ABSTRACT:

This report summarizes the data collected from the 2012-2014 National Survey of Entrepreneurship Education. It provides an analytical overview of the current state of entrepreneurship education in the United States. Moreover, this report is based on the seventh survey of entrepreneurship educators in the United States since 1979, with last run of the survey covering the years 2004-2005, offering a snapshot of the current state of entrepreneurship education in the United States while showing some trends and changes to entrepreneurship education.

Scholars and researchers in entrepreneurship education in the United States have reported that small business management and entrepreneurship courses at four-year college and university levels have grown in both the number and diversity of course offerings from 1990-2014. This expansion of educational offerings has been fueled, in part, by dissatisfaction with the traditional Fortune 500 focus of business education voiced by students and accreditation bodies (Solomon & Fernald, 1993).

Edelman, Brush and Manolova (2008) postulated that while current scholarship recognizes the short comings of entrepreneurship education as it is currently practiced, to date little research has adopted a content perspective and systematically compared what we are teaching in the classroom to what entrepreneurs are doing when they start a new venture. The purpose of this study is to begin collecting data on pedagogical and theoretical approaches to the teaching of entrepreneurship education and small business management.

The National Survey of Entrepreneurship Education is the country's oldest and most comprehensive surveys on small business management and entrepreneurship education dating back to the initial survey conducted in 1979 by Dr. George T. Solomon, Co-Director of The
George Washington University Center for Entrepreneurial Excellence (CFEE), as part of his doctoral studies.

This continuation of the National Survey of Entrepreneurship Education:

- Expands on earlier studies by collecting data on credit and non-credit courses and programs at both the undergraduate and graduate level in small business management and entrepreneurial education offered at four-year colleges and universities in the United States.
- Examines pedagogies and innovative delivery mechanisms, such as virtual and Internet based programs, and their effect on the upcoming generation of entrepreneurs.
- Captures information about Social Entrepreneurship, both current and projected offering in the future, which enables an accurate assessment of current course offerings of this unique subset of entrepreneurship education.

INTRODUCTION:

The Ewing Marion Kauffman Foundation in collaboration with The George Washington University Center for Entrepreneurial Excellence (CFEE) agreed to sponsor the 2012-2014 entrepreneurship education survey. The purpose was to update the 2002-2003 National Survey of Entrepreneurship Education to ascertain the current landscape in entrepreneurship education in the United States, collecting information about all entrepreneurship education programs available by four-year colleges and universities. Using this data, the goal was to gauge best practices and trends within the field of entrepreneurship education while providing a foundation on which to develop entrepreneurship education programs across the United States.
In examining the state of entrepreneurship education, it is helpful to define what we mean by “entrepreneurship education.” Colton, (as cited by Garavan and O'Carneide 1994, p. 4) suggests the following:

The major objectives of enterprise education are to develop enterprising people and inculcate an attitude of self-reliance using appropriate learning processes. Entrepreneurship education and training programs are aimed at stimulating entrepreneurship, which may be defined as independent small business ownership or the development of opportunity-seeking managers within companies. Shepherd and Douglas (1997) are rather more specific:

The essence of entrepreneurship is the ability to envision and chart a course for a new business venture by combining information from the functional disciplines and from the external environment in the context of the extraordinary uncertainty and ambiguity, which faces a new business venture. It manifests itself in creative strategies, innovative tactics, uncanny perception of trends and market mood changes, courageous leadership when the way forward is not obvious and so on. What we teach in our entrepreneurship classes should serve to instill and enhance these abilities.

Earlier data collected from the National Surveys of Entrepreneurship Education conducted from 1979 to 2003 by Solomon (Solomon 1979, 1982, 1986, 1991, 1997, 2000 and 2003), indicate that entrepreneurship and small business management courses have grown in acceptance at an accelerated pace from 93 colleges and universities in 1979 to over 1,600 in 2004 and we see continued growth in these course offerings in the present study. In fact, most colleges and universities are now more commonly listing not only courses but also major fields of study in entrepreneurship and small business management.

Anecdotal data gleaned from discussions with scholars in the field tend to indicate that the general acceptance of entrepreneurship and small business management may be linked to the popular literature extolling the somewhat glamorous role of the entrepreneur and the opportunities for younger people to select activities and new venture start-ups as a career choice. Also, the rise in endowed chairs and centers has contributed to greater acceptance of entrepreneurship education and small business by colleges and universities.
Finally, GEN X and Y students are exploring start-up efforts as viable career choices. These students, more so than enlightened administrators and faculty, are driving the demand for more course offering in their quest to create careers that make an impact in the world and follow their individual passions.

BACKGROUND LITERATURE:

The following examination of the literature presents the historical context of entrepreneurial education, a comparison between entrepreneurial education and traditional business education and a review of the conceptual distinction between small business courses and entrepreneurship courses.

**Historical Context**

Entrepreneurship education has experienced remarkable growth in the last half century. Within fifty years the field has evolved from a single course offering to a diverse range of educational opportunities available at more than 1500 colleges and universities around the world (Charney & Libecap, 2000). The field’s earliest roots are traced to Japan in 1938 and Shigeru Fujuii, Professor Emeritus at Kobe University who initiated the first efforts in applied education in entrepreneurship (McMullen and Long, 1987). Courses in small business management began to emerge in the 1940’s and in 1958. When Dwight Baumann, an engineering professor at MIT, introduced what may have been the first course in entrepreneurship in the United States (McMullen and Long, 1987).

The early prediction that “…the number of course offerings should increase at an expanding rate over the next few years” (Vesper, 1985, p. 380) has held true almost thirty years later. In 1985, 253 colleges or universities offered courses in small business management or entrepreneurship and in 1993, 441 entrepreneurship courses were available to interested students (Vesper, 1993). By 1999, Foote reported student enrollment in entrepreneurship
classes at five top U.S. business schools increased 92 percent from 1996 to 1999 and the number of entrepreneurship classes offered increased 74 percent. A recent estimate suggests that entrepreneurship and small business education may now be offered in as many as 1200 post-secondary institutions in the United States alone (Solomon, 2001) with educational experiences ranging from traditional course work to integrative curricula that include marketing, finance, new product development and technology (Charney & Libecap, 2000).


The evolution from negligible to massive interest in entrepreneurship, presents significant curricular and pedagogical challenges for administrators, professors, and other instructors in institutions of higher education. In its purest form, “entrepreneurship” is the art and science of creating a new venture and value for multiple constituencies (e.g., customers, employees, and communities). The call was echoed in Venkataraman’s (1997) seminal paper on the distinctive domain of entrepreneurship. At the core of entrepreneurship is the identification and exploitation of opportunities (Shane and Venkataraman 2000), yet the majority of entrepreneurship courses assume that the opportunity has been identified. However, we
define the “entrepreneur,” as the individual who takes on the risk and tasks of the creation of the venture and value.

Small Business Management and Entrepreneurship Courses

Unlike many specialized business courses, courses in both small business management and entrepreneurship focus on the total firm. These courses provide a breadth of creative managerial skills and knowledge that is the “closest approach to the original concept of professional management education offered at colleges and universities” (Zeithaml and Rice, 1987, p. 50). Both types of courses frequently provide students with opportunities to gain the knowledge and skills needed to generate a business concept, determine its feasibility, launch and operate a business, and develop exit strategies (Solomon, Weaver, and Fernald, Jr., 1994). Although small business management and entrepreneurship courses are closely related, there are also important conceptual differences between the two education types (Zeithaml and Rice, 1987; Solomon and Fernald, Jr., 1993). Small business management courses focus on achieving normal sales, profits and growth within an existing business. The traditional objective of small business management programs is to provide students with management know-how related to managing and operating small, post-startup companies including “setting goals and objectives, leading, planning, organizing and controlling from a small business perspective” (Solomon and Fernald, 1993, p.5). In contrast, entrepreneurship education focuses on originating and developing new growth ventures (Guglielmino and Klatt, 1993) with an emphasis on high profitability, rapid growth, and expedient exit strategies (Solomon, et al., 1994).

Differentiating Traditional Business Education from Entrepreneurship Education

Although small business management and entrepreneurship courses have experienced remarkable growth in the last several decades, there is consensus that the field is far from maturity (Robinson and Hayes, 1991.) As the field evolves, discussion continues regarding
the field’s relevance, course content, pedagogy, and effectiveness measures (Solomon, Weaver, and Fernald, Jr., 1994). Early discussions focused on the need for entrepreneurship education and questioned whether entrepreneurship courses were not simply traditional management courses with a new label (King, 2001). While there is general agreement that the core management courses offered in traditional business programs are essential for success in any business career, (Vesper and McMullan, 1987; Block and Stumpf, 1992), there are fundamental differences between business principles applied to new ventures and those applied to large corporations (Davis, Hills, and LaForge, 1985).

Unlike the functional “specialist” focus of traditional business programs such as accounting, marketing or finance, entrepreneurial education requires a “generalists” approach that integrates and combines a variety of functional skills and knowledge (Hills, 1988; Block and Stumpf, 1992). Entrepreneurship education is also differentiated by stage of development, the central problem of new ventures. ”Traditional management education presents the functional format as if it were equally applicable to ventures at all levels of development, from an idea onward as though no differentiation by stage of development is required” (McMullan and Long, 1987, p. 267). Courses and programs in entrepreneurship education must focus on early lifecycle development challenges; particularly those related to startup (Vesper and McMullan, 1987) such as opportunity recognition, market entry, protecting intellectual property, the legal requirements of new businesses and severe resource constraints. Educational content must also address the lack of specialized functional expertise, the ways in which some organizational objectives differ from mature firms, and the finite time span available to generate profits (Loucks, 1982; Hills, 1988).

A core objective of entrepreneurship education that differentiates it from typical business education is “to generate more quickly a greater variety of different ideas for how to exploit a business opportunity, and the ability to project a more extensive sequence of actions for
entering business…”(Vesper and McMullen, 1988, p. 9). Business entry is a fundamentally different activity than managing a business (Gartner and Vesper, 1994); entrepreneurial education must address the equivocal nature of business entry (Gartner, Bird, and Starr, 1992). To this end, entrepreneurial education must include skill-building courses in negotiation, leadership, new product development, creative thinking and exposure to technological innovation (McMullen and Long, 1987; Vesper and McMullen, 1988). Other areas identified as important for entrepreneurial education include awareness of entrepreneurial career options (Hills, 1988; Donckels, 1991); sources of venture capital (Vesper and McMullan, 1988; Zeithaml and Rice, 1987); idea protection (Vesper and McMullan, 1988); ambiguity tolerance (Ronstadt, 1987); the characteristics that define the entrepreneurial personality (Hills, 1988; Scott and Twomey, 1988; Hood and Young, 1993) and the challenges associated with each stage of venture development (McMullen and Long, 1987; Plaschka and Welsch, 1990).

The integrated nature, specific skills, and business lifecycle issues inherent in new ventures differentiate entrepreneurial education from a traditional business education. An additional comparison, within the context of entrepreneurial education, can be made between small business management courses and entrepreneurship courses—a distinction not always addressed in the literature (Zeithaml and Rice, 1987).

**Pedagogical Issues**

In addition to course content, educators are challenged with designing effective learning opportunities for entrepreneurship students. Sexton and Upton (1987) suggested early on that programs for entrepreneurship students should emphasize individual activities over group activities, be relatively unstructured and present problems that require a “novel solution under conditions of ambiguity and risk” (p. 12). Students must be prepared to thrive in the “unstructured and uncertain nature of entrepreneurial environments” (Ronstadt, 1990, p.72).
Offering students opportunities to “experience” entrepreneurship and small business management is a theme among many entrepreneurial education programs.

Among the most common elements in entrepreneurship courses continue to be venture plan writing, case studies, readings and lectures by guest speakers and faculty (Gartner & Vesper, 1994). The typical elements of courses include class work, tests and a major project, which is usually a consulting project (Carroll, 1993). Project based, experiential learning is widespread in entrepreneurship education and may take a myriad of forms, such as the development of business plans (Gartner & Vesper, 1994; Gorman et al., 1997); student business start-ups (Truell et al., 1998); consultation with practicing entrepreneurs (Solomon et al., 1994) and computer simulations (Brawer, 1997). Other popular activities include interviews with entrepreneurs (Solomon, et al., 1994), environmental scans (Solomon, et al., 1994), “live” cases (Gartner & Vesper, 1994). Student entrepreneurship clubs are also widespread (Vesper & Gartner, 1994).

Pedagogy is also changing based on a broadening market interest in entrepreneurship education. New interdisciplinary programs use faculty teams to develop programs for non-business students, and there is a growing trend in courses specifically designed for art, engineering and science students. Non-business students may require basic technology laboratories that focus on internet-based feasibility research, developing effective audiovisual pitch presentations and creating professionally formatted business plans. In addition to courses focused on preparing the future entrepreneurs, instructional methodologies should also be developed for those who manage entrepreneurs in organizations; potential resource people (accountants, lawyers, consultants, etc.) used by entrepreneurs; and top managers who must provide vision and leadership for corporations which must innovate in order to survive (Block & Stumpf, 1992).
Neck and Greene (2011) state that entrepreneurship education pedagogies should emphasize students to think and then to do. In order to do this, some educators tend to use cases and simulations, but in a different way. Neck and Greene (2011) focus on the entrepreneur as the protagonist, exploring not only the venture process but also the decision-making process. Other educators are using the writing of narratives and scripts based on the Mitchell et al. (2000) approach of arrangement, willingness, and ability to further the students’ understanding of how they process information about entrepreneurship. In reviewing the literature, Neck and Greene (2011) saw a number of great approaches, exercises, and classes on the search for opportunities, including Jim Fiet’s systematic search (Fiet and Patel 2006; Nixon et al. 2006) and DeTienne and Chandler’s 2004 opportunity identification exercise.

In summary, Neck and Greene (2011) indicate that the entrepreneur world has clearly informed us that there is no one type of entrepreneur. This means one of the challenges of the cognitive world is to avoid the trap of the entrepreneur world and therefore be able to recognize the richness of a diversity of cognitive approaches, again linked to a diversity of entrepreneurial motivations and desired outcomes or definitions of success. At the same time, with an over reliance on teaching entrepreneurship as a process, the process world appears linear and predictable. Innovation is often absent because we teach and applaud the use of existing business models often arguing that using proven models reduces the risk of failure. The vast majority of our student’s plans are not based on a truly innovative product or service. Even more absent is the innovation in business models. This leaves us in the position of largely replicating existing forms of businesses and therefore, even existing kinds of economies. The cognition world is growing in popularity because it recognizes the importance of the mind and the dynamic approach to learning how to think entrepreneurially.
METHODOLOGY:

Created in 1979 by Dr. George Solomon, the survey features five key sections – background information on the respondent and their respective institution; pedagogies, subject matter and materials; technology trends in the industry; external components and partnerships; and impact of the initiatives. Since 1979, Dr. Solomon has used the data to produce numerous articles reporting on the dynamic rise of entrepreneurship education in the U.S.

In the latest call for responses, the survey received 206 completed surveys, all stemming from four year universities and colleges across the country. Summarizing the survey data, this report provides an outlook of the U.S. entrepreneurship education industry, trends, growing movements, and new activities. This report can serve as an informational piece for individuals already in the entrepreneurship education industry and can also provide information to those interested in launching their own programs, courses or centers.

As a compliment to the following report, The George Washington University Center for Entrepreneurial Excellence as developed a dynamic website to host this information. The goal of the website is to present the research in an interactive methods, while also showcasing additional resources such as a list of entrepreneurship programs in the United States and a literature review of relevant, complimentary materials.

RESULTS AND IMPLICATIONS:

1. Overview of Programs in the United States
In general, the data indicates that there is more of a trend towards entrepreneurship education within undergraduate programs over graduate level or higher programs. As Figure 1.1 shows, the largest area within entrepreneurship education are undergraduate minors in entrepreneurship, receiving a score of 93, followed by undergraduate majors and concentrations, each receiving a score of 76.
Within the graduate level programs, entrepreneurship is more represented within Masters of Business Administration Programs as a Certificate. Additionally, we see a rise in Entrepreneurship focused MBA programs while entrepreneurship certificates within graduate programs, entrepreneurship masters of science programs and entrepreneurship PhD / DBA programs remain slightly under-represented in the United States.

Comparing Figures 1.1 and 1.2, we can see some similarities in the trends between business programs and entrepreneurship programs. In Figure 1.2, there is still a high focus on undergraduate minor programs and a lower representation for Masters of Science, PhD/DBA and Graduate Business Certificate programs. The two differences are the number of major and concentration programs. Comparing entrepreneurship programs to business programs, the number of business (score of 125) majors far out weights the score for undergraduate entrepreneurship majors (score of 76). Additionally, the number of entrepreneurship concentrations in entrepreneurship is higher, with a score of 67, compared to general business concentrations, which received a score of 67.
The level of student enrollment in the aforementioned business programs directly corresponds with the number of programs offered and has shown similar outcomes to the programs available in Figure 1.2. The large majority of students are enrolled in undergraduate business majors, which the lowest enrollment occurs within PhD/DBA Programs, as depicted in Figure 1.3 below:
Comparing these results from our initial report from the 2011-12 National Entrepreneurship Survey, we can conclude a decrease in enrollment in PhD/DBA programs throughout the United States. In the previous report, graduate certificate programs had the lowest enrollment by a small margin.

Figure 1.4 summarizes a variety of courses offered throughout programs in the United States. From this chart, we can conclude that the top 5 courses throughout entrepreneurship programs include:

- Entrepreneurship
- Business Planning
- Entrepreneurial Finance
- New Venture Creation
- Innovation

The three courses that tend received the lowest scores include:

- Franchising
- Venture Capital
- Small Business Financing

For these same course offerings, we are able to compare the number of sections offered with the number of students enrolled. This data is depicted in Figure 1.5. From this figure we can see that the 5 most popular courses offered, the ones that received the highest enrollment levels, include:

- Technology
- Entrepreneurship
- Venture Capital
- Business Planning
- Creativity

The three courses that received the lowest enrollment numbers include:

- Franchising
- Family Business
- Small Business Consulting
Some of the courses listed as ‘other’ include:

- Entrepreneurship in the Arts
- Intellectual Property
- E-Commerce
- Commercialization
- Business Strategy
- Business Law

Under the other category, a very high number of individuals indicated social entrepreneurship. Noticing this recent trend within entrepreneurship education to teach about creating new ventures that are focused on social initiatives, new questions were added to the survey to explore the trend in more details and are highlighted in a following section of this report.

Figure 1.6 shows the average number of professors who teach entrepreneurship employed by their respective colleges and universities. As the chart indicates, there are more full-time faculty hired in the fall than part-time and the number of full- and part-time faculty hired in
the spring is the same, an average of 3 per program. The “Other” category included responses community partners, contract positions, co-op teachers, doctorate students, Entrepreneurs-in-Residence, and faculty from other departments.

Figure 1.6: Faculty Hire in Entrepreneurship Program

Figure 1.7 illustrates the average type of additional programs that a school could have within their entrepreneurship program. As the chart shows, the most common programs include:

- Entrepreneurship Centers or Institutions
- Entrepreneur-in-Residence positions
- Endowed Chairs of Entrepreneurship
- Small Business Development Centers

Other initiatives being adapted throughout colleges and universities include:

- Incubators
- Family Business Centers
- Fellows Programs
Responsibility and oversight for the general entrepreneurship curriculum, as well as the additional resources and initiatives outlined above, fall within the responsibility of many. Figure 1.8 shows, on average, which departments generally house these programs. As illustrated, programs are mostly likely to be housed within existing departments of the university or college. These initiatives are less likely to be housed within a department that is dedicated to small business or entrepreneurship. Also surprisingly, they are more likely to be housed within an existing department than within the school of business within the college or university. This shows the growth trend towards integrating entrepreneurship across various disciplines within a school – a trend that will be explored again in the Impact section of the report.
Figure 1.8: Complimentary Entrepreneurship Resources & Initiatives

The most common Existing Academic Department listed was management with 56 responses followed by Business (either administration or management), with a score of 27. One of the most common responses under the ‘Other’ category was the Provost Office.

To fund these courses, programs, and research initiatives, grants and donations are often sought after through external sources. In Figure 1.9, we illustrate where the majority of this funding comes from. As the chart outlines, 29% of survey respondents indicated that funding came from alumni, 20% indicated that funding came from non-alumni entrepreneurs and 14% indicated resources from the federal government. The other two resources listed, the two that received the least number of responses at 9% and 3% are the Coleman Foundation and Kauffman Foundation respectively. Other sources listed included private donors or foundations, public agencies, other university divisions or individuals and grants.
Figure 1.9: Financial Support

2. Pedagogy and Learning Materials
Through this section of the survey, we attempt to determine how entrepreneurship programs are commonly designed to ensure student success and identify the various resources and materials the faculty members bring into the classroom to support the academic curriculum.

The first topic we explore relates to the additional learning opportunities available to students outside the classroom. Opportunities for student academic and professional growth are expanding beyond the classroom and into other programs and events. Figure 2.1 outlines how survey participants rated each extracurricular option. The most popular programs outside of the classroom include business plan competitions, entrepreneurship clubs, distinguished speaker series, and elevator pitch competitions.
Since business plan competitions are a large part of entrepreneurial education, we wanted to measure how many schools participated in competitions versus those who hosted them. Of the 206 survey respondents, 53% said that they participated in other business plan competitions while only 38% indicated that they hosted a competition at their school.

In Figure 2.2, we measure the level of frequency in which faculty use various teaching pedagogies in their entrepreneurship courses. In this particular chart, higher frequency of use is depicted with a lower value. For example, “Discussions” are used most often and “Small Business Institute (SBI)” least often. This is because respondents were asked to rank frequency of use on a scale of 1-6, with 1 representing “very frequent”, 5 representing “seldom”, and 6 representing “Non-Applicable (N/A).” As the figure shows, the six most frequently used pedagogies are discussions, creation of business plans, in-class exercises, lectures from small business owners and guest speakers. The five most infrequently used
include small business institute (SBI), twitter, blogging, computer simulations and counseling programs.

Figure 2.2: Classroom Pedagogies

Some of the most common pedagogies listed in the ‘other’ category include interviews with entrepreneurs, workshops off campus, business challenges, and mentorship opportunities.

To dive deeper into the curriculum of entrepreneurship education across the country, respondents were asked to provide information regarding the various subjects covered in their curriculum. Figure 2.3 illustrates the responses to this question, where survey participants were asked to indicate whether or not one of the 7 major topics listed were included in their entrepreneurship, small business management curriculum, neither or both.

The results show that all of the topics were included in the entrepreneurship curriculum more than small business management and that they appeared more in both than in neither. The topic that showed up most in the entrepreneurship curriculum is Psychology Traits and Startup Characteristics and the topic that is covered the least is Sustainability. The topic
covered the most in small business management is marketing and the topic covered the least is Psychology Traits and Startup Characteristics. Financing was the topic that was rated the highest as being covered under both curriculum and sustainability was rated the highest for being the topic that was not covered under either curriculum.

![Figure 2.3: Major Topics Covered in Curriculum](image)

Respondents were also asked to provide three additional major topics under an ‘other’ category. The most common topics included:

- Business model canvas
- Social entrepreneurship
- Feasibility
- Global
- Ethics
- Harvesting
- Innovation
- Lean start-up methods

To learn more about how faculty and educators are presenting information to students, we asked them to specify which of none teaching materials they used most recently. The most popular teaching materials included textbooks, websites, reading books, sets of readings and text material, and trade books.

**Figure 2.4: Common Teaching Materials**

Figures 2.5 and 2.6 highlight the various periodicals and academic journals that survey respondents indicated they most frequently use in the classroom. The most highly rated periodicals include Entrepreneur, Inc., Fast Company, The Wall Street Journal and Business Week. The most highly rated academic journals include Entrepreneurship Theory & Practice, Journal of Small Business Management, and the Journal of Business Venturing. Overall there were more responses to the use of periodicals versus academic journals.
3. Social Entrepreneurship
One of the latest trends in entrepreneurship education and the start-up industry in general, is the shift towards the creation of social enterprises and the goal of creating a business that
includes a double bottom line – both generate profit for shareholders and investors while also adding value to society. Throughout the survey we have seen the entrance of social entrepreneurship. When survey participants were asked to identify other major topics within entrepreneurship and small business curriculum, social entrepreneurship was one of the most commonly stated topics. Additionally, participants compared the enrollment levels versus the number of courses offered in their curriculum, social entrepreneurship was also common as part of their ‘other’ responses.

Seeing this trend first appear when our report for our 2011-12 data was generated, we decided to incorporate more questions regarding the use of social entrepreneurship topics in the curriculum. The following section outlines our results.

Starting out, we wanted to get a general sense of how schools were incorporating social entrepreneurship into their curriculum. Of the respondents surveyed, 40% indicated that they offer course(s) dedicated or specific to social entrepreneurship. Degree programs in social entrepreneurship are now ranging from undergraduate majors to doctoral programs. Figure 3.1 highlights these results:
Figure 3.1: Social Entrepreneurship Course Program Offerings

The majority of the course offerings lie within undergraduate majors and minors and MBA Programs.

For schools that did not begin introducing dedicated social entrepreneurship courses, we tried to determine whether or not they had plans to do so in the future. We received the following responses to general questions about their use of social entrepreneurship:

*If not dedicated, do you cover the topic in your general entrepreneurship course(s)?*

Yes = 61%

No = 39%

*If not dedicated, are you in the process of developing?*

Yes = 18%

No = 82%

Although the data indicates that schools still aren’t offering a dedicated social entrepreneurship program, it does indicate that the majority are incorporating it into their
general entrepreneurship course work. We also asked individuals to tell us when their school first starting offering social entrepreneurship courses and programs and the most common year was 2010, the first year was 1978 and the most recent year was 2014.

4. Technology
With rapidly evolving technology and the growth in online education, it is inevitable that we will see more and more growth towards the use of new technologies in the field of entrepreneurship education. Online courses are becoming more time- and cost-efficient for the students and the schools that offer them. To determine the level of adaptation of online resources by universities and colleges in entrepreneurship education, participants were asked to indicate whether or not they used certain technologies listed. Figure 4.1 outlines the responses to these questions and shows that the majority of individuals indicated that they used web-based assignments in their entrepreneurship curriculum and posted information regarding entrepreneurship and new venture creation. Although blogging seems to be a growing trend, many businesses turning to the inexpensive medium to educate consumers on their brand and industry, in entrepreneurship education it is not as prevalent. Only 25% of respondents indicated that they blog regularly. Another infrequently used online resource is delivering entrepreneurship courses online, with only 27% of respondents indicating that they offer online courses. Considering the movement towards online education, we might expect to see this increase in the coming years.
Figure 4.1: Utilizing Online Resources

With the growing use in social media, survey respondents were also asked to indicate which medium they use most often. Figure 4.2 shows that Facebook is used most often, followed by LinkedIn and Twitter. The least used media are Instagram and Pintrest and Google+.
5. External and International Components

To survey the offerings that U.S. schools provide outside of the classroom, survey respondents were asked to indicate whether or not they offered any of the following opportunities - internships, online learning, continuing education or executive development courses. Figure 5.1 illustrates that a lot of respondents indicated that they offered internship opportunities. It also confirms what we saw in Figure 4.1, that entrepreneurship education has still not made a big move towards offering online courses, as this option was the lowest ranked only behind executive development courses.
Figure 5.1: Social Media Use

Additionally, we wanted to measure how active programs were in communities outside of the school. Figure 5.2 illustrates the results:

Figure 5.2: External Partnerships
From these results we can determine that the majority of schools participate in external business plan competitions as their main form of developing external relationships. Another highly rated figure was that the school as a whole supports the interdisciplinary program by working together to help promote and highlight entrepreneurship as a viable career option.

6. Impact
In order to assess the overall entrepreneurship education industry, survey respondents were asked a variety of questions related to how they view the industry and where they feel that their school fits into the ecosystem. The first question asked what distinguishes their entrepreneurship program from those of other schools. The following were the top three responses:

- Experiential learning
- Interdisciplinary programs
- A resource network for students consisting of mentors, program partners, etc.

Please see Appendix A for a full list of distinguishing program features.

The third unique indicator mentioned above provided confirmation on the believe that maintaining connections with alumni is an important part of a healthy program, not only to turn to for donations and funding, but also to provide additional resources and an expanded network for current students and faculty. However, the data indicated that schools do not put a focus on maintaining these connections as only 43% of respondents indicated that they did keep in touch with alumni who have started their own business.

In order to identify how well the program is performing, most schools implement metrics to measure outcomes from individual courses and also the program as a whole. Survey respondents were asked to identify the key metrics that they used and the following are the four top responses:

- Number of businesses started – both during and after the program
- Student course evaluation results
- Number of participants in programs and events held within the school
- Number of students enrolled in the course or program

Please see Appendix A for a full list of identified metrics.

Furthermore, as it is predicted that online education and social entrepreneurship would both become more integrated into the entrepreneurship curriculum, survey respondents were asked to identify the top three trends they see in the industry. In ranking order, the top six trends predicted to become prominent in entrepreneurship education over the next five years are:

1. Social Entrepreneurship
2. Experiential Education
3. Interdisciplinary Programs
4. Business Modeling
5. Lean Start-up
6. Globally focused programs

Please see Appendix A for a full list of predicted trends in entrepreneurship education.

CONCLUSION:

The National Entrepreneurship Education survey provides an overview of the state of the entrepreneurship education landscape within the United States, giving an accurate picture of how entrepreneurship programs are organized and implemented. The majority of entrepreneurship programs fall within undergraduate programs, both minors and majors, and Masters of Business Administration Programs. Most are housed within an existing department of the school, usually within the business or management departments, and the most common form of funding is from alumni, entrepreneurs and the federal government. Additionally, within the programs, there is a shift in the course offerings, moving away from more traditional topics of Franchising and Venture Capital, and towards topics such as New Venture Initiatives, Business Planning, Technology, and Innovation.
Through the analysis, three trends have been identified, not only through the impact section that asked survey respondents to identify upcoming industry trends, but also throughout responses to other survey questions related to pedagogy and course offerings. These trends include social entrepreneurship, experiential learning and incorporating business model canvas activities into the curriculum.

The first trend, social entrepreneurship has been on the rise for a number of years. Seeing this trend when creating the 2012-13 and 2013-14 surveys, questions specifically targeting social entrepreneurship educational activities were added. The results concluded that 40% of schools in the United States offer specific courses in social entrepreneurship and 61% teach it in their core entrepreneurship courses.

Many survey respondents indicated that one of the features that provides their program with a competitive advantage over others in the is their ability to offer experiential learning opportunities to their students. Providing the opportunity for students to participate in real-life situations and activities outside the program is the second trend identified through the survey. Eager to apply their education outside of the classroom, students are looking to educators to provide the opportunity to participate in internships and business plan competitions and interact with professionals and entrepreneurs through resource networks.

Finally, the use of lean start-up and business model canvas models in programs and courses is on the rise. These two subjects were identified not only in the industry trends section, but also as additional topics offered under the course curriculum. As lean-start up strategies become more widely used in the industry, more and more educators are bringing the models into the classroom as a way to provide students with additional start-up strategies and analyze a new venture’s potential environment.
A trend that seemed not as prominent is the use of online course offerings in entrepreneurship education. Although the use of technology has been on the rise in terms of an increase in the use of social media and web-based activities, compared to the rise in online course offerings in general business programs, the number of respondents indicating that they used online courses within their entrepreneurship program was low. This could be related back to the desire to provide experiential learning opportunities to students and the difficulties in providing those opportunities through an online course.

Another trend that was prominent within the analysis was the need for interdisciplinary entrepreneurship programs. Although identified as being housed within business and management departments largely, entrepreneurship impacts various subjects outside of the business school. For example, many technologies and innovations come from engineering schools and, in the wake of the rising concerns over health care in the country, Public Health Schools are turning to entrepreneurial activities to creative innovative solutions. Integrating these types of schools into the program not only provides exposure to the school housing the program, but also a more hands on learning experience for students of the program, allowing them to work outside of the business discipline and be a part of a team with diverse backgrounds.

Finally, to further enhance the filed of entrepreneurship education it would be helpful to:

- generate a validated census of all schools who have either responded to any of the National Surveys of Entrepreneurship education, surveys conducted by Karl Veser and the Kauffman sponsored University of Illinois web survey.
- develop a successful strategy to collect data from two year colleges
- develop linkages with other entrepreneurship education databases such as Jerry Katz’s listing of endowed centers and chairs.
REFERENCES:


APPENDIX A: Full List of Free Response Answers

*Distinguishing Program Features*

<table>
<thead>
<tr>
<th>Program Features</th>
<th># of Responses</th>
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<tbody>
<tr>
<td>Experiential Learning</td>
<td>28</td>
</tr>
<tr>
<td>Interdisciplinary Program</td>
<td>13</td>
</tr>
<tr>
<td>Resource Network - mentors, program partners, etc.</td>
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</tr>
<tr>
<td>Focus on Social Entrepreneurship</td>
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</tr>
<tr>
<td>Liberal Arts Focus</td>
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<tr>
<td>Internship Opportunities</td>
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<tr>
<td>Experienced Educators</td>
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<tr>
<td>Research Focus</td>
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<tr>
<td>Incubator spaces available</td>
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<tr>
<td>Funding Programs for Students</td>
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<tr>
<td>In-residence Programs</td>
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<tr>
<td>Global Focus</td>
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<tr>
<td>Family business focus</td>
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<tr>
<td>Consulting Projects</td>
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<td>Commercialization focus</td>
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#### Metrics

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<td><strong>Number of startups - during and after program</strong></td>
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<tr>
<td><strong>Student course evaluations</strong></td>
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<tr>
<td><strong>Number of participating in internal competitions and programs</strong></td>
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<tr>
<td><strong>Number of students enrolled</strong></td>
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<tr>
<td><strong>Student performance results on tests and projects</strong></td>
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<tr>
<td><strong>Participation level from mentors / alumni</strong></td>
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<tr>
<td><strong>Number of students participating in external competitions and programs</strong></td>
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<tr>
<td><strong>Amount of funding received for startups</strong></td>
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<tr>
<td><strong>Performance metrics of start-ups - revenues, jobs created</strong></td>
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<tr>
<td><strong>Pre- &amp; Post-Program Surveys</strong></td>
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<tr>
<td><strong>Number of Business Plans Completed</strong></td>
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<td><strong>Use of software systems</strong></td>
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<tr>
<td><strong>Number of students completed program</strong></td>
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<tr>
<td><strong>Program sponsorship levels</strong></td>
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### Predicted Trends in Entrepreneurship Education

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<td>Interdisciplinary programs</td>
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<td>Business Modeling</td>
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<td>Lean Start-Up</td>
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<td>Global focus programs</td>
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<td>Increasing technology use</td>
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<td>Sustainability</td>
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<td>Incubators in Universities</td>
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<td>Case Studies</td>
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<td>Intrapreneurship</td>
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<tr>
<td>Family business focus</td>
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