

**Non-Credit Entrepreneurship Education in Community Colleges:  
The National Perspective**

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## Executive Summary

This report summarizes findings from a national survey of non-credit entrepreneurship and small business management education in American community colleges. Specifically, the project seeks to identify and document current best practices with respect to non-credit entrepreneurship and small business management education and to provide community colleges with a benchmark for assessing their own progress in meeting established program objectives. The survey findings also provide community colleges, their communities, responsible state agencies, and other sources of funding with criteria by which to evaluate the performance of community colleges in non-credit entrepreneurship education.

A brief review of relevant entrepreneurship education scholarship is presented along with a detailed description of the survey methodology and research sample (the survey instrument is included in the report appendix). Drawing upon data collected from 227 participating community colleges, the research findings presented in this report address the following dimensions of non-credit community college entrepreneurship training: program content and format, administration and funding, faculty characteristics, student enrollment, and program assessment.

Key research findings discussed in the report include:

- 71% of respondents offer non-credit entrepreneurship or small business management education
- A survey of non-respondents resulted in the estimation that 53% of non-respondent community colleges offer some form of non-credit entrepreneurship education with a ninety-five percent confidence range of 37% to 69%
- 76% of participating institutions offer *both* non-credit entrepreneurship and small business management education
- 76% of survey participants report offering *both* credit and non-credit entrepreneurship training

- 44% of institutions house non-credit entrepreneurship education within continuing, community, and adult education administrative units
- General college budget, student tuition/fees, and state allocations represent the three most prominent forms of financial support for non-credit entrepreneurship education
- Stand-alone workshops, continuing education courses, and workshop series are the three most common non-credit entrepreneurship education formats with 49% of survey respondents reporting the use of four or more different program formats
- Lecture, guest speakers, and group work topped the list of non-credit entrepreneurship instructional methods while business plan development, market analysis reports and personal development exercises were the three most frequently employed learning activities
- The majority of participating institutions (60%) enrolled less than 200 non-credit entrepreneurship students
- Only 35% of participating institutions report offering non-credit entrepreneurship programs that target specific demographic groups (e.g., women, racial groups, dislocated workers)
- The majority of institutions rely on adjunct faculty to provide non-credit entrepreneurship training and over 90% of these instructors possess prior entrepreneurial and small business management experience
- Slightly more than half of participating institutions reported development of a written statement of non-credit entrepreneurship goals, outcomes, or program evaluation criteria
- The majority of institutions (56%) conduct evaluations at the end of each course or program while only 12% utilize alumni surveys and 18% analyze economic data to gather assessment data beyond program completion

These empirical findings, elaborated upon in the full report, confirm and extend previous scholarship on community college entrepreneurship education. Consistent with Hagan's (2004) assertion that over 60% of American community colleges offer credit-bearing entrepreneurship training, the results of this study also reflect extensive community college involvement in the promotion of economic and workforce development via non-credit entrepreneurship and small business management education. The impressive breadth and depth of non-credit community college entrepreneurship training is underscored by survey data which illustrate the diverse range

of educational topics, instructional methods, learning activities, and institutional resources integrated into comprehensive educational programs capable of meeting the diverse informational and pedagogical needs of community college continuing education students.

Additional insights gleaned from this report include the collaborative nature of non-credit community college entrepreneurship education (as evidenced by the diverse range of external funding sources and formal partnerships reported by participating institutions) and the continued need for assessment practices that effectively measure student learning and program outcomes. The report concludes with a discussion of additional research topics (e.g., the nature and scope of collaboration between non-credit and for-credit entrepreneurship initiatives, external resource development strategies, and innovative assessment practices that measure long-term program outcomes) that warrant further investigation in the interest of advancing our knowledge of the important role American community colleges play in cultivating and sustaining entrepreneurial activity.

## **Introduction**

This report summarizes findings from a national survey of non-credit entrepreneurship and small business management education in American community colleges. Specifically, the project seeks to identify and document current best practices with respect to non-credit entrepreneurship and small business management education and to provide community colleges with a benchmark for assessing their own progress in meeting established program objectives. The survey findings also provide community colleges, their communities, responsible state agencies, and other sources of funding with criteria by which to evaluate the performance of community colleges in non-credit entrepreneurship education.

The significance of community college entrepreneurship and small business management education is evident in statistics on the prominent role American entrepreneurial enterprises and small businesses play in the promotion of local, regional, and national economic growth. A review of national census, commerce, and labor data reveals that America's 23 million small businesses represent 99.7% of all employer firms, employ over half of all private workers, account for 50% of the private sector output, and generate 60 to 80% of net new jobs annually in the U.S. (United States Chamber of Commerce, 2005). In addition, the Global Entrepreneurship Monitor (GEM), a collaborative research initiative between Babson College and London Business School, has documented a strong correlation between national entrepreneurial activity and economic growth as well as a strong relationship among entrepreneurship, education, and job creation. Specifically, GEM findings reveal that "30% of entrepreneurs with less than a secondary education expect to remain self-employed over the next five years, while 35% of the most highly educated entrepreneurs expect to employ 20 or more" individuals (Neck, Zacharakis, Bygrav, & Reynolds, 2003, p. 6). Despite the abundance of statistics confirming the economic

growth associated with entrepreneurialism, additional scholarship is needed to expand our understanding of the role entrepreneurship and small business management education play in cultivating and sustaining entrepreneurial activity.

Although a number of scholars have conducted survey research of for-credit entrepreneurial education programs sponsored by four-year colleges and universities (Solomon, Duffy, and Tarabishy, 2002; Vesper & Gartner, 2002), relatively few researchers have systematically examined entrepreneurship and small business management education within the community college sector—a surprising oversight given the prominence of economic expansion, community education, and workforce development among the multiple missions of American community colleges. The role of community colleges in entrepreneurship education is especially significant because of their place in the national educational system. By their very nature, the colleges are tied to the local community that they serve. Their students come from that community; many of them are part time students and they work in that community; they will very probably make their future life in that community. The businesses in the community look to the community college to provide their educated workforce; they frequently provide adjunct faculty for the community college; they provide workplaces for the students while they are attending the community colleges; they will very likely hire the graduates from their colleges. Thus, community colleges must be both pragmatic and directed to the immediate needs in training the labor force for work in the community. All of this makes the community college an ideal context in which to develop educational programs to create entrepreneurs. Indeed, many community colleges are already engaged in entrepreneurship education as evidenced by Hagan's (2004) assertion that 60% of American community colleges currently offer at least one credit-bearing course in small business management or entrepreneurship. What is missing from the

extant literature on community college entrepreneurship education, however, is a comprehensive review of non-credit entrepreneurial offerings. A 1994 report prepared by the Center for the Study of Community Colleges asserted that the majority of community college entrepreneurial training was offered as non-credit continuing education. Basing this assertion primarily upon a review of relevant literature and a limited survey of 40 urban community colleges, the authors of the 1994 report called for additional empirical research to examine the format, content, and administrative resources of community college non-credit entrepreneurship education.

Unfortunately, this call has remained unanswered. In addition to beginning to fill this gap in the literature on non-credit community college entrepreneurial education, the survey data presented in this report also provides valuable insights on the scope and function of external partnerships and assessment activities, two aspects of entrepreneurship education that have received relatively little attention in previous survey research.

Prior to presenting the findings from our survey of non-credit community college entrepreneurship and small business management education, we synthesize relevant entrepreneurship education research as well as provide a detailed introduction to the survey instrument and sampling procedures that frame this study.

## **Relevant Literature**

The proliferation of postsecondary entrepreneurship and small business management education offerings has been well documented in a diverse collection of scholarly articles and research reports published by numerous education, business, civic, and philanthropic organizations (Katz, 2003; Kauffman Center for Entrepreneurial Leadership, 2001; Kuratko, 2003; Solomon, Duffy, & Tarabishy, 2002). In order to establish a context for the findings presented in this study on the current status of community college non-credit entrepreneurship

education, we will briefly review the major themes and key findings of previous entrepreneurship education scholarship. We begin this literature review with a discussion of postsecondary entrepreneurship education research conducted on a national scale and then synthesize the rather limited body of scholarly work focused on entrepreneurship and small business management education in the community college context.

### *The National Perspective*

In order to better understand the contemporary status and future trajectory of American entrepreneurship education, it is important to explore the historical roots of this rapidly evolving academic discipline. In 2003 Jerome Katz published a comprehensive chronology of American entrepreneurship education that begins with the 1876 publication of Francis Walker's *The Wages Question*, "the first major work by an American university academic considering the entrepreneur" (p. 286). Developed from a review of primary and secondary historical source documents, examinations of entrepreneurship program websites, and discussions with numerous entrepreneurship scholars, Katz's chronology provides valuable insight on three distinct dimensions of entrepreneurship education growth: courses, infrastructure elements (e.g., endowed positions), and publications.

After examining the 100+-item chronology and reviewing trends in course development, endowment growth, and the proliferation of entrepreneurship journals and textbooks (the number of entrepreneurship journals has doubled every three years on average), Katz (2003) asserts two primary findings with implications for the future. The first is that American entrepreneurship education has reached maturity as evidenced by the emergence of "widely recognized and consistent" approaches in curricular content and pedagogy, disciplinary specialization (e.g., high-technology and economic development), and external legitimization of the discipline (for

example, *US News and World Report* national rankings) (p. 294-295). Katz's second major finding concerns the growth of entrepreneurship education beyond American business schools. Katz notes, "Entrepreneurship offerings continue to grow in schools of agriculture, engineering, the learned professions, and arts and sciences, usually with minimal or no involvement by business school entrepreneurship faculty" (p. 295). Building upon the historical scaffolding of the chronology, Katz concludes the article with insights into the challenges entrepreneurship education will face in the 21<sup>st</sup> century. These problems include: 1) a publication glut "with too many journals chasing too few good papers" (p. 295), 2) avoiding the stagnation that frequently accompanies complacency and success, and 3) a narrow entrepreneurship faculty pipeline stemming from a lack of PhD programs preparing future faculty. Despite these challenges, Katz asserts, "the good news is that entrepreneurship education is certain to continue as a major and growing academic discipline worldwide. There are too many academics, too much established infrastructure, and too much demand from students, firms, and governments to let entrepreneurship fall into disuse or disarray" (p. 298). The growth and maturity of American entrepreneurship education captured in Katz's comprehensive chronology is reinforced by the findings of two other national surveys of American entrepreneurship education discussed below.

In 1986, Rob Dainow published the results of an entrepreneurship education literature survey of articles published between 1974 and 1984. The purpose of this research was to "assess the current state of the art, based on published articles, with a view to identifying the strengths and weaknesses that can guide future efforts" (p. 10). After reviewing the literature, Dainow identified "a need for more systematic collection and analysis of data, and more varied methodologies to build a stronger empirical base" (p. 18). In the interest of building on Dainow's work through an examination of more recent entrepreneurship education literature, Gorman,

Hanlon, and King (1997) surveyed articles published from 1985-1994. The authors identified 92 articles published in seven leading academic journals specializing in entrepreneurship and small business management and then categorized the papers along three distinct dimensions: 1) theoretical or descriptive, 2) target market (e.g., student enrolled in the formal educational system, existing business owners), and 3) content (e.g., entrepreneurial propensity, pre-startup, post-startup). After carefully analyzing the selected articles, Gorman, Hanlon, and King identified several major themes that connect contemporary entrepreneurship education scholarship. First, the authors articulated a "need to distinguish among entrepreneurship, enterprise and small business management education and to differentiate each of these from traditional approaches to management education" (p. 18). According to the authors, this theme was particularly prominent in articles on entrepreneurship teaching strategies and curricular content. In contrast to the interdisciplinary findings highlighted in Katz's (2003) entrepreneurship education chronology, a lack of multidisciplinary approaches in entrepreneurship education was a second major theme to emerge from the Gorman, Hanlon, and King literature review. The authors reported, "only three of the twenty nine theoretical articles drew on fields other than business" (p. 18). This disparity in research findings may be a function of the journals reviewed by Gorman, Hanlon, and King.

Additional findings discussed by Gorman, Hanlon, and King (1997) included: 1) an emerging consensus that entrepreneurship can be taught and entrepreneurial attributes fostered through educational programming, 2) a demonstrated growth in entrepreneurship courses and programs coupled with a lack of constancy in approach, and 3) the presence of strong evidence to support the assertion that business owners and managers were often reluctant to participate in entrepreneurship training programs. The authors concluded the literature survey with

recommendations for future areas of investigation that centered on measuring the impact and effectiveness of comprehensive entrepreneurship education programs rather than continuing to focus on assessing the outcomes associated with completion of a single entrepreneurship course.

The 1999-2000 National Survey of Entrepreneurship Education conducted by George Washington University and sponsored by the Kauffman Center for Entrepreneurial Leadership (Solomon, Duffy, and Tarabishy, 2002) is the third and final national entrepreneurship education study reviewed in this report. Based on survey data collected from 240 institutions (13% of which were two-year colleges), Solomon, Duffy, and Tarabishy report that in comparison to previous national surveys, the 1999-2000 survey revealed modest growth in entrepreneurship education courses and degree programs as well as external funding for entrepreneurship education chairs, professorships, and centers. The survey findings, disaggregated by institutional type (2-year, 4-year, and international universities), offer insight on the nature and scope of entrepreneurship programs (courses vs. degrees), popular pedagogical methods, educational technology usage, and outreach initiatives (e.g., continuing education opportunities, elementary school programs, alumni tracking). Across institutional type, the three most popular entrepreneurship education course topics were small business management, entrepreneurship, and new venture creation. Case studies, business plan creation, and discussions topped the list of in-class instructional methods employed by community colleges while internships, on-site business visits, and small business consulting were the three most popular external classroom pedagogical methods. The bulk of the report's discussion, however, focused on surprising findings related to the limited use of educational technology in contemporary entrepreneurship education. Survey results indicate that while 52% of participants incorporate required web-based assignments in their entrepreneurship curriculum, only 30% provide students and entrepreneurs

with on-line management and technical assistance and only 21% of participating institutions use distance-learning technologies in entrepreneurship education. Solomon, Duffy, and Tarabishy assert, “Given the tremendous growth in personal, business, and academic technology, one might assume that a higher percentage of entrepreneurship educators would have adopted and used various educational technology tools such as the Internet, online chat rooms and distance learning” (p. 8). The researchers warn that a failure to quickly integrate technological advances into entrepreneurship education curricula will prevent the field from remaining on “the cutting edge” and adequately preparing students to meet the demands of entrepreneurship and business management in the 21<sup>st</sup> century.

#### *Entrepreneurship Education in the Community Colleges*

Despite the fact that the 1999-2000 National Survey of Entrepreneurship Education does include community college program data, the small number of community colleges participating in this survey (n=31) offers a rather limited portrait of community college entrepreneurship education. We conclude this literature review with a discussion of entrepreneurship education research explicitly situated within the context of American community colleges. Although this body of scholarship is rather limited in comparison to the breadth and depth of the research carried out in four-year college and university settings, a number of scholars have studied the growth and development of community college entrepreneurship and small business management course offerings. Two of the most comprehensive and informative studies are discussed below.

In 1994, the Center for the Study of Community Colleges submitted a report to the Kauffman Foundation Center for Entrepreneurial Leadership entitled, *Entrepreneurship Training in American Community Colleges*. This report, prepared in support of U.S. Senate Bill 862 (a

bill that proposed entrepreneurship education funding for community colleges and historically black colleges and universities), summarized previous scholarship on entrepreneurship programs in American community colleges and synthesized survey data collected from 40 community colleges located in major urban population centers. Among the report's key findings were: 1) most community college entrepreneurship education programs are administered as non-credit, continuing education opportunities, 2) several of the programs focus on fostering entrepreneurship among particular demographic groups (e.g., women, African Americans), 3) most community college entrepreneurial education programs are collaborative ventures that involve public as well as private support, 4) community colleges entrepreneurship instructors are typically experienced entrepreneurs and business managers with little or no formal pedagogical training, and 5) participating institutions rarely assess the impact or effectiveness of entrepreneurial education programs. In addition to this initial report, the Center for the Study of Community Colleges also prepared two highly informative reports on the status of sixteen community college entrepreneurship programs funded through the Kauffman Foundation Jumpstart project, a grant program focused on providing entrepreneurship training to African Americans, Hispanics, Native Americans, and women (Cohen, Brawer, Kozeracki, 1998, 2000). In addition to chronicling the development of innovative community college entrepreneurship programs, the Jumpstart reports also highlight the diversity of instructional methods, curricular content, and collaborative partnerships that characterize community college entrepreneurship training. Given the small sample size of community colleges represented in the Center's original 1994 report and two subsequent Jumpstart reports, additional empirical research conducted on a national scale is essential for constructing a more accurate and comprehensive portrait of community college entrepreneurship education.

In 2004 Elizabeth Hagan released the results of a comprehensive survey of for-credit entrepreneurship education offerings in American community colleges. Her research findings, gleaned from an extensive review of more than 1,000 community college web sites and the analysis of survey data collected from 171 community college entrepreneurship education program directors, offers tremendous insight into the diverse formats, curricula, and instructional methods that characterize community college entrepreneurship education. In addition, Hagan also examined the influence of institutional mission, geographic location, and faculty characteristics on entrepreneurship program growth and decline. Hagan's significant findings include survey results which reveal that 73 out of 426 participating institutions (17%) offer entrepreneurship or small business management degree programs, 131 (31%) award entrepreneurship certificates, 176 (41%) offer three or more courses in small business or entrepreneurship, 64 (15%) offer only one course, and 41 (9%) do not currently offer a credit-bearing entrepreneurship courses. Survey responses also revealed that the primary and secondary reasons given for the establishment of community college entrepreneurship programs were community-related (30% combined) and economic-related (16% combined). Only 8% of the participating institutions identified student-driven interest, demand or need as the primary or secondary reason driving the development of entrepreneurship and small business management offerings.

With respect to instructional methods utilized in for-credit community college entrepreneurship courses, Hagan surprisingly asserts, "action and experiential learning methods are not apparent in the results of the survey" (p. 76). Fifty out of Hagan's 122 survey respondents reported "always" using lectures in their community college entrepreneurship courses. Hagan qualifies this finding with additional survey results that reveal, "although the lecture method is

dominant, the respondents also indicated that other methods, especially the use of computers both on site and in Distance Learning is beginning to become more important” (p. 77) as twenty-one percent of the respondents report “always” or “very frequently” using computers in instruction and twenty-six schools reported offering computer-based distance learning programs in entrepreneurship and small business management. Hagan summarizes the implications of this data with the assertion, “when it comes to methodology, it appears that community college instructors are somewhat traditional in their reliance on the lecture method of instruction, despite research that indicates that the adult learner prefers to be involved in the learning experience, not preached to” (p. 100).

In addition to program format and content, Hagan was also interested in learning more about community college entrepreneurship faculty, specifically their personal experience with entrepreneurship and small business management. Hagan reports, “the 171 community college representatives who responded to the author’s survey reported that more than 52% of the full-time instructors and more than 43% of the adjunct instructors have owned a business. In fact 29% of full-time faculty members and 34% of part-time adjuncts currently own a business” (p. 81).

Lastly, Hagan analyzed survey responses with the intention of identifying what influence, if any, institutional mission, geographic location, or instructor characteristics had on the establishment and growth of community college entrepreneurship and small business management programs. A careful review of the data revealed no significant relationship between any of these factors and program growth. According to Hagan, “the primary outcome of the research is a determination that small business and entrepreneurship programs are as diverse as the communities and institutions that house them. They come into existence, grow, or decline

and are characterized by factors that are more expansive than attitude, geography, or instructor characteristics. The diversity and trend toward establishment of new programs suggests that future research about entrepreneurship education is needed” (p. 2).

Hagan’s (2004) national survey of for-credit community college entrepreneurship education represents an important contribution to the entrepreneurship education scholarship. The survey and research findings described below build on and extend Hagan’s work by providing a comprehensive review of non-credit entrepreneurship education provided by American community colleges. Reviewed together, these two empirical studies offer a thorough and insightful portrait on that national status of community college entrepreneurship education.

## **Research Design**

### *Entrepreneurship Education Defined*

Despite the emergence of consensus on the economic significance of entrepreneurialism, scholars have not yet reached agreement on a common set of definitions for entrepreneurialism, small business management, and entrepreneurship education (see, Hagan 2004 for a concise summary of diverse definitions). A frequent topic of discussion in the relevant literature is whether or not entrepreneurship and small business management should be treated as conceptually distinct constructs or combined in the formulation of a comprehensive definition of entrepreneurship education that spans the business life cycle from creation to maintenance to decline or transfer (Gartner & Vesper, 1997; Gorman, Hanlon & King, 1997). Although it is relatively easy to identify conceptual distinctions between entrepreneurship and small business management—for example, Hagan (2004) asserts that “it is clear that small business management is about running small businesses and that we can loosely define the overall field of entrepreneurship as the creation of new business enterprises” (p. 20)—research informed by

intuitive logic and real world practice tends to adopt a comprehensive definition of entrepreneurship education that includes both new business creation as well as ongoing maintenance. Accordingly, this survey of non-credit community college entrepreneurship education employs Katz's (2003) all-inclusive definition of entrepreneurship education as "a collection of academic disciplines and specialties including entrepreneurship, new venture creation, entrepreneurial finance, small business, family business, free enterprise, private enterprise, high-technology business, new product development microenterprise development, applied economic development, professional practice studies, women's entrepreneurship, minority entrepreneurship, and ethnic entrepreneurship" (p. 284). Given this definition, the terms entrepreneurship and small business management education will be used interchangeably in this report unless otherwise noted.

### *Research Sample*

Survey respondents were recruited to participate in this project via a two-phase invitation process. In the first phase of the project, introductory e-mails were sent to 1192 community college presidents and chancellors listed in the 2004 Higher Education Directory. The e-mail outlined the objectives of the study and requested that the president or chancellor provide the research team with the names and contact information of the institutional representatives who could speak most knowledgeably about the college's non-credit entrepreneurship education offerings. Two follow-up recruitment e-mails and one postal mailing were sent to non-responding community college leaders.

Of the 1192 community colleges contacted in the first phase of the project, 45 withdrew from the study because they did not currently offer non-credit entrepreneurship education and 380 institutions provided the name of at least one college representative knowledgeable about the

institution’s non-credit entrepreneurship offerings. Seventy-one institutions provided multiple institutional contacts resulting in the creation of an institutional contact database with 457 individual records. Please see Table 1 for a summary of the research sample and response rate information.

**Table 1: Research Sample and Response Rate Summary**

	<i>Phase 1</i>		<i>Phase 2</i>		<i>Survey</i>		<i>Summary</i>
	Institutions	Persons	Institutions	Persons	Institutions	Persons	
Total	1192	1192	380	457	184	198	1192
Removed as duplicate						14	
Positive Response*	380	457	184	198	162	162	162
Does Not Offer Non-Credit Entrepreneurship Education**	45	45	8	8	12	12	65
No Response	767		188	251	10***	10***	955
Response Rate	36%		50%	45%	95%		19%

\* Positive response numbers listed for Phase 1 and Phase 2 are the number of individuals/institutions that moved forward to the next phase of the study. The positive response numbers reported in the Survey and Summary columns are the number of institutions that reported offering non-credit entrepreneurship education.

\*\* Includes those institutions/individuals that selected to withdraw from study prior to completing the survey due to the absence of non-credit entrepreneurship education at their college.

\*\*\* Incomplete surveys that were not analyzed.

In the second phase of the recruitment process, these 457 institutional contacts were invited via e-mail to complete an on-line survey of the college’s non-credit entrepreneurship and small business management offerings. Again, two follow-up e-mails were sent to non-responding institutional contacts. Of the 457 individuals invited to participate in the study, eight withdrew from the study because their college does not currently offer non-credit entrepreneurship education and 198 submitted surveys (representing 184 different institutions).

Given the data presented above, response rates can be calculated for each phase of the study’s recruitment process. In Phase I (contact with 1192 community college presidents and

chancellors), 425 institutions<sup>1</sup> (36%) responded to our request for information. In Phase II (survey invitations sent to 457 individuals at 380 different institutions), 206 individuals<sup>2</sup> (45%) responded representing 184 different institutions. In summary, the project collected data from 227 community colleges<sup>3</sup>, representing 19% of the 1192 institutions initially contacted.

### *Non-Respondent Survey*

In the interest of augmenting the survey findings presented below, the research team also conducted a non-respondent survey. Rather than seeking to identify significant differences between participating institutions and non-participants, the non-respondent survey was designed to develop an informed estimate of the number of American community colleges engaging in non-credit entrepreneurship and small business management education. After determining the number of non-respondent institutions in the first phase of recruitment (n=722)<sup>4</sup>, a five percent sample (n=36) was randomly selected for follow-up. The sample included 32 public community colleges, 3 private community colleges, and 1 tribal community college. A web search was conducted with follow-up emails and phone calls as necessary to assess the status of entrepreneurship and small business education at each institution. It was determined that 19 (53%) of the institutions in the non-respondent survey sample offer some sort of non-credit entrepreneurship or small business education while 17 (47%) institutions do not. Based on these non-respondent survey findings, it can be estimated that 53% of the non-responding community

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<sup>1</sup> Includes the 380 institutions that responded with the names of individuals knowledgeable about the college's non-credit entrepreneurship offerings as well as the 45 institutions that indicated they do not currently offer non-credit entrepreneurship education.

<sup>2</sup> Again, includes both the 198 survey respondents as well as the 8 individuals who indicated their college does not offer non-credit entrepreneurship education.

<sup>3</sup> Includes the 174 institutions that submitted complete surveys as well as the 53 institutions that reported offering no non-credit community college entrepreneurship education.

<sup>4</sup> Calculated by subtracting from the original research sample (1192 community colleges) the 380 institutions that responded with the names of individuals knowledgeable about the college's non-credit entrepreneurship offerings, the 45 institutional responses indicating no current non-credit entrepreneurship education offerings, as well as 45 institutions who requested to be withdrawn from the study.

colleges offer some form of non-credit entrepreneurship education with a ninety-five percent confidence range of 37% to 69%. Although this approximation is slightly lower than Hagan's (2004) assertion that 60% of American community colleges offer for-credit entrepreneurship and small business management education, both estimates clearly underscore the important role of community colleges in preparing the next generation of American entrepreneurs.

### *Survey Instrument*

The development of the survey instrument (see Appendix A) was a collaborative process informed by the research team's extensive review of extant literature on entrepreneurship education and community college non-credit programs. In addition to gathering data that would add depth to our current understanding of community college involvement in entrepreneurship and small business management education (Center for the Study of Community Colleges, 1994; Cohen, Brawer, & Kozeracki, 1998, 2000; Hagan, 2004), the survey instrument was also designed with the intention of collecting information that would address perceived gaps in previous research on the topic (e.g., entrepreneurship education funding, assessment criteria, external partnerships).

To ensure the survey instrument accurately reflected the wide-range of practices taken up by non-credit entrepreneurial education programs, a pilot test was conducted in the winter of 2005. Respondents were recruited to participate in this initial pilot study via a three-phase invitation process. Invitations to participate in the pilot survey were sent via email to a total of forty randomly selected institutional contacts. Of those forty, nine responded affirmatively, netting eight completed survey responses.

Upon completion of the pilot survey, follow-up phone interviews were conducted using a protocol drafted by the research team (see Appendix B). The purpose of these follow-up

interviews was to solicit specific feedback from pilot respondents on topics related to content language and terminology, relevance and appropriateness of content questions, technical reliability and ease, as well as to garner feedback on the look and feel of the survey instrument. Feedback generated through this two-phase process was used to refine the final survey instrument for later dissemination. This included substantive changes to the presentation of specific questions as well as incorporation of additional questions of interest to entrepreneurial program administrators and practitioners.

The final survey consisted of 20 questions divided into five sections: 1) institutional information, 2) program information, 3) administration and funding, 4) students, and 5) program assessment. The survey was administered online and participants were provided with the option of completing the survey in multiple sittings. Based on feedback gathered from the pilot test, it is estimated that the survey took approximately 20 minutes to complete.

### *Data Analysis*

Upon a preliminary review of the survey responses, it was determined that fourteen community colleges were represented in the final survey sample by two different respondents (i.e., as noted in the discussion of the research sample, 198 individuals submitted survey data representing 184 different community colleges). Although this was not a surprising finding given that the community college presidents were provided an opportunity to submit more than one institutional contact for follow-up communication regarding their college's non-credit entrepreneurship and small business management offerings, the research team determined that analysis of the data at the institutional level rather than the individual respondent level would yield findings of greater utility. It was thus necessary to identify the primary institutional respondent for each of the community colleges represented more than once in the survey and

remove from the database the responses of the secondary contact. Those individuals who self-identified as the person most responsible for the administration of the college's non-credit entrepreneurship and small business management offerings were selected as the primary institutional respondent. In the case that both institutional contacts self-identified as the primary program administrator, the selection decision was based on the self-reporting of time allocated to administrative responsibilities (i.e., the individual with a higher percentage of time allocated to non-credit entrepreneurship and small business management administration was identified as the primary respondent).

In addition to eliminating the survey responses of fourteen secondary institutional contacts, ten additional respondents were removed from the final survey database once it was determined that these individuals had started the survey but not submitted responses beyond confirming their contact information. The removal of these ten incomplete surveys resulted in a final database of responses from 174 individuals representing 174 different community colleges.<sup>5</sup>

Although included in the final database, a number of respondents skipped individual items in the process of completing the survey (perhaps due to a lack of information or the item's irrelevance for their particular institution). To account for these missing response items yet retain the maximum number of survey respondents, missing cases were excluded from analysis on an item-by-item basis. The number of valid responses (N) included in the analysis of each survey item is reported in the discussion of key findings.

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<sup>5</sup> Of the 174 institutions included in the final database, 169 (97%) were public institutions, three institutions identified as independent non-profit, one institution indicated religious affiliation and one was a tribal college. This institutional breakdown by governance structure was not surprising given that 90 percent of our original sample (1192 community colleges) were public institutions.

## **Findings & Discussion**

To begin the discussion of survey findings, we offer a brief snapshot of the survey respondents and provide summary data concerning the number of participating institutions currently engaged in non-credit entrepreneurship and small business management education. Given that the recruitment process for this study involved extending invitations to those individuals previously identified by their college president as the person most responsible for the institution's non-credit entrepreneurship or small business management educational offerings, it is not surprising to learn that 93% of individuals (n=162) responding to the survey indicate that their college currently offers some form of non-credit entrepreneurship or small business management education while only 7% (12 respondents) report that their institution has no offerings in this area. Given that subsequent survey questions focused exclusively on the institution's non-credit entrepreneurship and small business management offerings, the 12 respondents who did not report current involvement in non-credit entrepreneurship or small business management education were immediately directed to the end of the survey and therefore are not included in subsequent findings.

In addition to the 12 institutions that reported via the survey offering no non-credit entrepreneurship or small business management education, 53 additional community colleges selected to withdraw from the study prior to completing the survey due to the absence of non-credit entrepreneurship or small business management education at their institution<sup>6</sup>. Although not represented in subsequent findings discussed in this report (due to the fact that these institutions did not submit completed surveys), the research team did include these institutions in

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<sup>6</sup> These 53 institutions communicated the status of their non-credit entrepreneurship offerings via direct communication with the project director.

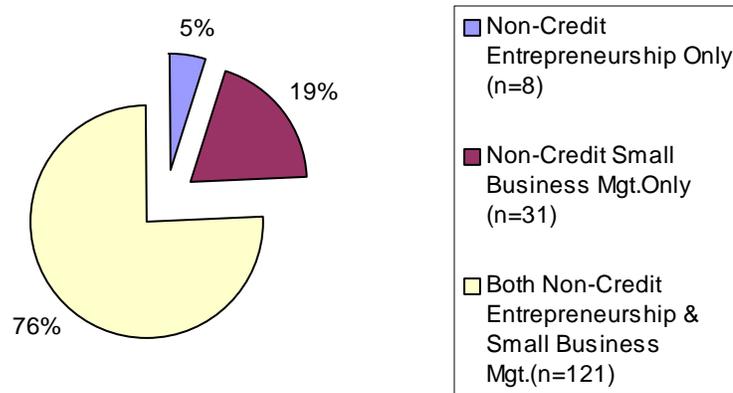
the count of project respondents (see Table 1) given that the colleges did communicate the status of their non-credit entrepreneurship and small business management offerings. As a result of combining the program status information of these 53 institutions with the survey data collected from 174 community colleges, it was determined that 71% of the community colleges that participated in this research project (162 out of 227 respondents) offer some form of non-credit entrepreneurship or small business management education.

Of the 160 respondents who reported involvement in non-credit entrepreneurship or small business management education<sup>7</sup>, 19% (n=31) offer only small business management programs, 5% (n=8) provide only non-credit entrepreneurship education, and 76% (n=121) report their institutions offer both non-credit entrepreneurship *and* small business management education (see Figure 1). This high degree of overlap underscores the inextricable connection between the skills and knowledge essential for launching and managing successful business enterprises and supports the continuation of research efforts and instructional activities that span the business life cycle (e.g., start-up, maintenance, growth, and decline/transfer) rather than arbitrarily focus on one particular stage. Additional survey findings concerning the format and content of these community college non-credit entrepreneurship and small business management educational offerings are presented later in this report.

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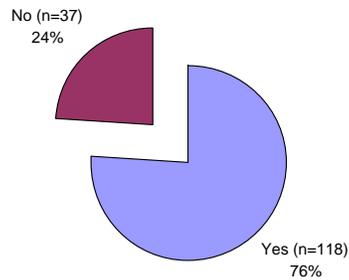
<sup>7</sup> Two respondents did not respond to this survey question however subsequent survey answers indicate that their institution does indeed offer non-credit entrepreneurship or small business management education. Although not included in the analysis for this particular survey item, these two institutions are included as positive responses in the Survey and Summary columns of Table 1 as well as included in the finding on the number of respondents that offer non-credit entrepreneurship and small business management education.

**Figure 1: Non-Credit Entrepreneurship & Small Business Management Offerings (N=160)**



In the interest of examining the relationship between non-credit and for-credit entrepreneurship education in American community colleges, survey respondents were asked to report the status of credit-bearing entrepreneurship and small business management coursework on their campus. As Figure 2 illustrates, the overwhelming majority of participating institutions (76% or n=118) offer both credit and non-credit entrepreneurship and small business management education. The documentation of a large overlap in academic and non-credit entrepreneurship education serves to highlight potential avenues of collaboration and underscores the increasingly prominent role community colleges play in cultivating American entrepreneurship.

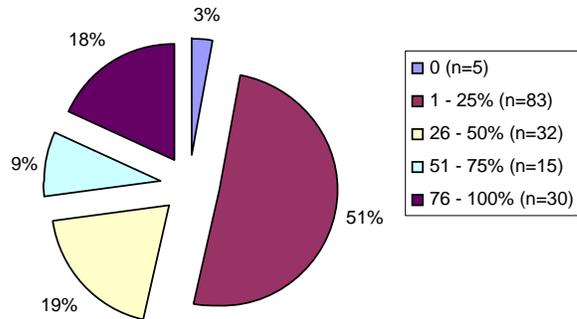
**Figure 2: Credit Coursework in Entrepreneurship & Small Business Management (N=155)**



With respect to the professional roles and responsibilities of the survey respondents themselves, 94% of the respondents indicated they were the person most responsible for the administration of their institution's non-credit entrepreneurship and small business management offerings. Although useful as a means of establishing validity for the survey results presented below, this finding is not surprising given the intentional two-phase recruitment process described above.

A second measure of the respondents' involvement in non-credit entrepreneurship and small business management education is the percentage of time dedicated to the administration of these programs. Although 94% of respondents identify as the person most responsible for the administration of their college's non-credit entrepreneurship and small business management education offerings, 51% (n=83) report spending less than a quarter of their time fulfilling these administrative duties. On the other end of the spectrum, 30 respondents (18%) report allocating more than seventy-five percent of their professional time to the administration of non-credit entrepreneurship and small business management education. Figure 3 presents a visual summary of the time allocation data.

**Figure 3: Percentage of Time Allocated to Administration of Non-Credit Entrepreneurship & Small Business Management Education (N=165)**



This disparity in allocation of administrative time can be explained by examining the respondents' professional titles, which range from Vice President of Community Education to Director of the Entrepreneurial Studies Institute. As expected, those individuals who hold senior-level administrative positions which cut across non-credit programs (e.g., Vice President for Continuing Education) report dedicating less time to the administration of non-credit entrepreneurship education programs in comparison to those respondents who hold mid-level administrative positions as program directors or coordinators. Table 2 summarizes the average time allocated according to the four most popular professional titles of survey respondents.

Professional Title	n	Average % of Time Allocated
<b>Director</b>	79	45%
<b>Program Coordinator/Manager/Associate or Assistant Director</b>	26	41%
<b>Dean or Associate/Assistant Dean</b>	42	33%
<b>Vice President or Associate/Assistant Vice President</b>	17	18%

Although this survey did not ask respondents to provide a detailed list of the professional tasks associated with their involvement in non-credit entrepreneurship education, the following discussion of survey findings pertaining to the administration and funding of non-credit

entrepreneurship and small business management programs provides valuable insight into the scope of administrative responsibilities associated with managing programs of this nature.

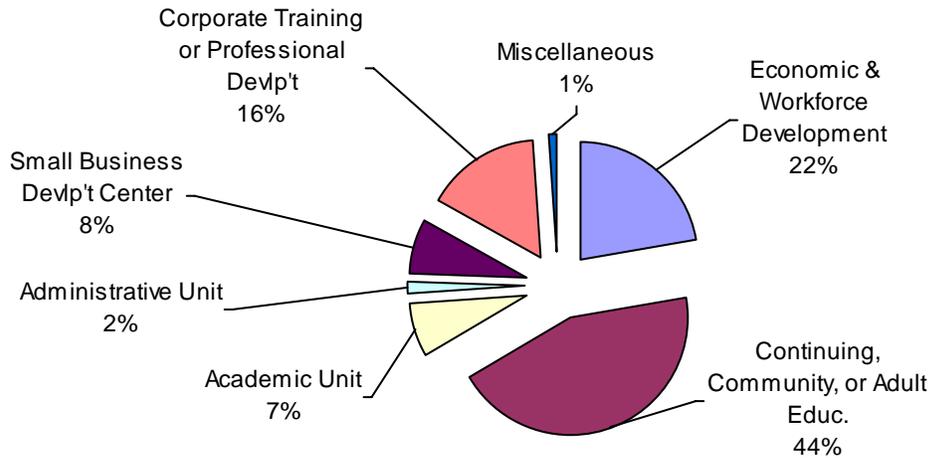
### *Administration & Funding*

In order to understand the variety of ways in which non-credit entrepreneurial education programs are both administered and funded, a series of five questions were posed to respondents focusing upon: (1) the manner in which each respective unit or program was situated within the larger institutional/college milieu; (2) the range of funding sources utilized by programs to subsidize programming activities; and (3) the scope and range of external linkages established by non-credit programs to complement existing entrepreneurial efforts at the college and within the community at large.

### *Institutional Location of Non-Credit Entrepreneurial Education Programs*

Given the non-credit nature of these educational programs, it is not surprising that 44% of all respondents indicated that their unit was located in the continuing education, community education, or adult education arm of their institution (See Figure 4). An additional 22% of all respondents described their units as being part of an economic and/or workforce development unit on their campus. By comparison, only 7% of all non-credit programs could be found within an academic department and 2% of programs are currently located in an administrative department.

Figure 4: Non-Credit Entrepreneurial Programs By Institutional Location (N=164)\*



*\*Note: Of the 164 respondents who answered this question, 65 provided multiple responses. As a result, the percentages presented above are based upon 249 total responses to the survey item.*

#### *Funding Sources*

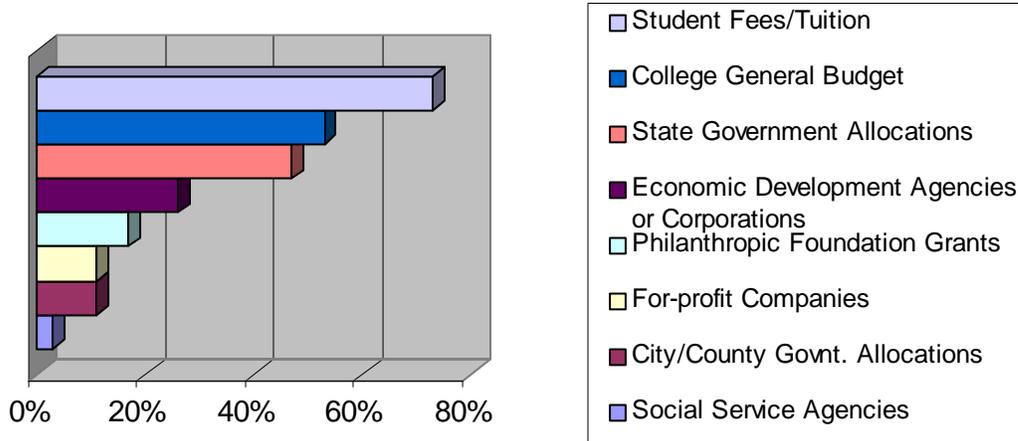
A vast majority of non-credit entrepreneurship education programs rely upon general institutional funds as well as student tuition revenue to subsidize their programmatic activities (See Figure 5). Seventy-three percent of participating institutions reported reliance on student fees. Likewise, 53% of responding institutions reported that they relied on the college's general operating budget in order to fund their non-credit programs.

External sources of funding also appeared to be an important revenue resource for non-credit entrepreneurship programs as 47% of all institutions reported receiving state level allocations. In addition, 26% of institutions mention economic development agencies or corporations as providing needed resources to support programmatic activities.

It should be noted, however, that while state allocations are indicated as a major external form of subsidization, it is unclear as to whether college budget monies directed to non-credit programs are in fact derived from state government funds. Albeit unsupported by our data, there is the possibility that state allocations directed to non-credit entrepreneurial education programs

actually exceed the levels currently reported by survey respondents.

**Figure 5: Major Forms of Revenue By Source (N=151)**



While state allocations represent the most substantial and consistent external source of revenue for our institutional sample, it is interesting to note that the majority of colleges primarily rely upon internal forms of subsidization offered through the college. Possible explanations for this pattern may be attributed to: (1) the program’s relative maturity as an autonomous institutional unit; (2) the type of student population served; (3) the breadth and depth of courses offered within non-credit units; (4) the relative importance of non-credit entrepreneurial education programming to those institutions surveyed.

#### *Scope and Function of Institutional Linkages with External Partners*

As reflected in the literature, institutional linkages with external partners serve as a core source of support to entrepreneurial education programs both in terms of funding, expertise, potential investment, networking, and program management and oversight. Of the one hundred and fifty-one responses received, 64% of institutions indicated that they maintained formal linkages with local economic development agencies and/or corporations. This is consistent with our earlier finding which indicated that these agencies/corporations were important funding

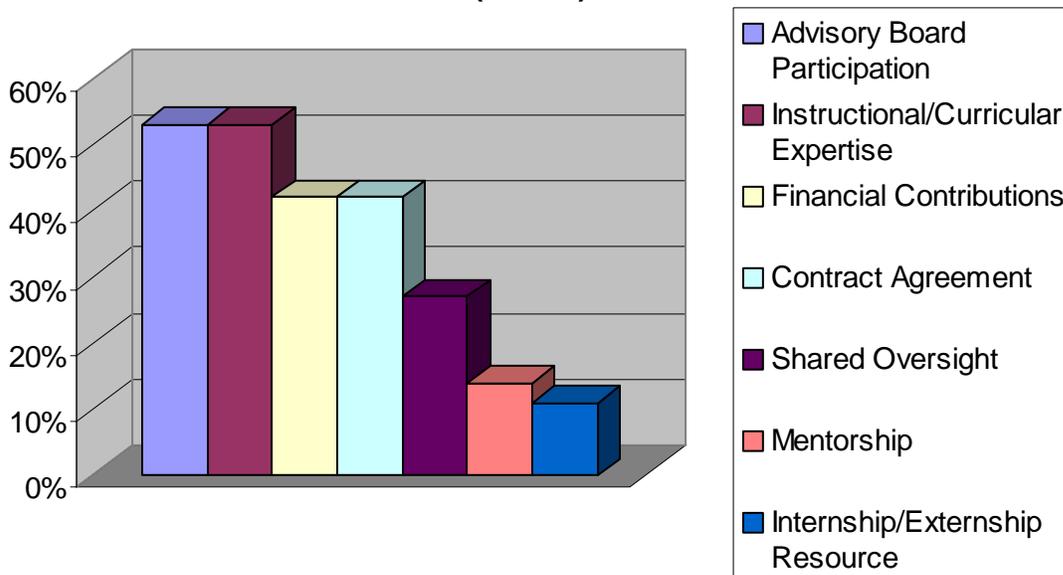
resources for non-credit entrepreneurial programs. While city and county governments were less inclined to offer financial resources, they appear to provide non-remunerative support as indicated by the 41% of institutions that report them as partners. In addition, for-profit companies are also frequent partners of non-credit programs as reported by 38% of all institutions. Finally, 29% of the participating institutions reported partnerships with four-year colleges or universities and 17% indicated the existence of a formal relationship with one or more philanthropic foundations.

Interestingly, of the one hundred and fifty one respondents, twenty-three institutions (15%) indicated that they maintained no formal partnerships or linkages with external sources of support. Of these institutions, twenty rely upon student fees and tuition as their major source of programmatic funding. Likewise, seventeen of these institutions offer credit-bearing programmatic options in addition to their non-credit offerings. Finally, it is worth noting that of these twenty-three institutions reporting no formal partnerships or linkages, an overwhelming 90% also report having no management or advisory boards. These findings seem to indicate that programs lacking formal external partnerships may either be in the formative stages of development or may be oriented towards the internal mandates of their parent institution.

Given the relative frequency with which programs establish external linkages of support, the functional purpose of these partnerships is of particular importance to understanding how these arrangements are determined. As represented in Figure 6, external partnerships operate as a frequent source of support to non-credit programs. In particular, we found that the two most oft-cited purposes of these partnerships were to provide instructional and/or curricular expertise (53%) as well as to serve as advisory board members (53%). Additional forms of program support include contractual and financial contributions (42%) and shared management and

programmatic oversight responsibilities (27%). Interestingly, our findings indicate that mentorship and internship/externship services are the most infrequent forms of support provided by external partnerships (14% and 11% respectively). This may be due to the fact that programs that affiliate with external partners are more often focused on local economic needs and small business development rather than professional development and/or population-specific interventions. While the existing literature has emphasized the importance of these partnerships to entrepreneurship education programs, this paper serves as the first instance in which the form and function of these relationships are descriptively portrayed.

**Figure 6: Nature of Formal Linkages & Partnerships (N=146)**



*Program Information*

In addition to gathering data pertaining to the administration and funding of non-credit entrepreneurship and small business management programs, the survey also collected information regarding the format and content of these educational initiatives.

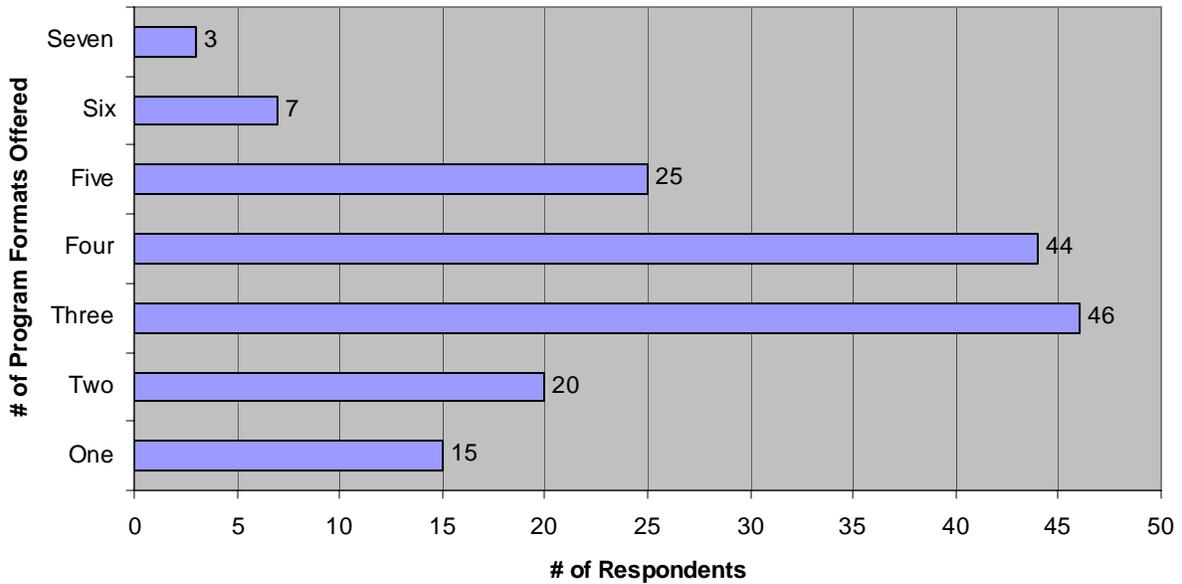
An overwhelming majority of survey respondents identified stand-alone workshops/seminars (91%), continuing education courses (81%), and a sequence of

workshops/seminars (72%) as the three most popular program formats for their non-credit entrepreneurship and small business management educational offerings. Although these categories are not necessarily mutually exclusive (it is possible that an institution’s continuing education program includes entrepreneurship seminars or a sequence of small business management workshops), the survey results presented in Table 3 clearly demonstrate the dominance of these three program formats in comparison to other forms of instructional delivery.

Table 3: Non-Credit Entrepreneurship & Small Business Management Education Program Formats (N=162)	# of Respondents	% of Respondents
Stand-alone workshops/seminars	147	91%
Continuing education	131	81%
Sequence of workshops/seminars	116	72%
On-line instruction	76	47%
Conference/Symposium	54	33%
Distance learning instruction	26	16%
Open circuit instructional television	7	4%

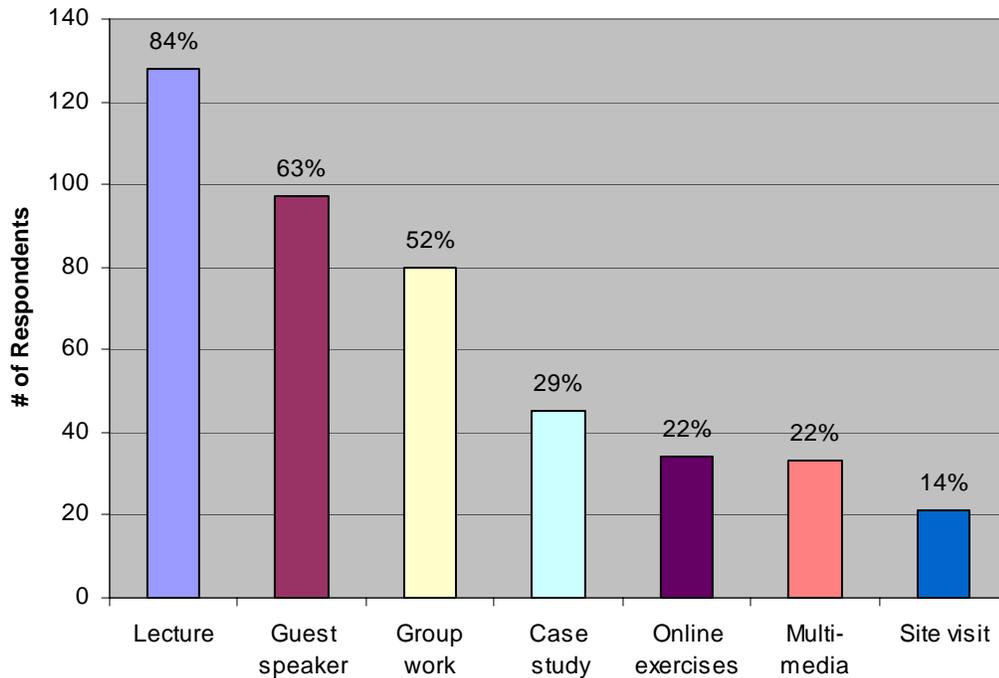
Although workshops and continuing education courses are clearly the most common program formats used in the delivery of non-credit entrepreneurship and small business management education, a second analysis of the program format data according to the number of different formats offered at an institution reveals the existence of tremendous program breadth within the survey sample. Of the 160 institutions that responded to this survey item, 72% of participating institutions use three, four, or five different program formats in the delivery of their non-credit entrepreneurship education (see Figure 7 below). Although this finding may also speak to the potential overlap of program format categories, the large number of institutions offering four or more different program formats (n=79, 49%) clearly illustrates a trend in the development of comprehensive entrepreneurship education programs capable of matching program delivery method to the diverse instructional needs of students.

**Figure 7: Breadth of Non-Credit Entrepreneurship & Small Business Management Educational Offerings (N=160)**



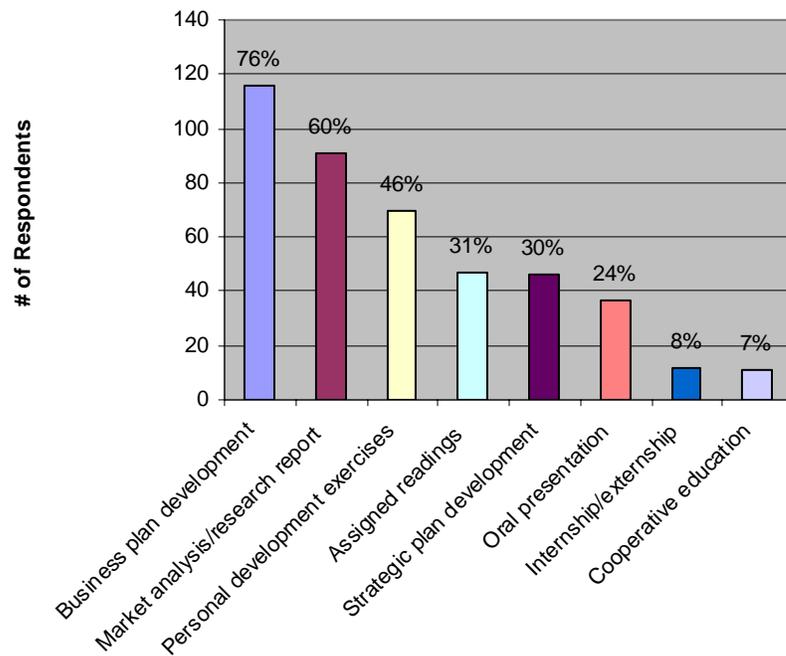
In addition to gathering information on program formats, the survey also asked respondents to identify the three instructional methods most frequently used in non-credit entrepreneurship and small business management educational offerings. Listed by more than half of all survey respondents, lecture (84%), guest speakers (63%) and group work (52%) were the three most popular instructional methods. Somewhat surprising, only one-third of the respondents reported the use of case studies and slightly more than one-fifth routinely incorporated online exercises or multi-media in instructional activities. This survey data is consistent with Hagan's (2004) research finding that lecture was the instructional method most frequently used in credit-bearing community college entrepreneurship education and Solomon, Duffy, and Tarabishy's (2002) data on the limited use of educational technology (e.g., online instruction) in contemporary entrepreneurship education. Figure 8 presents a complete summary of the instructional methods survey findings.

**Figure 8: Instructional Methods (N=153)**



Although the two most popular instructional methods (lecture and guest speaker) suggest the existence of passive learning environments within community college non-credit entrepreneurship and small business management education programs, survey findings pertaining to the three learning activities most frequently assigned to students (see Figure 9) demonstrate a focus on providing participants with practical and personalized experiences designed to develop the skills and knowledge necessary for starting and running a business. Seventy-six percent of respondents ask students to develop a business plan, 60% require participants to produce a market analysis report, and nearly half of the participating institutions provide students with personal development exercises. All other learning activities listed on the survey were utilized by less than a third of respondents.

**Figure 9: Learning Activities (N=152)**



In response to a question regarding the institutional resources made available to students enrolled in non-credit entrepreneurship or small business management education offerings, survey respondents identified one-on-one counseling (63%) and a Small Business Development Center (60%) as the two most frequently offered resources (see Table 4). Basic skills review, technology resources, networking events, and access to entrepreneurial funding were available at approximately 40% of participating institutions. The common thread connecting the institutional resources most frequently made available to aspiring entrepreneurs (e.g., counseling, business development centers, technology consulting, basic skills review) appears to be a commitment to providing students with the individualized attention necessary to launch and sustain successful business ventures.

Table 4: Non-Credit Entrepreneurship & Small Business Management Institutional Resources (N= 154)	# of Respondents	% of Respondents
One-on-one counseling	97	63%
Small Business Development Center	93	60%
Basic skills review (English, math, computers)	76	49%
Technology resources and/or consultation	70	45%
Networking events	67	44%
Access to entrepreneurial funding	60	39%
Business plan competition	47	31%
New business incubator	37	24%
Mentorship program	36	23%
Internship/externship program	29	19%

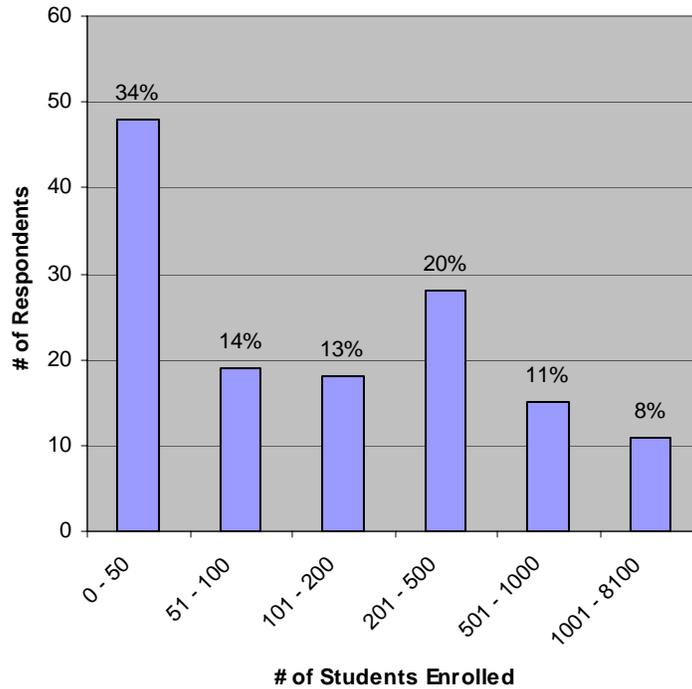
To gather insight into the content of non-credit entrepreneurship and small business management education, survey respondents were provided with a list of twenty common business topics and asked to identify the themes addressed in their non-credit entrepreneurship and small business management offerings. The five most popular topic areas reported on the survey were: 1) marketing (82%), 2) business planning (81%), 3) small business management (71%), 4) entrepreneurship (69%) and 5) accounting (66%). In addition, customer management, finance, human resources, leadership, new venture creation, supervision, information technology, and taxes were addressed by over 50% of the participating institutions. The number of respondents offering each topic area listed on the survey (along with the corresponding percentages) is provided in Table 5.

Table 5: Topic Areas Addressed in Non-Credit Entrepreneurship & Small Business Management Educational Offerings (N=154)	# of Respondents	% of Respondents
Marketing	127	82%
Business planning	125	81%
Small business management	109	71%
Entrepreneurship	106	69%
Accounting	102	66%
Customer management	99	64%
Finance	95	62%
Human resource /Personnel Management	87	56%
Leadership	87	56%
New venture creation/Starting a business	86	56%
Supervision	82	53%
Information technology	80	52%
Taxes	78	51%
Business communication & writing	76	49%
Business law	62	40%
Basic skills review (English, math, computers)	58	38%
Women & minority entrepreneurs	38	25%
Negotiation	35	23%
Creativity/Creative thinking	31	20%
Venture capital	24	16%

*Students*

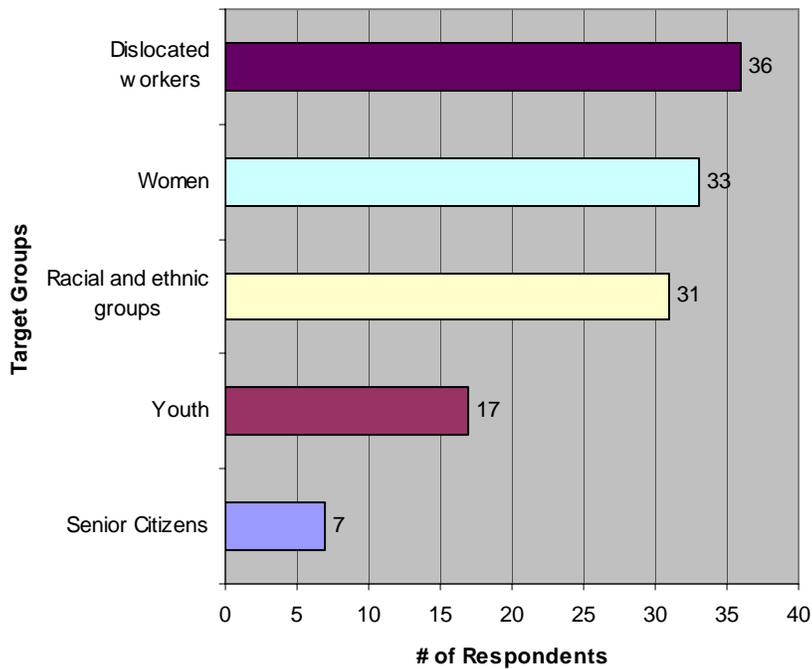
In addition to gathering data pertaining to the format and content of community college non-credit entrepreneurship education, the survey also asked respondents to provide information on student enrollment and recruitment. Of the 139 participants which shared information regarding enrollment in non-credit entrepreneurship and small business management offerings during the 2003-04 academic year, the largest percentage (34%, n=48) reported enrolling between 0 – 50 students. The second highest enrollment group, representing 20% (n=28) of the respondents, enrolled between 201 to 500 students. Although 8% (n=11) of the survey respondents reported enrolling over 1000 students, the majority of institutions (approximately 60%) enrolled less than 200 students. A summary of the student enrollment data is presented below in Figure 10.

**Figure 10: 2003-2004 Student Enrollment (N=139)**



As discussed earlier in the review of relevant literature, a number of entrepreneurship education scholars and practitioners have documented the benefits and growing popularity of entrepreneurial education programs that target specific population groups (for example, women). Surprisingly, out of the 147 individuals who responded to a survey question regarding the existence of targeted entrepreneurship education offerings, the majority of survey respondents (65%, n=96) reported that their institution does not offer population-specific initiatives. However, among the 51 participating institutions that do offer targeted entrepreneurship education programs, three groups in particular (i.e., dislocated workers, women, and racial and ethnic groups) are the primary focus of attention. Figure 11 summarizes the breakdown of targeted program offerings.

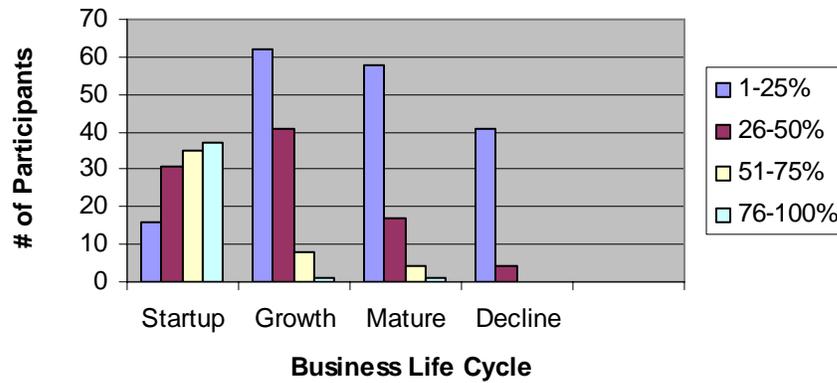
**Figure 11: Targeted Non-Credit Entrepreneurship & Small Business Management Offerings (N=51)**



In addition to gathering information regarding targeted student enrollment, the survey also captured data pertaining to the position of students within the business life cycle (e.g., startup/emerging, growth/expansion, mature/prosperous, transfer/decline). Given that 76% of participating institutions reported offering both entrepreneurship and small business management programs, it was expected that respondents would report balanced student enrollment across the business cycle. A review of the survey data (summarized in Figure 12), however, reveals that the majority of institutions currently enroll more students seeking information on starting rather than maintaining businesses. As you can see in the graph below, students enrolled in the mature/prosperous and transfer/decline phases of business typically account for less than a quarter of student enrollment while students seeking information on starting a new business venture were most frequently found to make up over 75% of enrollment. More specifically, 72 out of the 122 participants (59%) who answered this question indicated that over fifty-one

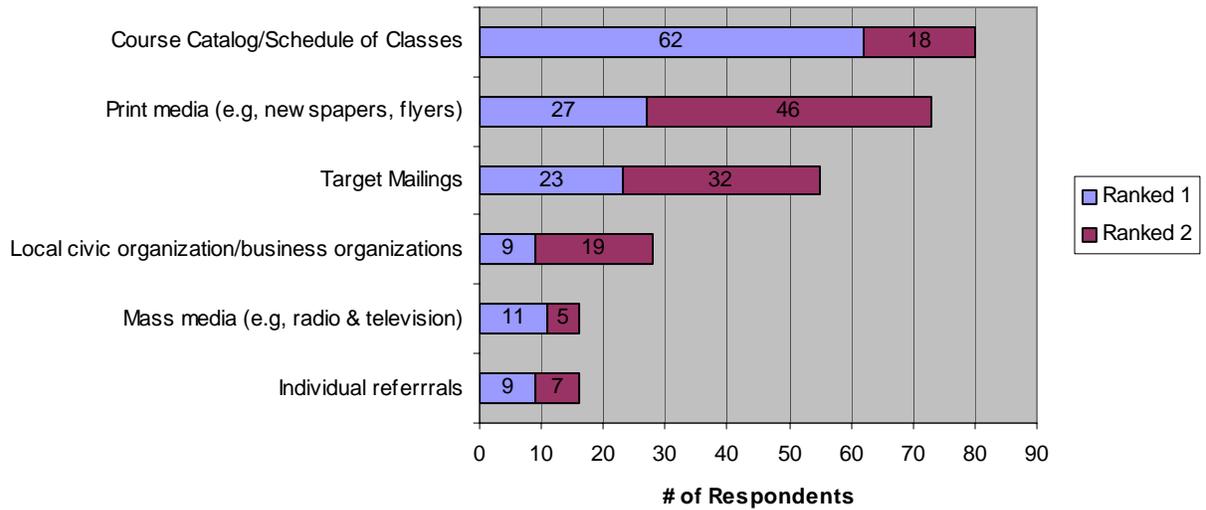
percent of their students were involved in the startup and emerging phase of business while only 14 participants (11%) reported over fifty percent of their students currently working within the growth or maturity phases of the business cycle.

**Figure 12: Student Placement within the Business Life Cycle as a Percentage of Enrollment**



The final student-centered question posed in the survey concerned methods of recruitment. Survey respondents were asked to rank six different recruitment methods in order of their effectiveness. As Figure 13 illustrates, course catalogs/schedule of classes and print media (e.g., newspapers and flyers) were the two recruitment methods most frequently ranked first or second with respect to effectiveness. These findings are not surprising given the fact that non-credit entrepreneurship training is typically embedded within continuing and community education administrative units that must market to a wide range of educational interests.

**Figure 13: Ranking of Student Recruitment Methods**



*Faculty*

Consistent with current trends in community college teacher hiring and continuing education faculty characteristics, our data indicates that a majority of instructors teaching entrepreneurship courses fall within the category of “adjunct.” Seventy-one percent of the 162 institutions that offer non-credit entrepreneurship education report using adjunct instructors to teach these courses. By comparison, 34% of institutions report placing volunteer instructors in their non-credit entrepreneurship education classrooms and only 23% of colleges utilize full-time faculty.

While most of the instructors within non-credit entrepreneurship classrooms may not be permanently affiliated with a given institution, a majority of these teachers bring valuable practical and professional business experience to their teaching. Of the 115 institutions that use adjunct instructors, 106 (92%) report that their adjunct instructors possess prior entrepreneurial and small business experience. Similarly, 91% of volunteer instructors and 89% of full-time faculty teaching entrepreneurship and/or small business management courses possess prior business experience. What these numbers seem to indicate is that non-credit programs are, more

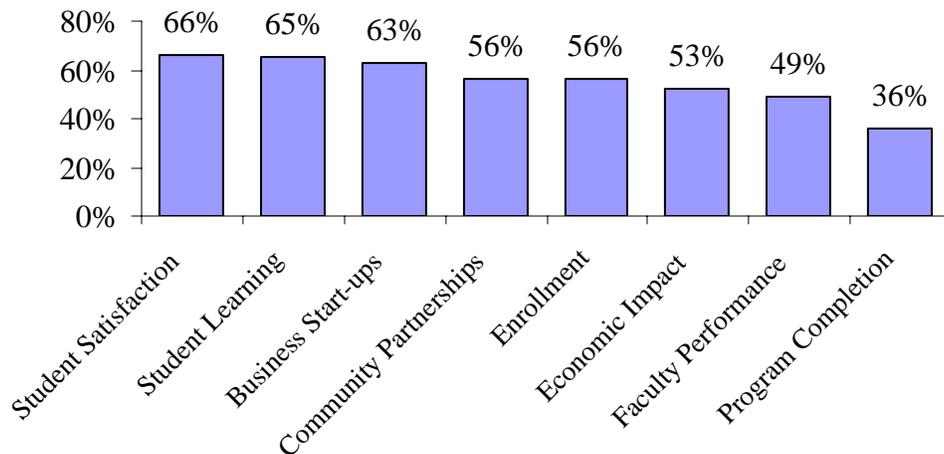
often than not, taught by experienced business and entrepreneurial practitioners; a finding that is consistent with what is already known about non-credit and continuing education instructional models.

### *Program Assessment*

In the area of program assessment, 73% of the 144 institutions who answered this survey item reported that their community college's non-credit entrepreneurship and small business offerings were a medium to high priority for the institution while only a small percentage (5%) indicated that these offerings were not a priority at all.

Regardless of how they ranked the importance of their non-credit programs, only 53% (n=77) of the respondents indicated that their institution had a written statement of goals, outcomes, or program evaluation criteria. From the graph below, one can see that the majority of statements focused on student learning and satisfaction, business start-ups, community partnerships, enrollment and economic impact. Surprisingly, only a few of these statements (36%) saw the goal of *program completion* as an important outcome of non-credit entrepreneurship and small business management education. The representation of these topical areas demonstrates how written statements often speak to the multiple constituencies served by these entrepreneurship and small business management programs. They reflect the needs of students as learners and of communities as supporters and hosts to community colleges.

**Figure 14: Areas Addressed in Written Statements of Goals, Outcomes, and Program Evaluation (N=80)**

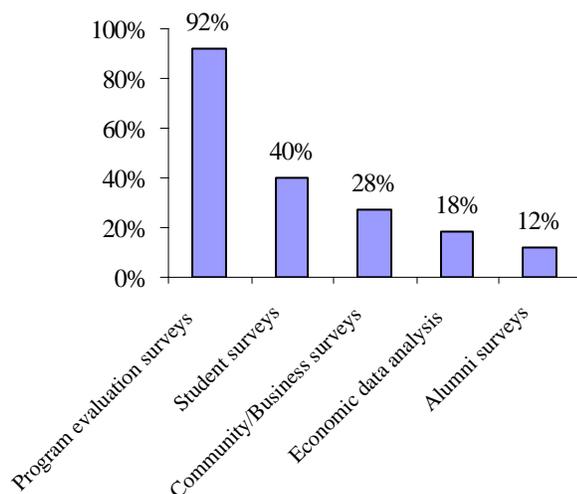


What is not surprising is the strong alignment between written statements and sources of program funding. For instances, a high percentage of respondents who mentioned economic impact and community partnerships in their statement (77% and 92%, respectively) reported receiving support from for-profit companies. Similarly high percentages were reported for programs that received support from philanthropic foundations and economic development agencies or corporations. In contrast, programs that did not have a written statement (n=68) reported receiving more of their funding from student fees as well as the general budget.

Respondents were also asked how frequently they evaluated their non-credit entrepreneurship and small business courses and programs. The majority of institutions (56%) reported that they conduct evaluations at the end of each course or program. A slightly smaller percentage (20%) reported that their institution conducts yearly evaluations. The remaining respondents reported conducting evaluations every semester (7%), every six months (5%), only

occasionally (5%), or not at all (2%) When evaluations are used, the vast majority of respondents (92%) reported that their institution uses program evaluation surveys, followed by student and community surveys (40% and 28%, respectively). Alumni surveys appear to be the least utilized method (12%). While impossible to speculate why some survey methods are used more than others, it is possible these trends represent wider institutional practices or reflect resource limitations.

**Figure 15: Assessment Methods** (N=149)



## Conclusion

The empirical findings presented above serve to confirm and extend previous scholarship on community college entrepreneurship education. Consistent with Hagan's (2004) assertion that over 60% of American community colleges offer credit-bearing entrepreneurship training, the results of this study also reflect extensive community college involvement in the promotion of economic and workforce development via entrepreneurship and small business management education. The impressive breadth and depth of non-credit community college entrepreneurship

education first described in *Entrepreneurship Training in American Community Colleges* (Center for the Study of Community Colleges, 1994) is underscored by contemporary survey data which reveals that 71% of participating institutions offer non-credit educational opportunities that span the business life cycle (from new venture creation to ongoing business management practices) and approximately 50% employ four or more different program delivery methods (e.g., workshops, on-line instruction, seminars). Coupled with survey data that highlight the broad range of educational topics addressed in non-credit community college entrepreneurship education (e.g., marketing, business planning, information technology, and human resources), these survey results confirm the growth of comprehensive non-credit entrepreneurship programs capable of meeting the diverse informational and pedagogical needs of community college continuing education students.

Additional insights gleaned from this report include the collaborative nature of non-credit community college entrepreneurship education (as evidenced by the diverse range of external funding sources and formal partnerships reported by participating institutions) and the continued need for assessment practices that effectively measure student learning and program outcomes. Although both of these points were also mentioned in the 1994 report prepared by the Center for the Study of Community Colleges, the national survey data presented in this report offers a more comprehensive and empirically-grounded portrait of contemporary administrative practices.

In addition to addressing existing gaps in the literature on non-credit community college entrepreneurship education, the survey findings presented in this report also serve to raise new research questions that warrant additional investigation. For example, although this survey did collect data on the scope and nature of external funding sources and formal partnerships developed in support of non-credit community college entrepreneurship education, additional

research is needed to develop a more nuanced understanding of program finance and resource development strategies. This line of questioning may be most effectively addressed through a series of qualitative case studies that develop comprehensive portraits of non-credit entrepreneurship education funding patterns as well as enhance our understanding of the manner in which external partnerships are initiated and the extent to which resource-sharing occurs through these important linkages. Qualitative case studies may also serve as a valuable means for gathering additional insight on the nature of collaboration between credit and non-credit community college entrepreneurship education. Seventy-six percent of participating institutions offer both credit and non-credit entrepreneurship training, however the current survey research offers little insight on the nature and scope of collaborative efforts between these two distinct community college administrative structures (e.g., shared resources, faculty partnerships).

Finally, similar to the research recommendation posed at the end of *Entrepreneurship Training in the American Community Colleges* (1994), we conclude this report with a call for additional research on non-credit entrepreneurship education outcome measures and assessment practices. Contemporary survey results indicate that the majority of program directors continue to conduct assessment at the end of each course or seminar and only 12% of participating institutions have implemented alumni follow-up surveys. Although end-of-course/program evaluations may be an effective means to capture data on student satisfaction and perceived knowledge acquisition, they offer community colleges little insight on the long-term impact of participation in community college entrepreneurship training. What role does non-credit entrepreneurship education play in the creation of new jobs in the local economy? What is the relationship between completion of a non-credit community college entrepreneurship program and business success (e.g., return on investment, rate of expansion, size of labor force, etc.)?

How does non-credit community college entrepreneurship education influence regional economic growth and shape the reciprocal relationship between the college and its surrounding community? These are important questions that must be addressed via additional research on entrepreneurship education assessment. American community colleges seeking to increase the breadth and depth of external investment in entrepreneurship education must develop and implement assessment practices capable of capturing the individual and collective economic benefits associated with community college entrepreneurship training.

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## Appendix A

### Entrepreneurship and Small Business Management Education In American Community Colleges: A National Perspective

#### Introduction

Welcome to the UCLA Community College Studies' online survey. We are conducting a national status study of **non-credit** entrepreneurship and small business management education in American community colleges. Survey findings will be used to identify current best practices in entrepreneurship education and to provide community colleges with a benchmark for assessing their own programs.

We appreciate your willingness to participate in this study. The survey should take approximately 20 minutes to complete. It is not necessary to complete the survey in one sitting. If you need to exit the survey prior to completion, simply press the "submit" button at the bottom of the page. This will save the survey responses entered thus far and allow you to return to the survey at a later time.

If you have any questions or concerns regarding this study, please contact the Project Coordinator, Rozana Carducci, at [rcarducc@ucla.edu](mailto:rcarducc@ucla.edu) or (310) 206-1200.

Prior to beginning the survey, please indicate that you have read and understand the following statement regarding your voluntary participation in this project:

<b>Consent to Participate in Research</b>
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Entrepreneurship and Small Business Management Education in  
American Community Colleges: A National Perspective

You have been asked to participate in a research study conducted by Dr. Arthur Cohen, Dr. Robert Hayes, and Rozana Carducci (MS) from Community College Studies at the University of California – Los Angeles. The specific purpose of this research project is to identify current best practices in non-credit entrepreneurship education and to provide community colleges with a benchmark for assessing their own programs.

#### **Potential Benefits of Participation**

The benefits associated with participating in this study include: 1) the right to request a copy of the research findings which can be used to inform the development and advancement of your college's non-credit entrepreneurship and small business management offerings and 2) the opportunity to contribute to the development of a comprehensive national status study of community college entrepreneurship education which will provide valuable insight on educational best practices and program assessment.

#### **Confidentiality**

Your identity as a participant in this research project will remain confidential. The only people who will know that you participated in this project are members of the research team. Any and

all individual contact information (e.g., name, address, phone number, e-mail, administrative title) gathered during the course of this study will be securely stored in password-protected database with access limited to research team members only.

It is anticipated that an analysis of the data collected in this study will be prepared for publication in a postsecondary journal or presented at a relevant professional conference. **The data presented in these reports will be summarized at the institutional level and will not contain the names of individual survey respondents or their administrative titles. When referencing a specific institution in an oral or written presentation of the data, the research team will make sure that no personal information is included that could reveal a subject's identity**

### **Participation and Withdrawal**

Participation in this study is voluntary. You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

Please [click here](#) to indicate that you understand the information provided above and consent to participate in this study. Once you have given your consent to participate, you will be automatically directed to the beginning of the survey form.

Survey Instrument
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Thank you for consenting to participate in the UCLA study of non-credit entrepreneurship and small business management education in American community colleges. To begin the survey, please fill in the information requested below. Please remember it is not necessary to complete the survey in one sitting. If you need to exit the survey prior to completion, simply press the "submit" button at the bottom of the page. This will save the survey responses entered thus far and allow you to return to the survey at a later time.

---

### **Section 1: Institutional Information**

Please provide the following information about your institution:

Institution's Name: \_\_\_\_\_

Institution's State: \_\_\_\_\_

Your Name: \_\_\_\_\_

Your Title: \_\_\_\_\_

Administrative Unit/Department: \_\_\_\_\_

E-mail: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Are you the person most responsible for the administration of your institution's **non-credit** entrepreneurship and small business management offerings?

Yes \_\_\_\_\_

No \_\_\_\_\_

What percentage of your time is dedicated to the administration of your institution's non-credit entrepreneurship and small business management offerings?

Free response \_\_\_\_\_

[Note: if respondent answers "No" to first question posed above, the respondent will be directed to the following two questions]

Please identify the title of the administrator who is most responsible for the administration of your institution's non-credit entrepreneurship and small business management education?

Free response \_\_\_\_\_

What percentage of this administrator's time is dedicated to the administration of your institution's non-credit entrepreneurship and small business management education?

Free response \_\_\_\_\_

[Click here to continue](#)

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## Section 2: Program Information

1. Which of the following does your institution offer with respect to **non-credit** entrepreneurship and small business management education? Please check all that apply.

- Non-credit entrepreneurship education
- Non-credit small business management education
- This institution does not offer non-credit entrepreneurship and small business management education and has no current plans to develop offerings in this area.

[Note: If respondent checks item 4 above, s/he will be directed to the end of the survey]

1b. Does your institution currently offer credit coursework in entrepreneurship and small business management?

Yes \_\_\_\_\_ No \_\_\_\_\_

[note: only those respondents who indicate they offer non-credit entrepreneurship or small business management education in question 1 (the first two response options) will be asked to complete question 1b)

Because a study of credit-course programs in entrepreneurship and small business management has been completed recently, the remaining questions focus specifically on your institution's non-credit entrepreneurship and small business management education offerings.

2. Please identify the program formats that your institution utilizes in the delivery of **non-credit** entrepreneurship and small business management education. Please check all that apply.

- Continuing education courses
- Stand-alone workshops/seminars
- Sequence of workshops/seminars
- Conference/Symposium
- On-line instructional courses
- Distance learning courses
- Open-circuit instructional television
- Other (Please specify)\_\_\_\_\_

2b. For each of the program formats you selected in question 1, please indicate the number of times these programs or courses are offered in a calendar year. (For example, please indicate how many non-credit entrepreneurship or small business management courses are offered each calendar year.)

- \_\_\_\_\_ Continuing education courses
- \_\_\_\_\_ Stand-alone workshops/seminars
- \_\_\_\_\_ Sequence of workshops/seminars
- \_\_\_\_\_ Conference/Symposium
- \_\_\_\_\_ On-line instructional courses
- \_\_\_\_\_ Distance learning courses
- \_\_\_\_\_ Open-circuit instructional television
- \_\_\_\_\_ Other (Please specify)\_\_\_\_\_

3. Please identify the institutional resources available to **non-credit** entrepreneurship and small business management students. Please check all that apply.

- Small Business Development Center
- New business incubator
- Access to entrepreneurial funding (e.g., business loans, venture capital, angel funding)
- Mentorship program
- Internship/Externship program
- Technology resources and/or consultation
- Networking events
- One-on-one counseling
- Business plan competition
- Basic skills review (English, math, computers)

- Other (Please specify) \_\_\_\_\_
4. Which of the following individual courses or general topic areas are included in your institution's **non-credit** entrepreneurship and small business management curriculum? Please check all that apply.
- Accounting
  - Basic skills review (English, math, computers)
  - Business law
  - Business communication and writing
  - Business planning
  - Creative Thinking
  - Customer management
  - Entrepreneurship
  - Finance
  - Human resources/Personnel management
  - Information technology
  - Leadership
  - Marketing
  - Negotiation
  - New Venture Creation/Starting a business
  - Small business management
  - Supervision
  - Taxes
  - Venture capital
  - Women and minority entrepreneurs
  - Other (Please specify) \_\_\_\_\_
5. Of the following, please identify the **three** instructional methods most frequently used in your **non-credit** entrepreneurship and small business management programs.
- Case study
  - Group work
  - Guest speaker
  - Lecture
  - Multi-media
  - On-line exercises
  - Site visit
  - Other (please specify) \_\_\_\_\_
6. Of the following, please identify the **three** learning activities most frequently assigned to **non-credit** entrepreneurship and small business management students.
- Business plan development

- Internship/externship
- Market analysis/research report
- Oral presentation
- Personal development/self-assessment exercises
- Readings
- Strategic plan development
- Cooperative education
- Other (Please specify) \_\_\_\_\_

7. Who is responsible for delivering your institution's **non-credit** entrepreneurship and small business management offerings? (Please report the number of individuals in each of the following categories.)

Full-time college faculty \_\_\_\_\_

Adjunct instructors who receive compensation (e.g., part-time faculty, consultants, business leaders, third party vendors) \_\_\_\_\_

Volunteer instructors who do not receive compensation (e.g, retired executives, community leaders) \_\_\_\_\_

8. Please estimate the percentage of your **non-credit** entrepreneurship and small business management faculty and facilitators who possess professional entrepreneurship and small business management experience.

Full-time college faculty \_\_\_\_\_

Adjunct instructors who receive compensation (e.g., part-time faculty, consultants, business leaders, third party vendors) \_\_\_\_\_

Volunteer instructors who do not receive compensation (e.g, retired executives, community leaders) \_\_\_\_\_

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### Section 3: Administration & Funding

9. Which administrative unit is responsible for the oversight of your college's **non-credit** entrepreneurship and small business management education offerings (e.g., continuing education, business department, etc.)? If more than one unit/department shares in this oversight, please list all departments.

Open response \_\_\_\_\_

10. Please identify the funding sources used to support your college's **non-credit** entrepreneurship and small business management education? Please check all that apply.

- Student fees/tuition
- State government allocations
- City/County government allocations

- Philanthropic foundation grants
- For-profit companies
- Social service agencies
- Economic development agencies or corporations
- College general budget
- Other (Please specify) \_\_\_\_\_

11. Has your **non-credit** entrepreneurship or small business management education program established formal partnerships or linkages with any of the following organizations? Please check all that apply.

- State government
- City/County government
- Philanthropic foundations
- For-profit companies
- Social service agencies
- 4-year college and university
- Economic development agencies or corporations
- Other (Please specify) \_\_\_\_\_
- No formal partnerships or linkages established

11a. If any of the check boxes above are marked....

Please identify the nature of these formal partnerships or linkages? Please identify all that apply.

- Financial contribution
- Shared oversight/management
- Advisory board participation
- Contract agreement
- Instructional or curricular expertise (e.g., teaching workshops, guest speakers)
- Mentorship of students
- Internship/Externship resource
- Other (Please specify) \_\_\_\_\_

12. Has your college established an entrepreneurship/small business management advisory or governing board?

- Yes
- No

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## Section 4: Students

13. Do your **non-credit** entrepreneurship and small business management education programs target specific populations (e.g., women, underrepresented students, dislocated workers)?

- Yes
- No

13a. If yes...

Please identify the target populations. Please check all that apply:

- Women
- Specific racial and ethnic groups
- Dislocated Workers
- Senior Citizens
- Youth
- Other (Please specify) \_\_\_\_\_

14. How many participants were enrolled in your **non-credit** entrepreneurship and small business management offerings during the 2003-2004 academic year?

Open response \_\_\_\_\_

15. At what stage of the business life cycle are your **non-credit** entrepreneurship and business management students? Please estimate the percentage of students that fall in each category.

- \_\_\_\_\_ % Startup/Emerging
- \_\_\_\_\_ % Growth/Expansion
- \_\_\_\_\_ % Mature/Prosperous
- \_\_\_\_\_ % Transfer or Decline

16. How do you recruit participants for your **non-credit** entrepreneurship and small business management programs? Please rank in order of effectiveness.

- \_\_\_\_\_ Mass media (e.g., radio, television)
- \_\_\_\_\_ Print media (e.g., newspaper, flyers)
- \_\_\_\_\_ Target mailings
- \_\_\_\_\_ Course Catalogs/Schedule of Classes
- \_\_\_\_\_ Promotion within local civic and business organizations
- \_\_\_\_\_ Solicitation of individual referrals from businesses or civic agencies
- \_\_\_\_\_ Other (Please specify) \_\_\_\_\_

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## Section 5: Program Assessment

17. How high a priority is the development and advancement of your college's **non-credit** entrepreneurship and small business management education offerings?

- High priority
- Medium priority
- Low priority
- It is not a priority

18. Does your **non-credit** entrepreneurship and small business management education program have a written statement of goals, outcomes, or program evaluation criteria?

- Yes
- No

18a. If yes...

Please identify the categories for which you have you developed written goals, outcomes, or evaluation measures? Please check all that apply.

- Student learning
- Faculty performance
- Economic impact
- Community partnerships
- Enrollment
- Program completion
- Other (Please specify) \_\_\_\_\_

19. How often do you evaluate your **non-credit** entrepreneurship and small business management education program?

- At the end of each individual course or program
- Every semester/quarter
- Every 6 months
- Yearly
- Only occasionally
- Other (Please specify) \_\_\_\_\_

20. What methods are used to gather evaluation data on your institution's **non-credit** entrepreneurship and small business management offerings? Please check all that apply.

- Program evaluation surveys completed by participants
- Student surveys, interviews or focus groups
- Alumni surveys, interviews or focus groups
- Community/Business surveys, interviews or focus groups
- Economic data analysis
- Other (Please specify) \_\_\_\_\_

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**Section 6: Miscellaneous**

21. May we contact you by phone or email, if we have any follow-up questions?

- Yes
- No

22. Would you like to receive a copy of our research results?

- Yes
- No

Thank you for completing this survey. The findings from this research project will be used to identify current best practices in entrepreneurship education and to provide community colleges with a benchmark for assessing their own programs. We sincerely appreciate the contribution of your time and knowledge to this study and look forward to sharing with you key research findings.

## Appendix B

### Pilot Test Phone Protocol

- 1) Did you find the introduction to the research project and survey instrument clear or confusing?
- 2) Did you have any trouble interpreting the survey instructions? If so, what was unclear or confusing?
- 3) What was your initial reaction to the definitions of entrepreneurship and small business management offered at the beginning of the survey? Did you find these definitions of entrepreneurship and small business management helpful with respect to interpreting the survey questions?
- 4) Were the definitions different from your own? If so, how?  
If different, did it make completing the survey problematic for you?
- 5) How long did it take you to complete the survey?
- 6) Did you experience any technical difficulties while completing the survey?
- 7) Was there anything about the “look and feel” (color, text size) of the survey that made completing it difficult or confusing? If so, what issues did you encounter? (Be sure to get computer and browser information---Mac/PC, Netscape, Internet Explore)
- 8) Did you utilize the “setup and save” function?  
If so, were you easily able to return to the survey when you ready to resume responding?
- 9) Did you feel the “other” response box gave you sufficient room to list other response options specific to your institution? (need to probe for how much extra room they want/need)
- 10) For each question...
  - a) Did you find yourself looking for response choices that were not there? If so, what were they?
  - b) Did you find any of the response choices inappropriate or out of place? Should any response choices be removed?
  - c) Would you change the wording of any response items in this question?
- 11) If you were conducting a national survey of non-credit entrepreneurship education programs, what questions or information would you find valuable that was not addressed in this pilot survey

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#### Survey Item Specific Questions (Add-On)

Related to Survey Item #1:

1. How did you decipher question #1 relative to your own program offerings?

Related to Survey Item #7

2. How did you define the categories provided (full-time faculty, part-time faculty, etc.)?  
In retrospect, would it be easier to report faculty participation in terms of actual numbers, or as it is currently posed, by percentages?