Beyond the Business Plan: Building Implementation into an Entrepreneurship Curriculum

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Abstract
This paper reports on an innovative entrepreneurship curriculum designed to facilitate the actual implementation of student business ventures as part of a core entrepreneurial curriculum across disciplines. The capstone experience in many university entrepreneurial programs revolves around the development and review of business plans in courses or competitions. This curriculum was created to emphasize implementation over planning. The courses are housed under the Center for Innovation at the Metropolitan State College of Denver (Metro State). Beginning with a freshmen-level creative problem-solving course, students identify business ideas and build on them throughout the course sequence. Winners of a college business plan competition receive the right to launch their start-ups as part of the curriculum’s capstone offering, a two-semester sequence entitled New Venture Creation I and II. Upon completion of this curriculum, all students can earn either a certificate or minor in entrepreneurship.

Introduction
The problem was simple: only business majors were taking entrepreneurship courses at our college. At an institution approaching 23,000 students, this scenario seemed to imply that only the almost 4,000 business majors at the Metropolitan State College of Denver (Metro State) had ideas and talents worthy of starting successful enterprises.

A logical counterpoint was that, while any student could take entrepreneurship courses offered through the management department, the prerequisites attached to these offerings made it impractical. Non-business majors were unwilling or unable to enroll in these preceding courses due either to time restrictions placed on them by their major areas of study, or a lack of interest in the content. It was simply easier for the vast majority of students not to study entrepreneurship.

The task force charged with researching entrepreneurship education on campus recognized this dilemma and started work on creating an entrepreneurial center that would be accessible to all, with fewer barriers to entry. The challenge was to fashion curriculum and programming that opened entrepreneurial doors for
potentially thousands of new students while still providing training in necessary business fundamentals.

After two years of development, the college announced the creation of the Center for Innovation (CFI), a new entrepreneurial center to make business start-up training across the curriculum available to all disciplines. Soon thereafter, an external board of advisors, consisting of entrepreneurs and investors in the community, concluded that the key to successful entrepreneurial education is not just in providing training, but also in providing opportunities. Specifically, giving students opportunities to fail in a safer environment than the so-called “real world.” This approach was especially important based on the college population, many of whom represented low-income students with fewer personal resources available to help build businesses. Since the intent was to build an entrepreneurial center with maximum input from experts in the field to help differentiate it from existing university programs in the area, center leadership carefully examined this option and decided to implement it. This philosophy supported both the mission and vision of the center:

**Mission**
To provide training and programs that cultivate entrepreneurial leaders and result in career opportunities and job creation.

**Vision**
To become the premier innovative program for inspiring underserved students to realize their entrepreneurial dreams.

**A Short History of the Center for Innovation**
The concept of the Center for Innovation was based on the vision of the current Metro State President. Part of this new vision for the college was that an entrepreneurial center should be established to serve the college and its unique constituents, including minorities, women, and urban youth. Faculty representing all schools at MSCD came together to form an Entrepreneurship Task Force to work toward establishing a center. The first official meeting of the task force was held in October 2005.

The Entrepreneurship Task Force met almost weekly from December 2005 through the summer of 2007 and moved forward on several initiatives involved in energizing the center. The center collaborated with a variety of different groups to develop aspects of an external needs assessment, including: the Coalition of Minority Chambers of Commerce, the Denver Office of Economic Development, the Division of Youth Workforce Development, and local community colleges and national entities involved in entrepreneurship education.

In January 2007, the Metro State Center for Innovation was established and began work on program and curriculum development under the direction of two successive interim directors. A website for the center was launched in October 2007, a staff person was hired, and after a national search, a permanent director was hired in April 2008. Programs developed by the center include Innovation Week activities, an entrepreneurship speaker series, an e-mentorship program, business plan competitions, and the formation of a new student chapter of the Collegiate Entrepreneurship Organization. The center also initiated a Faculty Fellows program to encourage the development of entrepreneurial courses across all disciplines, with faculty stipends awarded to the fellows to develop these courses.

Curriculum that provided an opportunity for all students on campus to access entrepreneurial training was
prepared and approved in the 2008-2009 academic year. This work culminated in the approval of a minor and a certificate in entrepreneurship in April 2009. The center’s first significant fund-raising successes occurred during this period as well. An example of this was the center’s securing funding for a micro-lending program to fund student start-ups.

The Center’s Position in Entrepreneurship Education

There have been many studies throughout the years that focus on various aspects of entrepreneurship education, including recent articles by Solomon, Duffy, and Tarabishy (2002), Brush et al., (2003), Katz (2003), and Kuratko (2005). While this research has addressed many aspects of entrepreneurial education, little of the work has focused specifically on aspects related to entrepreneurship centers. A recent national study by Finkle, Kuratko, and Goldsby (2006) directly examines the nature of entrepreneurship centers in the United States. The survey results provide some comparative information that indicates the unique nature of the Metro State Center for Innovation’s focus on implementation through the curriculum. The authors surveyed entrepreneurship center directors about their perceptions of how the faculty and administrators measured the success of their centers. For the entire sample of centers, the directors’ perceptions of the faculty’s top measures of success for a center are as follows, in order of importance: (1) number of students in the program; (2) student evaluations; (3) number of graduates; and (4) funding generated. The directors’ perceptions of the administration’s top measures of success for a center are (1) number of students in the program; (2) recognition; (3) funding generated; and (4) number of graduates. The Metro State Center believes that the best measure of success is the number of student ideas that proceed to start-up. This will be a long-term measure, since most new ventures are started by people in their mid-30s (Kauffman Foundation 2009), but was viewed as necessary to ensure the program is actually doing what it promotes to its students.

Other areas of concern for the Metro State Center are consistent with the findings of Finkle, Kuratko, and Goldsby (2006). The importance of funding issues appears to be consistent in the findings for the entire sample. Given the current state of the economy and current and proposed budget cutbacks, funding will continue to be an issue for centers in the future. Centers must be proactive and search for other means to increase funding. Some examples are (1) having students work with local businesses to write plans for them in exchange for a sum of money; (2) seminars/workshops; (3) grants; (4) start a student club, which will give donors something specific and measurable, some tangible feedback to motivate them to donate to the program; and (5) become involved in technology transfer. The Center for Innovation has developed programs with an eye toward similar strategies, with the introduction of a micro-lending program that links the center to a local entity and provides specific returns for the community on that investment.

The most popular internal activities for all entrepreneurship centers today are business plan competitions (77%), internships (77%), student clubs (76%), and technology transfer (55%). The most popular external (outreach) activities for all entrepreneurship centers today are seminars/workshops (93%), guest speakers (90%), and grants (58%) (Finkle, Kuratko, and Goldsby 2006). The CFI utilizes some of these types of activities with its sponsorship of Innovation Week on campus, a speaker series, a “Success in the Arts” program, and the e-mentorship program.

As Krueger (2007, 2009) reported, a key question to address in the promotion of an entrepreneurship center is: How do we grow a more entrepreneurial climate?

One answer is to provide training not just on the basics of technology commercialization but also entrepreneurship training and across the entire ecosystem. Formal classes and intensive immersion experiences (“boot camps”) are popular and can be highly effective if timely and well designed. Simply showing people the simple mechanics of a business plan can actually reduce entrepreneurial learning.
What participants need is genuine experiential learning that provides them with critical developmental experiences that help them move from novice toward expert as entrepreneurial thinkers.

This growth of an entrepreneurial climate is exactly what the center has tried to address with its Faculty Fellows program. A faculty member received a stipend to help with the development of an e-book customized specifically for teaching general chemistry at Metro State. Another new Faculty Fellow developed a multidisciplinary course on social entrepreneurship and its local and global applications and a co-requisite service-learning course designed to provide students applied experience in the Denver community. Yet another example of cross-disciplinary encouragement to help create a beneficial climate for entrepreneurial learning was the center’s support for a faculty member in the Aviation and Aerospace Department. This faculty member was funded to develop a course that addressed the entrepreneurial commercialization of space. Additionally, through fellowship funding, a social entrepreneurship course was created in the Department of Women’s Studies.

Increasingly, both business and engineering graduates are expected to function in a world where innovation is highly valued. The higher education community, in response to this demand, is itself innovating, as evidenced by the number of entrepreneurial programs that are being developed, many of which mix business and engineering students together on joint projects (Clouse, Wilburn, and Biernacki 2005; Ochs, Watkins, and Boothe 2001). Metro State has endeavored to go beyond this level of cross-disciplinary activity and encouraged the diverse nature of the Faculty Fellows proposals listed above. This depth and diversity is also demonstrated by the widely varied list of declared major areas for students who signed up for the center’s Creative Problem Solving course. This first offering in the curriculum attracted students from the departments of Behavioral Science, Political Science, Marketing, Management, Human Performance and Sport, History, Criminal Justice, Economics, Finance, African-American Studies, Elementary Education, Modern Languages, Psychology, Technology, Industrial Design, Individualized Degree Program, and Holistic Health, as well as undeclared majors.

The Center for Innovation at Metro State developed the following structure for their recently approved curriculum. The objective for students is to acquire a minor in entrepreneurship. The program does not offer a major because the strategy is for students to concentrate on product or service skills in specific areas and use courses in entrepreneurship to provide a foundation that can transform those areas of knowledge into an operating business. A certificate in entrepreneurship is also available, and this option was designed for members of the community who would like to obtain some entrepreneurial knowledge, but do not want to attain a bachelor’s degree through the college.
Along with one elective, the curriculum path of required courses illustrated in Figure 1 leads to either the minor or the certificate upon completion. The sole difference between the two credentials is that the minor includes an internship. The following sections describe the courses and programs illustrated in Figure 1.

**Business Planning Education**

The first two courses in the curriculum focus on idea generation and feasibility research, subject areas typically found in traditional entrepreneurship programs, although we introduce these courses much earlier than most institutions. The Freshman-level course Creative Problem-Solving is modeled after a similar course for juniors at Ball State University, where students identify their passion, find a problem in it, and devote the bulk of the semester to solving the problem. Ideally, students have their “big idea” after this course and they can then carry it to the second course in the sequence. Also included in the instructional components of the course is the introduction of some basic accounting as a fundamental concept, and guest speakers who describe the life and context of entrepreneurs. Students participate in the $20 Challenge, where they have to show a 500% profit on their business idea after receiving an interest-free loan from the instructor. This project demonstrates the concept of bootstrapping and pre-selling. A successful example of this exercise occurred when a team of four students identified the problem of personal prevention during the H1N1 influenza season on campus. With an initial investment of $20 per student ($80 total), this team aggregated items of personal hygiene recommended by the college’s Health Services Department and started selling them for $2 per pack, a markup of over 100%. Soon after product launch, the team had generated over $1,000 in actual sales.

Students move to New Venture Feasibility, where they test to determine whether their big idea is viable in the marketplace. Topics covered include legal entities, personal selling, organizational structure, market research, capital formation, financial analytics, and business planning. Once students reach junior standing,
they are eligible to enroll in an internship opportunity with either a working entrepreneur or start-up investor.

At any point in this process, students can join the E-Coaching program, where they receive online mentorship from entrepreneurs. Students in New Venture Feasibility submit their final projects to the center’s business plan competition, called the Innovation Challenge. Another division of this contest calls for entrepreneurial ideas that are judged on the merits of the concept alone. A speaker series rounds out the offerings that focus on planning education.

The CFI curriculum follows a typical sequence used by many authors. Timmons and Spinelli (2007) suggest dividing the course material into seven basic sections:

- Getting started: Finding, presenting, and selecting the projects or “big idea.”
- Finding the market: Defining the market and researching that market is a topic in the New Venture Feasibility class.
- Building the team: Addressed by the E-Coaching program.
- Testing the concept: Relating the project to the market and capturing the market, addressed in the $20 Challenge and New Venture Feasibility.
- Protecting intellectual property: Addressed in New Venture Feasibility.
- Financing the idea: Determining sources of capital to keep the company afloat, addressed in New Venture Feasibility and New Venture Creation I.
- Presenting the business: Writing and presenting the final business plan or business case, addressed in New Venture Feasibility and the Innovation Challenge business plan competition.
- The center would suggest that an eighth section should be added to address the implementation of the business plan.

Implementation Phase
At the conclusion of New Venture Feasibility, students have a “baby” business plan to nurture as their model adapts and evolves through the remainder of the coursework. From this point, students can look toward implementing their ideas. They can continue working with E-Coaches to guide them through specific issues dealing with a launch, and apply for a series of micro-loans to help get their plan working. For those entrepreneurs who would like to pursue an already established business plan, a planned franchise fair will provide them with those opportunities.

The winners of the business plan competition will be given the chance to launch their start-up in the two capstone courses in the curriculum, New Venture Creation I and II. Other students taking these courses can continue to refine their business plans, get involved with one of the student launch teams, or help a start-up in the community.

Though the actual launch opportunity will be limited to a few students, the vast majority will be able to participate in a “real” launch. This experience will give these students exposure to the realities of starting a business with the safety net of knowing their own enterprises are not at risk...yet. Entrepreneurship failure is an excellent learning tool, but given the circumstance that Metro State’s college population has a large number of students on the low end of the socio-economic scale, it is important that breakdowns occur in an environment that will not disable their entrepreneurial path forever. In its first semester during the fall 2009 term, ninety-four students from a wide array of disciplines enrolled in these courses. All but one of the program offerings were taught by entrepreneurs from the community. While it is still too early to identify
outcomes, initial responses from students, faculty, and members of the entrepreneurial community have been encouraging.

**Conclusion**

While the curriculum of Metro State’s Center for Innovation is still a work in progress, it is working towards its goal of addressing an implementation model in true entrepreneurial fashion. It identified a problem in entrepreneurial education (lack of cross-disciplinary access), and the subsequent need to produce more effective entrepreneurs (emphasis on implementation). Accordingly, it developed courses and programs that addressed these needs and is now introducing the entire concept to its students and surrounding community. Time will tell if this model of entrepreneurship education is viable.

**References**


