M or more
21. What is the most optimistic level of college-business-industry partnership revenue that you can envision in three years?
 Less than \$50,000 \$50,000-100,000 \$100,000-250,000
 \$250,000-500,000 \$500,000-1,000,000 1M or more
22. What percentage of your faculty are full-time tenure track and tenured faculty?
 Less than 20% 25-40% 45-60% Greater than 65%
23. Are the full-time faculty unionized at your college? Yes No
24. Please describe the faculty's participation in shared governance at your college:
 Strong shared governance
 Informal shared governance
 Shared governance on specific issues
25. In your opinion, to what extent are the academic units entrepreneurial?
 The units are very entrepreneurial
 There is recognition of the need but little is happening
 There is little recognition of the need to be entrepreneurial
26. Do financial incentives exist for faculty and staff to encourage and reward profit-generating initiatives? Please check one.
 No
 Yes, Primarily in the form of release time
 Primarily in the form of stipends
 Primarily in the form of consulting opportunities
 Other, please explain _____
27. In your opinion, are faculty responsive to participating in external partnerships created to generate a profit for the college? This may include such initiatives as industry specific program development, academic career ladders for incumbent workers, and noncredit-to-credit articulation agreements.
 Most faculty are very responsive
 Some faculty are responsive but overall faculty are disinterested
 Most faculty would not engage in these types of initiatives
28. Among the governing board and in regard to externally focused profit-generating initiatives, is there general agreement on the college's goals and objectives?
 Strong agreement Some agreement Lack of agreement
29. Among the governing board and in regard to externally focused profit-generating initiatives, is there general agreement on revenue expectations?
 Strong agreement Some agreement Lack of agreement
30. How would you describe the college's student body?
 Primarily on track to transfer to four-year institutions, AA and AS degrees
 Primarily vocational, AAS degrees and Certificates
 Primarily noncredit
 Other, please explain _____

31. How would you describe the college's relationship with neighboring four-year institutions?
 Excellent, the college has seamless transfer agreements in place with many neighboring four-year institutions
 Fair, the college has a few transfer agreements in place
 Poor, transfer of credits is still a difficult process for students

32. In general, I believe in allocating institutional resources toward activities with a greater revenue-generating potential.
 Strongly agree Somewhat agree Have many concerns and would generally disagree

33. Please indicate where the revenue-generating units (continuing education, public and private sector training, etc) are located on the college's organizational chart:
 Report to VP Academic Affairs Report to VP Administrative Services
 Report to VP External Affairs Report directly to the President
 Other, please explain _____

Thank you for taking the time to complete this survey. Please be assured that all responses provided on this survey will remain confidential. Presentation of the statistical results from this survey will be in aggregate with no individual or institution identified.

If you would like to receive the results of this research please include an email address:

APPENDIX B

COVER LETTER FOR SURVEY INSTRUMENT

Cover Letter

[Bergen Community College letterhead]

[Date]

[Name]

[Address]

Dear [name of college president]:

As part of my doctoral degree requirements, I am conducting a research study that looks at entrepreneurial initiatives occurring on community college campuses across the country. For the purposes of this study, these initiatives are defined as market-driven revenue-generating ventures and programs as well as innovative ways to capitalize on traditional community college endeavors.

With ongoing concerns regarding state allocations and greater governmental scrutiny, community colleges will need to become more innovative and entrepreneurial in finding ways to generate revenue to support access and sustain growth. I believe that my study may have important implications for policy decisions and institutional planning.

Enclosed you will find a survey which asks you to respond to 40 questions. These questions were primarily created so as to garner a snapshot of the activities currently occurring on your campus. The data obtained from this survey will be used in aggregate with no individual institution identifiable, and will be used as part of my doctoral dissertation in higher education administration at the University of Alabama, Tuscaloosa.

I would be most grateful if you could take the time to answer the enclosed survey questions. Please note that your participation in this study is voluntary and you may choose to discontinue participation at any time. Completing and returning the survey constitutes your consent. A self-addressed stamped envelope has been provided.

Please return the survey within two weeks of receipt. If you have any questions or would like additional information regarding this research study, do not hesitate to contact me by telephone at (201) 447-7160 or by email at ikleinman@bergen.edu.

Following the successful completion of this study, I will be happy to provide you with an executive summary outlining the key findings. If you would like to receive a summary of the research, please include an email address where suggested.

Sincerely,

Ilene Kleinman
Director, Division of Continuing Education and Community Outreach
Bergen Community College