

WHAT SHOULD WE TEACH IN THE NEW VENTURES CLASS? AN EMPIRICAL ANALYSIS

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ABSTRACT

Historically, entrepreneurship has been represented primarily by a single central course in the business curriculum. This central course on creating new ventures remains at the heart of entrepreneurship education in most institutions. Little research has examined the content of this course.

In this research we seek to identify the current content of “Creating New Ventures.” We review systematically the leading textbooks, then use those identified topics to survey leading faculty to see how they construct a new ventures course. A survey of faculty identifies core concepts for the course, including opportunity assessment, business planning and resource assembly. Results also distinguish entrepreneurship from other areas such as strategy and technology management.

Keywords: Pedagogy, New Ventures, Education, Entrepreneurship, Expert Survey.

INTRODUCTION

By common acknowledgement, the first course in entrepreneurship was taught at Harvard Business School by Myles Mace in 1947. From that time until the 1990's, entrepreneurship was represented primarily by a single central course in the business curriculum (Kuratko, 2005). Since that time, coursework has expanded into programs and degrees. In addition, a vast ecosystem has grown up around the university for entrepreneurship, including business incubators, business plan competitions, hackathons, small business development centres and more. But at the heart of entrepreneurship education remains the central course in launching new ventures, because the launch of a new organization and product is widely acknowledged to be the core of entrepreneurship (Gartner, 1985; Aldrich, 1999). Surprisingly, there is little research regarding the content of this central course (Edelman, Manolova & Brush, 2008).

In this research we seek to identify the current content of that central course, termed here “Creating New Ventures.” We review systematically the leading textbooks, then use those identified topics to survey leading faculty to see how they construct a new ventures course. By constructing an exemplar course, three gains are possible. First, a consensus around such a course would be valuable to provide guidance to teaching faculty and curriculum designers. This work offers a blueprint from which instructional faculty can add, adopt and modify topics. Such a need is especially relevant given the wide increase in demand in entrepreneurship instruction and the lack of full time qualified faculty to teach (Kuratko, 2005). Second, such an approach would implicitly offer more definition to the field. Entrepreneurship is a young discipline among its peers in the university and the business school. Definitional questions abound (e.g. Aldrich, 1999; Gartner, 1988 & 1990; Shane & Venkataraman, 2000; Wortman, 1987). By teaching, scholars make a judgment about what is worthy of attention (Pearce, 2007). These judgments

implicitly define the field. Finally, by identifying a set of topics, it would highlight unique content and concepts of the field and distinguish it from other content areas in the business school, such as strategic management.

The paper is organized as follows. Following a short literature review, methodology is presented, including both the textbook review and the faculty survey. Results are presented, followed by a discussion.

LITERATURE REVIEW

How has the new venture course been examined by prior scholars? Entrepreneurship education generally has been the subject of two systematic literature reviews by Pittaway & Cope (2007) and by Nabi et al. (2017). The new venture course is included but conclusions specific to the course are rarely identified, in favour of larger themes and context for the literature.

One prominent direction of research regarding the individual course has examined outcomes or effectiveness of the new venture course or close analogues. An example of this work is Salamzadeh, Azimi & Kirby (2013). The authors survey students at a Middle Eastern university after a course in social entrepreneurship to determine awareness and intention of plans for a venture. A careful meta-analysis of these studies of effectiveness of the course was done by Bae et al. (2014). They support the general conclusion that entrepreneurship coursework, including but not limited to the new venture class, increases a student's interest in entrepreneurship and his propensity and inclination to open a new venture. Deeper and larger commitments to entrepreneurship, including the formal and legal founding of the new venture, are less likely but also less easily observed by researchers.

Second, some research examines the new venture course but less so with regard to the content but with regard to various aspects of pedagogy. For example, McGuigan (2016) suggested a less "academic" and more "real-world" approach to classroom and class time activities. Connors & Ruth (2012) examined the question of whether business students performed better in the entrepreneurship class after taking the principles of management class. Surprisingly, the answer was no; the authors suggest that this result demonstrates that entrepreneurship is distinct from management.

Finally, one prior study examined the content of leading entrepreneurship textbooks. Edelman, Manolova & Brush (2008) examined the content of new venture courses through analysis of textbooks in an attempt to map them into the activities identified in the Panel Study of Entrepreneurial Dynamics (PSED). The authors found that about half the textbook content covered activities that entrepreneurs did when starting a business according to PSED. Many activities not covered by the texts were legal, financial and tax activities specific to organizational formation (e.g. open a bank account, lease machinery and equipment).

Acknowledging these insightful contributions should not obscure the observation that most authors bemoan the lack of clear content in the new venture course and in entrepreneurship generally (e.g. Pittaway & Cope, 2007; Edelman, Manolova & Brush, 2008). In the absence of content definition, research can perhaps mislead given that, in the same role, different faculty present distinctly different approaches to distinctly different topics. In practical terms, research examining whether a lecture, an experiential exercise or a project is used to teach a course (or component of a course) is not especially effective if the course is different.

METHODOLOGY

The objective of this study was to determine essential topics to be covered in a new venture creation class through a survey of thought leaders in the field. This required four steps:

- Identify core topics pertinent to entrepreneurship;
- Construct a sample of leading researchers;
- Administer the questionnaire; and
- Compile results to determine relative importance of these topics.

The methodological approach is similar in some ways to a structured literature review. For exemplars of this research see Pittaway & Cope (2007) & Nabi et al. (2017). In broad outline, in a structured literature review databases are searched for published research articles, coded by researchers or increasingly by software and frequency and other importance tabulated by the researcher or the software. Our approach differs in execution but the design is similar. Since the subject at hand is not about research but teaching, leading textbooks were chosen rather than research articles. Textbooks are chosen based upon market success and represent significant intellectual works by leading scholars and practitioners. The texts were coded by the researchers into topics and the frequency and importance of those topics was revealed by the survey of the thought leaders.

Identification of topics

For the purpose of this research, topics were used as the object of analysis. A topic was defined by the researcher to be a subject that contained enough material to discuss for at least one-half of a class (approximately 40 minutes). Examples of topics include venture capital, intellectual property and diffusion models. Of course, topics may be covered for much more than one-half of a class.

To generate topics, in an approach similar to that of Edelman, Manolova & Brush (2008), a review of eight major texts in entrepreneurship was undertaken. Of the eight, five were entrepreneurship textbooks with a management focus (*Barringer & Ireland, 2006; *Dollinger, 2003; *Hisrich & Peters, 2002; *Kuratko & Hodgetts, 2007; *Timmons & Spinelli, 2004), two were explicitly focused on technology ventures (*Allen, 2003; *Dorf & Byers, 2005) and one was written with a finance focus (*Fuerst & Geiger, 2003). (Texts reviewed use stars to distinguish them from references used as citations.) Each was written with the intention of being a new venture creation course in entrepreneurship, broadly defined. The researcher reviewed each book carefully to identify topics, to standardize names of topics and reduce the complexity of the list. In general each chapter subheading was a possible topic.

The final list contained ten major categories, each with four to ten topics. Respondents were asked about each item how much class time would be devoted to each topic: None, a short mention, one half of a lecture, an entire lecture or more than one lecture. Open ended questions allowed us to capture the number of lectures devoted to the topic.

Sample Construction and Characteristics

Thought leaders were identified in several ways: they are or were members of the editorial board of leading entrepreneurship journals, including the Journal of Business Venturing, Entrepreneurship: Theory and Practice and the Journal of Small Business Management. The field of entrepreneurship has often used surveys of key informants or thought leaders, selected in a similar way, to identify issues (e.g., Gartner, 1990; Ketchen, Short & Combs, 2011), to chart the progress of the field (e.g. Finkle, Kuratko & Goldsby, 2006; Macmillan, 1991 & 1993; Reader & Watkins, 2006) or to address key concerns of the discipline (Pearce II, 2012). The modal respondent from this pool would be a member of a management or entrepreneurship faculty, although some are prominent in other related areas such as economics, public policy and sociology. Both private and public school faculty were included. The professors surveyed were North American (US and Canada), which avoided problems of language and translation.

Questionnaire Administration

The researchers drafted the survey and revised it several times. Next the questionnaire was then iterated several times with the survey research laboratory of a major US research university to develop clearer and better questions. The survey was pretested with a few eligible respondents. Finally, the survey was reviewed, revised and finally approved by the Institutional Review Board of the university. Of 107 surveys sent, 78 responded, for a response rate of 73%. Such a response rate is relatively high and insures representativeness. Institutional Review Board rules prohibit the researcher knowing which individuals did or did not respond.

Opening the questionnaire was a set of questions about the context in which the respondent teaches entrepreneurship: semester-length versus quarter-length or years of experience teaching, for example. Next came pedagogical questions for those who have taught entrepreneurship: for example, do you require students to produce a business plan? The heart of the questionnaire came next, with the list of ten categories of topics from which the respondent chooses. Finally, the questionnaire concluded with demographic questions about the respondent and employing university.

RESULTS

Background of Participants

Describing the respondents, roughly 90% are at US universities; the others are in Canada and the UK. Over 90% of the panel has their primary appointment in a business school. The survey inquired about disciplinary influences: About two thirds of the respondents have strategic management as a major disciplinary influence on research, one third economics, a quarter psychology and a fifth sociology. Multiple disciplines could be chosen by respondents.

Of the respondents, 95% have taught a course in Entrepreneurship. Of those who have taught, 83% have taught New Venture Creation. About a third of the sample (34%) has taught Technology Management and 15% taught Entrepreneurial Finance. Of those who have taught entrepreneurship in any form, the respondents collectively have over 670 years of experience teaching entrepreneurship. The mean was ten years, although a quarter reported over 15 years of experience teaching entrepreneurship and its topics.

Audience and Pedagogy

Respondents were asked to design an ideal course in entrepreneurship, with freedom to choose audience, pedagogy, and topics. Regarding audience, although the respondents were overwhelmingly employed in business schools, the respondents stated a strong preference for teaching a mixed class of business and non-business majors (in particular engineers). Entrepreneurship as an interdisciplinary activity, where know-who is at least as important as know-how, appeared to be important. Most of the panel wanted course participants to have the business core or a significant subset, in particular finance and marketing. Several named in the open-ended response that economics would be useful as well.

Business school faculty in other disciplines would be surprised to find that entrepreneurship is not just the business plan course. Only 38% would require the business plan as part of an ideal course in entrepreneurship. For those who would use a plan, it would be weighted between thirty and forty percent of the course grade. Several respondents listed in open-ended responses that a business plan course would be the subsequent course to this “ideal” introductory course that they were now designing.

As reported in Table 1, no dominant mode of instruction emerged. Professors would employ case studies, lectures, discussions and experiential exercises. A few respondents noted that case studies need not be “typical” Harvard/Darden/INSEAD cases but shorter illustrations from the press or personal research. Experiential exercises generated the most variance; many respondents do not use them at all, while a significant minority relied on experiential exercises a great deal. One additional pedagogical technique was discussed frequently in the open ended questions: guest speakers live or video. Respondents suggested a judicious use of such speakers enhanced the class. In a variation on this theme, one suggested studying historical entrepreneurs.

Method	Mean	Std. Dev.
Case studies	3.382	1.08
Lecture	3.289	0.91
Experiential exercises	3.342	1.16

Question 10: “To what extent will you rely on the following methods as you teach your course?” From 1, not at all, to 5, a great deal.

In a related vein, many respondents also suggested that students should interview an entrepreneur. In the words of one respondent: “I’ve asked students to interview entrepreneurs in order to gather data on entrepreneurs’ perceptions of their venturing challenges and to solicit advice pertaining to the decision to start a business.” In addition, such an exercise is an entrepreneurial act: it requires the student to identify a resource, here a person and making contact while overcoming whatever reluctance the student might have to reaching out.

Topics Covered

The topics covered, means and standard deviations, are reported in Appendix A. One way to summarize the results is to examine which topics were considered by the panel to be worthy of inclusion in the ideal course. Specifically, we tabulated the results and asked which topics were worth one or more class periods (about 3.5% of class time). No topic was named by a majority of respondents, but four topics were named by 45% of the panel. These four were business models, creativity techniques, the business plan and identifying trends. Twenty topics were named by a quarter of respondents as worth at least one class period. To summarize these results, Table 2 reports the major topics that are named by at least 25% of respondents as worthy of one or more classes. The topics are grouped into five areas and sequenced into a course. The structuring of a common course syllabus and a common list of topics is likely to be of value in developing the field (Lerner, 2002; Pearce, 2007).

Topic	Count	Percent	Order	Topic Heading	Classes
Social impact of ENT	28	37%	1	Background	1
History of/Theories of ENT	18	24%	1		1
Creativity techniques	35	46%	2	Generating Ideas	2
Marketing research and marketing intelligence	22	29%	2		1
Identifying trends	34	45%	2		1
Business models	34	45%	3	Developing A Business	2
Formats for entry	26	34%	3		1
Patenting and IP	20	26%	3		1
How to sell/presentation techniques	20	26%	4	Assembling Resources	1
Valuing a business	21	28%	4		1
Basics of venture capital	22	29%	4		2
Building proformas	28	37%	4		2
Writing a business plan	35	46%	4		2
Building a top management team	18	24%	4		2
Value chain analysis	16	21%	4		2
Project management/milestones	14	19%	5	Planning	.5
Discovery driven planning	11	15%	5		.5
Start-up procedures	12	16%	5		1
Ethics	14	18%	6	Personal Growth	1
Crafting a personal ENT strategy	13	17%	6		1
				Total class sessions	26

One topic, ethics, deserves special mention. In an open-ended question, one respondent argued, “It’s absurd to do part of one class on ethics. That’s every class, every minute.” Certainly the most important asset of any entrepreneur (or any person) is his or her reputation and a constant emphasis on ethical behaviour throughout the course is worthwhile. What might deserve examination, however, is that entrepreneurship presents unique ethical situations that are novel to the budding student-entrepreneur. For example, entrepreneurs assembling resources are frequently asked by the resource owner what they intend to do with the resource. Answering the

question truthfully, completely and accurately may give away the business idea and make the resource more expensive or even unavailable. Both research and practice would be useful to identify such situations and to prepare the student for these novel situations. Respondents did not address questions regarding ethical situations but it would be valuable for further research.

Finally, in the open-ended responses, one topic often mentioned was the special challenge faced by women and certain minority groups in starting a business. This topic was not a part of the questionnaire, so it was not named by most respondents. To claim that respondents are unaware of these challenges is, in all likelihood, incorrect. Whether respondents choose to raise such a topic in class is unknown.

The topic may be difficult to discuss and very difficult to discuss credibly. Many faculties come from members of the (North American) majority culture and so this topic may be uncomfortable for faculty, for members of minority cultures and perhaps for the class as a whole. It may also invite discussion that a business professor feels unequipped to handle.

Philosophy and Teaching Objectives

Respondents did not, in general, see the purpose of the course to start businesses in the immediate future, as reported in Table 3. Instead, respondents counted their most important goal as transmitting an entrepreneurial mind-set. Respondents were not asked exactly what this would be, a failure of design of the questionnaire. To the author's mind, one part of the entrepreneurial mind-set is surely to see the world as a series of problems that need fixing--this is an engineering mind-set. A second part is to see the world as a canvas on which the entrepreneur can paint his or her venture and to access tools of people, material and money to make a venture possible.

Goal	1st	2nd	3rd	Not	Mean	Score
Develop an entrepreneurial mind-set	36	13	13	4	1.63	232
Teach specific skills relevant to starting a venture	19	26	16	5	1.95	189
Train students in a specific process relevant to starting a venture	7	16	11	2	2.11	94
Enable & empower students to start a business within 5 years	2	12	16	6	2.46	62
Enable & empower students to start a business after 5 years	4	8	9	5	2.23	53
Manage relationships with key stakeholders	1	3	5	7	2.44	19
Develop business skills in functional areas	0	6	8	2	2.57	26

Question 36: What is the most important/second most important/third most important goal for your course? (1=most important goal, 3=least important). "Not" indicates number of respondents who did not list the goal among the top three. The mean represents the mean of respondents who listed the goal among the top three; omission did not lower the ranking of the goal. A correction to reflect omission is required. The "score" is computed by giving 5 points for a most important goal, 3 for second and 1 for third, no points for not mentioning the goal.

Respondents do not feel that entrepreneurship is only teaching or sharpening general management skills. Very few respondents listed "basic functional skills" among the goals of the course. Of course, the totality of the business problem the entrepreneur proposes may sharpen those skills as a by-product.

The open-ended comments give insight into the entrepreneurial mind-set. Several brought to mind the classic definition of Stevenson & Jarillo (1990). “Entrepreneurship is a process by which individuals pursue opportunities without regard to the resources they currently control.” In the panel’s words:

- “Entrepreneurship is the process of shifting other people’s resources to opportunities you intend to pursue”.
- “Stress things like ‘bootstrapping’ and resourcefulness (i.e., how to start/survive/grow) with few resources to begin with or low control of such resources”.
- “How to acquire resources without owning them”.

Perhaps the most eloquent and most philosophical definition came from this respondent:

- “My primary objective [is] teaching the student to view life as an entrepreneurial venture in which he/she is empowered to be an agent of positive change as opposed to a victim of forces beyond his or her control who is somehow entitled to a ‘good’ life.”

A second take on foundations is reported in Table 4. Respondents were asked the “philosophical” question about their dominant view of the topic of entrepreneurship. The four definitions offered corresponded to the classification of Barreto (1989) and map to the classic definitions by Schumpeter, Kirzner, Knight and Say. Respondents felt that entrepreneurship is about the study of new things, about new innovations and about new organizations. Almost equal numbers of respondents defined entrepreneurship as the study of how “innovation enters the economy” and “the formation of a new organization.” As many have noted, exploiting an innovation often requires the legal organization of a firm in order to appropriate the gains. This highlights the theoretical question of why firms are needed to capture gains from venturing as well as the question of when and if firms might not be needed.

	Freq.	Percent	Cum.
ENT is the study of innovation, that is, of how new things come into the economy & the society.	26	42.62	42.62
ENT is about owning a business & bearing the risk that entails.	2	3.28	45.90
ENT is about arbitrage, buying low and selling high	0	0	45.90
ENT is about how a new organization gets started	18	29.51	75.41
None of the above	15	24.59	100.00
Total	61	100.00	

Question 44: What is your dominant view on the topic of entrepreneurship?

Role of Action versus Understanding

A close examination of the open-ended responses revealed a tension between the knowhow of entrepreneurship and the know-about. As one respondent put it, “You implicitly assume that one is designing a vocational education course. Other emphasis might include the

role in the broader economy, job creation, local economic development, more macro [economic] oriented concerns”. Others echoed this concern, although less directly, by describing the need to explain the social impact of entrepreneurship. Many respondents emphasized the importance of learning about the “role of small business in the economy.” Others suggested as goals “understanding the social consequences of an entrepreneurial culture,” or “what entrepreneurship is and how it affects society”.

But some respondents argued for the need for a bias toward action. As one respondent put it, he wants to teach students to “be an entrepreneur, not study entrepreneurship.” Others emphasized the potential for change, assumed positive, that entrepreneurship can bring about.

- “Entrepreneurship is about changing societies not how new things come into the society but how it is adopted and how these things change and shape society”.
- “To excite students about entrepreneurship, make them understand how it transforms society, enhances welfare and so on”.
- “I want my grads to understand how social and government policy affect economic activity and how important entrepreneurship is as a vehicle for change”.

A tension of theory and practice has existed for years within disciplines and within business schools (Simon, 1997). Typically the social scientists emphasize understanding while scholars of a more practical bent argue for action. As Simon (1997) noted, extremes are to be avoided; each requires the other. At present, respondents seem to have heeded that task in their introductory courses on entrepreneurship, although a second course or module on the social impact of entrepreneurship may be desirable.

Differentiation within the Business Curriculum

Other members of the business school faculty are not always certain what distinct elements of theory and practice comprise entrepreneurship. This research suggests such elements. To further entrepreneurship’s legitimacy, it may be valuable to distinguish entrepreneurship from other disciplines. In short, in addition to describing what entrepreneurship is, it is also important to note what entrepreneurship is NOT.

Entrepreneurship is not strategy. Virtually none of the traditional topics in strategic management received much coverage in an entrepreneurship course: “Five forces,” “first mover advantage”, “generic strategies,” would not be employed by respondents in the ideal course. The questionnaire did not explicitly ask about “resource based theory,” another distinctive strategy topic, but no one mentioned it as an open-ended response. Thus the material is very different from strategic management.

Entrepreneurship is not finance, but financial modelling, including spreadsheet and basic business economics, are a significant part of the course. Venture capital also remains a topic of importance. But respondents gave at least as much time to other topics broadly defined as marketing and management.

Entrepreneurship is not technology management. Traditional topics of technology (dominant design, industry lifecycles and the like) received no support from the panel. The one topic that was a partial exception, mentioned by about 40% of the respondents as worth half-a

class or more, was sustaining versus disruptive technology. Thus entrepreneurship is not simply about technology and science-based knowledge, although certainly technology-based entrepreneurs and entrepreneurship plays an important part in any curriculum.

As discussed above, entrepreneurship is not “just” the business plan course, although a minority of respondents use business plans as a significant part of the class. It is important to note that writing a business plan remains one part of a broader curriculum of substantial content.

DISCUSSION

All research has limitations that shape its conclusions and identify opportunities for further examination. This research takes an explicitly content focus for the Creating New Ventures course; it does not discuss the various methods and modalities for delivering such a course. In the taxonomy of Béchard & Grégoire (2005), it offers primarily a supply model of instruction, rather than a demand side. But nothing in the research suggests that faculty cannot use other methods, such as experiential learning or flipped classrooms, to transmit this content. Further research to identify the most effective methods of delivering this content would be desirable.

A second limitation is that we do not examine an allied set of skills and practices that are commonly part of some entrepreneurship curricula. Personal organization, how to do an elevator pitch and managing one’s self (Drucker, 1999) were only indirectly covered in our work (as in the leading textbooks). Future research might take a more holistic approach beyond academic content.

Third, the research focused on English language textbooks and North American faculty. Whether the same conclusions would hold and the same content would be chosen in other regions, languages and faculties would be a valuable subject for further research. With these cautions, let us examine implications of the results.

Topics

Four topics attracted the most support from the respondents: identifying trends, business models, creativity and business plans. Identifying trends has been a part of the business curriculum in strategic management, the business “environment” and business and government courses. Identifying trends borrows tools from those courses and adapts them.

Clearly a few respondents would argue that entrepreneurship is about new business models and many more would argue for the inclusion of business models in an entrepreneurship course. Business models are imprecisely defined as a way of creating and capturing value, but the phrase is used in various ways and the topic is quite confusing for research and practice. For some authors a business model is a combination of mission, strategy and marketing; for others it is a pricing strategy. Common examples of business models include the “razor and razor blades” strategy and the Internet subscription model. A few taxonomies exist but no real analysis. Thus there is an opportunity for further research into the construct and its dimensions.

Is creativity taught best by business school faculty or by creative artists or novelists? There is no shortage in the practitioner arena of creativity professionals; probably teachers borrow such concepts. Existing research of which the author is aware focuses on environments of creativity, how different theories of creativity can be defined (Amabile et al., 2005). It is not

clear that business faculty are the best people to teach creativity. In an open ended question, one respondent suggested taking students to art studios!

Business school faculty in other disciplines would be surprised to find that entrepreneurship is not just the business plan course. As reported above, only 38% would require the business plan as part of an ideal course in entrepreneurship and it would represent only a minority of the course grade. The use of a business plan also had the highest variance among respondents. Clearly many respondents feel the business plan is an unnecessary distraction from the teaching of other topics, yet some faculty choose to devote significant class time to the construction of a business plan. What, then, is the role of the business plan? Ventures have a necessary unity of persons, opportunity and resources. Unless the resources required for the venture are so small as to be within the resources of a single person, the ability to attract resources becomes a variable. Such a resource is a business skill, involving both novel elements (personal selling) and the conventional problem of developing a proforma. And all interested in the venture must be convinced that all the resources will be in place to exploit the opportunity. It is possible that the business plan represents a standard form or representation of the entire venture. Evaluation of the venture requires a set of facts, no one of which is decisive. For example, a good idea in the wrong hands is not considered valuable. The notion that the business plan is a “deliverable” or a set of action items for the next six months, does not characterize the plan and contributes to the confusion surrounding the field.

Contrary to the opinion of some faculty, these results demonstrate that entrepreneurship is not “just” the business plan course. The applied aspect of the business plan, a clear strength of the entrepreneurship curriculum and a perennial draw for students, has perhaps inadvertently worked against the legitimacy of entrepreneurship as a discipline. Many classes in professional schools (and, increasingly, the University as a whole) have a practicum course. In the business school, one thinks of the Harvard Business School “field study” or a consulting course with its accompanying project for a local small business client. In engineering, most departments require a capstone project. In areas such as education, recreation and social work, the curriculum requires an internship. And increasingly, across the university a wide variety of non-classroom-based activities are earning academic credit under an umbrella concept called “service learning.”

Regardless of the terms employed, project-based learning courses are often distinguished by the absence of direct pedagogy or substantial material of instruction. There is no body of theory and practice that constitutes the course foundation; instead, faculty supervise students with varying degrees of completeness and thoroughness. Class meetings are project reviews akin to a work environment rather than an active learning environment. If a project-based course is often supervised by adjunct or non-tenure-line faculty, as a result it may not be viewed with much respect by the regular faculty. Overt reliance on the business plan as a distinguishing feature has quite possibly earned entrepreneurship and entrepreneurship professor’s second class status, lumped with other “service learning” activities best taught by non-academics.

Audience and Enrolment

Respondents identified a paradox that explains at least some of the difficulties entrepreneurship faces as a discipline. Many respondents suggested that students should learn the business core (traditionally defined as marketing, finance, accounting, operations and management) or a subset as a prerequisite for the class. The ideal audience, however, contained both business majors and non-business majors engineers named most often. In the open ended sections, several respondents indicated their enthusiasm for cross-campus classes and students.

For example, in answering which non-business majors the respondent would like to see in a combined class, one answered, “ALL of them for crying out loud. These courses are useful to all students.” [Capitals in original.] Yet such an approach reduces the course in entrepreneurship to teaching many “remedial” business concepts. A lecture explaining the difference between debt and equity is not the best use of class time in entrepreneurship.

The study has highlighted the possibility of a useful division of labour, building on the classic definition of Stevenson & Jarillo (1990) “entrepreneurship is a process by which individuals pursue opportunities without regard to the resources they currently control.” Anyone with any experience of life can have an idea. For such an idea to be useful, it is worth knowing something of the raw material of business. On the other hand, there appear to be distinct issues associated with assembling resources and managing the process of formation. These skills create a niche for business schools and business students. At the moment, some of those skills are found among accountants, lawyers and other professionals, yet it is unclear why those individuals might have skills relevant to founding and growing a business.

The notion of calling in professional management for a start-up is longstanding. The question is whether a second specialty, prior to the first, can be identified as building a business. This person would have a set of skills different from the accountant, working with more speculative proformas, using more speculative models that represent uncertainty better (discovery driven planning, for example). They might be familiar with specifics of incorporation and taxation for smaller enterprises and perhaps familiar with current resources of the US Small Business Administration or loan programs. Certainly they would have skills of business promotion and personal selling. One can envision a person termed a Certified Start-up Professional who has a specific set of skills that can take an idea to market.

The formation of an organization legally and managerially is a crucial part of start-up. Organizations and more specifically companies are specific societal forms that create and protect property rights. They are created by law and custom to allow individuals to capture returns from their land, labour, capital and ideas. Nor are corporations the only such vehicle; patents, copyrights and trademarks are also specific societal forms. Other elements of the business environment availability and access to private equity, viral marketing campaign and others are unique and specialized tools that a Certified Start-up Professional might employ. In short, the skill of building the business is likely to be a distinctive intellectual and pedagogical domain for entrepreneurship. As many have noted, exploiting an innovation often requires the legal organization of a firm in order to appropriate the gains. This highlights the theoretical question of why firms are needed to capture gains from venturing as well as the question of when and if firms might not be needed.

The ability to recognize such ideas and evaluate whether they meet a need beyond the immediate need of the inventor is a worthwhile skill. The discussion has proceeded on the assumption that we separate the two tasks, how to identify opportunity or create it from the task of exploiting it through the formation of an organization. Is it possible to separate the building of the business from the development of creative ideas? Admittedly the blurring of the lines occurs at evaluation: how do you know that an idea is successful? Such a discussion is not an obvious part of existing curricula; the notion of evaluation is crucial but it is not an emphasized topic. Evaluation of opportunity is both an initial and a screening skill. One can imagine that some principles can be taught as part of the initial course or as an additional course or half-course.

It is also worth noting that many scholars believe that opportunities cannot be separated from the people who have them (e.g. Kor, Mahoney & Michael, 2007). Whatever the

philosophical and epistemological merits of such a claim, it is a distinction without a difference. Obviously people have an idea and that idea resides at first in their heads. But all but the most trivial require assistance to exploit the idea, so evaluation by third parties like potential employees, investors or customers is required.

CONCLUSION

In this study we have demonstrated that entrepreneurship has a distinctive body of knowledge that is unique within the business school curriculum and that such a unity gives rise to significant knowledge, skills and abilities. We have suggested that such material could be usefully consolidated to create a specific skill set and subject matter that could be identified as “professional”.

Our survey suggests that entrepreneurship scholars teach interesting, unique and distinctive constructs such as business models, creativity, business planning and environmental scanning. Given the centrality of these constructs in our teaching, they are surely worthy of more research than they now receive. Are we researching the problems and challenges associated with the distinctive body of knowledge that we teach? Do we understand how to foster creativity in individuals and groups? Can we identify creative business ideas relative to non-creative ones, and, in the process help to distinguish between entrepreneurship and small business? Do we research how trends are formed or the implications of demography for the profitability and the potential of new ventures? Do we understand the intricacies of business models? Do we have taxonomy of business models and research-driven recommendations for the use of one versus another? Can we develop measures and scales for such ideas and link their use or misuse to venture performance? If entrepreneurship is the study of innovation broadly, are we investigating innovation in other areas, such as services, that do not admit of patent counts and citations as metrics? Do we research why and under what circumstances a firm is the appropriate vehicle for appropriating the returns from innovation? The opportunities have been recognized, at least implicitly, in the classroom and opportunity beckons to bring more of these elements of the distinctive domain of entrepreneurship into the scholarly as well as pedagogical conversation. For nothing is as theoretical as a good practice.

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APPENDIX

SUMMARY STATISTICS FOR TOPICS ON THE QUESTIONNAIRE						
Heading	Topic	Mean	Std.Dev.	Mean Rank	Up Rank	Down Rank
STRAT	Business Models	3.333	1.110	1	3	2
OPP	Identifying Trends in the environment	3.311	1.080	2	4	1
RES	Business plan	3.278	1.340	3	1	21
OPP	Creativity	3.263	1.200	4	2	7
RES	Pro formas	3.110	1.180	5	5	12
STRAT	Format for entry (de novo, startup, alliance, licensing)	3.067	1.000	6	9	3
BACK	Social Impact of ENT	3.053	1.130	7	6	11
MKT	Mkt research	2.947	1.100	8	7	13
STRAT	Intellectual Property	2.920	0.983	9	13	4
ORG	Top Mgmt Teams	2.840	0.973	10	14	6
RES	VC financing	2.808	1.100	11	11	20
RES	Using a Social network	2.773	0.938	12	20	5
OPP	Biases / judgments	2.747	1.010	13	15	15
RES	Valuation	2.726	1.160	14	10	35
BACK	Generic types of businesses	2.690	1.030	15	16	19
RES	Personal Selling	2.667	1.130	16	12	34
ORG	Legal forms of organization	2.640	0.910	17	29	9
BACK	Historical / Theories	2.635	1.250	18	8	62
GROW	Expansion	2.595	0.890	19	32	10
BACK	Failure statistics	2.595	0.978	21	24	18
GROW	Liquidity events	2.595	1.040	20	17	25
STRAT	Product Lifecycles	2.581	0.950	22	28	16
STRAT	First mover advantage	2.573	0.856	23	40	8
BACK	Gov't policy	2.554	1.060	24	18	29
ORG	Start up processes	2.539	1.060	25	19	33
RES	Managing the cash cycle	2.521	1.050	26	22	32
RES	Angel financing	2.500	0.879	27	42	14
ORG	Value chain	2.493	1.010	28	27	27
PERS	Ethics	2.474	1.020	29	26	30
RES	Bank financing	2.466	0.944	30	33	22

OPP	Using the Library/Internet	2.453	1.090	31	21	48
PERS	Personal strategy	2.447	1.070	32	23	43
TECH	Licensing	2.440	0.933	33	36	23
STRAT	Mission statements	2.411	0.879	34	43	17
RES	Negotiation	2.370	1.040	35	30	45
NPD	Strategic Planning	2.355	1.090	36	25	59
ORG	Organization Theory	2.347	0.979	37	37	36
STRAT	Generic strategies	2.333	0.992	38	35	40
PERS	Leadership	2.329	0.985	39	39	39
TECH	Sustaining versus Disruptive Technology	2.297	0.902	40	46	26
OPP	Porter's Five forces	2.267	1.030	41	34	53
GROW	Acquisition	2.253	0.916	42	49	31
OPP	Brainstorming	2.243	1.010	43	41	52
MKT	New product Launch	2.243	0.933	44	45	37
TECH	Tech trends	2.243	1.030	45	38	58
GROW	Growth through Int'l	2.230	0.884	46	51	28
NPD	Discovery Driven Planning	2.230	1.100	47	31	65
PERS	Managing Risk	2.227	0.847	48	54	24
MKT	Price, placement, promotion, product— marketing's 4p's	2.173	0.963	49	47	50
PERS	Passion	2.147	0.995	50	44	61
NPD	Project management techniques	2.145	0.975	51	48	55
ORG	Using a Board	2.135	0.880	52	56	38
ORG	Hiring	2.107	0.909	53	53	46
MKT	Customer Relationship Management	2.093	0.903	54	55	47
GROW	Turnaround	2.083	0.945	55	52	56
GROW	Growth through Internet	2.082	0.878	56	58	42
GROW	Managerial Succession	2.069	0.887	57	57	44
OPP	SWOT	2.014	0.999	58	50	66
TECH	Dominant Design	2.000	0.833	59	60	41
ORG	Hiring Professionals	1.893	0.831	60	63	51
OPP	Drucker's sources of opportunity	1.892	0.853	61	61	57
PERS	Persistence	1.880	0.837	62	64	54
NPD	Diffusion models	1.863	0.961	63	59	67
GROW	Bankruptcy	1.808	0.775	65	66	49
ORG	Hiring a CEO	1.808	0.860	64	65	63
TECH	Modularity	1.795	0.881	66	62	64
PERS	Emotional Intelligence	1.689	0.757	67	67	60

Notes: “Up rank” and “down rank” hope to give a picture of variance. The up rank corresponds to adding two standard deviations to the mean and reranking; the down rank corresponds to subtracting two standard deviations to the mean and reranking.

Notes to codes: PERS: Personal Career Planning; TECH: Technology Entrepreneurship; ORG: Organization; GROW: Growth; NPD: New Product Development; OPP: Opportunity, STRAT: Strategy, RES: Resource Assembly; BACK: Background.

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