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LETTER FROM THE EDITORS

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The manuscripts contained in this issue were double blind reviewed by the Editorial Board members. Our acceptance rate in this issue conforms to our editorial policy of less than 25%.

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Ismet Anitsal
Editor
Tennessee Tech University

TEACHING SOCIAL ENTREPRENEURSHIP: ARTS MANAGEMENT WITH A COMMUNITY ENGAGED PERSPECTIVE

Thomas Clark, Xavier University
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ABSTRACT

This paper examines a semester-long community engagement pilot class for undergraduate students, Social Entrepreneurship: Managing in the Arts. It was designed to reflect three converging trends in academic programs: employing student-centered pedagogies, incorporating service learning components into class assignments, and recognizing arts management as a legitimate area for the academic application of social entrepreneurship strategies.

This analysis contributes to the debate over the extent to which nonprofit arts enterprises should mimic the principles of business management practices, or alternatively reflect a curriculum more specifically related to the creative mind. A version of this article was presented at the International Conference on Small Business in June 2010.

INTRODUCTION

This paper examines a semester-long community engagement pilot class for undergraduate students, Social Entrepreneurship: Managing the Arts. It was designed to reflect three converging trends in academic programs: recognizing arts management as a legitimate area for the study of social entrepreneurship; incorporating interdisciplinary service learning components into class assignments (Sterling, 2007) and (Evrard & Colbert, 2000; Chong, 2002) and employing experiential, student-centered pedagogies (Reynolds, 1999). Consistent with Leo Higdon's (2005) call for students and faculty to take an active role in life outside its campus, it was part of a university initiative to learn from and contribute to urban nonprofit arts enterprises.

The essay is organized as follows: it addresses why nonprofit arts management is an important component of social entrepreneurship; addresses why it is an appropriate area within which to do service learning; lists the goals of the course; shows the local arts scene as appropriate for community engagement; concisely explains the principles underlying the course's student-centered pedagogy; describes how we applied these principles to engage undergraduate students with the local arts community; and highlights what we learned from the data we gathered in interviews the authors and students conducted with local arts experts and from papers student teams wrote on their short term internships with arts organizations.

NONPROFIT ARTS MANAGEMENT AS SOCIAL ENTREPRENEURSHIP

Nonprofit arts organizations fit the Social Enterprise Alliance's definition of social entrepreneurship as "an organization that advances its social mission through entrepreneurial, earned income strategies" (2011) and Pomerantz' (2006) that its core "is the application of principles often associated with the business world to furthering a social or community mission," even as they have received relatively little attention in social entrepreneurship literature. (See Brkic, 2009; Palmer, 1998; Dimaggio, 1987). Hager (2001) points out that scholars need to study subsets of nonprofit organizations as different types of nonprofit entities face distinctly different business issues. The arts are an appropriate area for study given that "more than half of live theaters in the United States are nonprofits, as are more than 90% of the nation's orchestras, opera companies, and chamber music groups, and just under 90% of the nation's museums, art galleries, and zoological gardens" (Hager, 2001, p. 379; Salamon, 1999). In practice, while many nonprofit arts organizations are entrepreneurial models of the efficient use of limited resources, from theatre companies imaginatively re-using costumes and properties to small museums earning supplemental income by leasing space for weddings and other events, they are also highly vulnerable to failure. Bowen, Nygren, Turner, and Duffy (1994) report failure rates of ballet at 25.1%, opera at 22.7%, dance at 22.3%, theater at 20.3%, and museums at 9.8%. As Jerr Boschee (2003), director of the National Center for Social Entrepreneurs points out, in a time of shrinking resources, entrepreneurial endeavors are critical to the survival of many nonprofits, including those in the arts where a significant number of organizations are experiencing financial difficulties (See Rosenbaum, 2011).

ARTS MANAGEMENT AS AN AVENUE FOR INTERDISCIPLINARY LEARNING

Studying social entrepreneurship in the nonprofit arts arena is a natural meeting place for students from business and from the arts to learn from one another. Pomerantz (2006) points out that liberal arts colleges such as Connecticut College, Wake Forest, and College of Wooster have incorporated social entrepreneurship as complementary to their liberal arts curriculum. The Kellogg, Skoll, and Kauffman Foundations among others, sponsor faculty development and service learning projects related to social entrepreneurship. As Leo Higdon (2005) points out, social entrepreneurship is a good fit for interdisciplinary learning between business and liberal arts students. He asserts, "'true' entrepreneurship is a process: a series of actions, motivated by a certain mindset, resulting in the creation of value So if entrepreneurship is a process of innovation motivated by a particular way of thinking, and the desired result of a liberal education is the development of a creative and analytical approach, then the two concepts actually spring from the same mindset. The question then becomes: how can each serve the other in higher education?" In our case, we found that the arts and business students benefited from their varied experiences in class discussion and in the teams on which they served.

ARTS MANAGEMENT AS AN EXPERIENTIAL AVENUE FOR SERVICE LEARNING

Current models of service learning, a form of experiential education, promote the integration of academic perspectives and real-life community-based experiences (Howard 1998; Hatcher and Brindle 1997). As Timmerman and Bouman (2004) point out, “Through service learning, students engage in activities that address community issues and, at the same time, learn and develop from participation in these structured activities (p. 92). This approach typically rests on two assumptions: 1) students best learn critical thinking skills when they have multiple concrete referents for academic concepts (Winfield, 2003) and 2) the business skills students have learned in class are context free, that is they are directly applicable to the effective management of nonprofit organizations.

With regard to the first assumption, research indicates students can best understand the value of abstract knowledge by multiple involvements in complex situations, “especially if they are challenged both by surprising experiences and by reflective teachers who help them explore these experiences and question their fundamental assumptions about their world” (Winfield, 2003, p. 12; Lynch 1996). Winfield cites Stevens and Van Nata (2002) who argue that “analytical thinking and emotional engagement are enhanced by critical observation, the ability to recognize the limits of the types of claims we can make about an observation. ... They further argue that critical observation is comprised of three core skills: (1) the ability to make a clear distinction between an event and the analysis of the event ... (2) the ability to identify the assumptions, expectancies, and stereotypes we bring to our interpretations of behaviors and to recognize when we are relying on them rather than empirical evidence; and (3) the ability to identify the context in which observations are embedded -- the constraints that surround the behavior and give meaning to it (p. 8).”

Importantly, for business teachers, as demonstrated in our analysis of the pilot social entrepreneurship class we taught last year, faculty who traditionally teach business entrepreneurship will also need to be willing to explore the idea that traditional principles applicable to for-profit businesses may be inappropriate in some not-for-profit arenas. As Palmer (1998) points out, “arts organizations contain a range of multiple and often conflicting organizational objectives such as social, aesthetic, and financial objectives (p. 434)” suggesting their managers need to respond differently than managers in for-profit businesses. Indeed, Bolman and Deal (1997) argue that business managers could learn from artistic managers as business organizations would benefit if they saw leaders less as mechanics and more as artists when they identify criteria for leadership success.

In addition, it becomes important to first make sure students, in Stephen Covey’s words, “seek to understand before they seek to be understood.” That is, that they not see themselves as charity workers to organizations working with limited resources, and instead first learn to respect the nonprofit managers with whom they are interacting, seek to understand the special

constraints under which specific nonprofit institutions are working, and be willing to see some of the benefits the creative mind can bring to good management practice.

In fact, our experience in teaching this course contributes to the debate over the extent to which arts management classes should mimic the principles of business management practices, or alternatively reflect a curriculum more specifically related to the creative mind. As it was an initial offering, the class syllabus was planned around the content in William Byrnes' text, *Management in the Arts*, (2008), one of the most widely used in the field. As demonstrated below, because the class was planned around student-centered and community engagement pedagogies which brought student into direct contact with artists, arts managers, and arts venues, our experience confirms Brkic's (2007) view that the Byrnes' approach, focusing on the application of general business practices to the arts, has serious limitations when examined in light of practicing arts managers reactions to the principles advanced in his textbook. On the other hand, it confirmed the utility of apply Collins' (2005) "good to great" ideas for social sector success.

COURSE GOALS

One of the goals for the arts management class was for students to see the potential of learning from direct interaction with managers and artists associated with local nonprofit arts organizations, a course in which our students could use business skills to help nonprofit arts organizations meet their goals, while also learning about the challenges and opportunities facing different nonprofit arts genres. Our commitment was to design the class as a service-learning vehicle, which Sterling (2007) has identified as one of the "most powerful tools available for integrating experiential learning, professional training, civic responsibility, and responsiveness into higher education" (334). Given that boards frequently indicate that non-profits would operate more effectively if their leaders possessed business skills, it was perceived as filling an important need. It focused on analyzing a broad range of issues relevant to both for-profit and nonprofit organizations, such as planning, budgeting, marketing, human resources, and community engagement as well as those more directly relevant to arts organizations, such as ticket sales and fund raising. The authors designed the class to encourage a partnership between our academic offerings and the communities in which local arts organizations are situated. We took advantage of the strong presence of large and small arts institutions in the local community. Many are part of plans to re-develop the inner city, such as Know and Ensemble Theatres and the Symphony Orchestra, Museum Center, and Art Museum.

Our city also has unique programs, including ArtsWave, a fundraising organization for the local arts designed to imitate the United Way model of collecting and distributing funds to a variety of institutions, and Enjoy the Arts, which works with arts organizations to provide incentives to encourage young people to attend arts events inexpensively, as well as one time annual arts events, such as Summerfair, an event showcasing arts and crafts. As many arts are

centralized within our city's urban core, virtually all the off-campus assignments students completed were done within a fifteen-mile radius of our campus.

PLANNING: THE BOARD OF ADVISORS

During the Fall semester, we established a 6-person board to plan the class, with equal representation from students, faculty, and the community. To design assignments consistent with community engagement principles, we selected a group that consisted of the main instructor and a graduate assistant; two students, one majoring in the theatre arts and one in business; and two community members one from the ArtsWave and one from Enjoy the Arts.

The selection of these two community groups was due to each organization's close connections to artists, arts managers, and arts venues, and each organization has as a stated goal getting students exposed to a wide variety of art. As a result, we received excellent cooperation because our class was consistent with each organization's mission. Also, given our area has no other undergraduate arts management class, the organization's representatives were happy to support the planning and piloting of this program.

The two students, who had expressed interest in the class when it was first proposed, represented the arts and business student perspectives, and the instructor and teaching assistant contributed their experiences in having taught or participated in previous community-engagement classes.

STUDENT DEMOGRAPHICS

To encourage interdisciplinary participation, prior coursework in business classes was not required. The course attracted 24 students including 16 entrepreneurship majors, and eight others majoring communication, art, music, and theatre. All were juniors or seniors, with 11 men and 13 women.

While all of the liberal arts majors had attended multiple arts venues, the great majority of business students had not attended any. As a result, students strongly benefited from the experiential component of the class, especially finding out that some arts venues offer not only entertainment reserved for elites, but also for those who enjoy popular culture. A number of students reported they enjoyed attending a play, *Reefer Madness*, for example, where there was significant interaction between the actors and the audience (See Meisiek, 2002).

STUDENT-CENTERED PEDAGOGICAL PRINCIPLES

The board agreed upon a number of guidelines, consistent with a student-centered pedagogy and community-engagement principles, which were used as guidelines for planning the syllabus. Given the understanding that all assignments need to be achieved within the scope

of a 16-week semester, we used the following four principles of participatory, student-centered pedagogy.

1. *The assignments “empower students to create, lead, or manage” in the arts.* (Brkic, 274). We agreed the assignments should help this course achieve several outcomes, including understanding how creativity, intellect, training, and experience can be channeled into an arts-related career; how non-profit business structures and different types of nonprofit institutions require different responses to management issues; what is expected of artists or arts managers in the marketplace; and what challenges face the arts, including community engagement, audience development, and financial support. To expose students to arts influencers in the community and expose arts influencers to the classroom, we agreed to design individual and team projects both inside and outside the classroom, with arts managers serving as guest lecturers for ten of the weekly classes and students completing projects which required contacts with artists and arts managers.

As such, we considered assignments and exercises that are experiential, such as organizational analysis teams, interviews with artists and arts managers, and multimedia student presentations that put teachers, community partners, and students on a relatively equal footing. The assignments were designed around three elements: knowledge, direct contact with arts influencers, and reflection. As Reynolds points out, “students should be able to exercise choice in the direction and content of their learning by sharing in the decision-making through which, for example, topics, methods and membership of learning groups are determined” (p. 546).

2. *The assignments encourage the collective production of knowledge.* To enable students to be active participants in the learning process, we designed assignments to encourage seven types of learning: student to student; student to community partner, student to teacher; community partner to teacher, community partner to student; teacher to community partner and individual student learning (Barker & Stowers, 2005).

3. *The assignments allow students to play to their strengths.* Students work on a team that makes decisions about what work needs to be done and which team members will complete different tasks, allowing them to develop a personal stake in the process by demonstrating their strengths, such as finding appropriate media materials for a presentation, creating a handout or PowerPoint slides, or as the main presenter of the group’s presentation. Group members are expected to identify their strengths and to help others identify ways each member can best help the group meet their assignment’s goals.

4. *The assignments encourage students to include boundary spanning materials in class presentations,* including video clips, music, artworks, slides, and websites to supplement traditional materials, in Burke’s (2007) words, “a *coordinated* presentation of narrative and pictures” (p. 416). This shows respect for the students’ electronic preferences, using their experiences and responses to electronic media as a touchstone for student-led class presentations. It also assumes the validity of the multimedia effect: that “students learn better from screen words and relevant pictures than from screen words alone” (p. 417).

STUDENT ASSIGNMENTS

Consistent with these principles, the board agreed the following assignments best met course criteria. 1) Individual work, interview an arts influencer: Each student interviews a working artist or arts manager, selected from a list provided by the board, presents an in-class biography of that person, and hands in 3-5 page paper summarizing the interview. (See Chart 1 for assignment guidelines). This assignment met our criteria of exposing students to a wide variety of roles in the arts and of the differences in family history, education, cultural exposure, how and why they became involved in the arts; leadership style; vision, learnings from their experience, and their plans for the future.

2) Group work, analyzing an arts organization's website: Each student participates on a team, under the direction of the sponsoring community partner, to do web evaluations, a common assignment of using a common set of evaluation criteria (See Chart 2 for assignment guidelines and website assessment criteria) to assess the strengths and weaknesses of the each sponsoring organizations' website and present that evaluation to the class as an interim internship assignment during the middle of the semester, and separately to the sponsoring organization. We selected this project as board members indicated and students agreed that a key trend among nonprofit arts organizations was to develop effective websites because even small low budget organizations could compete on a relatively equal footing with larger long established groups, as they could present highly detailed information about their organizations without the cost of printing and mailing; update information in a real time basis; and create "buzz" for special events (Bernstein, 2007).

3) Group work, writing an informational report on a sponsor's strategic plans: Six teams of four students conducted on-site meetings with arts organization executives to understand the organization's objectives, what its leaders believe it needs to do to meet its goals; and to identify opportunities and barriers to growth and other issues the organization identified as critical to its current and future success. Each team included at least one arts and one business major so varying perspectives and experiences could be contributed. The students were to prepare a 40-minute multimedia class presentation on their findings and write a 10-20 page paper summarizing the results as each team's final exam.

Traditional assignments, completed as a class, include homework assignments related to weekly chapter content and case studies of nonprofit arts organizations, and attending a play and subsequently interacting with the actors, director, and crew.

FACULTY AND COMMUNITY PARTNER COMMITMENTS

The teacher and graduate assistant agreed to develop the syllabus for the course; give detailed instructions on individual and group assignments with appropriate periodic feedback; set

guidelines for in-class and community based assignments; and gather data from both community participants and students.

The board members solicited commitments for six nonprofit arts organizations to participate in student evaluations of their websites and to lend insight into their management strategies, tactics, and future plans. The board also got agreements from 24 artists and arts managers to agree to be interviewed by a student. Last, they found arts experts for each topic covered in the syllabus. This approach was designed to allow “student exposure to alternative business philosophies and marketing methods” (Lopez and Lee, 2005) of large and small museums, performing arts organizations, academic arts organizations and arts fund raising groups.

The experts were asked to describe their experiences and the principles upon which they based their decisions and also to comment on the chapter students read prior to hearing them speak. Ten arts influencers each delivered 1-hour presentations from groups such as Enjoy the Arts, Fine Arts Fund, Taft Museum, the Symphony Orchestra, the Playhouse in the Park, Know Theatre, and the Opera, as well as presentations from artists, arts patrons and board members. Importantly, virtually every guest speaker, each of whom was asked to read a text book chapter related to the topic of their presentation, indicated their experience was strongly at variance with the guidelines promoted in the text, indicating that very different talents are needed to run nonprofit arts institutions as are needed to run a for-profit business.

INSIGHTS

This course proved to be a revealing experience, as students learned about the particular issues facing a variety of arts genres, issues often very different than those facing for-profit organizations. Of special significance was the almost universal reaction of guest speakers that solutions in Byrnes textbook are “cookie cutter” and not applicable to their specific arts genres. This confirms Brkic’s (2009) perspective “the view toward managerial and economic aspects of the field is something arts managers have in common with general managers” is less descriptive of reality than the alternative perspective that “the artistic, the aesthetic, and the social is main factor that differentiates arts management from the field of general management” (p. 277). We found this to be true in terms of economic structures, marketing, management, and human resources.

Perhaps most importantly, we learned arts organizations vary dramatically in their economic structures, something that helps explain the different approaches different arts organizations have implemented to achieve their objectives. Performing arts executives indicated their organizations needed to generate significant revenues from ticket sales to attract the private donations they required to yield the ideal balance of ticket prices and sales to maximize box office revenues. Donors expected them to provide budgets that were neither

significantly in the black (are we donating too much?) nor in the red (is my donation going to be a sunk cost in a failed endeavor?).

Finance managers also indicated that entire seasons needed to be planned in advance, as the financial implications for any one show would impact what resources were available for every other show—and that sometimes an entire planned program of performances would be scrapped if the organization decided to change one of the initial selections. This shows that in arts organizations a tension frequently exists between innovation and control.

In addition, one major theatre executive related that the entire season's only profitable production was Dickens' *Christmas Story*, so popular that it has an extensive run each year, at low cost, as costumes and sets can be re-used and rehearsals times are shorter as well. The story from the ballet was similar, with *The Nutcracker*, offered annually, generating profits that subsidized a season of other less popular productions.

On the other hand, curators indicated museums cannot charge admission prices to cover even a fraction of their expenses, as the cost would be too high to attract enough visitors to justify the museum's presence. As a result, museum directors spent a significant amount of time on donor relations and special "donors only" events to maintain commitments and find new sources of investment for the museum's endowment.

Marketing also varied by arts genre. High culture organizations, such as the opera and ballet, indicated their most important marketing goal was to attract an audience wider than the 3% of the typically high income population that had ever attended one or other venue; while some smaller organizations needed to attract more affluent customers who would be willing to purchase season subscriptions, a key to planning and budgeting for yearly events.

Many organizations were also concerned that their audiences were aging and were searching for ways to increase their appeal to a new generation of culture seekers, without losing their older audiences, especially those who purchase subscriptions, a decision relatively fewer patrons are making and a factor in making long term decisions more difficult for arts managers (Bernstein, 2007). For example, a museum revealed it went through a yearlong process to update its public materials, including changing the font it used from one that was very formal to one that was in their view communicated greater accessibility and relevance to a younger audience about the value of participating in events at the museum. It also brought its art outdoors in conjunction with events to attract affluent families to the museum who were to serve as influencers for other families.

Students were also surprised at the significant investments virtually all the arts organizations made in an Internet presence. As Bernstein (2007) points out, the internet offers arts organizations the "power of instantaneous, comprehensive, and low-cost marketing tools," a 21st century way of informing visitors of events and of selling tickets and gift shop items. In addition, all six sponsoring organizations valued student feedback on the strengths and weaknesses of their sites and their suggestions for making more effective in reaching organizational goals.

Another insight confirms Jim Collins' (2005) that most nonprofits need to operate in terms of legislative leadership rather than executive leadership, in which "no individual leader—not even the nominal chief executive—has enough power to make the most important by decisions by himself or herself (p. 11), especially as large donors often exercised significant influence at board meetings and volunteers often work only for recognition and may not have the ideal talents for the roles they are assigned. Every speaker confirmed Collins' main premise: that getting the right people into leadership positions in the organization is essential. Importantly, some pointed out that artistic leadership was often charismatic, such as a symphony conductor, while an arts organization's business leadership reflected more traditional approaches to managing the organization (van de Ven, 1986), sometimes leading to tensions between the vision the former has for the organization and the limited resources that may compromise the organization's ability to realize it.

On the other hand, we found many leaders who said motivating employees was easier in the nonprofit segment because of the dedication of employees, donors and volunteers to the success of the enterprise—that is, a greater sense of commitment than some leaders experienced in the free enterprise sector. A number of arts executives who had worked in both the for-profit and not-for-profit sectors said they worked for significantly less money because of their emotional commitment to the arts genre itself (Cornwall and Perlman, 1990). This finding confirms Brkic's insight about the "intangible aspects of work in the artistic environments, such as interpersonal relationships" characterized by friendship and informality (p. 279). Palmer concurs: "Two differences are pinpointed the people being managed and the cultural product. Managing creative people requires a sensitivity to the way in which, for example, forcing them to fill out management by objectives (MBO) forms interferes with the "freedom to do their jobs without feeling that every time they're two days over schedule, Big Brother appears"(Kanter, 1991, p. 181). Similarly, managing cultural products is quite different from managing for-profit products. Pick (1989), maintains that, unlike selling soap, the arts is concerned "not with selling products but with fashioning an aesthetic contract with a chosen audience (pp. 8-9). "

Perhaps most importantly, arts leaders struggled with clearly identifying their community uniqueness so they could best connect with current and future donors and audiences, primarily through building their brand reputations. Qualitative judgments such as the reactions of audiences, the coordination of creative processes, and relationships with donors, volunteers, and employees all consistently played a significant role in strategic planning of the organizations students evaluated. The managers interviewed revealed that unlike business management, arts managers often do not have defined job descriptions, and the biographies revealed many juggled multiple roles. As a result, found few counterparts in the community with whom they compared experiences.

STUDENT REACTIONS

Evaluations for the class were generally positive. Importantly, students indicated that they enjoyed the community engagement experience and said their most significant learning came from the interviews with individuals and the contact with the principals of the organizations to which their teams were assigned. They endorsed the external assignments that reflected community engagement elements of “community participation and cooperation, academic student and discourse, and student reflection” (Frazer et al, 2007, p. 407). An entrepreneurship major said the class opened his eyes to the value of his education in helping a small theatre operate efficiently, an organization with which he continued to serve as an unpaid intern until his graduation the following Spring. His reaction confirms Sterling’s (2007) view that service learning gives students “a greater understanding of the complexity of real world problems than those without field experiences (p. 333).

The biographies proved valuable because they gave students contact with, in Brkic’s terms, “multiple perspectives of intellectual analysis” (p. 27), demonstrating the wide diversity of paths followed by those who were currently engaged in the arts. They also enjoyed the freedom that allowed them to use a variety of multimedia in making their presentations, as they could exercise significant creativity in designing their presentations. They appreciated the insights lent by the guest speakers, whom they found to be consistently credible and engaging, more so, in fact, than the instructor who was viewed as at times suggesting business solutions impractical when applied to the nonprofit arts organization the students were evaluating.

The most significant objection students raised was the incompatibility of what the instructors and the textbook indicated about applying for-profit principles to not-for-profit creative enterprises. One theatre major commented on the deep disparity between the instructor’s presentation of financial analysis in the arts with that of the theatre manager who served as guest speaker on that topic. Logically, students thought the instructor could have planned the class more effectively if they had spoken with artists and arts managers before selecting the textbook, making reading assignments, and developing lectures based on textbook content.

In short, the students valued the contact with real world experience in creative endeavors and thought it confusing that the teacher and textbook attempts to apply business principles at odds with guest expert experience. In this sense, this class reflects the value of the community engaged approach—that students in community engaged classes “have a greater understand of the complexity of real world problems that those without field experiences” (Sterling, 2007, p. 333) In addition, none of the students reported experiencing any of the five problems identified by Morin (2009), probably because the community board members selected the individuals and groups with which the students interacted in part based on their reputations for reliability.

As a positive unexpected outcome, our university's magazine included an article about the class while in the same article highlighting the achievements of an alumnus of founded a local theatrical company and served as its director and chief fundraiser.

WHAT WORKED

We learned several important lessons about what worked from this experience. First, textbooks for arts management need to highlight the distinctions among arts organizations, as different arts genres require different management strategies: one size does not fit all. For example, large arts organizations typically have access to larger amount of donor money and can provide permanent long-term jobs to its management team. Small organizations typically depend more on relatively poorly paid workers and volunteers to support their efforts. Each requires a different type of management and human resources strategy to succeed. Likewise, different arts genres allot their time differently: Museum directors spend a significant amount of time fund raising with large dollar patrons whereas performing arts groups spend more time attracting an audience to fill their auditoriums, an indication of success to patrons.

Second, organizational analysis teams are excellent learning tools. Most students worked directly with small, typically shoestring non-profit arts organizations, often with people of their own age, and some gained hands-on volunteer experience in calling donors, directly selling tickets, cleaning venues, and executing short term strategies to drive audiences to arts events. In particular, students noticed a key difference between the institutional organizations, with their more formal organization structures with those that operated on a shoestring budget. They noted that the smaller organization devoted more time to creative effort and less to reports, forms, and what they saw as other impediments to the creative process (Hagoort, 2003). And they indicated they benefited from the presentations of other groups as they learned how different the challenges were for different types of arts organizations.

Third, interviews with and class presentations about artists and arts managers allowed students to understand the varying paths people took in the arts, often surprising ones. They also learned collectively to improve their understanding of a wider range of arts organizations, as each student interviewed someone from a group other than where their internships were established. Students were surprised to learn that many artists found opportunities as arts managers, and some arts managers had little or no arts experience before finding and enjoying work in that field.

WHAT WE PLAN TO DO DIFFERENTLY IN THE FUTURE

As teachers, our most important learning was how the best-laid plans do not work as expected. We selected the textbook and scheduled presentations from guest experts well in advance of the semester's start, unaware that their messages might be incompatible. This put us

in a wise. Each week after we lectured from the assigned reading in the textbook (Byrnes, 2008), we heard our guest experts indicate disparities between textbook nostrums and what worked and did not work in their experience, something reflected in virtually every student evaluation.

We learned a good deal of humility and, in preparation for the next iteration of this class, are working with the board and guest speakers to make sure that instructor and guest speaker content are consistent with one another. For example, we plan to organize the course by genre such as museums and performing arts organizations, each subdivided into large and established organizations and small and shallowly rooted organizations.

We will be retaining James Collins' monograph, *Good to Great and the Social Sector* (2005), one that many guest speakers identified as valuable and are working on developing a set of case studies and handouts that will complement and be consistent with the presentations of the guest experts.

CONCLUSION

As we have demonstrated, significant student learning about the operation of nonprofit arts can be stimulated in community-engaged, social entrepreneurship classes such as the one we delivered. Part of our success was the respect we showed our arts community partners in giving them leading roles in the teaching and service components of the class. We learned that the required planning between faculty and community partners takes time and diplomacy, as does helping coordinate the off-campus activities in which students were engaged. Those who imitate our effort will probably find themselves investing significantly more time planning a community-based course as compared to a traditionally organized one. In addition, we found it necessary to deal with the unexpected with humility and good humor in executing the initial offering of our arts management class.

In short, we designed a student-centered class with a community-engaged perspective in which students learned from the experience and knowledge of arts experts and participated in arts activities under the direction of arts partners, reflected on their experiences, and presented their findings to their classmates and community arts representatives. The class met the four standards for effective community-engaged classes: it addressed important community needs; the service activity was tied to academic goals; students wrote papers reflecting on their experience; and students received and gave recognition to their community partners (Abravenal, 2003).

Significantly, business students achieved an appreciation for the arts and the importance of good management practices in the arts. Arts students likewise saw the importance of good business practices to the survival of arts organizations. They found they could maintain an interest in the arts by serving a role in an arts organization without being an artist and also learned of the issues facing arts organizations, especially the smaller ones that operate on year-to-year budgets and depend upon the generosity of donors to survive. The community partners

enthusiastically embraced their roles as expert resources for students and expressed appreciation for being allowed to direct the efforts of the student teams in explaining to them the challenges they faced and their plans for the future.

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Figure 1: Assignment Criteria for Biography of an Artist or Arts Manager

Conduct an interview with a local arts executive or performer and draft a 4-6-page biography that helps explain what makes these individuals "tick." Present your findings in a 3-5 page paper and also in a 15-minute multimedia presentation in class.

Topics to be covered include

- background and upbringing,
- stages of life, how and why they became involved in the arts,
- their motivations, philosophy of life, leadership skills and style, vision,
- learnings (what works and what does not) and strategies for transformation.
- the results of their work/impacts; how they generated their big, bold ideas;
- lessons they suggest for budding artists and arts entrepreneurs today

Figure 2: Assignment Criteria for Website Evaluation

1. Easy to find; appropriately named address
2. Quick download time; all sections can be used by all browsers
3. Curb appeal and presentation – use of pictures and graphics; use of backgrounds; font and color choices; banners; consistency of design from page to page.
4. Ease of navigation from page to page
5. Content: Emphasizes uniqueness of brand or image, highlights benefits to visitors; includes key information, including dates, fees, and special events. Creates excitement for events.
6. Writing: Reads well from top to bottom; provides a roadmap to site; correct spelling; concise frequent updates to encourage visitors to return for new information.
7. Useful link, such as to other arts organizations; links that work
8. Ease of ability to purchase tickets, products, and other services
9. Full contact address, phone/fax numbers, contact name
10. E-mail address and or message box
11. Page address and date in case printed out

Figure 3: Assignment Criteria for Strategic Analysis of Nonprofit Arts Organization

1. Gain entry, establish a relationship with arts managers, and draft a letter of engagement with the sponsoring organization that stipulates the rules of engagement and mutual responsibilities of each party.
2. Conduct research about your nonprofit arts organization in eight areas:
 - o Vision/Mission
 - o Competitive analysis of its place in the arts market
 - o Financial system including the use of budgets to assess if plans meet actuality
 - o Marketing strategies
 - o Fundraising efforts
 - o Staffing and human resources, including lines of authority
 - o Information systems, including website opportunities
 - o Use of boards of advisors and other volunteer committees
3. Complete a 10-20 page report describing your findings. Deliver a 40-minute multimedia, oral report summarizing your findings.

SYLLABUS FOR SOCIAL ENTREPRENEURSHIP: ARTS MANAGEMENT

COURSE OBJECTIVES

This course covers theoretical and practical aspects of the evolving field of arts management while introducing key issues in management, marketing, financial analysis, information technology, and fund raising. A variety of concepts will be explored: leadership theory, group dynamics, strategic planning and organizational design, decision making processes, management styles, fundraising categories and techniques as they apply to visual arts, theater, dance, and music, as well as organizations that promote the arts.

Prior coursework in business classes is not required. Instructional techniques will include group projects, guest presenters, interviews with artists and arts managers, website evaluations, and case analyses.

GOALS

- 1, To understand key business concepts and apply them to a variety of arts organizations through readings, case analyses, guest expert presentations, site visits, interviews with arts experts, and meetings with arts leaders.
- 2, To provide you with an environment within which to learn and test these skills individually and on teams, and with peer and instructor feedback.
 - *Critical thinking*, by focusing on thoughtful analyses based on actual experience with arts organizations.
 - *Communication*, writing papers and reports, evaluating web sites, making in-class presentations.
 - *Teamwork*, by working in small groups for both in-class exercises and out-of-class group assignments.
 - *Application*, by evaluating arts organization websites.

COURSE OUTCOMES

1. Skills
 - To learn how social entrepreneurship is practiced in the arts
 - To demonstrate the risks and rewards of nonprofit entrepreneurial activity
 - To understand non-profit business structures in the arts
 - To obtain a basic knowledge of arts marketing and communications
 - To understand the benefits and limitations of an arts or arts related career
- 2, Understanding
 - Knowledge of arts context: its culture, policy and management
 - Challenges facing the arts: audience development, financial support, and short and long-range planning.

ASSIGNMENTS

Individual Project: (30% of final grade)

Each class member will conduct an interview with a local arts executive or performer and draft a 4-6 page biography that helps explain what makes this individual “tick:” their background and upbringing, stages of life, how and why they became involved in the arts, their motivations, philosophy of life, leadership skills and style, vision, learnings (what works and what does not) and strategies for transformation. How did they generate their best ideas? What were the results of their work? What lessons do they suggest for budding arts entrepreneurs?

Students will do 15-minute oral presentations, with visual aids, summarizing their papers, with three interview summaries per week for eight weeks.

Team Project: (50% of final grade)

We will form six teams to work on information gathering projects with several arts organization. Key tasks include:

- 1, Gain entry, establish the relationship, and draft a letter of engagement approved by the arts organization, your team members and the instructor;

2. Outline the organization's objectives and what its leaders believe it needs to do to meet its various goals; identify barriers to growth and other issues needing exploration;
3. Assess the organization's:
 - a. Vision/mission
 - b. Competitive analysis of its place in the arts market
 - c. Financial system including the use of budgets to assess if plans meet actuality
 - d. Marketing strategies
 - e. Fundraising efforts
 - f. Staffing and human resources, including lines of authority
 - g. Information systems (requires interim report and presentation)
 - h. Use of boards of advisors and other volunteer committees
4. Write a 10-20 page report, plus a matrix summary of issues including short, medium, and long-term goals and approaches to address them
5. Deliver a 40-minute oral report during the last two weeks of class summarizing your analysis.

Class participation and two 1-2 page papers: (20% of final grade) each summarizing and analyzing one topic covered in Collins' monograph and one chapter in Byrnes text.

READING

Management and the Arts, William J. Byrnes, Focal Press.

Collins, Jim. *Good to Great and the Social Sectors: A Monograph to Accompany Good to Great*. Harper Collins.

ENTREPRENEURIAL OPPORTUNITY: A FRAMEWORK FOR TEACHING

Greg Clydesdale, Lincoln University

ABSTRACT

Prior research reveals that many academics believe opportunity identification cannot be taught. This paper attempts to provide a framework for the teaching of opportunity identification. It argues that an understanding of the forces that shape opportunity can aid their identification. This is of particular importance to small entrepreneurs who do not have the resources of large companies to influence their environment. The paper begins by discerning between opportunity creation and discovery. Recognising the importance of non-market activity in creating opportunities, a discussion and example is provided of such activity. The issue of timing is explored through the concept of 'thresholds' when an environmental force reaches a point that sustains the existence of a business, and two models are introduced to illustrate these concepts. The first is a creativity/discovery spectrum which illustrates the difference between the two is dependent on the state of the environment and the work needed by the entrepreneur to bring the opportunity into existence. The second is an extension of the Product Life Cycle to provide a framework to explore dynamics behind opportunities, including growth stages, niche development, thresholds, the importance of timing and luck.

INTRODUCTION

Research by Saks and Gaglio (2002) revealed that many professors of entrepreneurship believe that opportunity identification cannot be taught (Saks and Gaglio, 2002). Most professors surveyed believed that students may have an innate ability or predisposition towards identifying opportunities picked up during childhood while being around family entrepreneurs, but they do not believe what is taught by the family can be taught in class. In fact, the predominant belief was that opportunity finding was "un-teachable". Professors confined themselves to teaching opportunity evaluation and use of stage theory.

The emergence of opportunities in the market is central to the operations of entrepreneurship. Although substantial work has been conducted on the characteristics of people who seize opportunities, less information is available on the source of opportunities (Venkataraman, 1997). Drucker (1985) identified three classes of opportunity including inefficiencies within existing markets such as information asymmetries, changes in social, political, demographic and economic forces, and inventions and discoveries that produce new knowledge. Shane (2000) has provided a thorough review of opportunities, firstly dividing

Schumpeterian opportunities from Kirznerian opportunities (equilibrating, limited to discovery). Then, drawing on previous research, Shane summarised the sources of Schumpeterian opportunities as: technological changes, political and regulatory changes and social and demographic changes. He also recognised other environmental features that create a favorable environment for entrepreneurs including various characteristics of industries and economic conditions. More, recently, Clydesdale (2009) describes in some depth the changes in the environment that create opportunity.

Changes provide opportunities for those who can read the market or alternatively, those who are in the right place at the right time. The role of luck has previously been acknowledged (Knight, 1971). Inaccurate reading of the market can result in the illusion that an opportunity exists, when in fact it does not. Israel Kirzner (1998) links the availability of opportunities to the fact that people make errors. He claims there are two types of errors; errors of pessimism and errors of optimism. While errors of optimism can lead to failure, errors of pessimism provide opportunities. According to Kirzner, the key to discovering these profit opportunities is being alert. It also suggests that those with superior abilities and intellectual capacity are most likely to succeed. But is it as straight forward as that? Opportunity stems from change, and change cannot always be predicted. The current conditions on which we base our judgements are merely the pre-conditions of the future. They do not necessarily signpost the future. And even if change was predictable, everyone would enter the market and the entrepreneur would be faced with high levels of competition which could destroy their profit.

A key area of contention is whether opportunities are created by entrepreneurs or whether they pre-exist in the environment waiting to be discovered. Population ecology places an emphasis on environmental determinism. However, this approach has been criticised for ignoring the role of the entrepreneur in creating opportunities. It leaves little room for the Schumpeterian entrepreneur who is responsible for introducing environmental change. More recently, Baker and Reed (2005) suggested that most entrepreneurial opportunities are more enacted than discovered. They argued that opportunities are created by the entrepreneurs. They are not pre-existing conditions in the market. In sharp contrast, population ecology theory stresses that the birth rate of firms is determined by environment forces (Hannan and Freeman, 1984). Structuration theory is one way of accommodating this impasse, as it sees the entrepreneur and environment evolving together (Sarason, Dean, & Dillard, 2005).

Despite these valuable contributions, the literature on opportunities is still limited. There is for example, little on the importance of timing. Yet, in layman's terms, success is often seen as being in the 'right place at the right time'. Another over-sight is the importance of the political-legal environment. For example, Chen and Yang (2008) define opportunity recognition as:

- perceiving potential customers for the technology or product a company provides, which gives a mass-marketing opportunity;
- discovering a fit between potential customers' needs and the company's technology or product; and
- recognizing gaps in the existing customers' demands.

In the literature of entrepreneurship recognition, discovery and creativity, non-market activity takes a minor role. This paper is based on the idea that understanding how opportunities form is of value to the entrepreneurial process. Identifying how opportunities arise requires sensitivity to market and non-market dynamics. If aspiring entrepreneurs can be taught how these dynamics create opportunities, their ability to identify opportunities can be enhanced.

One reason for this weakness in education is the state of the literature on entrepreneurial opportunity. Plummer, Haynie and Godesiabo (2007) note:

A notable lack of research focused on the origins of opportunity, and the disparate nature of the propositions suggested in response to the question of where opportunities originate, is not surprising. The ontological and epistemological intricacies associated with opportunity research makes any direct, rigorous attempt to catalogue and describe the sources of opportunity a daunting proposition for scholars.

This paper seeks to provide a platform through which students can explore opportunity identification. It begins by examining literature on opportunity creativity and discovery. A key feature of creation is the shaping of the environment so that an idea becomes feasible. By contrast, with discovery, the environmental conditions are already favorable and that fact merely needs to be discovered. Recognising that non-market activity is frequently over-looked in the literature, the next section illustrates the difference between creativity and discovery, and provides an example of how an entrepreneur created an opportunity through such activity. Timing is an important issue for entrepreneurs in revealing the existence of an opportunity and this paper introduces the concept of thresholds; when an environmental force reaches a point that sustains the existence of a business. When a threshold is passed an idea becomes an opportunity. The concept of thresholds can be paired with Kirzner's errors of pessimism and optimism. Two models are introduced to illustrate these concepts. The first is a creativity/discovery spectrum which illustrates the difference between the two is dependent on the state of the environment and the work needed by the entrepreneur to bring the opportunity into existence. It does not define all opportunities as either creation or discovery-based, but argues that each opportunity embodies differing degrees of creation depending on how much work is needed to bring the opportunity into existence. The second model is an extension of the Product Life Cycle to explain the appearance of opportunities, in particular niche opening and closing within the market.

Thresholds are linked to niche appearance while niche closure is an equally important concept to impart on students as it times they will need to cut costs or even close their businesses.

OPPORTUNITIES AND MARKET EQUILIBRIUM

Entrepreneurial creativity occurs on a number of levels. First is the creation of an opportunity. Second is creation of the business that exploits that opportunity. Third is the creation of components of that business, from product design to strategy. Although Schumpeter is constantly aligned with the idea of opportunity creation he does not mention it in his text at all. He speaks instead of the creation of new combinations of means of production, which he equates to the production-function (Schumpeter, 1934). These combinations may be the case of the introduction of a new good or new method of production, the opening of a new market, the conquest of a new supply of raw materials or the carrying out of a new organization form. The entrepreneur creates a new combination and pursues it in the market and this has been interpreted as the creation of an entrepreneurial opportunity.

Schumpeter believed that opportunities rarely exist as a result of changes in consumer behaviour. Schumpeter (1934:65) noted that “innovations in the economic system do not as a rule take place in such a way that first new wants arise spontaneously in consumers and then the productive apparatus swings round through their pressure.” This provides some room for juxtaposing his position with those who argue that opportunities exist in the market place waiting to be discovered, however, this may be going too far.

While Schumpeter did not speak of opportunities, he did speak of ‘possibilities’. He states “new possibilities are constantly being offered by the surrounding world, in particular new discoveries are continually being added to the existing store of knowledge...” (Schumpeter,1934:79). He states:

The specific problem of leadership arises and the leader type appears only when new possibilities present themselves.... It is no part of his function to ‘find’ or to ‘create new possibilities’. They are always present, abundantly accumulated by all sorts of people. Often they are also generally known...In other cases there is nothing to discover about them, because they are quite obvious... (Ibid:88)

For Schumpeter, it is not a question of discovering but a question of doing. It is “doing the thing” in which the entrepreneur stands out and in so doing, drives economic development. When no one is doing, “possibilities are dead”. He also distinguished between the inventor and the innovator. From an economic perspective, inventions are irrelevant. It is the bringing of the invention into the market that is economically important, and that is the role of the entrepreneur. In this light, the notion of opportunity creation linked to Schumpeter is limited to the economic market sphere. As Buenstorf states :

...while the Kirznerian entrepreneur discovers and pursues opportunities that exist within markets (and are reflected in the price system), the Schumpeterian entrepreneur discovers opportunities that exist outside the economic sphere (and are not yet reflected in the price system) and pursues these opportunities by bringing them into the marketplace....

Subsequent authors have also framed the notions of opportunity discovery and creation in terms of market forces. Sarasvathy et al. (2003) proposed a model of entrepreneurial opportunity firmly based on the notions of supply and demand. They present 'opportunity recognition' as a situation in which both sources of supply and demand already exist, and the entrepreneur recognising this, matches them up. They present 'opportunity discovery' as a situation where only one side, supply or demand, exists and the other needs to be discovered. Finally, 'opportunity creation' is where neither supply nor demand exists and both need to be created.

While Sarasvathy et al.'s model explains some entrepreneurial processes it is a simple and insufficient explanation of what is required in other occasions. Entrepreneurs rely on a number of environmental forces, not just supply and demand. Although it could be argued that supply and demand embody many of these forces, the model relegates them to non-market activity. In reality, entrepreneurs may be involved in substantial non-market activity to bring an opportunity into existence.

Supply, demand and the notion of equilibrium have been at the heart of entrepreneurship. Entrepreneurs have been classified as Schumpeterian, taking the market into a state of disequilibrium or Kirznerian; taking the market towards equilibrium. Changes in demand are a key aspect of entrepreneurial opportunity. Dean and Meyer (1996) show a strong correlation between the rate of growth in demand and growth in the number of new businesses. On the other side, supply-driven opportunities are fuelled by changes in technology, resource prices, changes in the number of sellers, and changes to other industries that use the same resources.

Shane and Eckhardt (2003) criticised the equilibrium model's application to entrepreneurship. They identify a number of weaknesses with the model including the underlying assumption that prices convey all the relevant information to direct resources. Drawing on Arrow (1974) they also criticise the assumption that all information and expectations of market participants about the future can be reduced to current price bids for resources.

This paper argues that defining opportunity creativity and discovery in terms of market activity is too limiting and its focus on market activities is too narrow. The process of opportunity creation can include significant non-market activities. Schumpeter certainly saw a role of the entrepreneurial leader as having to overcome non-market barriers including legal and political impediments. Opportunities emerge from a complex pattern of changing conditions including technological, economic, political, social, and demographic conditions (Baron, 2006). It is the juxtaposition or confluence of conditions at a given point of time that determine the existence of an opportunity.

For Buenstorf (2007), the issue is not whether the opportunity pre-exists or is actively created, but the extent to which an entrepreneur brings the opportunity into existence. He distinguishes between opportunities, and 'higher order opportunities' ie "an opportunity to create the conditions for an entrepreneurial act by means of some targeted activity." When one discovers a higher order opportunity, s/he discovers an opportunity to create an entrepreneurial opportunity. An entrepreneur can 'discover' a 'higher order opportunity' and 'creates' the conditions for business success. Such an entrepreneur is involved in both creativity and discovery.

Buenstorf argues that the vast majority of entrepreneurial opportunities are created by human activity rather than exogenous forces (eg: natural disasters). This can include significant non-market activity through such things as new inventions and scientific discoveries. An opportunity may occur as a result of un-intended human activity. They may also arise from the entrepreneur's own activity even though s/he might not necessarily be pursuing an entrepreneurial idea. For example, an academic researcher may make a discovery through their scientific research that has the added unintended effect of creating a business opportunity.

Drawing on these insights, two simple descriptions of opportunity creation and discovery are proposed. Opportunity discovery is defined as finding a pre-existing opportunity to create a sustainable business. By contrast, with opportunity creation, the opportunity does not exist and environmental modification is necessary to bring the opportunity into existence, after which a sustainable business can be built.

These definitions do not offer the same distinction between recognition and discovery found in Sarasvathy et al's (2003) definition. These definitions imply that an entrepreneur could 'recognise' that an opportunity exists, in which case he has discovered it. An entrepreneur could also recognise a chance to create an opportunity. By this definition, recognition is not a market state but merely a state of higher alertness in the individual.

CREATING OPPORTUNITIES THROUGH NON-MARKET ACTIVITY

The emphasis on supply, demand and market fails to acknowledge the importance that non-market forces can play in opportunity creation and discovery. One of the key environmental forces that can affect the opening (and closing) of opportunities is government policy. Government policy can provide many entrepreneurial opportunities. Not only do governments have large resources at their disposal, but they set the rules by which markets operate. Consequently, a change in policy can both open and close opportunities. Many US fortunes were made from government expenditure. For example, although Rockefeller made his mark in oil, his first fortune was made selling provisions to the Union army during the Civil War (Licht, 1995). Budget changes can signpost changes in demand, as can changes in regulations. When laws are passed affecting what consumers can and cannot buy, they are effectively changing consumer tastes by decree. Many entrepreneurs in the 1990's benefited from a world-wide raft

of deregulation which saw entrepreneurs enter areas such as radio and airlines (Economist Intelligence Unit, 1998). Finally, changes in how governments manage their own resources can signal opportunity. The different approaches that businesses take towards government policy can help us distinguish the difference between opportunity creation and discovery. It can also provide further insight in to how businesses can manage their environment to create opportunities.

Weidenbaum (1980) outlined three general business responses to public policy. Although not linked to opportunity creation, Weidenbaum's classification can be used as a basis to distinguish between opportunity creation and discovery. Weidenbaum argues that businesses have three approaches they can take with regard to public policy. The first is 'passive reaction' in which a business simply reacts to government policy as it occurs. The second is positive anticipation in which the business is aware that changes are coming and anticipates these changes when they make their business strategies. The third approach is 'public policy shaping' in which the business becomes actively involved in the formation of policy and seeks to shape the political outcomes so that they are aligned with their own interests.

In the first two approaches, the business plays no direct role in the public policy process. If a firm takes either of these stances, it is doing nothing to shape the environment or create the opportunity. If the business takes a 'passive reaction' approach it waits until the changes are introduced and then acts so that they benefit from any opportunity that results. Of course, because they have been so passive, it is possible that the legal outcome may not have a favorable outcome. It may not result in an opportunity, but if it does, the business 'discovers' the opportunity and acts accordingly. In the second option 'positive anticipation', the firm is more positive that a favorable outcome will result and plans for that outcome. It has 'discovered' an opportunity will open in the future, and has created strategies to exploit that opportunity when it finally comes.

In the third option 'public policy shaping', businesses are more pro-active. When a business actively attempts to shape public policy, it can help define laws and regulations in their best interests. This includes removing barriers to markets, for example removing trade restrictions, or opening markets, perhaps by creating laws about product use. In this way, entrepreneurs can use the public policy process to create opportunities.

There are a number of approaches that an entrepreneur can utilise when attempting to shape government policy. Hitt and Hillman (1999) suggest three generic strategies that can be used to affect the political process. The first is 'information strategy' in which an entrepreneur provides government decision makers information through lobbying, research reports and other techniques, in an attempt to shape their decision. The second political strategy is 'financial incentive strategy' in which the entrepreneur targets political decision makers with financial inducements. The final strategy is 'constituency-building strategy' in which the entrepreneur works to gain the support of individual voters and citizens, who in turn seek to influence political decision makers.

An example of non-market activity creating an opportunity

An excellent example of opportunity creation through political management can be seen in the actions of MCI who used political activity to open a business opportunity in the long distance telephone market (Yoffie and Bergenstein, 1985). This market was regulated by the Federal Communications Commission (FCC) who had given AT&T a monopoly. It was commonly believed that long distance telecommunications transmission was a 'natural monopoly' whose high capital costs meant the best structure was to have only one provider.

MCI wanted to enter the industry using new microwave technologies, however both AT&T and FCC opposed opening the market. In the 1960's, the increased use of business computers and associated need to connect computer terminals from different locations also helped to create a call for change.

Microwave Communications Inc.(MCI) was founded in 1963, by an entrepreneur who intended to compete using microwave technology. To do this, the company needed to get approval from the FCC but found itself in a battle with one of America's biggest corporations. Between 1963 and 1969, it was entrenched in legal and political warfare, but generated no revenues.

In 1968, a new CEO was appointed with an aggressive political strategy. William G. McGowan moved the company's headquarters to Washington, D.C; an indication that political management was central to the company's success. He developed contacts, testified in Congressional hearings, pleaded MCI's case to the FCC, and publicized MCI where ever possible.

Officials in the government receptive to deregulation and competition were targeted and became welcome allies in his battle. His arguments were couched in economic terms that stressed the benefits to customers, and the role of competition in stimulating technological innovation. The debate was also couched in terms of broader social goals, in particular concerns of economic advancement and consumer welfare. In 1976, MCI joined together with a few other small companies to establish the Ad Hoc Coalition for Competitive Telecommunications (ACCT) to help in lobbying. A final strategy involved use of the courts, such as an anti-trust suit it took against AT&T in 1974.

Through aggressive political and legal action McGowan managed his political environment in a manner that successfully opened a business opportunity. Of course, MCI could not have exploited those political manouverings if it did not have the business and technological capabilities to back it up. The political strategy was only one arm of a business strategy, but without it, the opportunity would not exist.

THRESHOLDS AND THE ILLUSION OF OPPORTUNITY

Jeffrey Timmons (1999) has stated the difference between an idea and an opportunity is its feasibility. Feasibility is often determined by environment forces beyond our control. For example, there is already demand for a car battery that doesn't go flat at a reasonable price, but supply is not available due to technological limitations. This might be because science has not yet made the necessary break-through. Alternatively, it might be that the knowledge exists but has not yet been applied to the problem. This illustrates that business opportunities sometimes stem, not from new ideas but, from old ideas that suddenly become feasible.

To explore issues of feasibility, it might be useful to consider the concept of thresholds. A threshold is a point that is passed when an environment force reaches a level that is sufficient to support a business. At a threshold, an idea turns into an opportunity. A given state of technology or size of market is necessary for a product or service to be sustained. Once a demand or technology threshold is met, an idea becomes feasible and an entrepreneurial opportunity is opened for someone to seize. The idea of threshold can be paired with the work of Peter Earl. According to Earl (2003), entrepreneurs develop ideas by forming new connections between technologies and consumer demand. As technology and demand change, so too, do the opportunities to make new connections. For example, when the two-stroke engine arrived as a new technology, a number of entrepreneurs built successful businesses by linking the technology to different consumer needs. Some applied it to the forestry industry and built the chain-saw. Others applied it to transportation, with the two-stroke motorcycle. Others found uses for it in recreation, with the surf-ski. Technology enables us to exploit demand. Demand allows us to exploit technology.

The concept of thresholds is particularly important for entrepreneurship. Companies with significant marketing and R&D resources have greater potential to manipulate these forces. The small entrepreneur is more dependent on the initial state of the environment. If, for example, demand has not reached the necessary thresholds, the business will suffer. Therefore the entrepreneur must be particularly sensitive to the state of the environment and the point at which an opportunity appears.

Thresholds are not just restricted to technology and demand. Thresholds can be found in other environmental forces such as levels of government support, and levels of business infrastructure including the opening of transportation routes and communication channels. A change in any of these can create an opening once a significant threshold is reached that can support a business.

Thresholds can be paired with Kirzner's work on entrepreneurial errors. Kirzner described errors of optimism and errors of pessimism. Errors of pessimism provide opportunities. These occur when people in the market place believe something cannot be done, when in reality it can. Opportunities exist in the market place and are just waiting to be seized. This would occur when the thresholds have been passed but no entrepreneur has yet noticed their

passing. By contrast, errors of optimism occur when entrepreneurs believe something can be done but it cannot. In other words, an entrepreneur starts a business before the threshold has been reached. The entrepreneur makes an error of optimism believing the market (and other environmental features that will support a business when in reality it will not. The existence of an opportunity turned out to be an illusion.

The price of entering an industry before a threshold is reached is failure. One such example was the Great Western Steamship Company which pioneered steamship technology, but launched itself before the technology was feasible, with little success. Feasibility may also be limited by market or government thresholds that have not yet been passed.

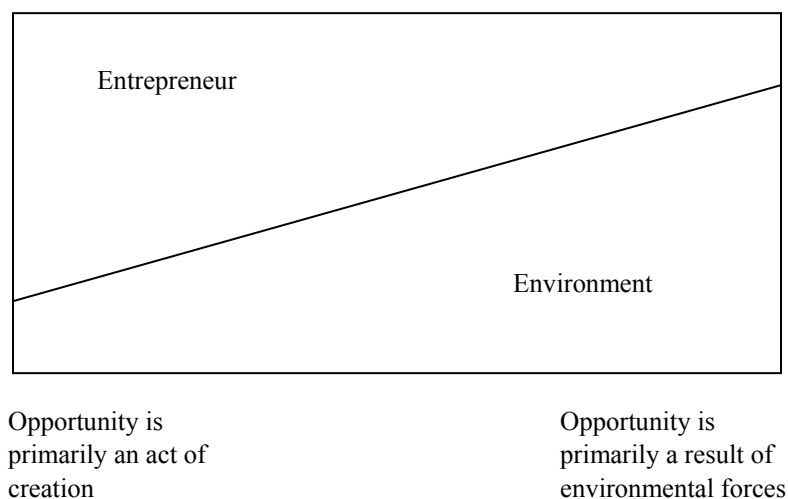
There is one clear problem if the threshold passing is noted by a number of people. The opportunity could be discovered by several entrepreneurs and the resulting competition could reduce the attractiveness of the opening. It is a reminder of the problem identified by Richardson (1960) who pointed out that investors do not always know what others are doing. It is a problem that always leaves the entrepreneur in some doubt over future competitive conditions. If market entry is relatively easy, an increase in the number of sellers can have a significant impact on opportunity as heightened competition can push the price down and reduce profit. Bruderl, Preisendorfer and Ziegler (1992) have shown that industries with a higher rate of competition have higher failure rates.

The concept of thresholds can give a new angle from which to explore the distinction between opportunity discovery and creation. An opportunity might come into being as the environment passes a threshold. This threshold passing can sit un-observed for some time before it is discovered and acted upon. The opportunity's existence may be revealed by search or accident. By contrast, opportunity creation could be said to occur when an entrepreneur acts to push forces past that threshold in the way that MCI manipulated the legal-political environment to engineer changes that opened the market. Another example is that of the British engineer Isambard Brunel who personally advanced technology in an attempt to pass a technological threshold that would make steamship businesses viable. In this light, the creator has to do significantly more work than a discoverer in exploiting an opportunity.

The debate over whether opportunities are discovered or created is one in which they either pre-exist in the environment or come into being as a result of the entrepreneurs actions. In this light, entrepreneurial opportunities could be placed on a spectrum which at one end has opportunities that already exist that wait to be discovered, while at the other end, are those opportunities that must be brought into creation by the entrepreneur. This can be seen in figure. 1 which illustrates the extent to which the entrepreneur brings a particular opportunity into existence. Those entrepreneurs operating at the right hand of the spectrum have discovered an opportunity which environmental conditions have deemed favorable for the up-take. The technology, market and political-legal situation are all favorable. An entrepreneur in this case will discover, evaluate and exploit the opportunity (Shane and Venkataraman, 2000).

Two schools exist on how opportunities are found. One school states that entrepreneurs ‘search’ for opportunities while the other places the emphasis on the process of discovery (Chandra, Styles and Wilkinson, 2009). Both occur on the right hand side. Here can be found the type of entrepreneur identified by Shane (2000) who when presented with knowledge of a technological change, knew from their previous experience, that the conditions were right in the market for this product. Similarly, the entrepreneur who searches for ideas could also be found here (Hills and Schrader, 1998).

Figure.1
Creativity/Discovery Spectrum



On the left hand of the spectrum, environmental forces are not yet sufficient and the entrepreneur needs to work on these before the opportunity is created. This may mean demand is not yet sufficient, and market development is needed to raise demand to a sustainable threshold. Perhaps the technology needs further development, or some lobbying is required to create a legal change. McGowan of MCI would exist on this side of the spectrum as he worked the environment past the political-legal threshold.

Although creative entrepreneurs have an extra layer of work, this does not necessarily mean that the creative entrepreneur is the hardest worker. Discovery can be preceded by search, and a discoverer may have spent several years searching for opportunities before finding one. On the other hand, someone with good political connections may find it easy to create a legal change that brings an opportunity into existence. There is also a lot of work to be done on the exploitation of the opportunity, mobilising the resources and bringing the venture to fruition. However, even a creative entrepreneur is dependent on the environmental pre-conditions.

Between these two extremes, are numerous variants of entrepreneurship that include both an element of discovery and creativity.

The following propositions are based on the assumption that all opportunities are dependent, in varying degrees, on the state of the business environment:

Proposition 1. More discovery processes occur where the opportunity pre-exists in the environment, while more creativity occurs where the environment needs to be modified to bring the opportunity into existence.

Proposition 2. Thresholds are key points in which environmental forces reach a level where an opportunity comes into existence.

Proposition 3. Successful timing requires an entrepreneur to act after the threshold is reached. Entrepreneurs acting before the threshold is reached will either fail, or if resources are available, complete a process of opportunity creation.

This view sees opportunities as objective phenomena either pre-existing or waiting to be brought into existence. It is consistent with Shane and Venkataranam (2000) and Kirzner (1998) or what Compans and McMullen (2007) call the 'economic school'. At first sight, it does not seem consistent with the 'cultural-cognitive school' which does not see opportunities as objective phenomena. This school claims that the environment is ambiguous and opportunities are therefore subjective and rely on entrepreneurs to interpret and define opportunities. However, a failure to interpret a phenomenon cannot be used as evidence the opportunity does not exist. Vaghely and Julien (2010) used an information processing approach to study entrepreneurs and found that entrepreneurs' interpretation, construction and enactment of their environment relies on both a cognitive approach in which they compare their representations of the environment, and a constructionist approach which involves trial and error. Entrepreneurs construct their reality by using information from the environment. It is true that they process that information, but the environment is the source of that information, and therefore the opportunity.

MARKET DYNAMICS AND ENTREPRENEURIAL OPPORTUNITY

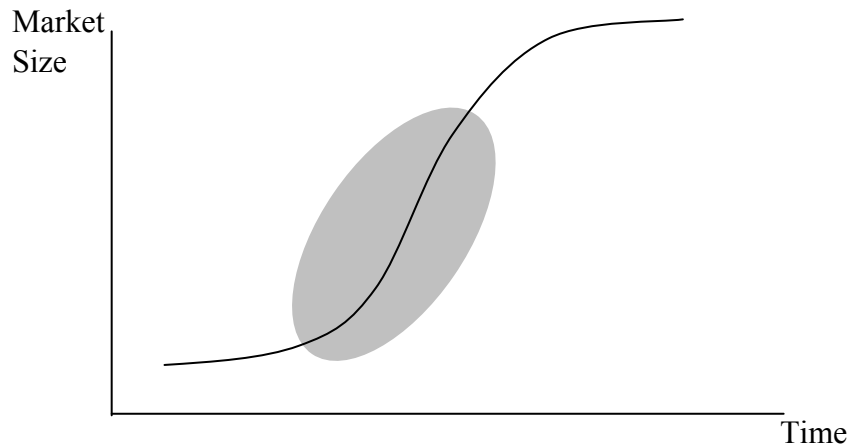
In this section, concepts of thresholds and niche opportunity emergence are built into the Product Life Cycle (PLC). This expanded model provides a stronger alternative for illustrating market dynamics and the appearance of opportunity than the market-equilibrium model. The PLC has been linked to entrepreneurship by a number of researchers. Timmons (1994: 91) used the PLC to explain windows of opportunities as shown in figure.2. A life cycle approach has

also been used by Murray Low and Eric Abrahamson (1997) who suggested that different types of entrepreneurs are better suited for different stages of the life cycle. This is because, as the market evolves, different demands and strategies will be required from the entrepreneur. This paper goes one step further to shape the cycle into an extended model that shows changing market dynamics over time. This model can be integrated with the concept of thresholds to explain the importance of timing and development of opportunities.

The first stage of the product life cycle is one in which a pioneer introduces a model to the market place. In the growth phase, more consumers recognise the benefit of the product and the market begins to take-off. This stage is the classic window of opportunity (Timmons 1994). This growth phase also correlates with the legitimisation stage in Population Ecology Theory with a large number of new foundings (Carroll and Hannan, 2000). It is stage in which entrepreneurs and venture capitalists start jumping on the bandwagon, attracted by the prospect of superior returns and the lower rate of failure. More competitors can increase the industry marketing effort and help educate potential customers to the benefits of the product. It could be argued that opportunity pre-exists for imitating entrepreneurs to discover due to the creativity work of the pioneer.

Figure.2: The Best Time to Enter a Market

(Source: Timmons 1994)

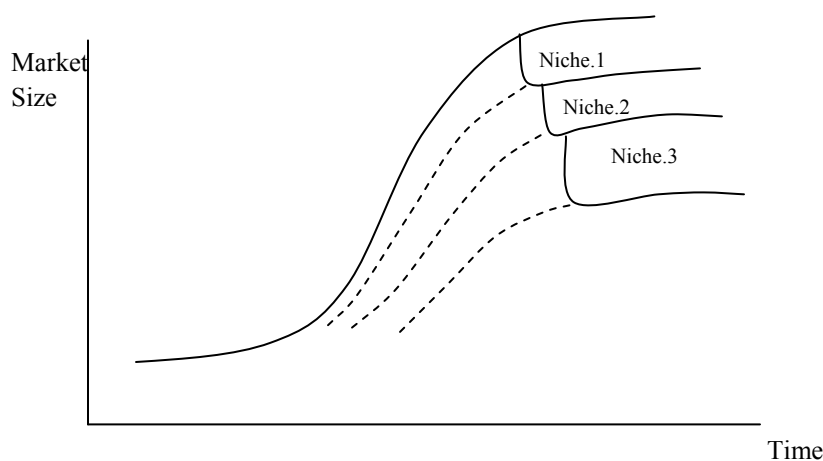


A number of writers have mentioned the appearance of niches as markets evolve, for example Klepper (1997). Such niches present opportunities for small businesses who can not compete with large ones who exploit economies of scale. The PLC can be adapted to illustrate niche development. In the early stages of the cycle, small numbers of consumers might prefer a variation of the product. They recognise the product has value but their needs are slightly different to what is on offer. These people are forced to either buy the product as it is, or not buy it at all. As the market grows, the number of people with these specific demands grows and, at

some point, crosses a numerical threshold in which there are enough people of this type to justify making a product specifically tailored to their needs. This threshold heralds the arrival of a sustainable niche. In figure.2, the dotted lines represent that section of the market which are consuming the general product, which becomes a sustainable niche when the black line forms. In terms of strategy the niche openings represent the time to pursue what Porter (1985) has called focus strategies. The growth phase is a time of niche-developing potential.

The crossing of a threshold presents an opportunity for potential entrepreneurs to discover and seize. There are a number of ways that they may be alerted to the opportunity including market research or frequent requests by customers. The importance of timing is illustrated in this model. An alert entrepreneur who identifies the rising market, and sets up business before the market is of sustainable size, will encounter insufficient demand for his product and will struggle to survive. By contrast, an entrepreneur who enters the market after that niche is opened has the demand to exploit. The threshold explains the importance of timing for business success.

Figure.3: Fragmentation of Markets into Niches



The emergence of a new niche signals an opportunity that would appear to favour the small entrepreneur over larger firms. Emerging niches are typically small and tends to favor firms that do not operate with economies of scale. They also favour businesses that can move quickly in response to the changing market (Shane, 2000; and Dorfman, 1987). However, the ability to exploit a niche is not just demand driven, but must also consider production technologies. If the products characteristics are such that mass production results in huge economies of scales, it may be hard to develop a competitive niche that can compete on price. On the other hand, markets can reach a size where they too can exploit economies of scale. This occurred in the automobile industry in the 1920's. Prior to this time, Ford had dominated the market with the Model T whose production benefited from significant economies of scale. But

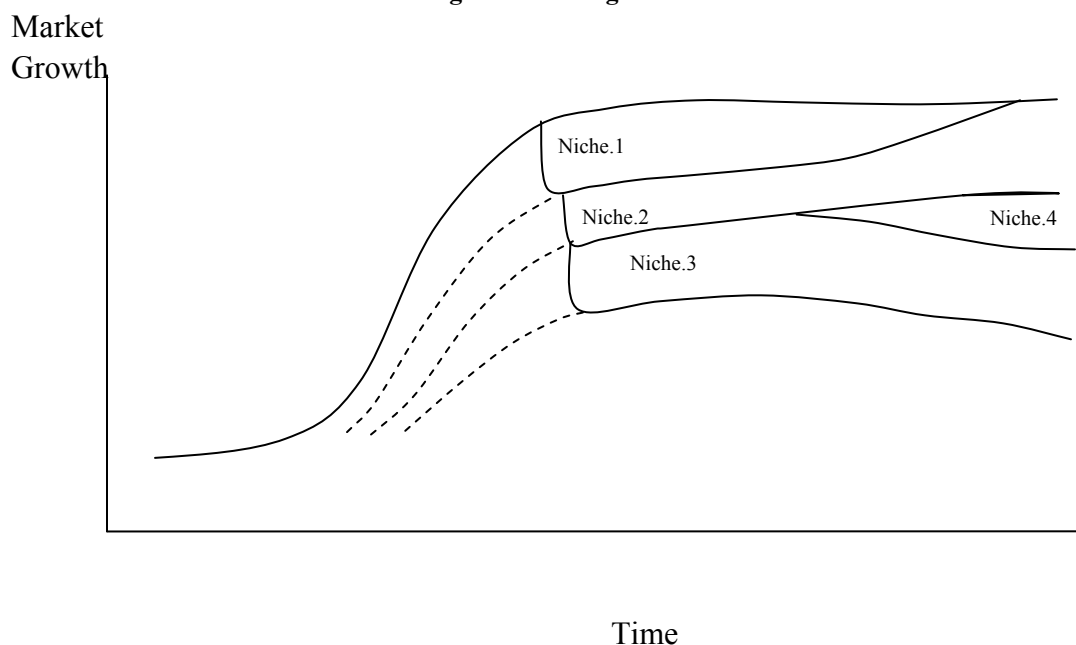
by the 1920's, demand had grown to the point where it was feasible for other niche manufacturers to take advantage of the production techniques pioneered by Ford (Langlois and Robertson, 1995).

Proposition 4. As some market grow, niches come into existence of a size that can support a business, presenting an opportunity for discovery.

Proposition 5. If the niche has not reached sufficient size, the entrepreneur has to proportionately increase the work in developing the market and creating the opportunity.

In a mature market, opportunities for niche opening still exist as entrepreneurs gain more in-depth knowledge of the values that consumer seeks. As more knowledge on what customers seek is gathered, a greater potential exists to create products which can more accurately address their wants and needs. Niches will also come and go as market forces fluctuate. New niches open and close, each demanding different product characteristics. The more the characteristics of demand change, the more opportunities are created for entrepreneurs who can respond rapidly to the changes. This is supported by Dean and Meyer's (1996) research showing that the greater the sales dynamics of industry niches, the greater the formation of new ventures.

Figure.4: Changes in Niche Markets



Niches open and close over time

A visual model of opening and closing niches is consistent with Klepper and Thompson's (2006) work which identified that the formation and closure of sub-markets is the driver of business sustainability. In illustrating that niches close, an important concept of the market is brought to the student's consciousness, illustrating that at times, cutting losses and closing businesses is part of the entrepreneurial process.

It must be noted that Klepper and Simon (1996) recognized variation in industry evolution, and the model can be re-drawn and used to illustrate industry variation. For example, if an industry emerged with a large generalist category of businesses and periphery niches, as per the Resource Partitioning Theory, the sizes of the niches and generalist niches could be redrawn accordingly.

CONCLUSION

This paper attempts to address some of the difficulties in teaching opportunity identification and suggests that sensitivity to market and non-market dynamics can help entrepreneurs become aware of opportunities as they arise. In contrast to definition of opportunity and discovery which emphasises supply and demand, new definitions were provided that are both simpler and more amenable to non-market activity. This was followed by an example illustrating the use of non-market activity in the creation of an opportunity.

A number of concepts were presented that aid in identifying opportunities. These include the concept of thresholds which help to provide one definition of entrepreneurial opportunities. A window of opportunity is opened when the threshold is passed but closes when the carrying capacity of the niche is reached, or another threshold is passed which lays the opportunity obsolete. The concept of thresholds also begins to provide some insight into the importance of timing.

A Creativity/Discovery spectrum was proposed that seeks to break the debate as to whether opportunities are created. It argues that opportunities may pre-exist or be created. Opportunities exist on a spectrum depending on the extent of human activity required to bring them in to existence. An opportunity that is created requires the entrepreneur to work environmental forces past the threshold to create an opportunity. With discovery, the threshold has already been passed and the opportunity pre-exists for the entrepreneur to exploit.

Thresholds also provide some understanding of 'timing' for business success. A window of opportunity is opened when the threshold is passed but closes when the carrying capacity of the niche is reached, or another threshold is passed which lays the opportunity obsolete. This offers a new way to view Kirzner's errors of pessimism and optimism. An entrepreneur who acts before the threshold is reached will suffer from an error of optimism and fail, while an entrepreneur who fails to notice a threshold is passed, suffers from errors of pessimism. The notion of thresholds increases our insight into the importance of timing and luck.

The thresholds concept also allows us to consider non-market forces such as legal and political barriers that must be passed to bring an opportunity in to existence. In recognising the importance of non-market activity, a threshold view of opportunity creation provides a more complete view of the entrepreneurial process. An example was given of McGowan who actively worked to shape the political-legal environment to open an opportunity in the telecommunications industry.

The last section then extends the Product Life Cycle to provide an alternative to the equilibrium model in explaining the appearance of opportunities. It can be linked to the research of Klepper and Thompson who identified the emergence of sub-markets as determining business sustainability. It illustrates the emergence and closing of niches and the importance of thresholds. In this way, it provides an important educational tool to explore market dynamics that provide entrepreneurial opportunity, and aid the entrepreneur with their identification. These dynamics include growth stages, niche development, thresholds, the importance of timing and luck.

There are variations of industry evolution, as Klepper and Simon (1996) noted, and the placement of niches in the model can be varied to reflect this variation. For example, a product may start serving a specialised niche then moved onto a generalised niche. These variations do not undermine the value of a model. In fact, these issues can be explored in greater depth if the shape and assumptions behind the life cycle are changed, and it is discussion of these variations that increase entrepreneurial sensitivity to market dynamics. The goal is to provide students with a sense of market evolution, niche emergence and timing through thresholds. The concept of thresholds is particularly important to the small business-person who lacks the research and development, marketing, and other resources that enable them to conduct extensive environmental change.

Seen in this light, the PLC becomes an even more useful tool for entrepreneurial analysis and hopefully will release some of the grip of the equilibrium model that for many years tied thought down to equilibrating or dis-equilibrating entrepreneurs. The model provides a model for industrial historians to illustrate changing markets over time. It can be drawn to illustrate Niche Formation Theory and Resource Partition Theory. The extent to which the framework is compatible with existing theory, along with its simplicity, makes it an attractive tool.

This paper has attempted to provide a teaching framework to think about market and non-market dynamics to help teach opportunity identification. If students can analyse these in different industries they can develop greater understanding of how opportunities are shaped by environmental forces. This understanding should help students look for forces that signal opportunity. It suggests a greater role for class-work on longitudinal market evolution and a useful assignment for students is to explore an industry of their choice to identify how opportunities have appeared over time. An emphasis on industry studies is also consistent with findings that entrepreneurs are more likely to succeed in industries in which they have knowledge.

It also suggests a need for academic to conduct more research into different types of 'windows of opportunities' with more longitudinal studies on how specific industries and markets change over time, and how opportunities have emerged within them. Similarly, historical research on industrial development which shows how entrepreneurial opportunities appear over time can illustrate variations in the model which and help to develop sensitivity to market dynamics.

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THE CREOLE SKILLET RESTAURANT: A POST KATRINA START UP

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Anne Kiefer, The Creole Skillet

ABSTRACT

The purpose of this paper is to examine the steps followed, obstacles faced, and sources of help and information used by Ms. Anne Kiefer in opening up a new restaurant in the City of New Orleans in the wake of Hurricane Katrina.

The sequence of steps did not follow the textbook model of a start up. Decisions were made with little information or analysis. The decision process reflects the entrepreneur's lack of business experience and her sense of urgency. The founder went to familiar sources for referrals, help or information. Elected officials or government administrators were used to get help in cutting through local and state government state agencies

Ms. Kiefer's lack of experience in the restaurant industry was balanced by her nephew and his wife who had a formal education in restaurant operations and years of restaurant experience. On the other hand, Ms. Kiefer's most valuable role was providing the investment funds and especially knowing people who could help solve problems.

Hurricane Katrina had an impact on this process. The Warehouse District where The Creole Skillet is located suffered no flood or wind damage. Citywide damage, however, put a premium on getting skilled tradesmen for renovation work and getting proper permits, etc. through overworked City offices. Last, the convention business has been hurt, however, long-term prospects for the City, Warehouse District and The Creole Skillet are most optimistic.

INTRODUCTION

The purpose of this paper is to examine the steps followed, obstacles faced, and sources of help and information used by Ms. Anne Kiefer in opening up a new restaurant in the City of New Orleans in the wake of Hurricane Katrina. The hurricane struck Southeast Louisiana and the Mississippi Gulf Coast on August 29, 2005. The storm claimed over 1,800 victims. The economic impact was far reaching. As of April 2006, the Bush Administration had sought \$105 billion for repairs and reconstruction in the region (St. Onge & Epstein, 2006). The total economic impact on Louisiana and Mississippi may exceed \$150 billion (Barton, M. & Hicks, 2005). The devastation was great in the City of New Orleans and the nearby parishes (counties) of St. Bernard, Plaquemines and Eastern St. Tammany all in the New Orleans Metropolitan Statistical Area (MSA). Eighty percent of the City was flooded. In the MSA, 512,249 homes

were damaged by the storm (Business Writer, 2006). Hospitals, schools, and transportation were all severely damaged in the devastated areas. Only 21 percent of all restaurants in the City of New Orleans were open in December 2005 (McNulty, 2006). By February 2006, 37 percent of all MSA restaurants were recertified to open (Hurricane Katrina/Rita News, 2006).

RESEARCH METHODOLOGY

Six one-hour personal interviews were held with the owner, Ms. Anne Kiefer. The two minority owners were not interviewed as Ms. Kiefer was the primary decision maker. She and the minority owners did review the typed sequence of events and other case facts as to their accuracy.

Two visits were made by the writer to the restaurant once during the construction phase and once after the grand opening to get a first-hand observation of the construction work and the end result. It was observed that the construction process was time consuming. A walking tour of the area showed that the restaurant was two blocks from the Morial Convention Center, Harrah's Casino, and six nearby hotels. There was limited parking for locals and there were ten established competing restaurants.

THE ROAD BACK

In the two and one-half years since Katrina the road to recovery has been slow. Why? One reason is the sheer size of the destruction. Some 182,000 homes sustained severe damage, not including commercial and industrial buildings. Also, people have been faced with slow payments by insurance companies and the Road Home Program. The sheer size of construction needs, residential, commercial, and industrial has made skilled trade labor at a premium. Last, the rising costs of residential insurance and utilities had slowed rebuilding (Scott, L.C., Richardson, J. A., Terrell, M.D., & Neathery, M. J., 2007).

The Metropolitan Statistical Area (MSA) employment and population are about 83 percent of pre-Katrina levels (Metropolitan Report, 2007). As of January 30, 2008, the population of the City of New Orleans is estimated to be 65 percent of its July 2005 level (GCR & Associates, Inc., 2008). Construction will be the driver of this economy. Many large commercial projects are on the horizon or started. Traditional drivers of the local economy such as oil and gas are at pre-Katrina levels. Education and medical services, government, and grocery stores are lagging, reflecting the lack of population. Tourism still lags the economy. There were six million visitors in 2007, about 60 percent of pre-Katrina levels (Metropolitan Report, 2007). The year 2008 is off to a good tourist year with the Sugar Bowl, BCSC game, NBA All Star game, Mardi Gras and Jazz Fest happening. On the other hand, the City continues to be plagued by a poor national image. The damage done by the cable news networks will be long standing.

The number of restaurants in Orleans, Jefferson and St. Bernard Parishes reopening is in pace with the recovery of the economy in those areas. As of August 2007, 69 percent of restaurants had reopened in the City of New Orleans, 94 percent in Jefferson Parish, and 39 percent in St. Bernard Parish (Warren, 2007). There are no accurate statistics on the startup of new restaurants in the MSA. One new restaurant was opened by Ms. Anne Kiefer in the Warehouse District of the City. Now for her story.

THE CAST

Ms. Anne Kiefer is a 62 year old retired City of New Orleans employee. She has three children and is a grandmother. She lives in Orleans Parish and was flooded by Hurricane Katrina. Ms. Kiefer has a B.A. in General Studies/Urban Education from The University of New Orleans and prior to Katrina she was the director of the New Orleans East Economic Development Foundation (NOEEDF). She is a civic activist and has been active in local politics and has no experience in the restaurant or tourism business. She has helped her son-in-law and daughter start a small business in Virginia. She is the majority owner and the only investor in The Creole Skillet.

Trent is the Executive Chef and minority owner and Mrs. Kiefer's nephew. He has a degree in Restaurant Management and Culinary Arts from the University of Alabama, as does his wife who is minority owner and manager of The Creole Skillet. Trent was formerly the Executive Chef at the ABC Grill in Metairie, Louisiana, a suburb of New Orleans and has 15 years of experience in the trade as does his wife. Other full time employees include Chris, a sous-chef, one bartender, one preparation cook, and a dishwasher. There are six part time wait staff.

THE SEQUENCE OF EVENTS

April 2007. The idea for the opening of a restaurant occurred at a family Passover dinner. Trent had recently left his position at the ABC Grill. He had built up a reputation for fine food at that property. From his experience in the restaurant trade, Trent was aware of the availability of a small Greek restaurant in Metairie. He had written a plan for the Greek restaurant. Ms. Kiefer discussed the plan with a CPA and a financial advisor. The initial reaction of these advisors was no. Next, they talked to Trent. His knowledge and experience in restaurants convinced them to change their minds.

The day of the signing the Greek restaurant lease changed everything. Ms. J. Smith owned a building in the New Orleans Warehouse District (near the Morial Convention Center). The building had a vacant area (formerly a coffee shop) on the first floor. Ms. Smith had eaten at the ABC Grill previously. She so liked the food that she sought out the Executive Chef, Trent. He was no longer there; however, the sous-chef directed her to Trent. She contacted Trent and

indicated she wanted him to open a restaurant in her building. The plan to go with the Greek restaurant was cancelled.

May 2007. Ms. Kiefer contacted a lawyer who arranged for them to be incorporated as an LLC. She sought out a \$15,000 loan from a national bank and the Jewish Federation. She backed out applying because they wanted tax records and a business plan. In addition, she contacted a local development agency Idea Village and a Small Business Development Center (SBDC) counselor. Both wanted business plans. She didn't have the time or money to have one written for her. Idea Village is a 50 (c) 3 nonprofit organization. It is New Orleans-based and provides consulting services to small business clients who meet selection criteria.

The major source of financing came from the personal funds of Ms. Kiefer. They were in the form of a loan to the restaurant corporation. Total costs were: (1) special new hood for the kitchen - \$25,000, (2) kitchen renovation - \$60,000, (3) restaurant renovation including a bar - \$25,000, and (4) insurance, permits, incorporation, initial promotion, office supplies and salaries - \$25,000. The total amounted to \$135,000.

Ms. Kiefer and Trent looked at the property and the local surroundings. This area had been spared from flooding. There was no damage to the building although the space had to be renovated. Neither Ms. Kiefer nor Trent conducted a formal market analysis. They relied, in part, on their general knowledge about the area. She was familiar with the Warehouse District. The Creole Skillet would be located one block from the Morial Convention Center and in a high foot traffic area. Other restaurants made it a very competitive situation. Trent felt he could handle the competition. The decision was made to go for it even though the rent of \$5,400 per month was considered to be high.

June 2007. A family friend who was an insurance broker was contacted to arrange for liability and property insurance. Next, the lease agreement was signed with Ms. J. Smith.

July-August 2008. Clean up was started as no permits were needed for that work. The building had no kitchen and one had to be built as well as a bar. Electrical and plumbing work had to be done. The building is over 200 years old and tradesmen familiar with construction issues of very old buildings were needed. Bids for plumbing and electrical work were let out. The electrician and plumber used by the building owner were used. Ms. Kiefer had to hire an architect to develop a plan for remodeling and building a kitchen. Since the building is in an historic district and an outside vent had to be built, the plan had to be presented to the Historic District Landmarks Commission (HDLC). The HDLC is the City of New Orleans regulatory agency for local historic districts outside the Vieux Carre (French Quarter). Repairs or renovation to the exterior of a building within an historic district need to be approved by the HDLC. The rest of the renovation plan was a concern of the City of New Orleans. Essentially, the architect took Trent's renovation plan and reworked it.

During this period, Ms. Kiefer attended an event and shared a cab ride with a former member of the New Orleans School Board, Mr. White. He referred an electrician to her as they needed another one.

September 2007. Trent started the paperwork to get a state and city liquor license. Construction work continued. Family help was used to install the bar and do additional construction work. Mr. Salas, the ex-husband of Ms. Kiefer's daughter is an artist. He painted murals on the walls and floor (at a below market price).

September-December 2008. A two person student team from a small business consulting course from a local university conducted a market and competitor analysis. Estimates of local visitors, tourists, and those working in the area market potential were made. Ms. Kiefer's acquaintance with the professor teaching the course (a former member of NOEEDF) led to this assignment.

October 2007. Building plans were sent to the State Fire Marshall in Baton Rouge, Louisiana. Processing was slow. Thanks to the effort of a friend of Ms. Kiefer, who is a state representative, her plan was reviewed and approved in a short time.

They were assigned a state Alcohol, Tobacco Control (ATC) agent. Advertising had to be carried out indicating a restaurant serving alcohol was to be opened at that location. Ads were placed in the daily newspaper (The Times-Picayune) and a sign was put in the window at the location. The notices allowed anyone who didn't want an alcohol serving restaurant at that location to register a complaint with the City.

November 2008. Ms. Kiefer met with her assigned ATC agent. There were several meetings and some confusion over what paperwork had to be completed. Ms. Kiefer was told that she missed the deadline (by now it was December) and had to start the process all over again. She contacted her friend, the state representative, for help. Within a few days an ATC agent came by and gave them a temporary liquor license.

The HDLC and City signed off on the architect's building plan. However, a City of New Orleans occupational license and City liquor license were needed. Ms. Kiefer contacted Mr. Brown, Director of the City's Job One Program. He was a friend from her days as head of the New Orleans East Economic Development Foundation (NOEEDF). Mr. Brown advised her of the different City departments she had to visit to get paperwork completed for the licenses. One requirement was for the three owners to go to the City Jail Central Lockup for finger printing.

November was the time to start thinking about promotion. Ms. Kiefer contacted Mr. West, a college business school graduate who had worked in several tourist-related jobs in New Orleans East while Anne Kiefer was director of NOEEDF. Mr. West now worked for the Downtown Development District which includes the Warehouse District. His advice was to join the New Orleans Tourist and Convention Bureau and the Louisiana Restaurant Association. A list of conventions was needed to help in scheduling the wait staff. In addition, Ms. Kiefer was to visit hotels in the immediate area and leave restaurant brochures with the front desk personal.

January 2008. The Creole Skillet is ready to open. The City Health Department came to give the final inspection (after cancelling three times). A wait staff was hired. The first wave of hiring came from friends of Trent. Due to the traditional turnover in wait staff, new employees

were being sought via advertising (a sign in the window). Trent, his wife, and Ms. Kiefer would help out, waiting tables if needed.

January 19, 2008. The Creole Skillet opened. Some 150 persons were emailed invitations for free food and drink. Invitees were friends, relatives, Mardi Gras Krew Captains, and friends of her deceased father, a well known local retailer. The Mayor was invited but was out-of-town. Mr. West represented the City. Trent appeared on a local TV talk show. The show's producer was a personal friend of Ms. Kiefer.

DISCUSSION

Why did Ms. Anne Kiefer decide to invest in the start up of a new restaurant? Insurance and State Road Home Money covered the complete repair of her flooded residence. With personal security taken care of she could rely on other sources (rental property, investments) for living expenses and investment in the new business. Money was a concern but not a major one. Another factor was her desire to help out family members and assist them in starting a business. The influence of her upbringing was at work as well as she grew up in a family where her father was the owner of a men's clothing store in New Orleans. Her love of the City of New Orleans and wanting to give "something" back was another factor at work.

The sequence of events in this start up did not follow the textbook model of developing and screening ideas, feasibility analysis, preparing a business plan, industry analysis, market analysis, develop a marketing plan, procuring a management team, developing an operations plan, making financial projections, and seeking funding (Barringer, 2009). None of these steps were carried out in any depth or at all. No business plan was ever written and one of the first steps was to seek outside funding. Incorporation and procuring insurance were viewed as necessary and procured early. The lack of conducting the proper steps as noted in the literature can best be explained by the lack of experience in doing these steps and the desire to move quickly. The entire process took only a little over nine months to complete.

Ms. Kiefer had many demands on her time and energy during this time period. She had home repairs to supervise and lived in a trailer on her front lawn for 16 months. In addition, she visited one daughter and son-in-law who lived in Virginia to help them start a cable collection business. Another daughter (divorced) and her 5 year-old child lived in Oregon. Ms. Kiefer spent time in Oregon helping her daughter in various ways. Now, the five year old is with the father (Mr. Salas) in New Orleans. Ms. Kiefer gets babysitting and pick up chores for that child and Trent's 2 year old daughter. Despite all these family responsibilities she was heavily involved with the start up.

The conventional wisdom of small business textbooks is that the entrepreneur should have experience in the industry. Yet, she had none. Fortunately, Trent and his wife had the education and experience in restaurant operations. Trent's major weakness was his lack of experience in operating a business in Orleans Parish. Previously, he had operated in suburban

Jefferson Parish where all permits, licenses, etc. were procured in one location. In Orleans Parish one had to deal with multiple City departments and the HDLC. Here is where Ms. Kiefer's contacts were most valuable. She went to known sources for help, information, or referrals. Family members were sought out for legal and insurance needs. She used her political connections (state representative and a City Hall administrator) to cut through bureaucratic red tape to get the job done (e.g., a permit procured). The Downtown Development District (DDD) contact was a source of free help on promoting restaurants.

One theme throughout this nine months odyssey was the sense of urgency on the part of Ms. Kiefer. She did not qualify for a Small Business Administration loan at the national bank. The Jewish Federation wanted tax records. The SBDC and Idea Village wanted to see a business plan. She didn't have the time, or experience to write a business plan nor the money to have one written. Problems in construction were resolved by getting referrals on tradesmen and the use of the building owners' tradesmen. Work was done by Trent and friends on constructing the bar at little cost. The political contacts described above were used as a last resort to solve a bureaucracy problem. Ms. Kiefer's behavior can best be described as "winging it." Her approach to making decisions was to make them on little information, using outside sources for help and being aggressive in solving problems.

Lambing and Kuehl (2006) discuss the role of serendipity (chance) being at work in the development of product ideas. Chance was at work as well in this situation. For example, the owner of the building just happened to eat at the ABC Grill. She liked the Chef's (Trent) food and sought him out. Ms. Kiefer attended an event, and subsequently shared a taxi ride with an acquaintance of hers, a former Orleans Parish School Board mentor. From him she got the name of a needed tradesman. Last, Ms. Kiefer attended a Katrina Recovery speech by Senator Mary Landrieu. By chance she sat next to a counselor of a New Orleans-based SBDC. From the counselor, she learned of an SBDC counselor who specialized in advising restaurants. They met but nothing came of it as the SBDC counselor wanted her to write a business plan.

What was the impact of Hurricane Katrina on this start up? The Warehouse District suffered no flooding and little wind damage. The damage citywide, however, put a squeeze on getting paperwork e.g., building permits, licenses, completed. The shortage of City Hall personnel (and experienced personnel) resulted in long waiting periods, miscommunications and errors. Compounding this situation was that the owners had to go to multiple offices in City Hall to get different permits and licenses to open a business. In addition, the requirements of the HDLC had to be met as well as that of the ATC office at the state level to get a liquor license. A limited pool of skilled tradesmen and the large number of repair projects delayed the time to get repair work done.

Another impact of Katrina was the steep drop in the tourism business, especially the convention business. The New Orleans Tourist and Convention Commission has been trying to recoup convention business. They are directing their efforts toward very small conventions, and small group and corporate meetings. Many of these events are held in hotels which are in or near

the Warehouse District. Also, because the nearby Harrah's Casino continues to pump money into their Fulton Street Development, the District could be a popular visitor spot in the future second only to the French Quarter.

As a final note, the restaurant business in the Warehouse District is very competitive. Yet, the chefs at nearby restaurants have been very supportive of Trent and have encouraged him to do well. Another successful restaurant in that area will help them as well, at least in their view. This behavior of the brotherhood of chefs has been observed in French Quarter restaurants as well (D. Sclafani, personal communication, February 13, 2008).

LESSONS LEARNED

There are guidelines to be followed in starting a business. Several lessons to be learned by Ms. Kiefer from the startup are listed below.

- *Write a business plan first.*
- *Use low or no cost sources of assistance. These include personal contacts, local universities, area trade associations, and government agencies.*
- *Join trade associations in the industry. Use their services.*
- *Network, network, network. Develop contacts in the local business and government arenas.*
- *Do not start a restaurant in an area already populated with restaurants, not unless you have a real advantage.*
- *Get personal experience in the industry.*

CONCLUSION

The sequence of events in the start up of a restaurant in post Katrina did not follow the textbook model of a start up. Decisions were made with little information or analysis. A business plan was not written as it would take too long and cost too much. The lack of a thorough analysis and carrying out the textbook steps for a start up reflect Ms. Kiefer's lack of business experience and her sense of urgency.

The entrepreneur went to known sources for information, referrals, or help. Elected officials or government administrators were used very effectively to get help in cutting through local and state government red tape.

Serendipity played an important role throughout the process. The phenomenon in part reflects Ms. Kiefer's many years of experience in New Orleans working in politics and the non-profit sector. Networking does pay off.

Conventional wisdom suggests that the start up entrepreneur have experience in the industry. Ms. Kiefer had no experience in business or the restaurant business. This was balanced,

however, by experience of her nephew, Trent, and his wife. Ms. Kiefer's most important roles were providing investment funds and in knowing or finding people who could help solve start up problems.

The hurricane had an impact on this start up process. Ms. Kiefer had to attend to the renovation of her home, yet work on the start up. The Warehouse District did not flood and suffered little wind damage. Citywide damage, however, slowed the permitting process at City Hall and there was a shortage of skilled or certified tradesmen. The storm has had a major impact on tourism, especially the convention business. With time, the convention business and small group meetings should grow. The Warehouse District is forecast by tourism officials to be a major attraction in the future.

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DEVELOPMENT OF ENTREPRENEURIAL ATTITUDE IN IRANIAN ELEMENTARY LITERATURE TEXTBOOKS

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ABSTRACT

The purpose of this paper is to analyze Iranian literature textbooks at the elementary level, in order to study to what extent is the entrepreneurial attitude, from the aspects of cognitive, affective and behavioral, considered in these books and how can be increased. Although many researchers have analyzed textbooks, content analysis of textbooks from the aspect of entrepreneurial attitude has not yet been done and this article is groundbreaking in this field. In this research, all the literature textbooks such as reading and writing books of five grades at the elementary level in Iran that were published in 2010, was analyzed with qualitative content analysis method. In this analysis entrepreneurial attitude was broken down to five categories with referring to entrepreneurship literature models such as Robinson's (1991). These categories are as follows: need for achievement, creativity and innovation, perceived self-control, self-efficacy and opportunity recognition. Validity of the tool, were confirmed by some specialists and reliability were estimated by the pie-Scott coefficient over than 80%. The analysis of data gathered by content analysis, were done by descriptive and deductive statistic methods. Results show that in all reading textbooks, in sum total of text, question and picture, 24.8% of all units consider the entrepreneurial attitude. In writing textbooks, this percent is equal to 54.9%. In the subjects of reading book lessons, 22.15% of all attend to entrepreneurial attitude categories. Creativity and innovation, among the other categories, has the most frequency in all books and opportunity recognition has the least and there was a significant different in frequency of five categories. On the other hand, textbooks of third grade had the most and first grade textbooks had the least frequency. In attitude components, including affective one in reading books and behavioral one in writing books was significantly higher than the others. Cognitive component had the least scale in all books.

Keywords

Entrepreneurial Attitude, Content Analysis, Literature Textbooks, Elementary level

INTRODUCTION

Entrepreneurship is 'at the heart of national advantage' (Porter, 1990, p. 125) and entrepreneurial people are a valuable asset for the government, most importantly because they create new jobs, take risks and are willing to take responsibility (Torokoff, 2006). Therefore, the encouragement of entrepreneurial activities is recommended as a way to stimulate economic growth (Harper 1991). Culture is an important topic in regards to entrepreneurship because it plays an integral role in determining entrepreneurial attitudes and intentions, and whether or not entrepreneurial behaviours are desirable (Morrison, 2000, Lindsay, 2005). Education is an important contributor to the development of an entrepreneurial culture (Burger, 2005). Therefore many governments are aiming to introduce entrepreneurial culture through education into the school system (Kyrö 2005; Carrier 2005; Mets and Andrijevska 2005; Venesaar et al. 2005).

There would be an increase in the number of people whom would be successful entrepreneurs if they were identified, recruited, and nurtured throughout the educational process (Hatten and Ruhland, 1995; Ede, Pnigrahi, & Calcich, 1998) and empirical evidence supports entrepreneurial education as an intervention tool, which impacts adult attitudes toward entrepreneurship (Ede, Panigrahi, & Calcich, 1998; Hansemark, 1998; Hatten & Ruhland, 1995). Education can improve individuals' skill level and overall perceptions of business creation (Morrison, 2000; Gatewood et al., 2002), and that attitudes are likely to be influenced by education (Florin, Karri & Rossiter, 2007). In the education process, elementary stage is very important because the principles and values acquired at an early age or in the course of an individual's socialisation have a stronger influence than those adopted later in life (Vadi 2004). The general education system at elementary schools form and reinforce major values, knowledge, skills, and attitudes at the most susceptible age (Torokoff, 2006). There is significantly higher probability for start-up of new activities among people with entrepreneurial attitudes (Lunnan et al., 2006) and empirical studies find that those enterprises adopting an entrepreneurial orientation exhibit superior performance (e.g. Wiklund, 1999; Zahra, 1991). Therefore reinforcing entrepreneurial attitude of the students at elementary level in order to increase entrepreneurship activities is very important.

Key dimensions that play an important role in implementing entrepreneurial education through the curriculum area are textbooks. Textbooks clearly serve as a source of knowledge and understanding for school students and potential tools of education for teachers (Williams, 2001).

Literature textbooks at the viewpoint of transferring cultural and attitudinal concepts can be an effective tool for developing entrepreneurial attitude among the students. Therefore, this research is conducted to assess whether and how elementary school literature textbooks helping students to present entrepreneurial attitudes.

LITERATURE REVIEW AND THEORICAL BACKGROUND

Entrepreneurship Education

Current years have witnessed the ongoing interest in entrepreneurship, which is essentially understood as the emergence and growth of new businesses (Rosa et al., 1996). Policy makers worldwide have now begun to recognize the instrumental role of entrepreneurship for economic growth. New and growing businesses are seen as a solution to rising unemployment rates, and as a major catalyst to national economic prosperity (Acs et al., 1999; Bruyat and Julien, 2000).

As a result of the proliferating emphasis worldwide on entrepreneurship as the catalyst for economic development and job creation, policy makers have developed a wide array of measures to support entrepreneurship (Gnyawali and Fogel, 1994; Maillat, 1998). Key among these is entrepreneurship education (Laukkanen, 2000). There appears to be a consensus that entrepreneurship education and training has a major role to play in the economic development of a country (Gibb, 1996).

Interest in entrepreneurship education grew rapidly in the late 1950s and early 1960s when some of the most well-known studies in entrepreneurship like McClelland's *The Achieving Society* (1961) and Collins, Moore, and Umwalla's *The Enterprising Man* (1964) were published. Over the years, entrepreneurship education has climbed the ranks in the business domain and was positioned sixth in importance out of the 60 recommendations on the solutions to the major problems facing small businesses (Solomon and Fernald, 1991).

Entrepreneurship education has been defined as education with the purpose of creating a new product or service that results in higher economic value (Hanesmark, 1998). Entrepreneurial education also focuses on knowledge of small business ownership and self-employment, as well as entrepreneurial skills and attributes. Formal entrepreneurial education has been found to affect attitudes of students toward entrepreneurship as a career option (Hatten & Ruhland, 1995; Hanesmark, 1998). It has been acknowledged that entrepreneurship education helps ignite the artistic, creative, and perceptual aspects of entrepreneurship (Shepherd and Douglas, *ibid.*). Indeed, recent evidence in the literature indicates that entrepreneurship education has a positive impact on perceptual factors such as self-efficacy (Cox et al., 2002/2003). Also it is proven that skills, knowledge and attitude may be modifiable by education (Tam, 2009). Kourilsky and Walstad (1998) suggested that stimulating entrepreneurial attitudes through education at the pre-collegiate level could encourage entrepreneurship as a career choice. The general education system, is the most important place outside their home for young people where, at the most susceptible age, major values, knowledge, skills, and attitudes towards targeted play and schoolwork are formed and reinforced (Vadi, 2004). A young person spends about 12-17 years within the pre-school and general education system, which is a long time – thus the experience forms beliefs which last for the rest of that person's life. Later life can only make some

corrections in these beliefs, but the core remains unchanged. The foundation for business-minded and enterprising behaviour and attitudes is laid before university starts and a well-organised educational system is the best insurance for each individual seeking a good job (Torrokoff, 2006)

Entrepreneurial Attitude

Although prior research has debated whether entrepreneurial characteristics are innate, recent findings support the idea that psychological attributes associated with entrepreneurship can be culturally and experientially acquired (Vesper, 1990; Gorman, 1997). Individuals are predisposed to entrepreneurial intentions based on a combination of personal and contextual factors (Boyd & Vozikis, 1994). Personal and contextual factors attributable to entrepreneurs have generally been categorized as demographic characteristics and personality traits. A number of psychological attributes have been suggested as predictors of entrepreneurial behavior in the literature on of entrepreneurs, with some degree of concurrence.

According to Robinson, Stimpson, Huefner, & Hunt (1991) traditional approaches for studying entrepreneurship, have provided substantial background on entrepreneurship based on a psychological paradigm that assumes temporal and situational stability. The field has advanced within the limits of that paradigm to a point that further effort will yield diminishing returns. An acceptable alternative paradigm must be able to both include the strengths of the preceding paradigm and overcome the deficiencies. It is proposed that the attitude approach fills both these requirements and offers substantial promise in advancing our understanding of the entrepreneur. An advantage of using an attitudinal approach is that it can be more domain-specific, which increases the correlation with actual behaviour and reduces unexplained variability.

Entrepreneurial attitudes can be seen as an individual's orientation towards future involvement in value-adding activities relating to self-employment in a small business (Burgur, 2005) and entrepreneurial attitudes can be associated with five main factors such as personal elements/traits factor (need for achievement, internal control, taking risk), personal environmental factor (family status, gender and having business-owning family), personal objective factor (being the owner of business, financial guarantee and vision), business environment factor (competition, societal attitudes towards new businesses and the accessibility of loan) and business idea factor (Naffziger, Hornby & Kuratko, 1994). Research conducted by Mazzarol, Doss & Thein (1999).

Attitudes have a behavioural component that consists of behavioural intentions and predispositions to act in a certain way toward some subject (Shaver, 1987). The Theory of Planned Behaviour argues that intention is an antecedent to behaviour (Ajzen, 1991), and intentions play a crucial role in understanding the entrepreneurial process (Krueger, 1993; Krueger & Brazeal, 1994). There are two fundamental approaches taken as to the nature of attitude. One approach holds that attitude is a one-dimensional construct and is adequately

represented by affective reaction alone (Fishbein & Ajzen, 1975). The other approach, known as the tripartite model, holds that there are three types of reaction to everything: affect, cognition, and conation. Attitude is a combination of all three (Allport, 1935; Breckler, 1983, 1984; Carlson, 1985; Chaiken & Stangor, 1987; Katz & Stotland, 1959; Kothandapani, 1970; Ostrom, 1969; Rosenberg & Hovland, 1960; Shaver, 1987). The cognitive component consists of the beliefs and thoughts an individual has about an attitude object. The affective component consists of positive or negative feelings toward the object. The conative or behavioural component consists of behavioural intentions and predispositions to behave in a given way toward the object.

Entrepreneurial Attitude Orientation (EAO) model developed by Robinson (1991), measure entrepreneurial attitudes. The subscales of the EAO measure individuals' attitudes on four constructs each of which consists of three components: affect, cognition, and conation:

1. Achievement in business (referring to the results of starting and growing a business venture);
2. Innovation in business (using innovative methods in business activities);
3. Perceived personal control of business outcomes (individual's control and influence on his/her business);
4. Perceived self-esteem in business (self-confidence and perceived competency in business affairs).

The EAO has been used in a number of prior studies was designed specifically to measure and compare entrepreneurial attitudes. Harris and Gibson (2007) used the EAO to identify differences between U.S. and Chinese business students, while Boshoff and Van Wyk (2004) used it to examine professionals in South Africa. Additional studies have used the EAO to examine entrepreneurs in India (Shetty, 2004) and Russia (Robinson, Ahmed, Dana, Gennady, Latfullin & Smirnova, 2001). Interestingly, Lindsay (2005) used the EAO to develop a cultural model of entrepreneurial attitudes specifically for indigenous entrepreneurs.

According to Robinson's theory (1991), the four subscales are not intended to be an exhaustive list of the attitudes associated with entrepreneurship and it is intended to be a starting place.

In the opinion of McCline, Bhat, and Baj (2000) opportunity recognition has an important role in entrepreneurship and should include to entrepreneurial attitude subscales of EAO model. As a result, they extended the work of Robinson, Stimpson, Heufner, and, Hunt (1991) by developing the entrepreneurial attitude opportunity recognition (EOR) scale which they found to be a more parsimonious scale in predicting entrepreneurial attitudes and differentiating entrepreneurs from non-entrepreneurs. Other researchers emphasize on relationship of opportunity recognition with entrepreneurial attitude, too. Ireland et al. (2003:965) state: "Exploring entrepreneurial opportunities contributes to the firm's efforts to form sustainable competitive advantage and create wealth." Lindsay (2007) identifies: 'exhibiting an appropriate

entrepreneurial attitude would seem fundamental to being able to identify business opportunities". Timmons and Spinelli (2007) express: 'Entrepreneurs exhibit an entrepreneurial attitude and entrepreneurial individuals are better at recognizing opportunities'. McCline, Bhat, & Baj (2000) stress: 'Successful venturing is linked to the entrepreneur's ability to distinguish an opportunity from an idea'.

According to Robinson's (1991) and Baj's (2000) studies, this research broke down entrepreneurial attitude into five categories that are as follows: need for achievement, perceived personal control, perceived self-esteem, Creativity and innovativeness and opportunity recognition.

Analysis of Textbooks

While textbooks are not singly to blame for all the problems in student learning, they largely determine what topics and ideas are taught in the classrooms and how these topics are taught (Association for Supervision and Curriculum Development, 1997; Tyson, 1997). A study found that 90% of all science teachers use a textbook 95% of the time (Harmes & Yager, 1981, as cited in Renner, Abraham, Grzybowski, & Marek, 1990). More recent studies indicated that many teachers rely on curriculum materials to provide them with some or all the content or the pedagogical content knowledge (Ball & Feiman-Nemser, 1988; National Educational Goals Panel, 1994). Poor curriculum materials can deprive both students and teachers of ways that allow them to understand and implement effective teaching practices (Abraham, Grzybowski, Renner, & Marek, 1992). Nonetheless, when used properly, good curriculum materials can be a powerful catalyst for improving teaching and learning (Ball & Cohen, 1996; Schmidt, McKnight, & Raizen, 1997). Indeed, some studies have suggested that textbooks that use effective teaching strategies improve student learning and provide good models for teaching (e.g., Bishop & Anderson, 1990; Lee, Eichinger, Anderson, Berkheimer, & Blakeslee, 1993). While better curriculum materials alone are unlikely to improve student learning, we think that high-quality curriculum materials can positively influence student learning directly and through their influence on teachers. For these reasons, valid identification of curriculum materials that actually support learning of worthwhile ideas and help teachers build their own content and pedagogical knowledge is essential. Therefore analysis and assess textbooks in order to improve the curriculum is very important and many researches analyze the content of textbooks.

Although many researchers have analyzed the content of school textbooks (Tommo, 2000, Wilson, 2000, Williams, 2001, Razzino, 2003, Lumbantobind, 2005, Chan, 2006, Hassan, 2008, Erdoghan, 2009) none of them have done this from the aspect of entrepreneurial attitude.

This research analyzes the content of Iranian literature textbooks from the aspect of entrepreneurial attitude in order to find to what extent these books consider entrepreneurial

attitudes. Also we want to realize that which component of attitude (cognitive, affective and behavioural) is included more in entrepreneurial related concepts.

METHODOLOGY

Content analysis method chose for answering the questions;

How much does Iranian literature textbooks attend to entrepreneurial attitudes?

Which component of attitude including cognition, affect or conation is considered more?

Is there a significant difference between entrepreneurial attitude categories?

Sample

Elementary level in Iran include 5 grades (age group 7-11) and Iranian school textbooks are all publishing by education ministry and prescribe all over the country. Literature textbooks are called “Farsi” and classified into “Reading” and “Writing” books. Reading book contains text, coloured pictures and questions and writing book contains exercises for pupils to copy.”Farsi” books of elementary level beside linguistic concepts contain attitudinal, cultural, historical concepts. Each reading book consists of 30 lessons with independent subjects.

In this research literature textbooks of five grades include reading and writing books were analyzed. For more precise content analysis, we didn’t sample and analyze all the textbooks that consist of 10 books (5 reading and 5 writing books).

Procedure

Content analysis uses the scientific process to identify messages relevant to a defined or evolving theoretical framework, recode the messages into a quantifiable form using explicit and objective processes and analyze the messages to draw conclusions that further understanding of theory (Holdford, 2008).

Analyzing process in this research included four steps:

1. Study the related references and categorize the entrepreneurial attitude concept.
2. Prepare coding procedure and define coding units.
3. Coding the content in the defined categorizations.
4. Analyze the gathered data.

In order to categorizing, entrepreneurial attitude in refer to Robinson model and other entrepreneurship literature, broke down to 5 categories such as: need for achievement, perceived personal control, perceived self-esteem, Creativity and innovativeness and opportunity recognition. For defining these concepts practically, some Indexes were derived from Robinson

questionnaire and other related references. In order to securing the validity of the theme, 10 experts of the field reviewed and accepted it.

In writing books coding units was defined as: text, question and picture which text coded sentence by sentence and each picture and question were considered as a unit. For further analysis each lesson was coded according to its subjects too. In writing textbooks coding was done by the analysis unit of exercise. Analyzing the gathered data, were done by descriptive and deductive statistics methods.

For examining the reliability of the research another researcher (a female university graduate working as a research assistant) was provided with the coding theme developed by the author and coded 10% of all content independently and the reliability were estimated by Pie-Scott coefficient over than 80%.

RESULTS

Results of content analysis summarize in table 1. As shown in the table, 6701 units in sum total of text, question and picture and 164 lessons were analyzed in all reading books that 1662 units in sum total of text, question and picture and 36 unit of lesson subjects reinforce entrepreneurial attitudes. In writing books, 1558 exercises were analyzed and 855 of them have considered entrepreneurial attitudes.

Book ↓	subcategory →	Perceived personal control	Need for achievement	Creativity and Innovativeness	Self Esteem	Opportunity recognition	Sum total	All units	Percent of all units
	Analysis unit ↓								
Reading	text	133	273	187	127	29	749	4396	11%
	question	56	103	561	65	11	796	1605	12%
	picture	8	7	98	3	1	117	700	2%
	sum total	197	383	846	195	41	1662	6701	25%
	percent	12%	23%	51%	12%	2%	100%		
	subject	6	9	12	7	2	36	164	22%
	percent	17%	25%	33%	19%	6%	100%		
Writing	exercise	29	51	756	12	7	855	1558	55%
	percent	3%	6%	88%	1%	1%	100%		

Inclusion of entrepreneurial attitudes in text is 11%, in questions this percent is equal to 12% and in pictures is just 2%. In lesson subjects, 22% of all lessons include entrepreneurial attitude in its subjects. Results of writing books show that in these books, 55% of all exercises attend to entrepreneurial attitude, but it is apparent that creativity and innovativeness possess 88% of this percent and other categories have very low scales.

Creativity and innovativeness possess 51% of all units that have entrepreneurial attitude aspect in reading books in sum total of text, question and pictures. In lesson subjects this percent is equal to 33% that indicates creativity and innovativeness have the most frequency in the books.

Need for achievement has the second rank among the categories. Self esteem and perceived self control have the next grade and opportunity recognition has the least percent. Further analysis by chi-square test revealed that there is a significant difference between categories' inclusion in reading textbooks in sum total of text, question and pictures at $p \leq 0.05$. In writing books significant differences was observed at $p \leq 0.05$, too but in lesson subjects of reading books significant differences did not observe at $p \leq 0.05$.

Figure 1 indicates the inclusion of entrepreneurial attitude in five grade textbooks. This chart indicates that reading books have higher EA inclusion from writing textbooks and inclusion in 3d grade textbooks in both reading and writing is higher than the other grades textbooks. It's also seen that inclusion of EA from first to third grade textbooks have an increasing trend but after that it decrease.

Figure1: Comparison of EA inclusion in Reading and Writing textbooks of five grades

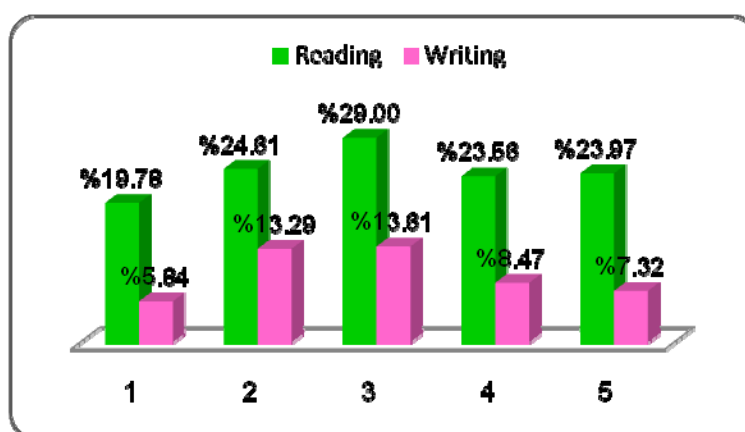


Table 2 shows the results of assessing the textbooks from the aspect of attitudinal components.

Book	subcategory	cognitive	affective	Behavioral	Sum total
	Analysis unit				
Reading	text	64	678	7	749
	question	13	159	624	796
	picture	0	38	79	117
	sum total	77	875	710	1662
	Percent	4%	53%	43%	100%
	<i>subject</i>	3	30	3	36
	<i>Percent</i>	8%	83%	8%	100%
Writing	exercise	3	72	780	855
	Percent	0%	8%	91%	100%

As shown in the table 2, in reading books, in the sum total of text, questions and pictures inclusion of the affective component has higher percent, in the subjects this status is seen but in writing books the behavioural component has the higher frequency. In reading books, questions and pictures have more frequencies in affective component but in text this rate is higher in affective one.

DISCUSSION AND CONCLUSION

Content analysis of Iranian literature textbooks at elementary level indicate that in 25% of all reading books units (text, picture, question), entrepreneurial attitude is reinforced. According to the variety of concepts that should include in the curriculum this rate seems not bad but there should be more attention to this category in literature curriculum in order to stimulate entrepreneurial attitudes in the students more and have higher entrepreneurial activities rate in future.

Lesson subjects have at least one frequency in each category and according to the limited number of lessons, it is satisfactory. In writing textbooks inclusion percent is 55% that is not bad but when we have more precise attention, it is seen that over than 80% of this refer to creativity and other categories have low rates and they should be attended in the curriculum seriously.

Among the categories creativity and innovativeness has the most frequency and this indicates curriculum administrators have tended to it. But other categories such as opportunity

recognition that has an important role in entrepreneurial activities have low inclusion and should be more attended in the curriculum.

It is indicated that there are differences in the distribution of frequencies in the five categories (in reading books in the sum total of text, question and picture and also in writing books) and the distribution should be more dominant in order to have better affect. But in lesson subjects of reading books the difference wasn't observed and this indicates that entrepreneurial attitudes have more dominant distribution in this field and curriculum administrators had adequate attendance to them.

In reading books inclusion percent of text and questions is partly similar, this indicates that questions harmonize with text and can reinforce attitudinal concepts included in text but it seems that pictures should be revised in order to reinforcing entrepreneurial attitude; its inclusion percent is very low.

In inclusion of five grade books an increasing trend is seen up to third grade and after that trend is decreasing. According to more intellectual growth of the children of higher ages, it is expected that entrepreneurial attitude inclusion increase in fourth and fifth grade but it is inverse.

In attitudinal component inclusion, text has more affective; questions, pictures and exercises have more behavioural components. It is expected that exercises and questions according to their nature be more behavioural but texts should have more cognitive and affective components, although for children of this age affective component is more impressive but both cognitive and affective components along with behavioural should be under consideration of curriculum administrators to have better efficacy.

Here are some suggestions in order to promote entrepreneurial inclusion in these books:

- Referring to GEM Global Report 2009, Iran's economy have raised from past decade but it still have to grow more. It also indicates entrepreneurship tendency and entrepreneurial activities is under growing there. Therefore it is expected that Iranian textbooks attend to entrepreneurial attitude more and policy makers should include it in their development plans.
- Concepts which reinforce entrepreneurial attitude should be included more in the curriculum; it is suggested that curriculum administrators define special part relating to entrepreneurship and entrepreneurial attitudes.
- Teachers' guide and teachers' qualification should also be updates in order to create stimulating learning entrepreneurship.
- It is suggested that memoirs of persons who have done entrepreneurial activities or have related attitudes include in some lessons.
- As the textbooks include some practical exercises or activities, adding games or activities in them in which stimulate children's entrepreneurial attitude is suggestive.

Below are some examples of these activities or games:

1. Writing interview questions and conducting interviews of the entrepreneurs by the students. The information from those interviews can be compiled in a directory of the types of goods and services, locations, and hours of the businesses.
2. Encourage the students to solve problems and make decisions by assign them the task of using the process for a family or school problem, such as where to eat dinner. The process can be adapted to come up with an idea for a business venture. Steps of Decision-Making Process are as follows: State the problem, List the alternatives, List the criteria for evaluating the alternatives, evaluate the alternatives, and Make a decision.
3. Have students look for businesses with interesting names.
4. Have students collect articles about persons with entrepreneurial attitudes such as self confidence individuals or achieved one and then make them read the article and answer such questions as: "How did the person succeed in his work?", "How did he face with obstacles?", "what was his new ideas, methods or ...?", "what risks did the person take? ", "Does this person have any competition? "
5. Put them in competitive positions for example in group game and encouraged them to be a winner.
6. Include few basic questions from a business plan and have students answer these questions for writing activities and projects. Ask each student to think of a project or product that others might be interested in buying: "Describe your project or piece. ", "Who will be your audience? ", "Who will look at this piece? ", "How will you make (or produce) your piece or project? ", "What do you need to make this a success? ", " With what or whom will your project compete? "
7. Have the students evaluating their writings, projects, and reports by answering these questions from themselves: "What is positive or strong about your work? ", "What is a minus or weak about your work?", " What needs to be changed?", " What needs to be stronger?", "What makes you say "Ah...I wish I had thought of that!"".

RESEARCH LIMITATIONS

The current study only investigates the entrepreneurial attitude presented in the textbooks. It did not study entrepreneurial attitude conveyed in other curriculum subjects, the interaction between teachers and students, and extra-curriculum entrepreneurial values of Iranian

children in schools activities that students would participate. The study also did not measure how children response to the entrepreneurial values taught at schools. Further research is needed to explore to what extend Iranian children understand or believe in the entrepreneurial values taught at schools.

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FACTORS INFLUENCING SUCCESS IN AN INTRODUCTORY ENTREPRENEURSHIP COURSE

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ABSTRACT

In this paper, we outline the results of a study at a small Midwestern university regarding curriculum design and an introductory course in Entrepreneurship. Using a sample of 229 undergraduate students, we look at how course placement, ordering, and student major affect learning outcomes in Entrepreneurship 100. Our findings have implications for curriculum design and the inclusion of non-business majors in entrepreneurship programs.

INTRODUCTION

Purpose of Paper

One of the youngest and most rapidly growing disciplines taught in today's business schools is entrepreneurship. Over time, the discipline has come to occupy a unique position in many schools, often offering extensive courses and programs to students outside of the business school. As well, whereas early entrepreneurship programs consisted of only one or two courses, many business schools are now expanding their curricula to offer comprehensive degree programs in entrepreneurship. Taking all of these factors into account, the central purpose of this paper is to determine some of the factors that affect student performance in an introductory entrepreneurship course, which will help guide curriculum and course development for entrepreneurship programs as a whole.

ENTREPRENEURSHIP AS A DISCIPLINE

First approached as a distinct discipline by colleges in the late 1970s and early 1980s, entrepreneurship has grown so rapidly that openings for senior faculty often go unfilled, and there are often more faculty positions available than there are qualified candidates (Finkle, 2007; Finkle & Deeds, 2001). While the number of schools offering entrepreneurship courses numbered fewer than 20 in 1980, more than 1,600 were offering entrepreneurship courses by 2002 (Solomon et al, 2002; Kuratko, 2005).

In contrast to other business disciplines, some schools have exerted effort to teach entrepreneurship campus-wide, moving beyond solely offering the courses to business students.

For example, Heriot and Simpson (2007) describe the process whereby a chaired professor of entrepreneurship was hired explicitly, in part, to foster campus-wide entrepreneurship education. Entrepreneurship education has broadened its scope to more nontraditional audiences (Frazier, 2005). Other research indicates that entrepreneurs often do not graduate with business degrees (Kauffman Foundation). As a result of this unique position in many colleges, entrepreneurship courses often have a large percentage of non-business students. In some colleges, business schools have created two separate streams of entrepreneurship courses: those for business school majors and those for non-business majors. In connection with the main purpose of this paper, we consider here the necessity of creating separate entrepreneurship courses for students inside and outside of the business school.

ENTREPRENEURSHIP CURRICULA

Similar to strategic management, the study of entrepreneurship tends to be an interdisciplinary one that draws on material from many other areas within the business school. Over time, many institutions have elected to use strategic management as a capstone course for a business degree, a course that is taken after almost all other business courses have been completed. Entrepreneurship as a discipline has found its way into most business school curricula but its place within those curricula varies. In contrast with strategic management, the introductory entrepreneurship course is often taken by students in the earlier years of their programs. In designing program curricula, an important consideration is the placement of courses within the program curriculum. To varying degrees, there is some amount of overlap across courses in schools of business due to the relatedness of subject matter. Entrepreneurship consists of originating, or starting, a company, and Management consists of operating an existing company (Zeithaml & Rice, 1987). Management courses tend to focus on managing a business to expect normal sales, profit, and growth while the entrepreneurship courses emphasizes rapid growth and profits with the possibility for high profits and quick sale of the company (Winslow et al, 1999). To the extent that there is overlap in content between courses, we expect students later in their respective programs to perform better on introductory courses simply because they will have been exposed to related material in other management courses.

These factors are of particular importance when offering campus-wide entrepreneurship education. On the one hand, programs want to offer thorough coverage of a topic. On the other hand, students outside of the business school often have a minimal number of course hours free with which to pursue other interests, such as entrepreneurship. Such constraints mean that attracting significant interest in entrepreneurship education by non-business students will require limiting the number of prerequisite courses required before students can study entrepreneurship. For students enrolled in the business school, the ordering of courses and prerequisites for a given course may play a critical role in student learning outcomes, since material in those courses will

often be interrelated. This paper explores the influence, or lack thereof, of a related course on student performance in an introductory course in entrepreneurship.

The remainder of this paper is divided into four sections. In Theory and Hypothesis Development, we discuss existing theory and build upon it to develop a series of hypotheses that will be tested later in the paper. In Data and Methods, we detail the data collection and statistical methods used to test the hypothesis. In Results, we discuss the outcomes of our data analyses and results of our hypothesis testing. In Discussion and Conclusions, we explore the meaning of the results as well as their implications for both researchers and educators.

THEORY AND HYPOTHESIS DEVELOPMENT

Theory Development

In general, we expect average student performance to be higher at the later stages of an academic program. One reason for this is simply a matter of attrition. Over time, weaker students will tend to be weeded out of their programs, either changing to majors outside of the business school, or leaving college entirely (Drane et al, 2005; Ost, 2010). Although we are not aware of any research that has tested this directly, there is ample research showing that the average grade in upper year courses tends to increase. This is true when we look at level of course; in other words, the average grade in an upper level course tends to be higher than the average grade in a lower level course (Devadoss & Foltz, 1996). This is also true for student GPAs when comparing those at earlier and later stages of their programs (Devadoss & Foltz, 1996). Both of these observations would seem to confirm the idea that, on average, stronger students last longer in their programs (Devadoss & Foltz, 1996; Drane et al, 2005; Ost, 2010). Thus, typically, the more dedicated and higher-performing students will remain in their programs until the end.

Since Entrepreneurship is a multidisciplinary and general course, we also expect there to be a learning effect as a student takes more courses in their program (Plutsky & Wilson, 2000). In effect, we expect there to be spillovers of knowledge from related courses that are applicable to entrepreneurship. So, the further a student progresses in their program before taking Entrepreneurship, the more general business knowledge they will be able to draw from, and the better they will perform in Entrepreneurship 100.

In many cases, introductory courses serve as prerequisites for more in-depth and specialized upper level courses. Some prior research has confirmed this conventional wisdom: that prerequisite courses help students to perform better in their later, more advanced coursework (Baard & Watts, 2008; Huang et al, 2005), but other studies have found little or no impact of prerequisite courses on student performance (Bashford, 2000; Wright et al, 2009). But what of introductory courses with no prerequisites; is sequence a factor, and does the order of these introductory courses matter? Years ago, program curricula were much more structured and hierarchical, owing in part to research done by Tyler (1975). More recent work on curriculum

development has argued for the centrality of the student in curriculum development, and has made the case for allowances for differential abilities and preferences of individual students (Aoki, 1993; Eisner, 2001). This consideration would seem to be of particular importance in the case of a discipline, such as entrepreneurship, which serves such a diverse population of students. Part of allowing students to be proactive in their education would be to allow them more freedom in terms of the types and ordering of courses that they take, which is a central topic of this paper.

In addition to a course's placement within the program as a whole, there are certain closely-related courses that will have more overlap than others. In the case of this study, there is considerable overlap between Entrepreneurship 100 and Management 101 in terms of topics covered, although Entrepreneurship obviously focuses on the formation and running of small businesses and Management tends to focus on larger companies. It should be noted that, although Management 101 is a required course for all business students, it does not serve as a prerequisite for Entrepreneurship 100. As discussed earlier, evidence in business education literature for the benefit of prerequisite courses on learning outcomes is mixed (Bashford, 2000; Wright et al, 2009), so proper curriculum design dictates that we determine whether or not Management 101 should be considered as a prerequisite for Entrepreneurship 100. Currently, students are able to take the two courses in any order they wish, even simultaneously, but because of this overlap of topics, we expect to find a performance boost for students who take the entrepreneurship course after taking the management course. If this is found to be true, it would make an argument that Management 101 be made a prerequisite for Entrepreneurship 100 in order to maximize students' chances of success. If we find no such effect, we do not have an argument favoring the use of Management 101 as a prerequisite. On the one hand, we want to maximize the chances of success of entrepreneurship students, but on the other, the creation of excessive amounts of prerequisite courses may discourage non-business students from taking entrepreneurship courses.

Examining the sequence of courses and student performance is consistent with processes designed to close the loop on program assessment, something that is receiving increasing attention in schools of business (Miles et al, 2004). Determining correct course placement and sequence is necessary for student success and retention. If courses can be offered in a more beneficial sequence, this could potentially improve student grades, something that has been shown to impact the persistence of students in college programs (Araque et al, 2009; Allen et al, 2008). The freshman year sequence is especially important to student retention. Although students are not required to do so, both of the courses in this study are listed in the freshman year course sequence for plans of study in the business school.

Anecdotally, some professors report that non-business students struggle in business courses in comparison with their business student peers. Other professors report that some of their finest students hail from majors outside of the school of business. Although these non-business students may not be as familiar with the jargon and style of business courses, some may compensate for these shortcomings with increased effort, in part because they are in many cases

taking the course as an elective and so may be more interested and invested in a course than someone who is required to take the course. As well, students from other disciplines may arrive in the entrepreneurship classroom with advantages in certain skills due to their aptitudes and prior coursework. For example, engineering and science students may bring higher levels of quantitative and analytical skills. As we have no compelling theoretical or empirical reason to suspect otherwise, we anticipate that business and non-business students alike will have similar learning outcomes in Entrepreneurship 101.

Another possibility arises when comparing business and non-business students. As business students progress through their program, they are exposed to many courses that are directly or indirectly related to the topics covered in entrepreneurship, something that is not true for their non-business counterparts. Over time, we expect this additional coursework in business to pay dividends disproportionately to business students. In short, we expect a multiplicative effect whereby the combination of being a business major and being later in one's program will lead to higher performance in Entrepreneurship 100, and do not expect to find a similar effect for non-business students.

In the section that follows, we outline the study that was undertaken at a Midwest university to evaluate the following hypotheses in an effort to better guide the development of a campus-wide program in entrepreneurship.

HYPOTHESES

The foregoing discussion leads us to four distinct hypotheses, which will be tested below:

- H1: The later in their programs that students take Entrepreneurship 100, the better they will perform in the course.*
- H2: Students who take Entrepreneurship 100 after taking Management 101 will perform better than their peers who took the courses simultaneously or who took Entrepreneurship first.*
- H3: There will be no significant difference between business and non-business students in Entrepreneurship 100.*
- H4: Enrollment in the business school will positively moderate the relationship between stage of program and students' performance in Entrepreneurship 100.*

DATA AND METHODS

Data was collected from a sample of 260 students who had taken Entrepreneurship 100 between 2008 and 2010. As mentioned previously, Entrepreneurship 100 is an introductory course with no prerequisites. Of these 260 students, 31 either withdrew from the course or earned an incomplete grade, and were thus excluded from statistical analyses, leaving 229 observations for our hypothesis tests. Table 1 (below) gives a breakdown of students' membership in a given school. Fully 40% of students had majors outside of the business school.

The second course of interest in this study was Management 101, a general introduction to management theory. More specifically, we were interested in whether or not the sequence in which the two courses were taken affected students' learning outcomes in Entrepreneurship 100. Of the students included in our analyses (i.e., those who completed the entrepreneurship course), 149 took the management course first, 45 took entrepreneurship first, and 35 took both courses simultaneously. As the numbers reflect, there is a clear bias toward taking Management 101 before Entrepreneurship 100, despite the fact that neither course has any prerequisites. In the business school, however, all students' plans of study suggest (but do not require) that students take Management 101 in their first semester of the program. As well, Management 101 is a required course for all students in the business school, but the Entrepreneurship 100 course is required only for students pursuing a BA (the school offers both BA and BS programs).

Table 1: List of enrolment, by school, of students in the sample. Note that 31 students (not listed here) were excluded from our analyses because they received no grade in Entrepreneurship 100, due to incomplete status or withdrawal from the course.		
School	Number of Students	Percentage of Total
Business	136	59.4%
General Studies	45	19.7%
Liberal Arts & Social Sciences	31	13.5%
Engineering, Math & Sciences	9	3.9%
Technology	7	3.1%
Education	1	0.4%
Total Sample	229	100.0%

To test for the influence of stage of program (Hypothesis 1) we created a variable, Semester of Program, which was coded as an integer from 1 to 8, each additional increment reflecting fifteen hours' worth of courses that the students has completed (0-15 hours=1, 16-30 hours=2, and so on). In order to check the robustness of the results, we did a second set of analyses (results not reported) that used a different measure – the number of credit hours completed by students – and obtained very similar results.

At issue in Hypothesis 2 was how the order of courses taken affected students' performance. Since there were two courses and students can take multiple courses at the same time, there were three possible options available: taking Management 101 first, taking Entrepreneurship 100 first, and taking both courses simultaneously. This required the creation of two dummy variables to indicate the order in which the two courses were taken. Took Management First was given a value of 1 if the student took Management 101 before taking Entrepreneurship 100, and was zero otherwise. Took Courses Simultaneously was assigned a value of 1 if a student had taken Entrepreneurship 100 and Management 101 simultaneously and had a value of zero otherwise. It should be noted that some students had not yet taken the management course. Since our data was collected exclusively from entrepreneurship rosters, there were, by construction, no students in the sample who had taken the management course but had not yet taken entrepreneurship.

To test Hypothesis 3, we created a dummy variable Business Major?, which took the value of one if the student was registered in the business school, and zero otherwise. As mentioned previously, Table 1 gives a breakdown of the schools in which the students in the study were enrolled. In addition to the variables of interest for our hypothesis testing, we also controlled for students' GPA in an attempt to control for the possibility that individual aptitudes and not course curriculum were driving the results of the study.

Hypothesis 4 predicted a moderating effect between being a business major and semester of program. In order to test this hypothesis, we created an interaction variable, multiplying semester of program by the business major dummy variable. We tested all hypotheses using least squares regression. The results of these analyses are presented below in Table 2.

RESULTS

Table 2 (below) shows the results of our hypothesis testing. Hypothesis 1 received strong support in all four models: students who take entrepreneurship later in their program, as indicated by the coefficient on Semester of Program, tend to perform better in Entrepreneurship 100. For every semester further along in their program, students earned, on average, a grade approximately 0.058 higher on a four-point grade scale. From a practical standpoint, students taking the course at the end of their program tended to score almost a half of a grade higher than their peers who took the course at the beginning of their program. As mentioned earlier, we obtained similar results if we looked at credit hours completed as an alternate measure (results not reported).

Our second hypothesis did not receive support in either Model 2 or Model 3, suggesting that it does not matter whether students take Management 101 first or even simultaneously with Entrepreneurship 100, arguing against the necessity of using Management 101 as a prerequisite to Entrepreneurship 100. In essence, the order of these two courses relative to each other does not seem to influence student performance. Hypothesis 3, on the other hand, was supported in all

four models: performance of business students was not distinguishable from non-business students; both groups seemed to perform equally well in Entrepreneurship 100. In order to test for the possibility of knowledge spillovers due to taking larger numbers of business courses, Model 4 tested for the interaction of business major with semester of program. The interaction term did not reach significance (Jaccard & Turrisi, 2003), leaving Hypothesis 4 unsupported.

Dependent: Grade in Entr. 100	Model 1	Model 2	Model 3	Model 4
Semester of Program	0.058 (0.009)***	0.059 (0.008)***	0.059 (0.011)**	0.103 (0.002)***
Took Management 101 First		-0.042 (0.708)		
Took Courses Simultaneously			.009 (0.951)	
Business Major?	0.105 (0.285)	0.122 (0.260)	0.106 (0.288)	0.472 (0.035)*
GPA	1.037 (<0.001)***	1.040 (<0.001)***	1.037 (<0.001)***	1.032 (<0.001)***
(Sem. of Prog.) x (Bus. Major?)				-0.078 (0.068)
Intercept	-0.324 (0.077)	-0.319 (0.083)	-0.329 (0.096)	-0.516 (0.015)
F-Test	104.09 (<0.001)	77.80 (<0.001)	77.72 (<0.001)	79.72 (<0.001)
R Squared	0.581	0.581	0.581	0.587

N=229, * p-value <0.05; ** p-value <0.01; *** p-value<0.001

DISCUSSION & CONCLUSIONS

Discussion

Our results offer some interesting findings as it relates to curriculum design. From our test of Hypothesis 1, it seems that there is a benefit to taking entrepreneurship later in the program. Although our data is not rich enough to determine the cause, we suspect that this result is largely driven by attrition of weaker students who leave their programs, leaving largely higher performers behind in the upper levels of their programs. That said, we did control for student GPA, and the stage of program effect is still significant, suggesting that there may be additional

learning that takes place that allows more senior students to perform better than their newly-arrived counterparts.

Since prior research is mixed on the influence of prerequisites and course ordering on student learning outcomes, Hypothesis 2 was a necessary test to determine if Management 101 is a worthwhile prerequisite for Entrepreneurship 100. Whether students took the Management first or simultaneously with Entrepreneurship, there was no apparent difference in learning outcomes. From a business student standpoint, this argues against prescribing the order in which the two courses are taken, and against making one course a prerequisite for the other. The result of this hypothesis test, combined with that of the Hypothesis 3, suggest that students outside the school of business can be equally successful not only relative to their peers in the business school, but also whether or not they take Management 101. The purpose of our fourth hypothesis was to dig deeper into the possibility of knowledge spillovers from taking additional business courses. This hypothesis was also left unsupported by the data.

Taken together, these results bolster the idea that students can get a solid grounding in Entrepreneurship without the need to take an extensive group of business additional business courses. As well, and in contrast with some other business programs, these results argue against the necessity of creating a separate curriculum for non-business students.

“As entrepreneurship and management scholars focus on *what* should be taught, then little knowledge is developed about *how* this content should be taught, or about *how* entrepreneurship students and practitioners effectively get to master this content. In turn, scholarly research on entrepreneurship education remains characterized by a noted emphasis on macro-pedagogical issues (e.g. a focus on what should be taught and on the social impact of entrepreneurship education), with little consideration of teaching and learning dynamics per se” (Bechard & Gregoire, 2005). There is still little uniformity in content and approach among entrepreneurship courses and the research on entrepreneurship education remains sparse (Falk & Alberti, 2000). Particularly in the case of non-business students further research must be done to maximize the effectiveness of curriculum design in assuring the learning of students who decide to combine their non-business majors with entrepreneurship education.

Implications for Curriculum Design & Conclusion

The results of our study have several implications for the design of entrepreneurship curricula. In an introductory entrepreneurship course, at least, there appears to be no need to create a separate course for non-business students; both business and non-business students perform equally well in the course. That said, there may be other incentives to create courses customized for a particular group of students outside of the business school, such as to spur interest in the topic by tailoring courses to the interests of students from a given non-business discipline, or to entice administrators from other schools to channel their students toward taking entrepreneurship. From a pure performance standpoint, however, non-business students seem

able to performance just as well as their business peers in entrepreneurship. For administrators, this finding can allow more flexibility in the teaching and creation of courses, allowing teaching and other resources to be more easily scheduled and shared across courses.

From a curriculum design standpoint, the suggestion here is that student success can be better assured when students take the course later in their programs. This could be accomplished by requiring that students have achieved sophomore or junior standing before gaining entry to the course. The down side to moving courses later in the program is that fewer students will be exposed to the discipline, and may not be exposed to entrepreneurship until after they have committed to another major. If a secondary goal of the entrepreneurship course is to attract students into doing a major in that discipline, earlier exposure to the discipline is likely to be more effective, particularly for non-business majors.

For future research, the next logical step in this research is to look at upper level entrepreneurship courses and determine the effectiveness and necessity of course ordering and prerequisites. As well, it would be interesting to know how effective an introductory course is in attracting students to transfer into the business school in general, and into an entrepreneurship major in particular.

All told, our general conclusion from these results is that designers of entrepreneurship curricula have considerable freedom to change the order and offerings of courses in the program without adversely affecting student outcomes. Knowing this should allow administrators considerable flexibility as they attempt to meet the needs of various needs of their stakeholders, student or faculty, business or non-business alike.

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A CASE STUDY: ACTION BASED ENTREPRENEURSHIP EDUCATION HOW EXPERIENCE PROBLEMS CAN BE OVERCOME AND COLLABORATION PROBLEMS MITIGATED

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ABSTRACT

This paper contributes by providing suggestions on how to analyze business ideas for exploitation in an entrepreneurial education context, and how the institution can provide support activities to enhance the chance of successful exploitation. Active learning has become the preferred choice of teaching entrepreneurship and external ideas are used to provide the students with business opportunities to exploit. An instrumental case study on the Norwegian University of Science and Technology – School of Entrepreneurship, however, finds challenges on collaborating with these external partners. By reviewing theory, ways to improve the analysis of business opportunities are found and presented. Additionally a structured idea search process and mentors are suggested as a mean of gaining access to sufficient business ideas and the experience and network necessary for a successful evaluation and exploitation process.

INTRODUCTION

The contribution of this paper is to provide suggestions on how to analyze business ideas for exploitation in an entrepreneurial education context and how the institution can provide support activities to enhance the chance of successful exploitation. Entrepreneurship practice has been subject to a rising interest over the latter years. In times of economic recessions and rising unemployment, entrepreneurship is by many regarded as a mean for continued economic growth and prosperity. With an increased interest in entrepreneurship, follows an increased interest in the facilitation of entrepreneurship, by policy makers, entrepreneurship education being an area of special attention (Laukkanen, 2000). Entrepreneurship education is even regarded to play a major role in the economic development of a country (Gibb, 1996). According to a study by Brockhaus's (1991), entrepreneurship education is recognized as a tool for economic development worldwide, and universities all over the world, including former communist countries, both teach entrepreneurship and conduct research on both practical and theoretical entrepreneurship issues.

Entrepreneurship education has been in transition over the last couple of years, becoming more and more an arena of action learning and less prone to scholastic pedagogical methods. This is in line with the academic work on entrepreneurship education arguing that

entrepreneurship is best taught by acts of entrepreneurship and experimental pedagogical tools (Haines, 1988; Hills, 1988; McMullan & Long, 1987).

When looking into the literature on opportunity search, evaluation and exploitation, experience is often cited as one of the main ingredients of success. Experience can however not only be taught in a scholastic setting, but also emerges from observing, and participating in, real events.

So what strategies do entrepreneurship educators use to help students overcome the problems related their lack of experience and to build entrepreneurial knowledge reservoirs for themselves, and importantly: do they succeed at this?

Conducting an instrumental case study on the action learning based institution Norwegian University of Science and Technology – School of Entrepreneurship (NSE) this article shows that NSE uses several strategies to overcome the experience chasm. Ideas are gathered from external sources to overcome experience challenges on opportunity search and discovery, and are started with external partners to remedy experience challenges related to exploitation. Former students are involved in business plan workshops and external resource persons like lawyers and venture capitalists are brought in to help evaluate business potential. However, problems related to the collaboration with external partners have caused several projects over the last years to be abandoned. Problems with communication, involvement, dedication, and willingness to share economic reward, are examples of these problems. As a reaction, students shift towards less innovative ideas with less economic potential in order steer clear of external partners. This we consider as a potential threat to NSE's role as a school of technology based entrepreneurship.

This research points to flaws in the process of analyzing external business ideas where founder characteristics such as success in previous work, dedication and startup experience is not given enough attention, and looks into important areas where action based entrepreneurship education can possibly be improved. It is shown that in situations where collaboration with external partners occur it may be useful to learn from venture capitalists in emphasizing team or founder analysis over most other characteristics of the opportunity. Consequently, the following research question has been developed:

In an action based entrepreneurial learning context, how should opportunities be analyzed, and how can the educating institution best provide support activities in order to maximize the chance of a successful exploitation?

The structure of this article will be as follows: First some theory on entrepreneurship education will be provided; second the methodology and NSE as context, will be presented; third findings of the case study are submitted; fourth, the theory is revisited in search of improvements to the existing process and framework; and last suggestions are presented.

THEORETICAL FRAMEWORK

It has been questioned whether (entrepreneurship) education increases the chance of a successful startup, or said differently, whether entrepreneurship can be taught at all all (Fiet 2001; Sexton & Upton 1987).

Robinson and Sexton (1994) find that general education has a strong positive influence on entrepreneurship and success, even stronger than that of experience. This is in strong contrast to the often presented anecdote of the high school dropout making it big in the business world (Robinson & Sexton 1994). Later research has confirmed the importance of education, specifically entrepreneurship education; graduates with an entrepreneurship major are more likely to start new businesses and have stronger entrepreneurial intentions than the general graduate (Kolvereid & Moen, 1997).

Entrepreneurial education theory often distinguishes between the *science* and the *art* of entrepreneurial practice (Jack & Anderson, 1998). The science or skills includes raising cash, legal, marketing and other skills that can be learned in a traditional classroom setting (Garavan & O'Cinneide, 1994). The art, however, can first and foremost be learned through experience rather than in the educational environment (Gorman, Hanlon, & King, 1997). The focus of most entrepreneurial courses is on the functional skills, or the science of entrepreneurship, however, entrepreneurship educators unanimously agree to a shift towards the artistic and creative teaching of entrepreneurship (Douglas & Shepherd, 1997).

The Schumpeterian and Kirznerian perspectives on entrepreneurship have also been used as a distinction between the teachable and unteachable aspects of entrepreneurship (Dana, 2001) argued that while the Kirznerian opportunity recognition can be taught, the Schumpeterian, opportunity creation, cannot. Summarized, entrepreneurship practice consists of both teachable and unteachable aspects. The teachable can again be separated into aspects teachable through traditional scholastic methods and aspects learned through experience.

An important question is whether the act of finding and selecting viable business ideas can be learned, or only the actual exploitation of it. According to Further, Saks and Gaglio (2002), it is possible to teach the evaluation of opportunities, but not the recognition thereof. Advocating that this can be achieved, Baron and Ensley (2006, p. 1333) state that; "*Basic research on pattern recognition and recent research in the field of entrepreneurship suggests individuals can learn to notice patterns necessary to identify business opportunities*". Research also suggest that the search for opportunities of experienced entrepreneurs differs significantly from that of novice entrepreneurs suggesting there is a learning potential in experience (Bar-Hillel & Falk, 1982; Fiet, Clouse, & Norton, 2004; Gaglio, 1997; Gilad, Kaish, & Ronen, 1988).

Still, can a search for opportunities be managed in a world of unknowable uncertainties? According to Austrian economics an active search of opportunities is not possible since searching in an unbounded domain without knowing what to look for, per definition, cannot result in a successful outcome. Instead the Austrian entrepreneurial alertness (Kirzner 1973), where an opportunity is discovered as a surprise to the finder, is the way opportunities emerge. If opportunities emerge as a surprise to the finder in a world of unknowable distributed information, then alertness is largely dependent on luck (Demsetz, 1983) and luck cannot be taught. A belief in this perspective can hardly be combined with a positive view on entrepreneurship education, or can it? When conducting a search the object is to identify a discovery, which is a valuable economic opportunity, such as the founding of a new firm, the creation of a new product line, the development of an innovative technology, the satisfaction of an ephemeral market need through arbitrage, or the like (Fiet & Patel, 2006). Regardless of

which perspective of opportunities one advocates, information is required to recognize and exploit a business idea (Fiet, 2001; Kaish & Gilad, 1991; Shane & Venkatamaran, 2000).

According to Fiet & Patel (2006) it is possible to maximize the outcome of a search for opportunities. This can be accomplished by utilizing one's specific knowledge, which is the intellectual perception of people, places, timing, special circumstances and technology (Hayek, 1945) and searching in information channels, what can be a comparatively low-cost source of new specific information that is capable of changing our views of the future, particularly as they relate to the creation of new wealth (Fiet, 2007; Marshak, 1971) Entrepreneurs can select and search based of specific knowledge from prior experience (Fiet, 2007; Fiet, 1996). This can be described as searching for opportunities related to what the entrepreneur already knows, through information sources providing information in accordance with his own experiences. This search behavior is that of experienced entrepreneurs, which is different from that of novice entrepreneurs (Bar-Hillel and Falk, 1982; Baumol, 1993; Fiet et al., 2004; Gaglio, 1997; Gilad et al., 1988). With a lack of experience, the possible information channels are reduced, decreasing the chance of finding a viable business opportunity.

Shane and Venkatamaran (2000) are more Kirznerian in their approach to opportunity discovery and do not, as Fiet, argue for the possibility of an active search; however they agree on the importance of experience. They point to:

“(...) two categories of factors influencing entrepreneurial discovery, (1) the possession of prior information necessary to identify an opportunity and (2) the cognitive properties necessary to value it.” (Shane & Venkataraman, 2000, p. 221-222)

As can be seen, an element that by many is regarded as important for the discovery of opportunities is experience and prior knowledge, and experience cannot only be transferred through traditional (scholastic) teaching and learning methods.

According to Politis (2005) it can be distinguished between entrepreneurial experience and entrepreneurial knowledge. Experience in this context, can be defined as a direct observation of, or participating in, events associated with new venture creation while entrepreneurial knowledge is the practical wisdom resulting from what an entrepreneur has encountered (Reuber, Dyke, & Fischer, 1990). According to Kolb (1984) experimental learning consists of acquisition and transformation. In line with Politis' (2005) framework for the entrepreneurial learning process, what is referred to as experience in the continuum are all observation, and participating in, events which can lead to entrepreneurial knowledge through a transformation process. Specifically included is startup experience, management experience and industry specific experience. Shane (2000, p. 452) puts it:

“Three major dimensions of prior knowledge are important to the process of entrepreneurial discovery: Prior knowledge of markets, prior knowledge of ways to serve markets and prior knowledge of customer problems”.

The factors influencing a successful opportunity recognition and development process according to Ardichvili, Cardozo and Ray (2003) are, entrepreneurial alertness, information asymmetry and prior knowledge, social networks, personality traits, including optimism and self-efficacy and creativity and type of opportunity itself.

There has also been some research on entrepreneurs themselves and which attributes they possess that make them recognize opportunities others overlook. The importance of subjective differences between entrepreneurs and non-entrepreneurs is debated but since opportunity recognition is a cognitive act, it is also an individual act (Eckhardt & Shane, 2003). Some individuals may recognize opportunities others overlook because they possess the cognitive frameworks needed to perceive the patterns among seemingly unrelated trends or events (Baron & Ensley, 2006).

Traditionally entrepreneurship education has had an individual focus but in later years this has been subject to a shift towards a more action oriented pedagogical approach. This shift is based on what appears as consensus in the entrepreneurial education research, namely that entrepreneurship is best taught by acts of entrepreneurship and experimental pedagogical tools (Haines, 1988; Hills 1988; McMullan & Long, 1987, Root & Gall, 1981, Harwitz 1977). A parallel strategy combining individual focus with training in business establishments has been suggested by Laukkanen (2000). His “business generation model” suggests that students should be operationally involved in real business contexts.

There has however also been showed that entrepreneurship education has a lack of uniformity in their objectives, philosophy, content, pedagogy and outcomes (Fiet 2001, Gorman, 1997).

By asking successful entrepreneurs and CEOs of successful growth companies, Hood and Young (1993), identified what the practitioners suggest should be part of the curriculum in entrepreneurship education, based on their own experiences. Positive for the aim to educate entrepreneurs was their finding that the surveyed actually believed most aspects of entrepreneurship can be learned and is not entirely genetically given or developed in early child years (Hood & Young, 1993). Summarized, entrepreneurship practice consists of both teachable and unteachable aspects. The teachable can again be separated into aspects teachable through traditional scholastic methods and aspects learned through experience.

As a result of the importance of experience in all aspects of the entrepreneurship field (discovery, evaluation and exploitation), action learning has emerged as the preferred pedagogical approach, often through a business generation model. According to McMullan & Long (1987) entrepreneurship education should be creatively grounded with student exposure to problem solving and ambiguous and complex situations, in addition to hands-on working experience with community ventures. Shepherd & Douglas (1997) have suggested a shift of emphasize from teaching to learning through hands-on active participation in real life ventures with constructive feedback from an expert. This and similar approaches are referred to as action learning.

To find what an entrepreneurship educator does to support this business establishment, and to bridge the lack of relevant experience and network e.g. providing mentorship and collaborating with external founders is part of the aim of this research.

Important in the academic discussion of entrepreneurship education is the need for evaluation of itself (Block and Stumpf, 1992; Curran and Stanworth, 1989). The majority of studies actually trying to examine the effect from entrepreneurship education in terms of venture creation have however suffered from intrinsic procedural and methodological limitations (Curran & Storey, 2002; Gorman and Hanlon, 1997). Criteria of assessment can be the number of graduate or undergraduate courses offered, the level of commitment to and formalization of the program, the amount of institutional resources available in the form of faculty and staff dedicated to the program; and the presence of extracurricular organizations in the form of clubs, societies and special interest groups supported by the program (Robinson & Hayes, 1991).

The context of the research or the case is that of the NTNU School of Entrepreneurship (NSE). A general description of NSE follows.

NTNU SCHOOL OF ENTREPRENEURSHIP (NSE)

NSE is associated with the Norwegian University of Science and Technology. It educates master students in Science and Technology, with the aim to create future entrepreneurs and business developers. NSE has high ambitions both nationally and internationally with a vision to educate the world's best business developers.

“The primary goal for NSE is for the students to learn business development, the secondary is to accomplish technology based innovation” – Roger Sørheim, 2011

The two years at NSE contain a significant amount of practical project related work with an explicit aim for the students to create actual ventures. To be accepted at NSE, students have to be enlisted at any M.Sc. and Tech. degree at NTNU and to have completed 3 years of their studies, which corresponds to an undergrad or bachelor degree. To be accepted, the students have to show their skills and motivation through an application letter and interview and they will also be judged based on their previous accomplishments and grades. The purpose of this selection process is to secure ambitious and motivated students, necessary if the goal of launching new ventures is to be fulfilled.

Academic Curriculum

The action learning aspect of NSE is complemented by a curriculum of more traditional style. Since all students of NSE have a background corresponding to an engineering undergrad degree and are eventually receiving a master of science and technology, some technical/engineering subjects are needed. More interesting in an entrepreneurship context are the subjects supposed to help build the entrepreneurial competence. The first semester, the students have a course in strategy. Additionally, they are introduced to several entrepreneurial theory and research concepts such as effectuation vs. causation, the resource-based view on entrepreneurship, etc. The second semester two additional courses are mandatory, international business development, which consists of various marketing strategies, and technological business development which introduces concepts such as company valuation, venture capital and

intellectual property rights. During the second year, the students are prepared for their masters degrees with a subject on research methods and entrepreneurship research.

Successes

Over the years since its establishment in 2005, NSE has seen some successes: Verdande Technologies, which was founded by students of the first ever class of NSE in addition to a NTNU professor, has expanded to 28 employees. It is still privately financed and held. Verdande is a technology based company which delivers:

“(...) a software-platform designed to reduce risk and cost related to complex and critical operations across industries. It is used in the planning process – to optimize the operation, during operation – to monitor and take corrective action when necessary, and in post-analysis – to improve efficiency.”

In fall 2010, NSE experienced its first exit of a NSE related company when the start-up called Prampack, a protection bag for prams to be used during flight transport, was. In addition, several students are, or have been, involved in different other start-ups. Examples are Windflip, aiming to launch a barge for transportation of offshore floating wind turbines, and yast, an online time tracker for timing different projects of all shapes and sizes. Another startup called dSafe is also started by a NSE student with a business idea of digitalizing receipts.

The Instrumental Case Study Approach

An instrumental case study seeks to answer questions that arise from a conceptual review of theories and tries to understand the theoretical framework within a specific setting (Stake, 1995). We use the instrumental case study, or exploratory case in Yin's (1989) typology, to explore how theories play out in the real life context. The particular instance of the action based entrepreneurship master program at the NTNU used as the instrumental case to provide insight into the issue. The process of action based entrepreneurial education is elaborated on the basis of opportunity theories and venture capital theory as a theoretical framework. In case studies there are challenges regarding the determination of boundaries or the unit of analysis (Creswell 1998, Stake 1995). In this study the boundaries were defined according to a priori categories. The boundaries were set within three categories such as the idea selection and exploitation, problem of experience and challenges regarding external partners. The rationale is to rely on theoretical propositions, i.e. how these aspects can be combined, and then to analyze data and propose practical implications based on those propositions. The instrumental case study is thus used to provide tentative insight into an issue of how action based entrepreneurial education can function in these three areas.

This involves data triangulation, i.e. choosing descriptions from various sources of research. The use of different research sources, public documents, web sites, interviews and evaluation reports has been shown to be a good approach in finding information, descriptions and interpretations of the action based entrepreneurial education case.

We have also used theory triangulation to obtain a more comprehensive view of action based entrepreneurial education. It has been proposed that the triangulation of multiple theories can, “*produce a richer, more sophisticated understanding of the phenomenon*” (Babbie & Baxter, 2004, p. 319). Here, theoretical triangulation means that various theories are examined and compared to facilitate the research question, theoretical insights and practical implications. Using opposing viewpoints can enhance the validity (Denzin, 1970) especially when a broader, deeper analysis of findings is provided (Banik, 1993). The problem definition comes from a thorough analysis of the research in the entrepreneurship in a search for possibilities to increase chance of venture success. Theoretical reflections laid a basis for further exploring the field of entrepreneurship education and the experience problem.

In the discussion section we present some theoretical insights and educational implications which are articulated in light of the combined use of theories (i.e. opportunity theories, views on the importance of experience, venture capitalist decision criteria and successful venture criteria). The benefits of this type of triangulation hopefully include a better understanding of the action based entrepreneurial education phenomenon.

Data

Nine (9) semi-structured interviews have been conducted with duration from 30 to 120 minutes. The interviewees represented 12 present and former startup projects.

Medium	Style	No. of respondents	Time	Class of
Mail	Semi-structured	11	NA	2011/2012
Phone	Semi-structured	4	5 Hours	2011
Live meeting	Semi-structured	5	4 Hours	2012

Data Analysis

In data analysis, it is not the sheer amount of accumulated data, but the ability to identify the essence and reveal this essence with sufficient context (Wolcott, 1990). For data evaluation, grounded theory techniques have been used.

Findings

The NTNU School of entrepreneurship utilizes a specific framework of what is referred to as “acid tests” in combination with external ideas, to find viable business opportunities for the student to participate in action learning. Acid tests are a preliminary study of business potential conducted over one week in order to identify or discard the idea as a possible startup. These acid tests in combination with the initial search for ideas are a way of organizing and actively searching for business opportunities without the student having to identify the opportunities themselves.

The evaluations of the business ideas, or acid tests, are conducted during the first semester at NSE. This is done in groups of about 5 students, themselves choosing which idea to assess. The teams are chosen by the NSE staff. The business ideas are then assessed in a rather unstructured process. The students are urged to call potential customers, industry experts, distributors, retailers etc. with an emphasis on quantity. The delivery is a however clearer, a report based on a template and a presentation of the findings described in the report. The main points addressed are:

1. *Product and/or service concept*
2. *Market/Industry*
 - a. *Segmentation*
 - b. *Value chain*
 - c. *Customers*
3. *Organization*
 - a. *Source of idea*
 - b. *Business model*
4. *, Economy*

Before analyzing the ideas, these are gathered through different sources in a process that differs each year. (Students interviewed described this potential area of improvement, setting up a more systematic process to increase the number of ideas available). Among the ideas that were analyzed in 2009 and 2010 about 70 percent came from external sources. These external sources include technology transfer offices, industry partners, former students, etc.

Rated from most common to least, the idea sources are:

1. *Ideas by NTNU Technology Transfer or Cern Knowledge Transfer (15)*
2. *Ideas by NSE students and friends (14)*
3. *External ideas by industry partners etc. (11)*
4. *Ideas by active search towards NTNU researchers and students (3)*
5. *Ideas by former NSE students(1)*

When it comes to which ideas are eventually chosen, the ratio of student ideas has fallen to about 15% indicating that these are found to be less attractive than the opportunities with external partners.

As the first semester at NSE comes to an end, the students themselves form teams of an average of three students and select a business to pursuit.

WHY PROJECTS ARE DISCONTINUED

An overweight of the interviewees however indicate collaborative problems with their respective founders. These problems include but are not limited to dedication, involvement, business knowledge etc.

Of the business ideas initially pursued by the class of 2011 several have been aborted due to collaboration problems with the external rights owners:

Expectation dissonance

“The rights owner had several different projects which resulted in him giving our idea less attention. We felt more and more that we were conduction consulting work than participating in a startup”

Communication problems

“It was a difference in what we were envisaged and what was actually the status of the project”.

Incentive and ownership problems

“We could just not summon the passion needed for our project since the ownership was elsewhere. Because of that it just became a school project.”

As one interviewee summarizes:

“My impression is that in reality there often arise two different teams. One NSE team writing a business plan, and one external team having the ownership and decision power. This way the NSE work is reduced to consulting work and not real business development”.

Some of these groups have later started over again with less technology intensive ideas. As one interviewee puts it, *“some may think that (non-technology ideas) do not belong at NSE, but as long as we do not have any recent successes (of technology startups) it is hard to gain support of choosing high tech.”* Another interviewee, having started again without external partners disclosed: *“We wanted to start something and making decisions without having to wait for someone else to approve. The progress just suffered too much on lack of commitment from our external partners”*

So while finding evidence that NSE seeks to overcome the experience problem with connecting with external partners in the search, and exploitation for business ideas. It is obvious that there are some challenges in succeeding with this process.

POTENTIAL IMPROVEMENTS

Mentors and learning

When asked of what they believed would remedy these problems, students e.g. suggested an institutionalization of evaluation and selection with more assistance from mentors and more learning from previous mistakes.

“More should be done to educate the students in previous mistakes. As of now I have the feeling that the same mistakes are done every year”.

“More mentors and coaches with experience since they early can spot collaborative difficulties and projects that should not be pursued”

“Institutionalization of evaluation and team creation could help not repeating the mistakes from previous classes”

Acid tests

The problems experienced by the students when collaborating with external partners seem to have several different explanations. One of which could be flaws in the analysis of the business ideas. As one student puts it: *“The Acid test framework is maybe too much a test of concepts, and the team is underemphasized”*. As a basis for further discussion, a thorough analysis of the acid tests from the last two years was conducted and revealed some challenges in other areas as well as related to the analysis of external founder.

- As a rule more than an exception, the conclusion was not built on the rest of the analysis.
- The acid tests were more a collection of information than an analysis at all and while for example the description of competitors and substitutes is given, little was said on how the competitive environment is positive or negative for a potential startup in that space.
- The importance of the team was undermined in the analyses, often not even looking into the working background of the founder.

Only 20% of the students graduating from NSE (2010 and 2011) continue an entrepreneurial career immediately after graduation, and because of the short age of the program, no long term effects can yet be seen. When the students graduating 2012 were asked if they thought they would continue their projects after graduation, alternatively what conditions would have be present for them to do so, most cite economic potential as the main driver for a decision to continue. Some also point to the possibility of having a career comparable to that possible as an employee, in terms of responsibility and challenges. This probably reflects the fact that students of NSE mostly are recruited to high status jobs, mainly in finance and consulting, often even long before graduation. In a 2008 evaluation of NSE, 95% of alumnae view it as probable that they participate in a startup later in their career (Engløkk, 2008).

LITERATURE REVISITED

Based on the empirical findings, the literature is revisited once more in order to come up with recommendations to improve the process of idea selection and exploitation. “(...)

experienced entrepreneurs appear to focus in their efforts to identify opportunities on factors likely to influence success, while novice entrepreneurs tend to be fascinated with sheer newness or novelty” (Baron & Ensley 2006, p. 1339). Naturally the experienced entrepreneurs know what to look for since they already have experienced the process of exploitation. In the following, some characteristics and attributes that can enhance the chance of success are established, as a basis for search and decision to exploit. The main sources of these characteristics and attributes are (1) literature on venture capitalists investment decisions, (2) literature on attributes among successful ventures and growth companies (3) literature on opportunities and (4) literature on the individual entrepreneur. If attributes that can increase chance of success can be isolated they can also be taught and since it is now clear how to teach aspiring entrepreneurs to be more alert (Fiet, 2007), this could be a considerable contribution to entrepreneurship education.

Venture capitalists decision criteria

Venture Capital firms are those organizations whose predominant mission is to finance the founding or early growth of new companies that do not yet have access to the public securities market or to institutional lenders (Gupta & Sapienza, 1992), they are in other words professional investors in startup companies. In 2010 in the USA, companies that were at one point in time backed by venture capitalists accounted for 11% of jobs and 21% of GDP (Thompson Reuters, 2010), constituting solid evidence of the contribution VCs have had to the economy and society as a whole.

VCs have developed strict routines in analyzing venture potential. This can also be useful for entrepreneurs, especially those in need of VC funding (Hall & Hofer, 1993). Before making an investment they carefully scrutinize the founders and their business concept (Fried & Hirsch, 1994) and Venture capitalists are generally thought to be successful at predicting new venture performance (Shepherd et. al. 2000).

When using venture capital investment decision criteria as proxy for entrepreneurial decision criteria, we have to bear in mind two things, first, Venture capitalists have a preference for companies that increase their value ten - to hundredfold over a relatively short timeframe or as Mason & Harrison (2002) put it, hitting home runs; and second, the success of companies backed by venture capitalists is not only determined by attributes ex ante the founding event, but also by value added work by venture capitalists. Hellman and Puri (2002) find that funding by VCs contribute to the professionalism of startups and that these ventures have superior performance over non-VC-backed ventures. Even if only one in 600 startup companies receive venture financing, 60% of companies reaching an initial public offering (IPO) have backing from VCs (Kaplan & Lerner, 2009), so even as decision criteria in venture capital cannot be blindly accepted as a basis for a decision to exploit an opportunity, there are certainly elements in VC backed companies increasing the chance of success.

So what are the attributes and characteristics influencing the investment decisions of venture capitalists?

Hirsch and Jankowicz (1990) isolate three basic constructs as basis for venture capitalists decision making, namely Concept, Management and Returns. Fried and Hisrich (1994) expand on these investment criteria. Concept has four subtopics, first, potential for earnings growth, which can come from a rapidly growing market, increasing market share or significant cost cutting; second, the concept must involve a business idea (product service or retail concept) that works already, or can be taken to the marketplace within a limited period of time (max two or three years); third, the concept must have considerable competitive advantage versus competitors, or be in a relatively non-competitive industry fourth the concept must have reasonable capital requirements (ROI). Within the second basic construct, management, Fried & Hisrich (1994) elaborate: they must have displayed personal integrity; they must have done well in prior jobs; they must also be realistic, hardworking, and flexible and have a thorough understanding of the business. Within the returns construct, the investment must provide an exit opportunity, potential for high rate of return and high absolute returns. Kaplan and Strömberg (2004) find that market size and growth is the most often cited driver for investment decisions. Another research by Shepherd, Ettenson and Crouch (2000) finds that on average, the most important criterion for venture capitalists in their assessment of profitability is industry-related competence. The second tier of importance is competitive rivalry, and educational capability. The third tier of importance is lead time, key success factor stability and timing x lead time interaction. In addition an earlier literature review by Hall and Hofer (1993) find several aspects of interests for venture capitalists, the attributes found important in most of the underlying research being, Managerial capabilities, and also experience of management team, cash out potential, stage of development and a proprietary product.

These important decision criteria found important in the venture capital community can be summarized through a model.

Figure 1 - Venture Capital summarized



LITERATURE ON ATTRIBUTES AMONG SUCCESSFUL VENTURES AND GROWTH COMPANIES

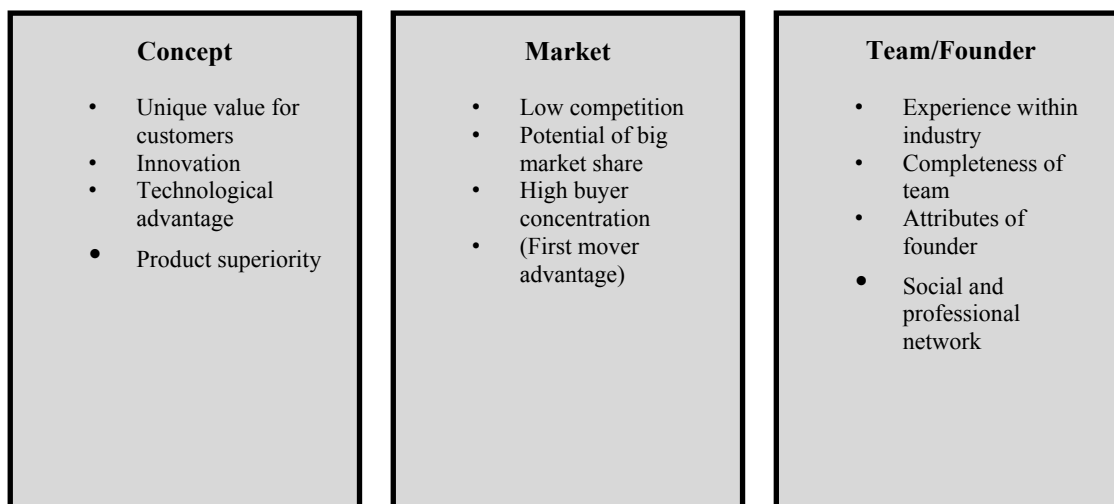
Over the years there has also been some empirical research and theorizing on attributes that enhance the value of a company or venture and also several literature studies examining and summarizing this research. This research is a combination of empirical investigations of attributes that have actually lead to higher survival rate, theorizing on the same subject, etc. - Whereas the VC-literature merely states what VCs do, under the former mentioned assumption that these are successful at predicting new venture performance (Shepherd et. al. 2000).

By many scholars, what is regarded as the most important factor of new firm success, are the attributes of the founder or the founding team. In a preliminary to their 2003 article, Characteristics, Contracts, and Actions: Evidence from Venture Capitalist Analyses, Kaplan and Strömberg (2000) find that companies in which the VCs assessment indicated a strong management team are almost three times more likely to go public. The attributes of the founder are reflected into the firm as a lasting “stamp” that influences culture and behavior (Mullins, 1996). The founders lay an important foundation for the development of the firm, including strategy, operations and not least recruiting of employees. It is therefore not especially surprising that the founding team is of great importance as an indicator of firm success. More specifically the literature points to especially several areas of founder characteristics that will have a positive impact: Experience within the same industry (Cooper & Bruno, 1977), education (Watson et al., 2003; Sapienza & Grimm, 1997) and the completeness of the founding team. A broad social and professional network also has a positive influence on chance of success (Hansen, 1995; Birley 1985).

In regards to market and industry factors a market with low competition is favorable (Roure & Maidique, 1986), since competitive intensity usually reduces overall industry profitability. A venture looking to be successful should also attack markets with a high buyer concentration (Roure & Keeley, 1990; Duchesneau & Gartner, 1990) and aim at markets where they can gain a high market share and therefore play an important role (Roure & Maidique, 1986). A first mover strategy is somewhat of a twofaced sword. Although these firms enjoy higher risk of failure (Aaker and Day, 1986; Nelson and Winter 1982; Mitchell, 1991), they enjoy higher returns than their later counterparts (Schumpeter 1975; MacMillan, Siegeal and SubbaNarasimha 1985; DeCastro and Chrisman 1995).

There are also some aspects on the business idea or concept believed to have a substantial impact on success rate. Firms creating unique value for customers have a greater chance of success (Doorley and Donovan, 1999; Kim & Mauborgne, 1997), the same with firms enjoying product superiority (Roper, 1997; Roure & Keeley, 1990). The quality of their products or services creates value for customers, encouraging repeat sales (Barringer et al, 2005). Innovation (DeCarolis & Deeds, 1999) and utilization of new, advanced technologies are also positive characteristics of growth companies and successful ventures.

Figure 2 - Attributes found in research



Mitchell (1998) determined six basic attributes of viable business ideas: innovation, value, persistence, scarcity, non-appropriability, and flexibility. According to Fiet (2007) there are four attributes of the opportunity that together make out the potential of the venture ideas, to be exploited for competitive advantage and wealth creation. Fit: Does the specific knowledge of the founding team fit the opportunity to be exploited? Value: Does the opportunity, if exploited, have a potential of creating economic value, as creation or increase of revenues and decrease of costs? Rarity: Are there a vast number of competing threatening the market so that the chance of exploiting it with an economic profit is small? Inimitability: Does the venture have a cost advantage to competitors trying to follow a similar strategy? The only attribute not already covered is that of founder-idea-fit. The specific knowledge of the founder or the founding team must, as stated, fit that needed to exploit the opportunity.

It emerges from this theory that not only will experience increase the likelihood of finding an appropriate business idea, it is also the first and foremost indication on a successful exploitation, according to both research and practitioners. This will necessarily have implications for entrepreneurial education.

When it comes to improving the acid tests, these findings can be used to either restructure the framework used, or to give some additional recommendations to the framework employed today.

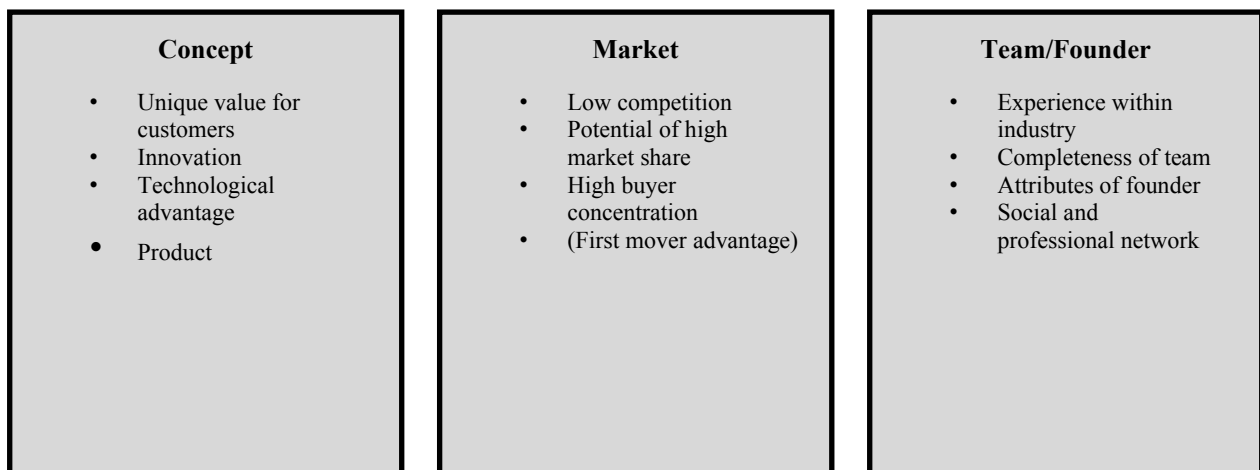
For an entrepreneur student in learning, trying to establish a business with an external founder arguably some of these attributes are more important than others. Some of the more venture capital specific criteria in order to secure exponential growth will not be of the greatest importance. Creating unique value for customers and a potential and economic profit will however be important conceptual attributes, as well as technological advantage if applicable. In terms of market characteristics, low competition, potential of a high market share and a low

buyer concentration are elements that increase the potential of success, and therefore something that should be part of the analysis of startup potential. What seems to be of greatest importance in earlier research are attributes connected to the founder or the founding team. This should be properly addressed. The attributes related to the team and founder are:

1. **Experience related to the industry**
2. Network
3. Founder characteristics
4. Completeness of team

The characteristics can be summarized:

Figure 3 - Attributes applicable for NSE



When analyzing opportunities discovered by others, these students must combine the perspective of venture capitalists, with that of prospective entrepreneurs. They must combine the thorough analysis of the people involved with a personal assessment of whether the idea is a good fit with their personal knowledge, skills and motivation.

DISCUSSION

Experience, both that related to the startup process and that related to industry, is again and again emerging throughout the entrepreneurship literature as a factor in opportunity discovery, evaluation and exploitation; - the main (theoretical) stages of an entrepreneurial venture. When aiming to educate future entrepreneurs, methods of action learning are believed to be advantageous over traditional learning methods. Action learning can be a way to build the startup experience necessary for a later entrepreneurial career, since entrepreneurship consists many elements that cannot be learned through traditional methods. Interestingly, the curriculum

of NSE is in good correspondence with the suggestions of Hood & Young (1993), emphasizing strategy, financing, marketing e.g. in traditional lectures and weighting attributes like leadership experience, self-motivation and values when selecting students.

An important issue with the tendency of students to abandoned projects with external involvement is the threat to the technological profile of the education. If the success stories all consist of non-technology ventures, this can be potentially harming to the recruiting of students with ambitions to start technologically focused ventures. This is a very important reason to improve the process of finding and selecting business ideas or opportunities.

The analysis of the acid tests, and the study of the literature on attributes increasing chance of success, reveals flaws in the analysis process, mainly in the area of founder related attributes. The founder's influence on success seems to be underemphasized to a degree that maybe damaging for the ability to create successes from technological ideas with external partners.

When interviewing team members of all startup teams of the class of 2012, problems with the founder or other stakeholders were often given as challenges. This can be a consequence of the deficiencies in the analysis or acid tests. Based on the interviews, the analysis of the acid tests and firsthand knowledge, it is very possible that the success rate of NSE ventures could be improved with a better analysis of the entrepreneurial opportunities present and with a more thorough search for opportunities. An answer to this problem is not only relevant to NSE but in all cases where the decision to become an entrepreneur has been made ex ante of the opportunity discovery, and for all institutions aiming to educate future entrepreneurs.

A source of problems with evaluating and selecting the right ideas, is that this process in the case of NSE starts parallel with the individualistic teaching of themes that optimally should be known in advance such as marketing, strategy etc. This may possibly be part of the reason that the conclusions in the acid tests are so loosely based on the information in them. At this point in time, students do not yet know the meaning of their findings. Here the institution should provide some guidelines. Adding quality assured questions to the evaluation framework would be a low threshold solution to this. Examples of these questions are:

Team:

- Has the founder relevant industry experience?
- Has the founder done well in his prior job
- Has the founder access to a network helpful when exploiting this opportunity?
- Can the lacks of the founder easily be replaced without the founder opposing this?

In the market category, for example: Does the business opportunity have a high buyer concentration? To all categories, questions of this character can easily be developed based on the findings presented in the previous parts of this paper.

But possibly a deductive knowledge focus when analyzing ventures is not enough to succeed. Potentially the mere analysis itself needs to build on a basis of prior experience. Mentors, external partners or former students could be brought in to also help on the evaluation and selection of ideas. A need for more mentorship was suggested by some of the students

interviewed. Mentors could be used as a way of improving both opportunity validation and exploitation. Several scholars have called for the stronger tool, "entrepreneurs in residence". This strategy is of course more resource demanding. When aiming to teach through action learning and the establishment of real ventures, the university could institutionalize some of the elements called for by entrepreneurship literature such as experience and also a network needed to gain access to the necessary resources.

Important is also the search process for these opportunities. The best optimized analysis will not make up for an idea/opportunity basis without the necessary potential. When trying to establish a framework for active search for opportunities, Fiet & Patel (2006) emphasize experience and prior knowledge as the fundament for building a search procedure. This of course complicates the process for students in need of business ideas for their action learning startups. Necessarily a more optimized process of gaining access to external ideas should be developed. This is also suggested by several of the interviewed students. Secure more and higher quality ideas through a more formalized collaboration with industry partners and universities could be a solution.

There are some general implications which can be drawn from this instrumental case study. Some recommendations for the improvement of an action based entrepreneurship education are:

- External ideas are an effective tool in action based entrepreneurship education, since it is difficult to discover opportunities without having an experience base.
- When using external ideas, the founder/team involved should be analyzed as were you a venture capitalist.
- Utilizing a checklist with guiding questions can remedy lack of previous knowledge, when analyzing ideas at an early point in time of the entrepreneurship education.
- Mentors or entrepreneurs in residence should be involved in the process of evaluating and selecting ideas.
- The institution should help remedy the student's lack of network by establishing contact with general entrepreneurial resources (lawyers, accountants, industry specialists).
- The institution should provide a structured process securing access to as many ideas/opportunities to

As stated in the findings, the majority of students from NSE go into high status jobs after graduation. By some, this is seen as a indicating a problem with the school and a failure to educate entrepreneurs. It can however also be argued that the number of students continuing their career with a "direct from school- startup" is not an adequate measure of the impact of the education. If NSE manages to provide the students with an entrepreneurial mindset and entrepreneurial ambitions, the longtime effects of the study program may prove great. Students may gain valuable industry and leadership experience through their employment, and utilize this in later startup projects later in their working life. As the study program is merely 5 years old, it

is yet too early for any empirical work on the long term effects but the 95% of alumnae indicating future startup ambitions (Englökk, 2008) certainly look promising. In any case, it is important to increase the number of students working with entrepreneurial ventures during their entire time at NSE, to increase the learning effect. It seems fair to suggest that if the intensity is kept equal, the longer venture involvement is prolonged, the more experience is accumulated. And for this reason it is important to better the process of selecting the right ideas.

LIMITATIONS AND FUTURE RESEARCH

While this paper examines the advantages and challenges of action based education based on one single case, it is important to note that none of these findings may apply to other (technological based) entrepreneurial education contexts. That is to say, the aim is not to achieve and defend a statistical generalizability, but to provide a context of application to enable naturalistic generalization. The concept of naturalistic generalization is described as a partially intuitive process arrived at by recognizing the similarities of objects and issues in and out of context (Stake 1980, p. 69). Hence, it is essential that the case study is properly descriptive as readers may recognize essential similarities to cases of interest to them. These are similarities which can be associated to the fact that hardly no action based entrepreneurial educational program is without challenges. For example challenges regarding dealing with analyzing opportunities discovered by others as shown in this case, students should combine the perspective of venture capitalists with that of prospective entrepreneurs.

To bear in mind that it is through education that research on entrepreneurship could do a lot for business practice (Davidsson 2002), it seems reasonable to propose future research along these lines. Future research may focus on how to measure the level of learning that occurs for the student entrepreneur during the experiential process. A simple pre-test and post-test could capture entrepreneurial knowledge prior to and after each project in order to determine the project's effect on the students. This measurement would also allow the researchers to analyze which projects benefit entrepreneurial learning the most and at which experiences seem to have the greatest impact for students. Even without this research, however, it is reasonable to assume that from an educational perspective, this action based type of learning and education is valuable because students get to act like an entrepreneur without incurring any (real) risks, and potential entrepreneurs get information at little cost. Future research could also further explore the impact of 'Train the trainer' provision to educators, not only from the perspective of the educators but also, through comparative analysis of student feedback and assessments. Moreover, the feedback can generate re-definition of goals, contents and pedagogies. Maybe we also need more in-depth case studies to get a more accurate picture of one of the main challenges for entrepreneurship educators: they have to meet the rigors of academia and science while keeping a practice-based focus and entrepreneurial climate in the learning experience environment (Solomon, Duffy and Tarabishy 2002).

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EMERGING DIVERSITY INTEGRATION: LATINO YOUTH ENTREPRENEURS AND THEIR DESIRE TO PURSUE EDUCATIONAL GOALS IN THE UNITED STATES

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ABSTRACT

Youth Venture, a youth organization started by ASHOKA launched the Tu Voz My Venture initiative in conjunction with The Bill & Melinda Gates Foundation. This initiative launched 82 teams across the United States. Teams were awarded start-up grants of up to \$1,000 to launch their ventures to young Latinos.

Participants' experiences and initial progress reports of 30% of teams three months after their initial launch were analyzed. Four variables were analyzed: Impact on Educational Goals; Impact on Life Skills and Engagement; Impact on Communities Served, and Programmatic Knowledge. Results indicated that the work of venture teams has an impact to both the Latino communities that were the focus of the ventures as well as the community at large. Survey participants also strongly conveyed that the activities of the young people involved in the ventures have positively affected the perception of Latino youth in their communities in addition to positively impacting the education of Latino students.

Because of the Tu Voz My Venture initiative in furthering educational goals and achievement indicated by evaluation results, it is recommended that this model is replicated by other youth organizations to reach more youth from vulnerable populations around the country.

Keywords: Latino, youth, social entrepreneurship, venture, Youth Venture, ASHOKA, youth entrepreneurship education

INTRODUCTION

The progression of young people into the labor market remains a problematic area for policy makers. Most of us will agree that education is the answer to most, if not all, the questions raised by the global knowledge based economy. In the United States, an emerging youth group "Latino Youth" is questioning if education is the only way to insert themselves in the labor market.

The United States grew steadily more diverse last year, with Latinos holding on to their rank as the nation's largest and fastest-growing minority group, a trend with far-reaching implications for American politics and immigration policies. Newly released figures from the U.S. Census Bureau show that the nation's Latino population grew by 1.4 million in 2007 to reach 45.5 million people, or 15.1% of the total U.S. population of 301.6 million (*Los Angeles Times*, May 1, 2008). Blacks ranked as the second-largest minority group, at 40.7 million.

By 2020, about one in three Americans will come from a minority background (Ingram, 2002). We need to target this population with strategies that will keep the Hispanic student in school, to be able to graduate, to attend post-secondary universities, and to pursue a career. In 2000, approximately 1.56 million U.S. residents ages 16 to 19 had not graduated nor were enrolled in school. Of the total, nearly 34 percent were Hispanic.

Youth Venture, a youth organization started by ASHOKA,- the oldest largest and fastest growing association of the world's leading social entrepreneurs-, launched the *Tu Voz My Venture* initiative in conjunction with The Bill & Melinda Gates Foundation in an effort to transform the lives of Latino youth by improving their interest in education, self-confidence, life skills, community engagement, and leadership skills.

Youth Venture is based on the simple underlying and core insight that if an individual is powerful as a young person, they are highly likely to be powerful as adults. To be powerful – in fact, to be a full citizen in a world characterized increasingly by change – one must be a changemaker. Youth Venture invests in young people to become changemakers by inspiring and guiding them as they create their own sustainable, community-benefiting ventures. In starting a venture, young people learn important skills of leadership, entrepreneurship, teamwork, and empathy, as well as other practical skills, as they form teams and run ventures together.

Youth Venture, supported by the Bill & Melinda Gates Foundation, launched *Tu Voz My Venture* as a collaborative effort. The goal of this initiative was to empower Latino youth to take action on education, and to inspire and support Latino teams in creating their own sustainable social ventures to prepare for productive and engaged futures. The goal of *Tu Voz My Venture* was not only to help young Latinos to take initiative and address challenges they face in their schools and communities, but also to transform the lives of these youth by improving their interest in education, self-confidence, life skills, community engagement, and leadership skills. Youth Venture surpassed its goal of 50 Venture Teams by successfully launching 82 teams across the United States through the *Tu Voz My Venture* initiative. The teams were awarded start-up grants of up to \$1,000 to launch their ventures to help young Latinos stay in school and prepare for college and beyond. Additionally, five finalist teams were selected to receive a \$5,000 scholarship towards higher education.

In order to better understand the *Tu Voz My Venture* participants' experiences making change, the initial Progress Reports of 30% of teams three months after their initial launch were analyzed. Even though preliminary results were positive, additional research was needed to

substantiate these findings, further measure the impact of the program on the individual, team, and community, and advance institutional knowledge on working with Latino youth.

As Youth Venture expanded in the U.S. and increased outreach to Latino youth, there was a desire to increase knowledge of the needs of this major minority group in order to better improve current services and outreach strategies. This information was also helpful to work with other vulnerable populations.

THEORETICAL FRAMEWORK

La Comisión Económica para Latino América y El Caribe de las Naciones Unidas (CEPAL) and la Organización Iberoamericana de Juventud (OIJ) (2004) reported that economic pressures have youth combine work with higher education, and even though this practice could ease youth into the labor force in the future, it has detrimental consequences in academic performance. The report states that education is still considered a key factor to improve the employment prospects for youth in Latin America; however, in times of economic crisis, educational attainment does not guarantee successful insertion in the labor force, there is an increase in the last decade of “academic unemployment” leaving youth with high levels of education working in low productivity sectors.

More groups of youth improved their insertion in the labor force when they incremented their work experience in hard skills (procedural and organizational knowledge) as well as soft skills (attitudes and dispositions). However, not all youth benefit from this process; many young women or youth with very low educational levels do not reap the benefits of this competitive advantage (CEPAL & OIJ, 2004). The O’Connor and Ramos (2006) study explored how education and development in the skills of innovation, foresight and entrepreneurship relate to the empowerment of young people in respect to creating new ventures. Three groups of youngsters aged 13-18 were evaluated with mixed-methodology nine months after their participation in an entrepreneurship program. Results indicated that innovation and enterprise education empowered young people in a dynamic way; it was evidenced that more than a skill level was raised but a sense of accomplishment that translates into confidence that leads to initiative and responsibility taking. The study suggested that a form of social empowerment or agency may be one prerequisite to entrepreneurship. The empowerment stage was where students found sources of inspiration, innovation and renewal that gave them a sense of hope, motivation and direction. Students were socially empowered to find new relationships, networks, practices, behaviors and projects that address their entrepreneurial interests.

Research shows that attitudes can change across time and across situations through interactive processes with the environment. Attitude can be considered a dynamic interactional way that an individual relates to the object, changing from situation to situation (Ajzen, 2001; Chaiken & Stangor, 1987). As entrepreneurial attitudes are open to modification, they may be influenced by educators and practitioners. Youth entrepreneurship programs geared to Latinos in

the United States can benefit from targeting thoughts, feelings and behavioral intentions to produce change towards a more positive entrepreneurial attitude. Llisterri, Kantis, Angelelli, and Tejerina (2006) found that young entrepreneurs get their first work experience from their entrepreneurial initiatives. For most, it is their only way to get qualified for future jobs. The field of youth entrepreneurship education will benefit with the results from this study as it enhances the impact of entrepreneurship as a tool for youth and workforce development, and provide further insight for more intentional educational interventions.

EVALUATION GOALS

The evaluation was designed to answer four primary research questions:

How does participation in Tu Voz My Venture impact the individual lead Venturer and team members in pursuing educational goals, with a specific focus on high school and college?

How does participation in Tu Voz My Venture impact the individual lead Venturer and team members in life skills development and youth engagement in the high school/college environment?

To what degree do Venture Teams impact the communities they serve?

What can Youth Venture add to its programmatic knowledge in the area of launch and post-launch support for vulnerable youth, specifically Latino youth?

METHODOLOGY

Two types of instruments and methods were used to answer the research questions described above according to the type of data gathered. An online impact survey instrument was developed for quantitative data, and a focus group interview protocol was developed for qualitative data; both instruments were tested for reliability.

Quantitative Analysis

Attempts were made to contact all 164 *Tu Voz My Venture* participants (lead Venturers and team members). Surveys were completed online and over the phone by 79 past and present lead Venturers and team members for a response rate of 48 percent:

- 67.1% of participants were lead Venturers.
- 32.9% of participants were team members.

The data gathered was conducted over a two month period. The data has a Confidence Interval of 95, a maximum Margin of Error of +/- 3% for paired sample tests, and all items were statistically significant $p < 0.05$. The internal consistency reliability is 80%, Cronbach's Alpha (.80) for all items *Before* and 91%, Cronbach's Alpha (.91) for all items *After*. The data collected was analyzed using descriptive and inferential statistics.

Qualitative Analysis

In total nine focus groups were conducted, gathering insight from 47 Lead Venturers, team members, and allies. Five on-site focus groups of four to eight participants were conducted in Washington, DC and New York, in addition to several supplemental ally interviews in New York. Four groups were comprised of Lead Venturers and team members and one group was comprised of allies.

Additionally, four conference call focus groups were conducted to gather input from *Tu Voz My Venture* participants living throughout the United States. Two groups were comprised of Lead Venturers and Team members and two groups were comprised of Allies. Each group lasted approximately 90 minutes.

The data collected from survey open questions and focus groups was analyzed using thematic and trend analysis.

RESULTS

The evaluation results are arranged to respond directly to the four research questions:

How does participation in Tu Voz My Venture impact the individual lead venturer and team members in pursuing educational goals, with a specific focus on high school and college?

Impact of *Tu Voz My Venture* on the Pursuit of Educational Goals

The evaluation sought to capture the impact of involvement in the *Tu Voz My Venture* initiative on participants' pursuit of educational goals by measuring changes in attitude after six months of work in a venture in four capacities: awareness, motivation, preparedness, and action. Survey results indicate significant increases in participant agreement in all indicators, particularly in motivation to pursue education goals, and most youth expressed that the

entrepreneurial venture experience impacted their interest and motivation in pursuing higher education.

Changes in the awareness of the benefits of graduating and pursuing educational goals

The change in the mean difference in the *awareness* variable of the benefits of graduating before and after participation in the *Tu Voz My Venture* program is statistically significant, $p=.000 < 0.05$.

Before launching or participating in a venture, 62% of youth reported to have a clear vision for their career path, while 86% of youth reported having a clear vision for their career path after six months working with a venture.

BENEFITS OF GRADUATING	Disagreement (%)		Agreement (%)	
	(1 or 2 on 1-5 scale)		(4 or 5 on 1-5 scale)	
	Before	After	Before	After
I believe that there are benefits to graduating	5.1	1.3	93.7	96.2
I am likely to finish High School or College	3.8	2.6	91.2	97.5
I have a clear vision for my career path	13.9	6.3	62	86

Changes in motivation to pursue educational goals

The change in the mean difference in the *motivation* variable to pursue educational goals is statistically significant, $p=.000 < 0.05$. Before launching or participating in a venture, 62% of youth reported that they often talked about their educational goals with teachers, professors or counselors, while 96% of youth agreed with this statement after six months working in a venture.

MOTIVATION	Disagreement (%)		Agreement (%)	
	(1 or 2 on 1-5 scale)		(4 or 5 on 1-5 scale)	
	Before	After	Before	After
I am motivated to pursue my educational goals	5.1	1.3	87.3	96.2
I want to attend college, technical programs or graduate school	1.3	1.3	89.9	97.5
I often talk about my educational goals with friends and family	12.6	3.8	67.1	88.6
I often talk about my educational goals with teachers, professors or counselors	12.6	1.3	62	96.2

Changes in preparedness and skills for pursuing educational goals

The change in the mean difference in the *preparedness* variable to pursue educational goals is statistically significant. Before launching or participating in a venture, 73.4% of youth reported feeling prepared to attend college or begin a career, while 92.5% of youth agreed with this statement after six months working in a venture, illustrating a 19.1% increase in feelings of preparedness.

COLLEGE PREPADANESS	Disagreement (%)		Agreement (%)	
	(1 or 2 on 1-5 scale)		(4 or 5 on 1-5 scale)	
	Before	After	Before	After
I feel prepared and ready to attend college / begin a career	7.6	2.6	73.4	92.5

Changes in action taken regarding pursuit of educational goals

The change in the mean difference in the *action* variable to pursue educational goals is statistically significant.

ACTION	Disagreement (%)		Agreement (%)	
	(1 or 2 on 1-5 scale)		(4 or 5 on 1-5 scale)	
	Before	After	Before	After
I am working towards graduation	2.6	1.3	92.4	98.7

Effect of Youth Venture in pursuing higher education (HE)

A strong majority of youth surveyed report (4 or 5 on 1-5 scale) that Youth Venture experience has affected their attitudes towards higher education:

- 81% report that the Youth Venture experience has affected their *interest* in pursuing higher education;
- 88.6% report that the Youth Venture experience has affected the *motivation* of participants and/or team members to pursue higher education; and
- 88.6% report that the Youth Venture experience has affected the *preparedness* of participants and/or team members to pursue higher education.

EFFECT OF YOUTH VENTURE IN PURSUING HE	SD%	D%	Slightly Agree %	A%	SA (%)
Youth Venture experience has affected my interest in pursuing higher education	7.6	3.8	7.6	35.4	45.6
Youth Venture experience has affected the motivation of participants and/or team members to pursue higher education	1.3	0.0	10.1	51.9	36.7
Youth Venture experience has affected the preparedness of participants and/or team members to pursue higher education	1.3	0.0	10.1	51.9	36.7

While a few youth are unsure what their next steps will be, the majority of youth surveyed expressed clear future ambitions and outline concrete steps they are taking to reach those goals.

Most high school participants plan to graduate from high school, with many reporting plans to apply to and attend college, and some reporting plans to continue working to help other Latinos finish high school. A few participants also report interest in attending technical or vocational schools to prepare for careers such as automotive technician, massage therapist, and television production.

“I plan to be the first one to finish high school in my house. I want to be successful and do not want to work like my parents, three jobs for little money. No matter what I will graduate....I also want to get a scholarship to go to College.”

-Male Venturer from New York

Most college participants are more focused on their immediate graduation plans as a road map to a successful career in fields as varied as photojournalism, neurology, criminal justice, education, and nursing. Some of these participants expressed using internships and studying abroad as strategies to solidify their career plans or open their horizons to new possibilities. Choices of current and future higher education vary among participants and include community, private, and public colleges. Several youth report aspirations to pursue graduate and PhD studies in the fields of law, business, physics, and medicine.

“The Venture has done a lot for the students at our college. We have students who look like them and are going on to graduate, going on to 4-year degree, getting all kinds of degrees. Some of them had dropped out and then see an old classmate, find out about financial aid programs, tell them it is going to be okay and try to help them solve the problem.”

-Female Ally from Oklahoma

Some participants expressed an interest in pursuing a career in education after working with the field in various capacities through a venture project. These young people state interest in educational administration, direct education, working with Teach for America, and counseling Hispanic youth to attend college. One focus group participant outlined specifically how Youth Venture experience through the *Tu Voz My Venture* initiative impacted her feelings towards pursuing a career in education:

“Education is second nature to me, and now through Youth I felt like the whole Venture was planning a curriculum. I discovered that my Venture’s essence was teaching. I am an English major, I am studying film, and now I want to use videography to teach kids about Latino folktales.”

-Female Venturer from Virginia

Similarly, after participating in a Venture and enjoying working with the community, several youth have decided to integrate community outreach work into their future career plans. Interests in this area include: immigration law, non-profit graphic design, public health, and continuing to work in the Latino community.

“My daughter said she wanted to teach English always, but now she says she also wants to be in public relations to communicate out to the community.”

-Female Ally from Texas

How does participation in Tu Voz My Venture impact the individual lead venture and team members in life skills development and youth engagement in the high school/college environment?

Survey results and focus group discussions confirm that youth who participated in the *Tu Voz My Venture* initiative report an increase in knowledge of critical life skills and an increase in engagement in education and educational environments.

Life Skills

Survey results show an increase in life skills developed by youth who participated in the *Tu Voz My Venture* initiative (see Table 1). When asked to rate the strength of particular life skills after six months of work with a venture, survey results display increases of knowledge in all fields compared to responses about knowledge before the start of a venture. Specifically, youth report high levels of knowledge (4 or 5 on 1-5 scale) in life skills after working in a venture as follows:

- 97.4% in being a successful member of a team;
- 96.2% in successfully leading a team;
- 91.1% in setting and achieving goals;
- 91.1% in the field of planning;
- 87.4% in evaluating work;
- 86.1% in the field of budgeting;
- 82.3% in getting assistance and finding mentors; and
- 75.9% in organizing volunteers.

Life Skills (%)		No knowledge of	Limited knowledge of	Some knowledge of	Knowledgeable	Highly knowledgeable
Being part of a Team	Before	1.3	5.1	22.8	54.4	16.5
	After	0	1.3	1.3	31.6	65.8
Leading a Team	Before	6.3	11.4	34.2	34.2	13.9
	After	0	1.3	2.5	26.6	69.6
Setting and Achieving Goals	Before	2.5	15.2	25.3	32.9	24.1
	After	0	0	8.9	32.9	58.2
Planning	Before	5.1	11.4	40.5	35.4	7.6
	After	0	0	8.9	43	48.1
Evaluating work	Before	6.3	12.7	32.9	38	10.1
	After	0	2.5	10.1	49.4	38
Budgeting	Before	12.7	27.8	40.5	19	0
	After	0	1.3	12.7	63.3	22.8

Most youth referred to their gain in life skills as one of the most rewarding parts of the *Tu Voz My Venture* experience.

“I learned that to be the leader was not to be the boss but to have what it takes to keep us all focused and happy working for the community.”

-Male Venturer from California

“We did not know how to act as a team in the beginning, we were all doing the same thing or we would get into arguments very quickly. We had to learn how to work together if we wanted the project to succeed.”

-Male Venturer from New York

“To have done the whole project by ourselves gave us skills that we will never forget and that we can apply in school and at work... I never saw myself doing a budget or planning a schedule for all mentor volunteers and at the same time solving problems with the kids!”

-Female Venturer from New York

One focus group participant cited increased knowledge in fundraising, a life skill not captured in the survey:

“The biggest accomplishment for us was the benefit. We raised \$15,000 at the event, about \$5,000 more than we expected. We are starting our college tours for a large Latino program, and the students only have to pay \$50 for the program when they would normally pay \$300.”

-Female Venturer from New York

Educational Engagement

Youth surveyed also report increases in engagement in school, in both high school and college environments. Educational engagement was gauged by involvement in school work, extra-curricular activities, and leadership in extra-curricular activities.

EDUCATIONAL ENGAGEMENT	Disagreement (%)		Agreement (%)	
	(1 or 2 on 1-5 scale)		(4 or 5 on 1-5 scale)	
	Before	After	Before	After
I am engaged in my school work	5	2.5	77.2	95
I am engaged in activities at my school /college	6.3	1.3	70.8	91.1
I have taken the lead in school / college activities	22.8	2.5	48.1	87.3

Focus group participants had the opportunity to elaborate on specific ways in which their engagement, including new insights in educational attainment and career paths, has increased:

“I just realized how my grades have gone up greatly... with more responsibility and focus I am able to get better grades in school. Now when I look for jobs or colleges, people really look for leadership, and that is what [Youth] has given me.”

-Female Venturer from Virginia

“Girls are more concerned about community issues and what’s happening around them. They are more responsible and aware. They have a drive and a belief that they can change. They are participating much more in school because they have the power to affect other people’s lives and improve the community.”

-Female Ally from Texas

“My perspective on the actual education has changed. Before, I saw it as a job, something to do when I was older... now I see the actual reason for getting my education.”

-Female Venturer from Georgia

Youth in the focus groups brought up other ways in which their educational engagement has increased as a result of their participation in the *Tu Voz My Venture* initiative. One venturer mentioned how seriously he takes his education now, while another mentioned being more recognized by professors and advisors around campus as a result of his Venture work. Several Venturers discussed how their experiences helped refocus or reshape their educational goals and career paths towards citizen-sector work, or being proud to assert that they were the first college graduates in their families.

To what degree do Venture Teams impact the communities they served?

The survey and focus group results indicate that the work of Venture Teams has impacted both the Latino communities that were the focus of the ventures as well as the community at large. Survey participants also convey that the activities of the young people involved in the ventures have positively impacted the perception of Latino youth within their communities.

Estimated number of volunteers and estimated number of people benefited

Most youth report an estimated number of up to 10 volunteers involved in their Venture in some capacity; most youth also report up to 49 people directly benefiting from the activities and services of their venture.

Estimated Number of Volunteers	Valid Percent (%)
Less than 10	45.6
19-Oct	30.4
20-49	19
50-99	3.8
100 or more	1.3

Number of People Benefited	Valid Percent (%)
Less than 10	17.7
Oct-49	48.1
50-99	13.9
100-499	17.7
1000+	2.5

Impact in the Latino community

Youth report impact in the Latino community in the areas of educational feasibility, awareness of resources available, educational advocacy, parental involvement, academic responsibility, expectations of Latino youth, youth motivation and behavior, volunteerism and community engagement, and issue awareness.

Some youth report that their ventures have helped Latino youth become more familiar with resources available and steps to be taken toward improving their education. They report that the community is realizing that there are opportunities available for Latino students and the Latino community as a whole to succeed. Specifically, many participants report an increase in community knowledge around access to educational opportunities such as scholarships and other resources for low-income Latinos and other minority students without funds for college. These youth report that the communities they serve now have the information necessary to make informed decisions.

A few youth report community impact in educational advocacy. Some youth became aware of the lack of access to higher education in some states as a result of venture activities, they started to be motivated to actively participate in political campaigns that advocate for rights to education for Latinos, especially for illegal immigrants.

“My kids were very concerned about how to bring real opportunities for illegal immigrant youth. They felt with no answers when undocumented friends asked them for advice; they looked into resources and saw that there were ways to go through the system and get an education even if you are not legal. They became very active in the Dream Act and are looking for ways to voice their opinions.”

-Female Ally from Virginia

One of the major challenges some participants report in motivating Latino youth to finish high school and further their education is parental support. Through the work of the ventures, several youth report that Latino parents are now more aware of the benefits of higher education and ways in which their children can directly impact their income if they finish high school and obtain higher degrees. Several participants report earning the trust of parents and succeeding in

getting them motivated about their children's educational possibilities. A few participants also report seeing communities and friendships created between parents and other family members, expanding the dialogue and creating a culture where it is no longer acceptable for kids to drop out of high school.

"After working with my group of girls I have realized that many of them do not apply for schools because they know their parents would not let them go to any college where they have to leave their homes. Other parents are not educated and want their children to follow their steps at work and do not see any future in getting a degree...that is when I knew I had to start with the parents..."

-Female Venturer from Virginia

"The impact has been that people who the girls have talked to are starting to change their minds about Latinos. People were amazed to see that 10 Latino girls were able to raise the money and go beyond the Rio Grande Valley. Parents need to let go and let the kids see what is out there and trust that they will come back. The parents were really excited, and said 'I am so proud of you that you went out there. Maybe one day my daughter will go and get out there too. I am not afraid anymore.'" It is important for people to see that our kids are not any different; they can do things, too. Things are really changing."

-Female Ally from Texas

Some youth report that most of the team members of the ventures gained visibility in the school, and with the attention came the responsibility to do better academically. As awareness surrounding higher education increased, so did the willingness of these team members and youth served to be proactive with their education in the present. Another trend several participants report in the Latino community is for youth to choose advanced courses or to take mainstream classes instead of ESL classes as Youth Venture felt more mentored and inspired by their peers. These youth report that their peers take grades more seriously, are more committed to school, and have an increased sense of responsibility.

"Our major achievement has been to have some of our students move to mainstream classes. They felt too comfortable with their friends that did not speak English, that they did not want to challenge themselves; it was cool to have low expectations... We encouraged them to move on as we did, we told them that they would really not lose their friends and that they would gain other ones in mainstream. We shared how afraid we also were to let go, but if they wanted to succeed, they had to learn to risk..."

-Female Venturer from Texas

Several youth also report that the work of the ventures allowed their peers to raise their personal expectations as they saw the venturers and team members around them succeed. Youth participants indicate being stimulated and influenced by other youth in their pursuit of higher education. One participant conveys that through life journeys and personal stories, Latino students could directly relate to the lessons learned and generated a support system that allowed them to stay motivated together. A few participants indicate that their ability to impact in this area comes directly from the peer-to-peer connection the ventures allowed them to establish instead of the typical bottom-down approach used by parents and administrators.

Some participants say that their ventures have become avenues for positive activities and prevent negative behaviors among Latino youth. Several youth claim their Ventures encourage alternative behaviors to violence, promote healthy lifestyles, and keep other young people off the streets. These youth say that other young people now participate more consciously in school and take the initiative to be a part of the school or college environment in a more active way, particularly in leadership roles.

“One of the team members has a background with drugs; he was the one who was really motivated with this project and really enthusiastic about it. From then on, he took all the steps necessary to graduate from High School; he wanted to be a mentor, to take the steps that he saw others taking. One other girl, she took the steps to graduate, took the GED, plus got enrolled in community college. She is still attending and taking summer school classes. The team has changed from having nothing to motivate them or being in the streets to taking productive steps. This project has motivated them to complete those steps. Changes were really positive and very constructive.

-Male Ally from California

Several participants report that involvement in a venture generated a behavior that inspired other young people to volunteer in other initiatives in an attempt to also make a difference in the community. Some youth indicate that other young people in their communities even wanted to apply for the creation of their own venture. Many participants also state that the Latino youth in the communities they served are now more likely to ask for help when it is needed because of the active support venturers and team members provide to students to seek assistance and resources.

“We saw that most of our Latino kids are afraid to ask anything, they do not know the system, and with the anti-immigrant climate they are not used to saying anything. We teach them that it is OK to ask for help, to ask a question, and that there are people that care for them everywhere.”

-Male Venturer from New York

Many survey participants cite increased awareness around the issue of their venture as a major impact in the Latino community. Sample venture issues include: the environment, teen pregnancy, health, and scholarship opportunities.

Finally, many youth indicate that they see the need to continue the success of the Venture to obtain lasting impact in the Latino community. In most cases, the participants identify younger kids to continue to maintain the functions of the venture, ensuring that the venture will stay by-youth and for-youth.

Impact in the community at large

Most survey participants report that there was a general shift to a more positive perception of Latino youth in the community at large. A few participants indicate that leaders within the school and general American community see Latino venturers and team members becoming more engaged and more responsible for the situation of Latinos in their communities. Several participants report that the importance they placed on higher education and their futures forced the community to look at young people as both partners and resources.

“The community of Long Island is recognizing them as active members now, and not only as the son or daughters of landscapers or a probable trouble youth. They have gained respect in the community center and the recreation center, they even got jobs there. Without showcasing their work and positive impact, they would have never been visible and valued.”

-Male Ally from New York

Some participants say that some community members were not aware of the experiences that Latino immigrants go through, and these people became more sensitive and conscious of these issues. In particular, one youth reports that the venture made many of the community businesses more aware of the struggle inner city students go through to attain internships and careers that will prepare them for college.

Several youth indicate that the community at large became energized by the participation of Latino students in addressing issues that affect everybody. One participant claims that the efforts of the venture brought the community together by encouraging dialogue between groups who did not typically interact. Another participant attributes community involvement and support to the venture’s efforts to spread community news.

Impact in the education of Latinos

Most of the ventures launched as a result of the *Tu Voz My Venture* initiative are specifically targeted to the Latino community in the form of bilingual educational services, including counseling around higher education, tutoring, after-school activities, college preparation training, and formal and informal mentoring. Venture participants teach peers how to write resumes, help younger kids learn to read, provide homework assistance, create school support groups, provide a safe and fun place in the community, and create a space for creative expression for young people.

Many participants report that Latino students in their communities have become more conscious and knowledgeable about the option of completing and furthering their education. In terms of direct impact, one participant reports that the venture helps students who are not thinking about going to college find trade schools, while other participants say they encourage students to consider the numerous alternatives to dropping out. Another youth reports raising awareness through the venture that young people can go to college, even if they are not financially stable. A focus group participant explains the impact her venture had in the education of Latino students:

“High school students came up to me and said they assumed they couldn’t go to college and we helped them figure out how. It was amazing that we could see that we really did affect people and their personal choices.”

-Female Venturer from Idaho

Participants express diverse ways of exposing young people to the world of higher education. A few ways ventures make the experience tangible include planning visits to college campuses, finding college mentors, and providing research on specific schools. One participant explains that the venture provides a space for interaction between Latino high school students and Latino college students who can serve as role models and mentors.

Another impact several participants report pertains to increased mentorship, both peer-to-peer and adult-to-youth. Youth with ventures related to mentorship say that the young people served feel comfortable with youth who are similar to them, receive their advice, and feel supported. One participant reports being an academic role model for the other students in school as the first member of his or her family to attend college.

Many participants report witnessing an increase in sense of self-worth and confidence that success in society is possible for Latino youth in their schools and communities. Some participants indicate their lack of successful role models at home, as they are the first generation in their families to have a high school diploma or go to college. A few venturers convey that their work and example has helped other Latino students realize that they are also capable of

succeeding in college and elsewhere. One participant states success in increasing confidence among Latino students to apply to college.

“Everything starts with the mind; these kids see that people that look like them and come from the same neighborhoods are doing wonderful things through education. They want the same for themselves, but they do not see it as a reality, as their environment does not show them those examples. The Venturers became those lost and most expected role models.”

-Male Ally from New York

Several participants explain that their ventures assist in the higher education process by acting as mediators between services offered and Latino students. A few ventures provide mentorship to help other Latino youth navigate the school and college system, by helping enroll students in college-bound programs for example. One survey participant states that students are able to take the SAT and ACT exams after receiving support from the venture, while another states that the venture actually helps students pay for SAT testing fees. One participant asserts the venture activities help advance Latino students from ESL classes to general classes, and another venture helps move Latino students from general classes to Advanced Placement classes.

Many youth surveyed indicate their ventures provide assistance with bilingual services as needed. Some venturers report being bi-cultural, aiding them in understanding both the immigrant and American worlds and helping them interact successfully in both environments. One participant offers Spanish-language services to Latino students, because many services are typically available exclusively in English. Another young person says the venture helps the limited-English-speaking students better understand the classes they have with non-bilingual English-speaking teachers.

“There is a great advantage in the fact that Latino Youth [are] bilingual and bicultural; they can reach students that we cannot reach for the language, the position, and our roles in schools. Because we do not look like them, they are already intimidated; my group of girls broke those barriers.”

-Female Ally from Virginia

Participants in several instances report impacting not only the education of Latinos, but all vulnerable groups and ethnicities that need assistance in building a road map to college. One venturer says that the team positively impacts all cultures, not only Latinos, by increasing awareness of the importance of staying in school.

What Youth Venture can add to its programmatic knowledge in the area of launch and post-launch support for vulnerable youth, specifically Latino youth?

In order to improve the support Youth Venture offers to young people, focus group participants were asked to detail both successes and challenges they faced during the planning phase, the launch phase, and the post-launch phase of their venture projects.

Experiences during planning

Focus group participants indicated that most of their ventures experienced some tension in the beginning as it was their first time planning, organizing, and presenting an idea to the real world. Youth report having to conduct further research, become more familiar with community systems and characteristics, and rely on support from their Allies to successfully complete the planning phase.

In terms of challenges during planning, focus group participants reported having trouble finding available space, navigating the school system, working with existing youth-serving organizations, and gaining access to their target youth population. A Venturer and an Ally describe having to adjust plans in the face of unexpected obstacles:

“Planning was a challenge. What we wanted to do was to aim at high school girls, [but] we didn’t exactly know who to talk to. So we talked to a Principal in a high school, then we talked to a Vice Principal. Eventually we worked with a teacher [who] helped us and planning worked out, but it was different [from] what we thought it would look like.”

-Female Venturer from Michigan

“To tell you the truth, I just watched over them. They have planned the whole thing, have gathered all info they needed for planning. They could not get the space they wanted – in the beginning they were given an OK, but it was not formal. When they went back to check, there were problems and found another space. They were in need of encouragement to continue. I gave them the idea to contact the Latino-American association in the neighborhood and that’s where they got space... They thought it would be much easier than it really was.”

-Female Ally from Georgia

In spite of all the challenges, many focus group participants labeled the planning process as a learning experience. A few participants stated that the planning process was impactful in making them think, and another participant said that the learning process was very stressful as it became more apparent that the group hadn’t initially thought things through all the way. Several participants claimed that the process was very helpful and even enjoyable and fun, stating that planning was difficult in the beginning, but got better at the end. One focus group participant

outlines the learning experience and transformation her team went through during the planning phase:

“We had a good idea but to start as a group was difficult. To write a grant and ask for money was a new experience. Most of us were shy, and now we are much more open to new ideas. The experience was nerve wracking but afterwards good. For us it has been a good experience.”

-Female Venturer from Oregon

Experiences during launch

After a panel approves a venture’s Action Plan, the team receives seed funding and Youth Venture launch-support materials. Most focus group participants recounted some initial challenges they had to overcome during this phase, including constant modification of the venture plans in response to the realities they were facing.

Several participants reported feeling very excited at the prospect of launching. One participant said that the team could not wait to get started, and another stated that the process went smoothly because the team started with something really easy. A few participants attributed the excitement during this phase to feelings of friendship and teamwork that were present among team members. However, one focus group participant describes how her team’s initial excitement quickly became more tempered:

“We got carried away at first but were over-ambitious. We counted on people doing a lot of things and then they didn’t get done, so we had to modify things so we would know we would get a good outcome. I wanted to bring the reality closer to the dream, but I ended up having to bring the dream closer to reality.”

-Female Venturer from Florida

Despite these feelings of excitement and anticipation, most focus group participants described challenges during the launch phase. Many participants cited getting people involved as an initial challenge, including lack of motivation from target participants, lack of initial trust from participants, trouble finding mentors for their programs, problems recruiting and gaining access to participants, and problems staying in contact with participants. Two focus group participants describe their ventures’ initial struggles getting people involved:

“One thing that our group didn’t really think about at first was that we didn’t take into account people’s willingness to participate or join or say this sounds like a good program and I want to do it. We realized a lot of kids are not

focused or not aware... we needed to reel them in with fun stuff. Getting the amount of people we wanted was kind of difficult in the beginning.”

-Male Venturer from Wisconsin

“Launching at the beginning was easy, but... it was tough because our Venture is completely online, and it is hard to get people to hear about it.”

-Male Venturer from California

Other participants cited inexperience, trouble communicating with schools, and competition with other after-school activities as initial challenges during the launch phase.

Experiences during post-launch

After four to six months in operation, close to half of the focus group participants reported experiencing success, while the other half of the participants reported still having several challenges to overcome. However, the participants who continued to face challenges also reported feeling the most successful at the end. One focus group participant explains the adjustments her team had to make in order to make the venture more successful in the long-term:

“After several months, we started noticing our weak points and started looking for motives for youth to attend. We looked for scholarship opportunities and other stuff, thinking this would be a motivator. But we realized that most of the youth we served were illegal, so they didn’t know if they would even be eligible for the scholarships. We found people who were knowledgeable who could go into the schools and help explain. We also started recruiting younger youth instead of just seniors, so it wasn’t the kind of thing where they had one shot and then we lost them.”

-Female Venturer from Oklahoma

Many participants reported having to continuously make adjustments to the initial venture plans during the post-launch phase. Adjustments included shifting meeting times to increase enrollment, using technology as an incentive, finding ways to increase momentum, and dealing with a lot of volunteer turnover. One focus group participant describes how her venture had to adjust their program in order to accommodate unintended participants:

“At first a lot of people were enthusiastic, but [our message] unfortunately didn’t reach out to all of the people that we wanted. The people that were interested already had so much on their plate. It was really hard to schedule things. At first the turnout was great. The people that were not academically strong but had an interest in the venture were who

we were looking for, but that didn't work out. [The program] ended up being more for AP students, which was not what we were intending."

-Female Venturer from Florida

Some other focus group participants described the post-launch phase as a constant learning experience. Youth cited learning how to more efficiently communicate with schools and host organizations, ways to keep kids interested, and how to make things work with what was available. A focus group participant outlines how his team learned to run more productive meetings:

"Once the ball got rolling, it was easier to get in contact with team members and the people involved. People were starting to get more comfortable with their roles. Five months in is a long time. We had meetings where we would sit down and try to map out what we wanted to get done. We would get sidetracked by every little thing; we would talk about the most minute things. That diminished over time. We learned that we couldn't just keep having meetings; everyone had to bring something to the group and then get something out of the meeting. Over time, it all became more efficient."

-Male Venturer from Wisconsin

CONCLUSIONS

The *Tu Voz My Venture* experience has significantly impacted the pursuit of educational goals of the Latino youth involved as well as the communities they served. The Youth Venture model has proven to be an impactful tool for the educational transition of minority youth in furthering their educational goals. It demonstrates that offering youth an opportunity to choose their own venture project, making them accountable for seed funds, and providing the necessary support to develop their skills and interests can serve as a catalyst towards improving knowledge about educational access and opportunity and encourages youth to become leaders and partners in the development of their communities.

Impact of *Tu Voz My Venture* on the Pursuit of Educational Goals

The study findings show an overall increase in awareness, motivation, preparedness and action taken towards higher education in individual lead venturers and team member participants. The highest increases are shown in the motivation and preparedness for higher education.

Regarding the change in awareness, while the participant youth already had a high belief that there are benefits to graduating, they reaffirmed this notion as well as their intention to finish high school or college. The major change that occurred among participants after practicing life skills in the real world was to acquire a sharper vision for their career path. Several participants reported that the reason and purpose of attaining higher education became remarkably clearer as they discovered why and how to use the skills gained from a higher educational institution.

Regarding the change in motivation, the participants reported increased motivation to pursue educational goals and increased willingness to attend college, technical programs, or graduate schools. The most dramatic increase was found in sharing of educational goals with friends and family, and even more so with teachers, professors and counselors. This behavior shows confidence and an inclusiveness of others in the community to assist in achieving educational goals.

Regarding the change in preparedness, the participants felt more prepared and ready to attend college or begin a career. In many instances, the venture itself did not provide college specific training tools. However, through interactions with college environments or experiences in the real world, the young people prepared themselves to be more self-reliant, independent, and ready to perform in a college or work environment.

Regarding the change in action taken, the participants slightly increased their actions aimed towards graduation. The concrete steps of taking SATs, filling out applications, or applying for financial aid were not the main focus of the venture experience.

The majority of youth surveyed expressed clear ambitions and outlined a general road map for their educational goals. Most high school participants plan to graduate from high school and attend college afterwards. A few also reported interest in technical or vocational schools. College students have sharpened college plans, changed majors or taken internships. Several youth reported a willingness to link their career path with the citizen sector or public service, and many of them are exploring the field of education as a career.

A strong majority of youth surveyed reported that the *Tu Voz My Venture* experience has directly affected their interest, motivation and preparedness towards higher education.

Impact of *Tu Voz My Venture* on Life Skills Development and Engagement in Educational Environments

Study results show a high increase in life skill development among youth participants. The highest increases are in the fields of being a successful team member, leading a team, setting and achieving goals, and planning. These are key skills for educational and workplace success. Youth report to be more engaged in school work and activities organized in an educational environment. There is a particularly high increase in taking the lead in school and college activities.

There is a high positive correlation between the life skills learned through *Tu Voz My Venture* and educational interest among participating youth. A factor analysis defined educational interest as the awareness, motivation, preparedness, educational engagement, and actions taken towards educational goals. This means that through participation in Youth Venture model and the life skills acquired, the participant youth will very likely increase their interest in furthering their education.

Impact of *Tu Voz My Venture* Teams on the Communities Served

Most youth report an estimated number of up to 10 volunteers and up to 49 people directly benefiting from activities and services of their venture. In the Latino community there was a strong impact on Latino youth served. Study results report a major change in the feasibility to pursue educational goals by Latino youth served and an increase in their belief that they could do something about their education. They also increased their own academic expectations, showed academic responsibility, motivation, and felt highly encouraged and mentored by other Latino youth.

The Latino community as a social group became more aware of the resources available for Latino Youth, and venture teams raised awareness of the situation regarding access to education by minority groups – specifically regarding the situation facing illegal immigrants. The community also received direct educational services such as tutoring, after-school activities, mentoring, assistance with language and cultural barriers, and educational advocacy. By encouraging positive social and educational engagement, the ventures prevented anti-social behaviors.

One of the major challenges most participants report in motivating Latino youth to finish high school is the lack of parental support. Through the work of the ventures, several youth reported an increase in awareness of the benefits and opportunities regarding higher education for their children among Latino parents. A few participants reported seeing communities of parents expanding the dialogue and creating a culture where it is no longer acceptable for their children to drop out of school.

In the community at large there was a general shift to a more positive perception of Latino youth. The community started to perceive Latino youth as both partners and resources for development.

The ventures highly impacted the education of Latinos they served. By providing access to positive mentorship, exposure to higher education, and college preparation training, they served as a bridge between the community and educational access and opportunity. In many instances the ventures acted as recruiters for other college-bound or educational programs that did not have a strong community-based approach.

Future Venture Plans

Most venturers plan to continue their work based on community needs due to the synergy and expectation that has already been established. These youth report that they have used the following strategies for sustainability: identified new leaders, trained new leaders, created membership bases, expanded fundraising, and sought legal status as a non-profit organization. Several ventures intend to expand, replicate or extend their times of services or their target groups to increase the amount of people and communities benefiting from their work.

Programmatic Knowledge

Even though the planning phase was challenging for most groups, overall it was labeled a rewarding learning experience. Most of the challenges described were: trouble finding available space, navigating the school system, working with existing youth-serving organizations, and gaining access to their target youth population. Allies played a key role by encouraging and assisting youth in the challenges faced during this planning period.

During the launch phase most of the youth reported initial excitement and momentum. The challenges for this phase were lack of motivation or trust from target participants, problems recruiting, gaining access and staying in contact with participants, trouble communicating with schools, and competition with other after-school activities. Most teams solved their problems by rethinking strategies, asking for help, and developing the necessary relationships to move the ventures forward.

After four to six months, most groups were making several adjustments in order to make the venture more successful. Youth again described this phase as a constant learning experience, where past unsuccessful strategies were the stepping stones to improving the next one.

Youth Venture Model as a Motivator for Pursuing Educational Goals

Prior studies show that one of the reasons for high dropout rates in minority groups is the lack of motivation to further education. This mainly occurs due to a lack of perceived purpose and meaning in getting a college degree or obtaining a job.

The study shows that youth increases the motivation necessary to pursue higher educational goals as their ventures provide a sense of purpose and direction to career goals. After young people participate in an entrepreneurial venture, they realize how the world really works and what role they want to play in it. The ventures serve as “social laboratories” where strategies are tested, skills are used, and learning by doing takes place. This increased awareness and skill development provides the basis for a change in behavior in the pursuit of educational goals.

Related findings show that during the entrepreneurial venture, the motivational triggers for minority youth are: 1) the freedom by which youth choose their own venture theme, action steps, and desired outcomes; 2) the accountability placed on the young people by providing them with seed funds to start a venture; and 3) the support given by allies, Youth Venture as an organization, and the community at large.

These foundational motivational elements convey the message to minority youth that an organization believes in their capabilities as changemakers and is willing to provide a support system in the form of knowledge, social networks, and resources for them to launch ventures. Minority youth do not receive these messages often, and when they do, they raise the expectations of themselves, act as catalysts for access and opportunity, and become leaders and partners in the development of their own communities.

LESSONS LEARNED

Youth Venture as a model is an important tool for the educational transition of Latino youth in furthering their educational goals. The recommendation is to replicate this model and approach to reach more Latino youth throughout the country.

This entrepreneurial youth model can be used with other vulnerable youth groups with high dropout rates, such as African Americans and Native Americans. A cultural adaptation should be made for these target populations.

This model plays a motivating role in pursuing educational goals as well as providing the opportunity for youth to feel more prepared to take further steps. Youth could partner with other higher education readiness programs that provide college-bound specific skills to ensure that youth act on these feelings of motivation. The ventures would provide the motivation and skills necessary for students to succeed, and the partners could provide the hard skills required.

Even though all life skills were increased after participation, there is room for improving support in the following areas: budgeting, getting assistance and finding mentors, and organizing volunteers.

Latino youth employing a grassroots approach are very effective at reaching the Latino community, as they know thoroughly the needs and challenges their communities face. This grassroots approach should be maintained strongly in the beginning of a venture and then expanded to other communities; Latino venturers need to see how other communities work, and Youth can expose them to that through the work of other teams.

Latino youth seem to be very effective at working with hard-to-access groups such as low-income working parents and illegal immigrant youth, especially because of their bicultural and bilingual background. Their work with Latino parents and immigrant youth should be encouraged and supported.

In general, Latino youth felt supported throughout the overall process, but do need specific guidance at certain stages. In the beginning stages, youth could receive additional tools

or workshops on overcoming common setbacks such as: access to finding available space, navigating the school system, working with existing youth-serving organizations, and gaining access to their youth target population. Post-launch, there could be workshops on how to maintain participation, continuing to sharpen strategies, and creative problem solving.

This model places youth as a mediator between the educational opportunities available and the community at large. This approach could be used inside educational institutions such as schools or universities in the form of youth clubs that promote the agenda of furthering higher education.

This entrepreneurial youth model proves to be sustainable in Latino communities as parents, educators, and community members get involved. To increase sustainability, more youth should be supported to launch new ventures in geographic areas with high density of Latino populations.

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WOULD FUTURE ENTREPRENEURS BE BETTER SERVED BY AVOIDING UNIVERSITY BUSINESS EDUCATION? EXAMINING THE EFFECT OF HIGHER EDUCATION ON BUSINESS STUDENT THINKING STYLE

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ABSTRACT

This study empirically examined the impact of undergraduate business education on entrepreneurial thinking style by comparing thinking styles of 275 entering freshmen and 247 graduating seniors who were general business and accounting majors enrolled in a private university in southwest United States. Results of paired-sample t-tests indicated that graduating seniors did not evidence less of a nonlinear thinking style, contrary to common complaints of an overly linear nature of higher education and business education in particular that interferes with effective entrepreneurial thinking. Seniors also reflected significantly greater linear/nonlinear thinking style balance, which was found to be correlated with perceived entrepreneurial self-efficacy—both constructs considered to be important cognitions leading to entrepreneurial success. Implications of the results are discussed within the context of learning outcomes assessment of the imperative of helping students develop critical cognitive skills in support of effective entrepreneurial thinking.

INTRODUCTION

Entrepreneurship is frequently cited as a primary driver of economic prosperity and growth at local, national, and regional levels, and even playing a central role in leading the way out of occasional global economic crisis and recession (Lerner, 2010; Terjesen & Amorós, 2010; Bhasin & Venkataramany, 2010). In our rapidly changing, increasingly complex, and uncertain global market economy, entrepreneurial thinking helps small, medium, and large organizations in private, public, and non-profit sectors alike to successfully adapt, and to recognize patterns of opportunities for problem resolution, survival, and growth (Butler, Doktor & Lins, 2010; Bhagavatula et al., 2010; Ahmad et al., 2010; Meydani, 2010; Carroll, Burke & Carroll; 2010). It is widely held that unfettered entrepreneurial activity is worthy of considerable support and

resource investment in infrastructure, domestic and international regulatory policy, and associated learning objectives should have a high priority in education (von Graevenitz, Harhoff & Weber, 2010; Floyd & McManus, 2005; Schramm, 2004; Gopalakrishnan, 2004).

Effective planning and problem solving in our complex and rapidly changing global business environment call for entrepreneurial thinkers who can reach beyond merely a logical or “linear” cognitive orientation of rules, reason, rational logic, and scientific cause-effect predictability (Siggelkow & Rivkin, 2005) to also include thought patterns of intuitive and emotional assessments, creativity and lateral thinking, holistic and total systems appraisal, integrative and synergistic thinking, perceptual flexibility, imagination and visualization, and insight (Baum & Bird, 2010; Sarri, Bakouros & Petridou, 2010; Fillis & Rentschler, 2010; Shellenbarger, 2009; Zampetakis et al., 2009; Sadler-Smith & Shefy, 2004; Maani & Maharaj, 2004; Csikszentmihalyi, 1996; Damasio, 1994; De Bono, 1992). As alternatives to linear thinking, these diverse thought patterns for coping with the chaotic, dynamical nature of today’s global business environment have been characterized as nonlinear thinking (Groves & Vance, 2009; Losada & Heaphy, 2004; Sadler-Smith & Shefy, 2004; *Horgan, 1989*).

Thinking style has been defined as one’s preferred approach to using mental abilities in daily activities, including perceiving, understanding, and solving problems and challenges. To a great extent learned, a particular thinking style utilized may vary according to the demands of a given situation (Dane & Pratt, 2007; Sternberg, 1997; 1994; 1988). Successful innovators and entrepreneurs are widely perceived as relying heavily in opportunity recognition upon such nonlinear thinking style patterns as intuition, creativity, imagination, and optimism that support the consideration of novel ideas, as well as risk-taking and perseverance in the face of failure (Fraser & Greene, 2006; Markman, Baron & Balkin, 2005; Gartner, 2005; Aquino, 2005; Simon, Houghton & Aquino, 2000). As asserted by Ripsas (1998), it would appear that entrepreneurship involves discovering that which is not conducive to rational optimizing calculus.

There is a common perception expressed in both the popular business press and academic research that successful entrepreneurs, in whatever organizational context, possess a prepotent nonlinear problem solving and decision-making style compared to other professionals. For example, empirical work by Corbett (2002) demonstrated that successful new venture entrepreneurs predominantly use an intuitive thinking style, while more traditional managers prefer an analytical or linear approach to information processing and decision-making. Cardon et al. (2009) also concluded that emotion is a primary source of entrepreneurial persistence and perseverance, problem solving, and processing of data toward successful decision-making. The demands of decision-making in today’s rapid pace of market change and uncertain conditions, and surrounded by a plethora of data and environmental information in multiple forms and degrees of relevance, tend to reinforce the perception that effective entrepreneurial thinking requires a high degree of nonlinear cognition rather than a more traditional systematic and rational linear approach.

The worldwide recognition of the importance of nonlinear thinking in entrepreneurial cognition is driving curriculum change efforts in degree and non-degree programs (Mustar, 2009; Kerr & Lloyd, 2008; Hamidi, Wennberg & Berglund, 2008; Pinard & Allio, 2005; McGrath & MacMillan, 2000). For example, courses at widely-recognized Babson College and the Cranfield School of Management are intended to help business professionals to "...understand that there's a whole part of the creative process outside the rational mind," and to "...regain their humanity—and in the process, become more inspirational leaders" (Shinn, 2003: 35-36). Notwithstanding such notable curricular examples, many critics continue to fault the traditional Newtonian "linear reductionist," scientific compartmentalization of learning of Western higher education, and particularly prevalent in general business school curricula (Maines & Naughton, 2010; Grassl, 2010; Bennis & O'Toole, 2005; Pfeffer & Fong, 2002). These and other researchers contend that institutions of higher education generally stifle and even discourage creativity and other forms of nonlinear thinking, and that the value of the learning content in these linear-oriented business and management degree programs (e.g., financial control skills, market research, human resource planning) "...is almost incidental for the entrepreneurs running highly successful companies" (Paauwe & Williams, 2001: 96). Due to this linear predominance, Weick (2003) believes that many managers simply lack the requisite skills to be creative in their thinking and work. In fact, many argue that future managers and business professionals are better prepared for their future work by liberal arts programs such as in the humanities and fine arts, which promote creative thinking and problem conceptualization and tools for insight generation (Godwyn, 2009; Pink, 2004).

Given the above concern, we might wonder whether future entrepreneurs who must continue to spark innovations in our private, public, and non-profit organizations generally would be better off avoiding altogether undergraduate majors in business and management. In their acquisition of current functional tools of finance, marketing, human resources, IS, production/operations, etc., do undergraduate business students necessarily risk developing an overly linear thinking style, at the neglect of developing nonlinear conceptual tools, which ultimately would inhibit their future entrepreneurial thinking contributions? It should be emphasized here that we are referring more broadly to entrepreneurial thinking, which applies to a much wider range of sizes and forms of organizations than the more traditional small business/new venture focus of specific academic programs in entrepreneurship.

In this study we will begin to empirically address this question of the impact of undergraduate business education on entrepreneurial thinking style by examining and comparing the thinking styles of business school freshmen with their graduating senior counterparts. We first will examine the role of important cognitions associated with entrepreneurship success, including linear and nonlinear thinking style and perceived entrepreneurial self-efficacy. We then will consider the possible impact on these cognitions of the undergraduate education of business and accounting majors in a liberal arts private university in Southern California. Finally, we will discuss the implications of our findings, within the context of learning outcomes assessment, for

the imperative of our universities in helping our students develop critical cognitive skills in support of effective entrepreneurial thinking.

CRITICAL COGNITIONS FOR EFFECTIVE ENTREPRENEURIAL THINKING

Where today's challenging decisions in the context of complex nonlinear dynamical systems need to be made under a tight deadline and in the midst of an overwhelming mass of information, successful entrepreneurs often rely on such nonlinear thinking process dimensions as creativity, insight, holistic thinking, feelings, and experience-based intuitive judgments to guide their thinking for recognizing opportunities that are invisible to most other business professionals (Sarri, Bakouros & Petridou, 2010; Ko & Butler, 2007; Townsend & Harkins, 2005; Ward, 2004; Cunningham et al., 2002; Gaglio, 1997; Kirzner, 1997; Carland, Carland & Busbin, 1997; Vesper, 1996). However, notwithstanding the value of nonlinear patterns of thought for guiding entrepreneurial decision-making, there is evidence that more linear modes also can be beneficial, and even help avoid serious negative consequences of an over-reliance on nonlinear forms of thinking. For example, related to the feeling or emotion dimension of nonlinear thinking, unfounded optimism and overconfidence underlying a tendency toward excessive risk taking, without appropriate factual analysis, have been identified as forms of cognitive bias that can result in serious negative consequences to entrepreneurial decision-making (Forbes, 2005; Simon, Houghton & Aquino, 2000; Sitkin & Weingart, 1995). Other negative consequences that have been identified of an overreliance on nonlinear thinking at the neglect of systematic factual analysis and reasoning include counterfactual thinking, planning fallacy, affect infusion, self-justification, self-serving bias, representativeness errors, illusion of control, and a faulty belief in the "law of small numbers" (Simon et al., 2000, Baron, 1998; Busenitz & Barney, 1997). Moreover, successful entrepreneurs' nonlinear keen market insights and uncanny opportunity recognition have been proposed to be grounded to a great degree upon very linear thought involving tacit and explicit factual knowledge and direct experience, as well as a careful analysis of market stimuli (Townsend & Harkins, 2005). Cunha (2007) has described effective entrepreneurial decision making as being comprised of rational, intuitive, and improvisational approaches—involving both linear and nonlinear perspectives. Finally, supporting the notion of linear/nonlinear balance in effective entrepreneurial cognition, Baum and Bird (2010) recently empirically demonstrated that successful entrepreneurial intelligence consists of practical, analytical, and creative intelligence and that, together with entrepreneurial self-efficacy, it enables and motivates successful entrepreneurial behavior.

Based on the above review, it appears that effective entrepreneurial thinking would tend to employ a balance in both nonlinear and linear thinking style dimensions. If this is indeed the case, an important learning outcome for business students as a result of their undergraduate education would be increased linear/nonlinear thinking style balance. Despite the previously described common criticisms of Western higher education (and particularly of professional

schools including undergraduate business education) in neglecting and even negating the development of creativity and other nonlinear thinking skills needed to support, in concert with linear thinking skills, effective entrepreneurial thinking, there is evidence in today's higher education of a concerted effort to enhance both linear and nonlinear thinking skills of graduating students.

For centuries a primary objective of a liberal arts education has been to develop general intellectual capacities of both a linear (e.g., mathematics, sciences, logic and critical thinking) and nonlinear (e.g., fine arts, rhetoric and persuasion, creative thinking) nature (Sangster, 2010; Fogarty, 2010; Hutton, 2006). And there has been increasing pressure from employers, governments, and accrediting organizations for undergraduate education to build upon the more regimented and rote learning excessively linear foundation of primary and secondary education and to demonstrably produce more balanced graduates who are capable in written and verbal communications, critical thinking, creative problem solving, interpersonal skills and working in teams, and able to initiate and respond to change (Rose, 2010; Badcock, Pattison & Harris, 2010; Crebert et al., 2004). As a result, many Western liberal arts universities and their separate business colleges are active in their curricula in teaching and assessing the degree of effective acquisition of critical generic skills (both linear and nonlinear in nature) for regional and national accreditation purposes. Examples of linear skills promoted by these curricula include analytic and critical thinking, problem solving, logical and independent thought, written and oral communication, and information management. Examples of nonlinear skills include curiosity, self-awareness and reflection, imagination and creativity, ethical awareness and application, tolerance for diversity, emotional intelligence, interpersonal effectiveness, and personal and professional values (Landau & Meirovich, 2011; Smith, Clements & Olson, 2010; Martell, 2007; Barrie, 2006; Martell & Calderon, 2005; Allen, 2004; Bath et al., 2004).

Thus, there is evidence of a traditional and growing priority in Western undergraduate liberal arts and business school education to expand upon the predominantly linear orientation of earlier formal education by encouraging the further, more balanced development of both linear and nonlinear thinking skills. To measure the success of educational efforts driven by this growing learning priority, we would ideally use a longitudinal pre-post approach to assess each student's linear and nonlinear thinking style profile at the start of his/her higher education experience, and then collectively compare this measure with an assessment of the same student's profile upon graduation. However, a more immediate approach for assessing a general trend in collective student linear/nonlinear thinking style profile change over the course of undergraduate study would be to measure entering freshman profiles with those of their senior student counterparts upon their graduation. As a trade-off of greater experimental power using the former approach, this latter approach would provide a more timely general trend assessment. Following this latter approach, we therefore would predict the following related hypotheses:

H1: Graduating business school seniors will reflect a greater degree of nonlinear thinking style compared to recently entered business student freshmen.

H2: With their additional years of exposure to nonlinear learning activities inherent in a liberal arts curriculum, graduating business school seniors will reflect a greater degree of linear/nonlinear thinking style balance compared to recently entered business student freshmen.

The concept of entrepreneurial self-efficacy has been defined as an individual's confidence in his or her ability to successfully perform entrepreneurial roles and tasks (Chen, Greene & Crick, 1998). This construct, typically measured by self-report, is particularly important since several recent empirical studies point to perceived entrepreneurial self-efficacy as a strong predictor of future entrepreneurial interest, intent, and actual successful entrepreneurial activity—including new business start-up and running a new venture enterprise (Baum & Bird, 2010; Zhou, Hills & Seibert, 2005). Therefore, given the earlier purported association between linear/nonlinear thinking style balance and entrepreneurship success, we also would expect a correlation between linear/nonlinear thinking style balance and general measures of perceived entrepreneurial self-efficacy, as stated in our third hypothesis:

H3: In individual freshman, senior, and combined business student samples, there will be a significant correlation between measures of perceived entrepreneurial self-efficacy and linear/nonlinear thinking style balance.

METHOD

Sample

Our survey sample consisted of 275 freshmen and 247 seniors who were general business and accounting majors enrolled in a private university in southwest United States. The university requires a significant undergraduate liberal arts core curriculum in the humanities (including theology and philosophy), physical and social sciences, and fine arts, and typically more than 50% of business and accounting student major coursework is taken outside of the business disciplines. The freshman data were collected within the first month of the fall semester of their initial entry into undergraduate study as part of a large first-year freshman seminar course. Thus, the freshman students completed the survey within a month of their university entry while they were enrolled (as declared business and accounting majors) in university liberal arts core courses (typically five three-unit courses) such as micro or macro-economics, Western Civilizations, English writing, mathematics, and either philosophy or theology. The senior student data were

collected during the last full month (April) of the students' final spring semester of undergraduate study as part of their enrollment in six different sections of a senior-level required core course on business and society. By this point in their studies the seniors all would have taken a traditional AACSB-accredited undergraduate business curriculum of core courses including finance, accounting, marketing, principles of management and organizational behavior, human resources, production and operations management, information systems, business law, and business strategy. Besides completing their core course on business and society, the senior students also were in the process of completing three advanced business electives selected according to their differing declared emphases in the above various business functional areas, as well as entrepreneurship. Student participation was voluntary and participant confidentiality was ensured. Reflecting similar national trends, the ratio of female to male business students at both freshman and senior levels was nearly even, although there was greater female representation at the senior level (54%). The median age for the entering freshmen, as expected, was 18 for freshmen and 21 for seniors. The ethnic background of the total sample was 58% Caucasian, 19 % Hispanic/Latin-American, 13% Asian-American, 5% African-American, and 3% Native American. To control for possible effects of national culture, foreign student responses were not included in the sample.

Measure

All participants completed during class time a hard copy questionnaire that included (1) the 26-item Linear/Nonlinear Thinking Style Profile (LNTSP) (Vance et al., 2007), (2) a measure of entrepreneurial self-efficacy, and (3) a final section soliciting demographic information. The LNTSP is a four-dimensional self-report measure of decision-making style comprised of two types of forced-choice items: five pairs of statements describing alternative decision-making behaviors (10 total items), and eight pairs of words or phrases that influence decision-making (16 total items). Using a Likert-type scale (3 = "very often", 2 = "moderately often", 1 = "occasionally", and 0 = "rarely or never"), respondents were asked to allocate exactly three points across each pair of alternative statements according to how frequently they perform such behaviors. An example pair of statements includes, "I primarily rely on logic when making career decisions" and "I primarily rely on feelings when making career decisions." Also using a Likert-type scale (3 = "very strong influence on how I behave," 2 = "strong influence on how I behave," 1 = "moderate influence on how I behave," and 0 = "little or no influence on how I behave"), respondents again were asked to allocate exactly three points across each pair of alternative words or phrases. Example item pairs include "Feelings" and "Facts," "Inner Knowing" and "Logic," and "Felt Sense" and "Reason".

The four LNTSP subscales include external information sources (EIS), inner information sources (IIS), linear decision-making (LDM), and nonlinear decision-making (NDM). The EIS subscale (eight items) reflects external sources of information, data, and influences that guide an

individual's decision-making and behavior. IIS also contains eight items, however of a nonlinear nature, representing inner or internal information sources such as feelings, sensations, and impressions that influence an individual's decision-making and behavior. LDM (five items) includes linear items that represent the mental processing of external sources of information, including verifiable facts, analytical reasoning, and objective factors, for the purpose of rational decision-making and subsequent action. Finally, NDM contains five nonlinear items that reflect the processing of internal sources of information, such as feelings and intuitive sense, for the purpose of guiding subjective decision-making and subsequent action. The Cronbach alpha reliability estimates for EIS, IIS, LDM, and NDM were .88, .89, .74, and .72, respectively. For each participant, the total linear score is represented by the sum of the scores for the LNTSP linear subscales (EIS and LDM), the total nonlinear score is represented by the sum of the scores for the nonlinear subscales (IIS, NDM), and the linear/nonlinear balanced thinking score is represented by the absolute value of the difference between the total linear and total nonlinear scores (thus, the lower the score, the greater the balance).

The self-report measure of perceived entrepreneurial self-efficacy has been used in previous studies (Zhou, Hills & Seibert, 2005; Chen, Greene & Crick, 1998), and consisted of 21 items of tasks that are known to be associated with effective entrepreneurial decisions making, such as "Identifying new business opportunities," "Creating new products," "Thinking creatively," "Commercializing an idea of new development," "Setting and meeting profit goals," "Working under pressure and conflict," "Taking calculated risks," "Controlling costs," and "Managing time effectively." As can be noted, these entrepreneurial self-efficacy items can relate to many different organizational contexts besides the stereotypical entrepreneurial new venture. For each item, students were asked to indicate by circling on a 5-point Likert scale their personal degree of confidence in performing each task (5 = Completely Confident, 1 = No Confidence). The Cronbach alpha reliability estimate for the full sample on this perceived entrepreneurial self-efficacy scale was .92.

RESULTS

Table 1 presents results from paired-sample t-tests assessing significant differences between the freshmen and senior samples on each of the linear and nonlinear LNTSP subscales. The overall pattern of mean differences between the two samples indicates a greater propensity for linear thinking by the freshmen sample compared to their senior counterparts. Conversely, the senior sample demonstrated an overall pattern of greater nonlinear thinking style. Although these mean total linear and nonlinear thinking style differences between the freshmen and senior samples were in the expected direction, they were not statistically significant, thus technically failing to support Hypothesis 1. However, in support of Hypothesis 2, the overall mean difference for balanced thinking between the two samples was significant (.07, $df = 520$, $p <$

.05), with seniors showing greater linear/nonlinear thinking style balance than their freshman counterparts.

Variable	Sample (n)	Mean (s.d.)	Mean Difference (t value)
Linear decision-making (LDM)	Freshmen (n = 275)	1.63 (.39)	.02 (.63)
	Seniors (n = 247)	1.61 (.43)	
Nonlinear decision-making (NDM)	Freshmen (n = 275)	1.37 (.29)	-.02 (-.54)
	Seniors (n = 247)	1.39 (.43)	
Internal information source (ISS)	Freshmen (n = 275)	1.25 (.36)	-.02 (-.75)
	Seniors (n = 246)	1.27 (.40)	
External information source (EIS)	Freshmen (n = 275)	1.75 (.36)	.04 (1.15)
	Seniors (n = 246)	1.71 (.40)	
Linear thinking	Freshmen (n = 275)	1.69 (.67)	.03 (.99)
	Seniors (n = 246)	1.66 (.74)	
Nonlinear thinking	Freshmen (n = 275)	1.31 (.34)	-.02 (-.72)
	Seniors (n = 246)	1.33 (.37)	
Balanced thinking	Freshmen (n = 275)	.64 (.43)	.07 (1.79)*
	Seniors (n = 246)	.57 (.49)	

Notes: df = 520; * p < .05.

Table 2 presents descriptive statistics and correlations among the primary study variables for the combined sample, while Tables 3 and 4 present the same information for the freshman and senior samples, respectively. As predicted by Hypothesis 3, entrepreneurial self-efficacy was correlated with balanced thinking in the combined sample ($r = .11, p < .05$), freshman sample ($r = .16, p < .05$), and senior sample ($r = .14, p < .05$).

	Variable	Mean (s.d.)	1	2	3	4
1	Entrepreneurial self-efficacy	3.69 (.53)				
2	Linear thinking	1.68 (.36)	.12**			
3	Nonlinear thinking	1.32 (.36)	-.13**	-.45**		
4	Balanced thinking	.65 (.46)	.11*	.60**	-.39**	

Notes: n = 523; * p < .05; ** p < .01.

Table 3: Correlations among Study Variables (Freshmen Sample)

	Variable	Mean (s.d.)	1	2	3	4
1	Entrepreneurial self-efficacy	3.64 (.56)				
2	Linear thinking	1.69 (.67)	.16**			
3	Nonlinear thinking	1.31 (.34)	-.14*	-.84**		
4	Balanced thinking	.64 (.43)	.16*	.57**	-.53**	

Notes: n = 275; * p < .05; ** p < .01.

Table 4: Correlations among Study Variables (Senior Sample)

	Variable	Mean (s.d.)	1	2	3	4
1	Entrepreneurial self-efficacy	3.74 (.50)				
2	Linear thinking	1.66 (.74)	.12 ⁺			
3	Nonlinear thinking	1.33 (.37)	-.10	-.24**		
4	Balanced thinking	.57 (.49)	.14*	.64**	-.29**	

Notes: n = 247; ⁺ p < .10; * p < .05; ** p < .01.

DISCUSSION

Previous research points to the importance of linear/nonlinear thinking style balance for effective entrepreneurial problem solving and decision-making. The primary purpose of this study was to examine the possible impact of business students' undergraduate study in a liberal arts environment on their entrepreneurial thinking. Contrary to common complaints of an excessively linear, limiting influence on student learning of Western higher education and business education in particular, we did not find a significant difference between entering freshmen and their graduating senior counterparts in predominance of linear and nonlinear thinking style profiles. Nevertheless, we found a non-significant but consistent pattern across all of our linear and nonlinear subscales of greater linear thinking style among the freshmen and greater nonlinear thinking style among the seniors. More importantly, we did find that graduating seniors reflected significantly greater linear/nonlinear thinking style balance than their freshman business student counterparts. In addition, we found that linear/nonlinear thinking style balance has a significant correlation with perceived entrepreneurial self-efficacy, which has been linked in past research with entrepreneurial intent and actual successful entrepreneurial activity.

Our finding that further undergraduate business education within a strong liberal arts context may contribute to the development of a more balanced thinking style, which may enhance future entrepreneurial thinking, conflicts with the popular image of successful entrepreneurs as college dropouts (e.g., Budman 1997; Storey & Morgan 1998). On the contrary, our results suggest that attaining an undergraduate business degree may actually facilitate successful entrepreneurial thinking through building greater linear/nonlinear thinking style

versatility and balance. Our findings are consistent with those of other recent studies on entrepreneurial human capital (e.g., Rauch, Frese & Utsch, 2005; Marvel & Lumpkin, 2007), which found formal education to be related to new venture growth and innovation radicalness—both characteristics critical to entrepreneurship success.

However, the limitations of the present study should caution the broad generalization of our results. Additional research with a larger sample across multiple universities and geographic regions should be conducted to determine whether our present findings can be replicated. Also, the present study compared only entering freshmen with graduating seniors from the same university to begin to assess collectively the general impact of their university's educational experience. Further pre-post test research with greater experimental power should be conducted to obtain measures on entering students and compare them with measures of the same students as seniors as they are preparing to graduate. In addition, a much more fundamental influence on the formation of senior students' greater linear/nonlinear thinking style balance in our study may merely have been the variable of student age, providing additional time for cognitive maturation (Piaget, 1972; Epstein, 1990). Additional research should be conducted to compare senior student data with subjects of the same age who received no additional education beyond high school.

It also is unclear about which aspect of our senior student sample's undergraduate experience provided the greatest degree of contribution to their linear/nonlinear thinking style balance. Was it their liberal arts core requirements, their business major core requirements, or their advanced business elective studies having the closest fit with student career aspirations for the immediate future? Or was it a combination of these educational influences, as well as a rich supply of formal and informal influential extracurricular activities that contributed in concert to greater cognitive maturity and flexibility characterized by increased linear/nonlinear thinking style balance? To obtain a better picture of the impact of a liberal arts education on thinking style, future research should compare senior student data with subjects of the same age who followed their high school education with specialized training or technical school instruction. Prior to future curricular planning and policy development, further research should be conducted to gain a clearer understanding of what in the undergraduate experience may be contributing most, and what may be contributing least, to the formation of increased linear/nonlinear thinking style balance.

Nevertheless, our results do not support the frequent claims against Western higher education and undergraduate business study in particular of a deleterious effect on entrepreneurial thinking style outcomes. Rather, our research points to a potentially fertile future direction for further research to improve the impact of education on entrepreneurial thinking skills to strengthen human capital within the national labor force and for enhanced entrepreneurial contributions within all forms of organizations. In addition, our research may provide helpful practical guidance in support of the growing interest among universities in assessing and demonstrating effectiveness in achieving desired learning outcomes.

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