

What Students Should Really Learn to Be Successful Crowdfunders

Dr. Dale Jasinski
Quinnipiac University

Dr. David Tomczyk
Quinnipiac University

Dr. Steven Dunn
University of Wisconsin Oshkosh

Crowdfunding is an increasingly important competency and we seek to determine the key skills a student needs in order to run a successful campaign. We conducted meta-analysis of the literature where we identified each skill or core concept identified as a key to running a successful campaign. Next, we created skill clusters—groups of similar skills that operate on a common theme. We then either correlated each of the skills in a skill cluster with a concept or construct used in entrepreneurial classes or business classes in general. We also provide a list of educator resources for teaching crowdfunding.

INTRODUCTION

Entrepreneurs and their startups require resources to succeed, and it is recognized that one of the most critical of these is financing (Gompers and Lerner, 2004, Gorman and Sahlman, 1989 and Kortum and Lerner, 2000.) Since 2009 and the launch of the website Kickstarter, crowdfunding has increasingly grown in importance as a way for startups to secure funds and avoid seeking out venture capital or other traditional sources of venture financing. President Obama, in his 2012 remarks upon signing the JOBS Act to legalize equity crowdfunding, stated that “for start-ups and small businesses, this bill is a potential game changer.” Despite such endorsement from the President, it is unclear in what ways, exactly; crowdfunding might be taught to university students engaged in entrepreneurship programs. In this paper, we attempt to explore the potential impact of crowdfunding on entrepreneurship education and to identify the skill sets that need to be acquired by students.

Defining Crowdfunding

Crowdfunding, the act of raising funds from peers and strangers to achieve a goal or launch a project, product, or business, has recently seen a spike in interest with the creation of sites like Kickstarter and Indiegogo. It represents a new approach for entrepreneurs to secure funding for their new venture in return for future products or in many countries and soon in the United States even equity. The roots of crowdfunding can be found in concepts like micro-finance (Morduch, 1999) and crowdsourcing (Poetz and Schreier, 2012). Yet, we believe it crowdfunding is a distinct type of fundraising, which is being fueled by a rapidly increasing number of internet sites providing platforms by which entrepreneurs can

seek funding. As is often the case in emerging fields, the popular and academic conceptions of crowdfunding are constantly evolving. Schwienbacher and Larralde (2010) provide of the few published primers of the topic and they define crowdfunding as “an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes.” Mollick (2014), suggests that for purposes of the field of entrepreneurship, crowdfunding refers to “the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries.”

There is also a wide variety of the types of projects in terms of both the ultimate objective of the campaign and in the amount of funding being sought. A recent report shows the overall crowdfunding industry has been doubling in size year over year since 2012, with well over 1 million individual campaigns globally. In 2015, the industry is projected to grow to about \$8 billion with about \$5.5 billion in the donation or reward based segment and another \$2.5 billion in the new equity based segment (Massolution, 2015 Crowdfunding Industry Report). Moreover, what used to be a relatively small act constrained by the limitations of geography and limited transportation is now a digital phenomenon, meaning people and businesses can tap into vastly larger networks of people to raise necessary funds. In fact, crowdfunding sites give greater access to people who have funds and who share an interest in the project or goal. This has led to what were previously niche hobbies into a more mainstream prominence. For students, this means that business ideas that may have previously been discarded as having too small of a market or not being appealing to investors have an alternative funding option. This concept is further reinforced by the recent U.S. legislation that will allow crowdfunding to be used to invest in a startup. The implementation of crowdfunding for equity (where stocks are exchanged for cash via online sites) is mandated by President Obama’s Jumpstart Our Business Startup (JOBS) Act, signed into law April 5, 2012.

The challenge, though, is that although sites like Kickstarter and Indiegogo allow most anyone to create a project, few know how to effectively create and manage a successful campaign. Unlike more traditional sources of funding, crowdfunding usually attempts to appeal to a multitude of people with more limited resources or funds. Adding to the confusion, many sites allow crowdfunding entrepreneurs to offer incentives in order to attract more donations or initial purchases. More than a few backers will contribute at levels that will not reward them with the actual good or service being developed while others will contribute money in order to spend additional money. For example, the Veronica Mars movie campaign on Kickstarter launched and funded last year offered one contributor the opportunity to donate \$10,000 in order to pay their own expenses to get to the filming location in order to have one line in the movie and three others could donate \$8,000 to pay their way and their lodging to just be extras in the movie.

While the above examples might seem bizarre or merely the result of rabid fandom, these are in fact not isolated events in crowdfunding. Donor/consumer behavior in crowdfunding campaigns have certain trends and require careful management of the initial pitch, on-going updates and crowdfunding site maintenance, supplemental marketing, and an understanding of how a project connects to the potential donors. Some of these skills students can learn in entrepreneurship classes; others are radical departures from more traditional models.

LITERATURE

Despite the large volume of the projects and the funding they receive, and even after all of the action by the United States government to encourage this form of financing for entrepreneurs, very little academic research on this subject has been performed. To date, there has been very little published peer-reviewed work to date on the topic of crowdfunding. Schwienbacher and Larralde (2010) propose one of the first descriptions of crowdfunding and present a case study of a French music crowdfunding startup. In their paper, Belleflamme et al., 2012 attempt to build a theoretical model of when individuals would

choose to crowdfund. Kuppuswamy and Bayus (2013) examine how backer support on Kickstarter varies depending on project success and timing. Agrawal et al. (2010) try to understand whether crowdfunding alters the geographic constraints on fundraising that are typical of venture capital firms by examining a market of musicians seeking crowdfunding. Burtch et al. (2011) examine 100 pitches for new journalism stories and describe how timing and exposure impacted their success. Indeed, Mollick, (2014) states:

“Scholars know very little about the dynamics of successful crowdfunding, as well as the general distribution and use of crowdfunding mechanisms. We do not know whether crowdfunding efforts reinforce or contradict existing theories about how ventures raise capital and achieve success. There is also uncertainty about the long-term implications of crowdfunding, such as whether existing projects ultimately deliver the products they promise. In short, this important and growing area of entrepreneurial activity and government action is understudied, even as both practice and policy continue to rapidly advance.” (p. 1).

Despite the lack of peer published research, there are a wide variety of sources, however, that put the focus on crowdfunding directly, including the book *Kicking It: Successful Crowdfunding* (Cooke and Germain, 2012), podcasts and articles about the topic, post-mortems (analyses of the successes and failures of a campaign after it has completed), updates from current and completed campaigns, and more. However, many of these fail to fully tap on the existing literature of key aspects of the process, such as donor behavior, core marketing principles, how to budget and plan appropriately, how to protect intellectual property while providing information necessary attract donors, managing expectations, concerns, and complaints, and other aspects of managing an on-going but limited duration financing campaign.

In terms of entrepreneurship education, several studies suggest that entrepreneurship education is becoming an increasingly important vehicle for delivering entrepreneurial skills. O'Conner and Greene (2012) in their examination of entrepreneurship education, note that there is a high correlation between business-educated entrepreneurs and start-up ventures, "if only because such support raises their awareness of the entrepreneurial option" (pg. 11). Likewise, research by Elmuti, Houry and Omran (2012) found that when inclusive of a reflective educational process, formal education in entrepreneurship increases both the confidence and skills necessary for entrepreneurship.

METHODOLOGY

We wanted to explore the literature and media on crowdfunding to determine what are the key skills a student needs in order to run a successful campaign. Since this is an exploratory empirical study, our goal is to develop initial evidence about the nature of crowdfunding skills and their role in entrepreneurship education. This method of research is appropriate given both the emerging nature of the topic of crowdfunding and the still growing field of entrepreneurship (Aldrich and Baker, 2000, Busenitz et al., 2003 and Cornelius, 2006). While the purpose is to improve pedagogy, we also believe our study and its methodology might serve as a useful start for future theory-building (Eisenhardt, 1989) in the topic of crowdfunding. The remainder of the paper then will not focus on formal hypothesis testing but instead examines the key issues around crowdfunding from the perspective of entrepreneurship education.

To do this, we conducted a meta-analysis of crowdfunding post mortems—analyses of crowdfunding campaigns posted on blogs or internet magazines written most often by the founders of a campaign after it completed. We chose these articles as they offer insider knowledge and insight, identifying the skills veterans of crowdfunding campaigns (both successful and unsuccessful) point towards when describing how to run a successful campaign. We pulled from the full range of post mortems, which means we looked at articles written by crowdfunders ranging across a wide range of successes in crowdfunding, from wildly overfunded, to just barely funded, to not funded at all. We chose this approach as we wanted to ensure that we captured all aspects of crowdfunding. We also wanted to ensure that we did not overlook any core skills that successful crowdfunders take for granted, as unsuccessful crowdfunders would be likely to identify these skills as points of failure for them. We also drew on academic literature

about crowdfunding and *Kicking It: Successful Crowdfunding* by Cooke and Germain (2012), a book written by two successful crowdfunders on the topic.

We reviewed the articles and if they mentioned a specific campaign, looked up and summarized the campaign as shown in Table 1:

**TABLE 1
CAMPAIGN SUMMARY STATISTICS**

COMPANY/ ORG NAME	AMOUNT SOUGHT	AMOUNT FUNDED	# OF BACKERS/ FUNDERS	# OF UPDATES	# OF COMMENTS	REFERENCE
Shaniqua-no- ho	\$2,000	\$102	10	2	7	—,— (2013)
Double Fine Adventure	\$400,000	\$3,334,203	87142	38	11156	Amirkhani, J. (2012)
Onesec	\$12,358	\$1,063	23	12	42	Andersen, V. (2012)
Capacity Rural International	\$2,000	\$1,085	13	0	4	Arkenberg, T. (2013)
Ubuntu Edge	\$32,000,000	\$12,814,216	27,635	14	20,930	Arthur, C. (2013)
<i>The World in Red and White</i>	\$4,534	\$487	15	0	2	Atkinson, D. (2013)
<i>Linda Allen is Getting a Life</i>	\$5,000,000	\$243	17	0	6	Beggs, S. (2013)
Indie Game Story	\$1,000	\$1,106	46	7	27	Bergeron, T. (2013)
STASIS	\$100,000	\$132,523	4,298	23	1,368	Bischoff, C. (2014)
Dari Design Studio	\$6,000	\$675	19	0	34	Cruz, D. (2013)
Deconstructe am	\$10,892	\$27,754	871	16	86	De Paco, J. (2013)
The Daily Muse	\$10,000	\$2,710	34	6	22	Dunn, C. (2011)
A Show with Ze Frank	\$50,000	\$146,752	3,900	15	270	Frank, Z. (2012)
ZionEyez	\$55,000	\$343,415	2,106	19	1,617	Gibbs, M. (2012)
Tripchi	\$10,000	\$11,580	124	8	5	Jacobs, C. (2014)
Sad Pictures for Children	\$51,615	\$8,000	1,073	35	143	Johnston, R. (2014)

Dwarf Corp	\$20,000	\$45,783	2,260	34	316	Klingensmith, M, and Pei, W. (2014)
Scraps	\$19,504	\$25,134	928	20	78	Klingensmith, M, and Pei, W. (2014)
Called Shot	\$14,000	\$1,335	33	15	19	Koenig, J. (2013)
Meliway	\$12,500	\$881	33	15	29	Marinova, D. (2014)
Amp	\$30,000	\$30,423	211	15	130	McKinney, S. (2012)
New York City Opera	\$1,000,000	\$301,019	2,108	8	9	Meyer, R. (2013)
Dark Acre	\$1,500	\$74	7	4	0	Nilssen, C. (2011)
<i>République</i>	\$500,000	\$555,662	11,611	42	2,837	Payton, R. (2012)
This Just In...from Gen Con 2011	\$1,500	\$2,025	49	19	53	Perez, D. (2011)
The Quarter-Life Breakthrough	\$9,000	\$12,790	518	9	73	Poswolsky, S. (2013)
This Is Art	\$6,000	\$7,110	60	18	53	Richmond, A. (2011)
Loochi	\$75,000	\$6,288	72	1	32	Sarlandie, T. (2013)
Zego	\$50,000	\$50,239	537	30	190	Shambroom, J. (2013)
Darkest Dungeon	\$75,000	\$313,337	9,639	21	6,724	Sigman, T. (2014)
The Cauldron Kitchen, Inc.	\$45,725	\$1,175	11	1	0	Villarroel, D. (2014)

After identifying a subset of articles, we applied qualitative analytical methodology. We read through them and the book and noted any references to a skill, identifying the relevant skill and creating a draft codebook of all the skills. After reading through ten articles and the *Kicking It* book, we reviewed the codebook, combined similar skills, and wrote descriptions of each. We then reviewed additional articles, again noting any skills discussed and comparing the results to the codebook. In instances where a skill in the codebook was referenced, we noted the article next to the skill. In instances where no parallel was found, we created a new skill and description. We accomplished then, our first goal for this paper, which was to identify a comprehensive list of skills necessary for students to develop in order to be successful at crowdfunding. After a search of the literature, we have generated Table 2, which provides the list of skills and a description of each:

TABLE 2
CROWDFUNDING SKILLS

NAME	DESCRIPTION	COUNT
"Meme"-ing	Creating a catchy but short name, video, or other visible component of the campaign	8
Analyzing data	Using data from the campaign to determine how to improve or modify the campaign	7
Assessing potential revenue	Estimating revenue to be gained by the the campaign either by each contributor, by backer tiers, or overall	9
Beautifying	Improving the visuals (static and moving) and aesthetic appeal of the campaign as a whole or just a component	5
Building a successful team	Finding partners who will help bring the project/product/service to life after the campaign is successful and communicating that expertise to backers	6
Building and maintaining a website	Creating a website independent of the campaign to house important supporting information about the product or service being crowdfunded	4
Communicating with supporters	Handling any form of direct communication with supporters of the campaign (ex. updates, email, real-time chats, posting responses to comments, FAQ, etc.)	19
Creating a compelling video	Creating a video pitch as part of the campaign that inspires and/or intrigues potential and current donors	13
Creating incentivizing rewards	Creating incentives to induce contributions to the site; most frequently referencing backer tiers	13
Delivering on promises	Ensuring that promises made in the campaign are achievable and then working to meet those promises	9
Developing relevant expertise	Gaining expertise connected to the product or service (how it works, industry knowledge, etc.) or doing research on crowdfunding components (costs for other campaigns, etc.) or operations (how to set up the campaign, etc.)	6
Developing trust	The ability to connect with potential contributors and convince them that their money and/or resources will be used to deliver the product or service	7
Evaluating options	When faced with multiple possibilities (such as which crowdfunding platform to use), consider the pros and cons of each option to choose one	7
Handling legal issues	Understanding and dealing with any legal issues related to the establishment and/or the running of the crowdfunding campaign	1
Handling logistics	Dealing with any logistical issues of the campaign (ex. setting up a way to receive payments, shipping, delivery of backer rewards, etc.)	3
Increasing contributions	Using techniques to incentivize contributors to increase their contributions to campaigns (ex. offering add-ons, stretch goals, etc.)	7
Maintaining focus	A dedicated and sustained effort focused on the campaign and/or development of the product or service afterwards	7

Maintaining passion	Maintaining passion for the project and campaign throughout the life of the campaign and afterwards	8
Making an attainable goal	Choosing a well-thought out goal for the project and being able to explain why you chose that goal	4
Managing the follow-up	Regardless of success or failure, handling the aftermath of the campaign	8
Marketing	Creating and maintaining marketing campaigns to encourage people to visit the campaign, especially public relations	15
Marketing via social media	A subset of the marketing skill related specifically to marketing using social media to draw people to the campaign	14
Networking	Tapping into the expertise and/or resources of other people to further the goals of the crowdsourcing campaign	9
Planning for costs	Assessing and accounting for costs to be incurred by the the campaign (rewards, taxes, platform fees, etc.)	13
Responding to feedback	The ability to effectively respond to backer and outsider comments, suggestions, and questions and determine when such feedback warrants changes to the campaign	7
Speaking the language	Understanding terminology related to crowdfunding and/or the project for which funding is sought	3
Strategizing	Creating a long-term plan of action for one or more components of the crowdfunding campaign	8
Timing	Assessing when the time is right for launching the campaign and concluding the campaign to maximize impact and minimize burnout from backers	9
Transparency	Keeping backers up-to-date with relevant and accurate information	8
Understanding contributor behavior	Understanding what motivates people to donate or contribute to campaigns	14
Understanding your limits	Facing and adapting to limitations in personal ability (mental and/or physical)	8

Our second objective for this paper, namely to help educators identify the core skills that students need to be successful crowdfunders, is addressed in this section. The purpose is not to be absolute or normative but rather to create a foundational starting point upon which forward-thinking educators can build on and utilize in their own institutions and classrooms.

As shown in Table 3, we have categorized the skills associated with crowdfunding by several dimensions in an attempt to provide as much value as possible to educators in reviewing their curriculum in terms of developing student competencies for crowdfunding. Accordingly, we identify the conceptual skills necessary to crowdfunding, the type of course(s) where you would typically find these being addressed both in a business school and in the larger university setting, the need for new courses specifically geared for entrepreneurship and finally how the skills relate to one of the more popular vehicles for teaching entrepreneurship, the Business Model Canvas.

TABLE 3
CROWDFUNDING SKILLS IN UNIVERSITY COURSES

NAME	CONCEPTUAL SKILL	BUSINESS DISCIPLINE	UNIVERSITY DISCIPLINE	NEW CURRICULUM
Analyzing data	Analytics, statistics	Statistics		Business Analytics
Delivering on promises	Branding, ethics	Marketing	Philosophy	
Planning for costs	Budgeting	Accounting		
Assessing potential revenue	Budgeting, logic	Accounting	Philosophy	
Networking	Building and leveraging networks	Professional development	Sociology	Social media networking
Managing the follow-up	Commitment	Organizational behavior	Ethics	
Responding to feedback	Communication	Business Communication	English	
Developing trust	Communication, leadership, ethics	Organizational behavior	Philosophy	Entrepreneurial leadership
Communicating with supporters	Communication, social media	Business Communication	English	Entrepreneurial technology
Transparency	Communication, social media	Business Communication	English	Entrepreneurial technology
Creating incentivizing rewards	Consumer behavior	Marketing	Psychology	
Increasing contributions	Consumer behavior	Marketing	Psychology	Gamification strategies for entrepreneurs
Understanding contributor behavior	Consumer behavior	Marketing	Psychology	
"Meme"-ing	Creative thinking	Entrepreneurship		
Beautifying	Graphic design	Design		Entrepreneurial technology
Building and maintaining a website	Graphic design, web design	Information Systems	Computer science	Entrepreneurial technology
Developing relevant expertise	Industry expertise, crowdfunding basics	Strategic Management	Various	Entrepreneurial Experience
Speaking the language	Industry expertise,	Entrepreneurship		Crowdfunding for entrepreneurs

	crowdfunding basics			
Marketing	Marketing, public relations	Marketing	Public relations	Public Relations for Entrepreneurs
Handling logistics	Operations management, event planning	Project Management	Event Planning	Planning tools for Entrepreneurs
Maintaining passion	Self-management	Management		Entrepreneurial leadership
Understanding your limits	Self-management	Management		Entrepreneurial leadership
Maintaining focus	Self-management, strategic thinking	Strategic Management		Entrepreneurial leadership
Marketing via social media	Social media skills	Marketing		Entrepreneurial technology
Strategizing	Strategic thinking	Strategic Management		Entrepreneurial leadership
Timing	Strategic thinking	Strategic Management		Entrepreneurial leadership
Evaluation of options	Strategic thinking, SWOT	Strategic Management		Entrepreneurial leadership
Building a successful team	Team building, leadership	Organizational behavior		Entrepreneurial leadership
Creating a compelling video	Video production		Film Studies	Entrepreneurial technology

For purposes of this draft of the paper, we will concentrate the discussion on the latter two dimensions: the need for new courses and how these skills could be introduced within the context of the business model canvas. As shown in the summary table, many of the skills required for crowdfunding are already being addressed at some level in business and university courses. The role of the entrepreneurship educator in those cases would be to: (1) verify the course details to confirm that indeed those basic skills are presented, and (2) ensure that the student understands how to apply those skills to context of crowdfunding. In our environment, this typically happens during the advising sessions with students prior to course selection but depending on the institution and faculty roles the dialogue could happen at other times.

Our intent is to do such a mapping of specific courses at our university by reviewing relevant course syllabi and preparing a document that identifies the specific courses that support skill building as we have identified them. For example, at our institution, we have a course “MK 301 – Internet Marketing” which has the following description:

“This course explores the rapidly evolving world of Internet marketing and examines the strategies and tactics that firms can use to utilize the Internet as an effective marketing tool. Students discuss search engine marketing, social media tools, web site design and Internet advertising. The course also examines the role of the Internet as a channel of distribution.”

A “deeper dive” into the course syllabus, reveals that students will examine over approximately 25% of the course the following topics:

- Social Media Marketing - Introduction
- Designing and Developing Mobile Apps.
- Social Media - Marketing on Facebook
- Web Video Marketing- YouTube
- Marketing on Blogs, Twitter, LinkedIn.
- Marketing on other social media sites (e.g. Pandora, Google Plus, StumbleUpon, Pinterest, Instagram, etc)
- Mobile Marketing and Advertising

Comparing this course against our skill sets enables us to conclude that students who take this course are developing the required skills of “crowdfunding basics” and “social media skills”. It also enables us to now take this basic competency and both develop it further and apply it to context of crowdfunding in our entrepreneurship courses and activities.

In terms of new courses, our preliminary review of existing courses revealed the following gaps that we propose filling through the creation of a series of new one-credit courses. Again, at our university, courses are typically delivered in units of three credits, which roughly translate to 3 hours of class time each week for a 15-week semester. We feel that by dividing the units into a series of one-credit experiences, we can leverage additional faculty expertise and better engage students at a more “just in time” basis in that they can schedule these courses into their studies at the time it makes most sense for them in their entrepreneurial journey. We have students who discover a viable business model early, middle or late in their studies or not at all. By giving them flexibility as to when and how much they develop these skills, we hope their motivation and application will be enhanced.

The new courses specifically supported developing crowdfunding skills include the following:

- Business Analytics for Entrepreneurs
- Social Media Networking
- Entrepreneurial Leadership
- Entrepreneurial Technology
- Gamification Strategies For Entrepreneurs
- Entrepreneurial Experience
- Crowdfunding For Entrepreneurs
- Public Relations For Entrepreneurs
- Planning Tools For Entrepreneurs

Our goal is to prepare detailed new course proposals for each of the above necessary to get them approved as part of the curriculum which for our university requires course description, learning objectives, course syllabus, learning activities, assessment of learning, and how the course satisfies departmental, school and university learning objectives. For example, the “Business Analytics for Entrepreneurs” course would review the following tools available for entrepreneurs and show examples of when and how to apply them to the entrepreneurial context:

- **Convert** - Testing suite for A/B, multivariate, and split URL testing. Convert offers a simple testing wizard to walk you through setting up A/B tests.
- **Google Analytics Content Experiments** - Test variations of your pages and learn which designs bring you the most conversions. Content experiments are easy to set up: look under Experiments in the **Content** section of your Google Analytics account.
- **Optimizely** - Track engagement, clicks, conversions, sign-ups, or anything else that matters to you and your business. Optimizely's custom goal tracking provides an endless range of measurable actions that you can define.
- **Qualaroo** - Adds the ability to serve targeted calls to action, lead generation forms and routes visitors to drive conversions in real time.

- **Sendwithus** - Lets user set up emails with a simple word editor and measure the engagement.
- **Visual Website Optimizer** - AB testing software for marketers with built-in heatmaps.

The final categorization presented in this paper maps the skills required for crowdfunding to the Business Model Canvas methodology as popularized by Alex Osterwalder in his book “Business Model Generation”. The nine elements of the canvas are:

- Key Activities (KA) are the most important activities in executing a company's value proposition.
- Key Resources (KR) are the resources (human, financial, physical and intellectual) that are necessary to create value for the customer.
- Key Partners (KP) are relationships a company forms so they can focus on their core activity.
- Value Proposition (VP) is the collection of products and services a business offers to meet the needs of its customers that distinguishes itself from its competitors.
- Customer Segments (CS) identifies which customers a company is trying to serve
- Channels (CH) describes how a company delivers its value proposition to its targeted customers through communication, distribution and sales channels.
- Customer Relationships (CR) describes how the company plans to maintain and build relationships with each of its customer segments.
- Cost Structure (C) describes all of the costs a company incurs to operate its business model
- Revenue Streams (RS) describes the ways the company makes income from each customer segment.

Table 4 maps the crowdfunding skills against these elements of the business model canvas noting that not all skills are relevant in the context of the business model canvas:

**TABLE 4
CROWDFUNDING SKILLS RELEVANT FOR BUSINESS MODEL CANVAS**

NAME	CONCEPTUAL SKILL	BUSINESS MODEL CANVAS
"Meme"-ing	Creative thinking	VP
Analyzing data	Analytics, statistics	
Assessing potential revenue	Budgeting, logic	RS, CS
Beautifying	Graphic design	
Building a successful team	Team building, leadership	KP, KA
Building and maintaining a website	Graphic design, web design	CR
Communicating with supporters	Communication, social media	CR
Creating a compelling video	Video production	
Creating incentivizing rewards	Consumer behavior	CR
Delivering on promises	Branding, ethics	CR
Developing relevant expertise	Industry expertise, crowdfunding basics	KR
Developing trust	Communication, leadership, ethics	CR

Evaluation of options	Strategic thinking, SWOT	C
Handling logistics	Operations management, event planning	KA
Increasing contributions	Consumer behavior	RS
Maintaining focus	Self-management, strategic thinking	VP
Maintaining passion	Self-management	
Managing the follow-up	Commitment	CR
Marketing	Marketing, public relations	C
Marketing via social media	Social media skills	
Networking	Building and leveraging networks	KP
Planning for costs	Budgeting	CS
Responding to feedback	Communication	CR
Speaking the language	Industry expertise, crowdfunding basics	KR
Strategizing	Strategic thinking	
Timing	Strategic thinking	
Transparency	Communication, social media	CR
Understanding contributor behavior	Consumer behavior	CS
Understanding your limits	Self-management	

For example, we have identified as an essential crowdfunding skill “Communicating with supporters” which encompasses any form of direct communication with supporters of the campaign. This maps quite nicely with the element of the business model canvas concerning “Customer Relationships” (CR) which requires the entrepreneur to explore what type of relationship does each of their customer segment expect to have, how costly are they (time and money) and how are they integrated into the rest of the business model. Examples of customer relationships cited include personal assistance, self-service, automated service, and user communities. In presenting crowdfunding, the educator can use this same framework in designing and implementing a crowdfunding campaign. For example, for which potential donor customer segments is an automated email response appropriate whereas for which might an actual phone or personal interaction is more appropriate?

CONCLUSION

Crowdfunding is gathering momentum across the globe as countries including The United Kingdom, Canada, Australia, Italy, Germany, Sweden, Norway, Finland, Turkey and New Zealand as well as the United States, are using a variety of web based platforms. This is because crowdfunding provides entrepreneurs with a new, increasingly varied, and potentially disruptive way to secure startup funding for their ventures. Despite the billions of dollars raised, millions of funders participating, and over a million projects funded, and the fact that campaigns generally succeed by small margins, or fail by large ones, the subtleties of crowdfunding have been largely unstudied. Few people have tried to take a comprehensive

look at formally training people in this alternative to traditional funding. And with the coming implementation of the recent U.S. law that will allow donors to receive equity in a business that may be adopted by other countries and/or allow international investors, conceivably radically changing the investing landscape, we wanted to create a foundation upon which forward-thinking educators can build into their classrooms. This paper offers some exploratory insights into how crowdfunding works, the skills required to be successful, and how these skills can be embedded into entrepreneurship education. In doing so, we hope to begin to close the gap between entrepreneurship education and practice. We believe that this paper begins this process, giving educators the necessary information to begin reviewing their curriculum to ensure that they are helping to prepare their students for success in their endeavors.

REFERENCES

- ,— (2013). “5 Kickstarter Projects Whose Failures Will Cheer You Up.” *Graphic Design NYC*. Published on March 2013. Last accessed on April 15, 2014 at <http://graphicdesignnyc.net/2013/03/a-kickstarter-project-so-racist-and-sexist-even-the-creators-had-to-admit-and-pull-the-campaign-shaniqua-no-ho/>.
- Agrawal et al., (2010), A. Agrawal, C. Catalini, A. Goldfarb, The geography of crowdfunding, SSRN Electronic Journal.
- Aldrich, H. and Baker, T. (2000). *Blinded by the cites? Has there been progress in entrepreneurship research*, D.L. Sexton, R. Smilor (Eds.), Entrepreneurship, Kaplan Publishing (2000)
- Amirkhani, J. (2012). “The 10 Biggest Video Game Wins and Fails On Kickstarter This Year.” *Complex Gaming*. Published on December 28, 2012. Last accessed on April 15, 2014 at <http://www.complex.com/video-games/2012/12/the-10-biggest-video-game-wins-and-fails-on-kickstarter-this-year/>
- Andersen, Vidar (2012). “On Failing: Crowd Funding an iPhone App on IndieGoGo.” *Stop Me Before I Blog Again*. Published on October 26, 2012. Last accessed on June 7, 2014 at <http://stopmebeforeiblogagain.com/on-failing-crowd-funding-an-iphone-app/>.
- Ardizzoni, M. (2013). “Tactical media practices in Italy: The case of Insu^tv.” *Journalism*. Published March 19, 2013. Last accessed on April 15, 2014 at <http://jou.sagepub.com/content/14/7/868>.
- Arkenberg, Therese (2013). “On IndieGoGo Campaigns.” Story Addict (Blogspot). Published on May 1, 2013. Last accessed on June 6, 2014 at <http://theresearkenberg.blogspot.com/2013/05/on-indiegogo-campaigns.html>.
- Arthur, Charles (2013). “Ubuntu Edge: How Many Phones Were Really Ordered- and the Mistakes.” *The Guardian*. Published August on 27, 2013. Last accessed on June 6, 2014 at <http://www.theguardian.com/technology/2013/aug/27/ubuntu-edge-phones-data>.
- Atkinson, Daniel (2013). “The IndieGoGo Post Mortem.” Wordpress. Published on May 11, 2013. Last accessed on June 5, 2014 at <http://danielatkinsonyr3.wordpress.com/2013/05/11/the-indiegogo-post-mortem/>.
- Augustine, Ini (2014). “6 Lessons learned from my crowdfunding failure.” LinkedIn. Published on April 30, 2014. Last accessed on June 2, 2014 at <https://www.linkedin.com/today/post/article/20140430155806-5872362-what-you-can-learn-from-my-crowdfunding-failure>
- Beggs, S. (2013). “The Best Possible Example of How Not to Do Kickstarter.” *Film School Rejects*. Published on September 13, 2013. Last accessed on April 15, 2014 at <http://filmschoolrejects.com/features/the-best-possible-example-of-how-not-to-do-kickstarter.php>.
- Belleflamme et al., (2012). P. Belleflamme, T. Lambert, A. Schwienbacher, Crowdfunding: Tapping the Right Crowd, SSRN eLibrary.
- Bergeron, Thomas (2013). “IndieGoGo: Post-Mortem.” *Indie Game Story*. Published March 14, 2013. Last accessed June 6, 2014 at <http://indiegamestory.org/2013/03/indiegogo-p>

- Bischoff, C. (2014). "Kickstarter Postmortem." *Stasis*. Published on January 6, 2014. Last accessed on April 15, 2014 at <http://www.stasisgame.com/kickstarter-postmortem/>.
- Burtch et al., (2011). G. Burtch, A. Ghose, S. Wattal, An empirical examination of the antecedents and consequences of investment patterns in crowd-funded markets, SSRN Electronic Journal.
- Busenitz et al., (2003). L. Busenitz, G. West, D. Shepherd, T. Nelson, G. ChandlerLast, A. Zacharakis, Entrepreneurship research in emergence: past trends and future directions, *Journal of Management*, 29.
- Cook, M. and Germain, S. (2012). *Kicking It: Successful Crowdfunding*. Stone Box Press.
- Cornelius, B. (2006). Entrepreneurial studies: the dynamic research front of a developing social science, *Entrepreneurship Theory and Practice* (2006), pp. 375–397.
- Cruz, Dariana (2013). "5 Lessons Learned During our IndieGoGo Campaign." *Dari Design Studio*. Published on January 11, 2013. Last accessed on June 6, 2014 at <http://daridesignstudio.com/5-lessons-learned-during-our-indigogo-campaign/>.
- De Paco, Jordi and Garabito, Eduardo (2014). "Gods Will be Watching Crowdfunding Post-Mortem." *Deconstructeam*. Published on September 23, 2014. Last accessed on June 5, 2014 at <http://www.deconstructeam.com/en/postmortem-del-crowdfunding-de-gods-will-be-watching/>.
- Dunn, Claire J. (2011). "Crowd-Funding Campaign Lessons Learned: What You Need to Know." *Forbes*. Published on December 31, 2011. Last accessed on June 6, 2014 at <http://www.forbes.com/sites/dailymuse/2011/12/31/crowd-funding-campaign-lessons-learned-what-you-need-to-know/>.
- Eisenhardt, K. (1989). Building theories from case study research, *Academy of Management Review*, 14 (1989), pp. 532–550.
- Elmuti, D., Khoury, G., & Omran, O. (2012). Does entrepreneurship education have a role in developing entrepreneurial skills and ventures' effectiveness? *Journal of Entrepreneurship Education*, 15(1), 83-98.
- Frank, Z. (2012). "Kickstarter post-mortem." *ze frank on tumblr*. Published on March 29, 2012. Last accessed on April 15, 2014 at <http://zefrank.tumblr.com/post/20122841731/kickstarter-post-mortem>.
- Gibbs, M. (2012). "The Truth About Kickstarter and ZionEyez." *Forbes*. Published August 20, 2012. Last accessed on April 15, 2014 at <http://www.forbes.com/sites/markgibbs/2012/08/20/the-truth-about-kickstarter-and-zioneyez/>.
- Gompers, P. and Lerner, J. (2004). *The Venture Capital Cycle*, MIT Press
- Gorman, M. and Sahlman, W.A. (1989). What do venture capitalists do? *Journal of Business Venturing*, 4 (1989), pp. 231–248.
- Hauser, A. (2014). "Kickstarter Fail: Artist Raises \$51K to Publish Books, Burns Them in Alley." *DNainfo Chicago*. Published on March 5, 2014. Last accessed on April 15, 2014 at <http://www.dnainfo.com/chicago/20140305/wicker-park/kickstarter-fail-artist-raises-51k-publish-books-burns-them-alley>.
- Jacobs, Chandra (2014). "Lessons Learned on How to Use Crowd-Funding for a Travel Startup." *Tnooz*. Published on March 3, 2014. Last accessed on June 6, 2014 at <http://www.tnooz.com/article/crowd-funding-lessons-for-travel-startup/>.
- James, L. (2012). "5 Kickstarter Killers Your Band Should Avoid Like the Plague." *Music Think Tank*. Published on November 28, 2012. Last accessed on April 15, 2014 at <http://www.musicthinktank.com/blog/5-kickstarter-killers-your-band-should-avoid-like-the-plague.html>.
- Johnston, R. (2014). "Kickstarter Fail: John Campbell Burning Comics Rather Than Sending Them To Donors." *Bleeding Cool*. Published on February 28, 2014. Last accessed on April 15, 2014 at <http://www.bleedingcool.com/2014/02/28/kickstarter-fail-john-campbell-burns-comics-rather-than-sending-them-to-donors/>.
- Klingensmith, M. and Pei, W. (2014). "Kickstarter Postmortem." *DwarfCorp*. Published August 29, 2013. Last accessed on April 15, 2014 at <http://www.dwarfcorp.com/site/2013/08/29/420/>.

- Klingensmith, M, and Pei, W. (2014). "Scraps Kickstarter Postmortem - \$24,00USD and Greenlit in 3½ weeks." *Scraps Game*. Published January 7, 2014. Last accessed on June 5, 2014 at <http://www.scrapsgame.com/scraps-kickstarter-postmortem/>.
- Knight, Zachary E. (2014). "Our OKGameDev Post Mortem And Plans For The Future." Published on March 17, 2014. Last updated March 20, 2014 <http://okgamedev.com/2014/03/our-okgamedev-crowdfunding-post-mortem-and-plans-for-the-future/>
- Koenig, John (2013). "He's Dead, Jim: an IndieGoGo Post-Mortem" *Called Shot*. Published August 20, 2013. Last accessed June 5, 2014 at <http://www.calledshot.org/2013/08/hes-dead-jim-indiegogo-post-mortem.html>.
- Kortum, S. and Lerner, J. (2000). Assessing the contribution of venture capital to innovation, *RAND Journal of Economics*, 31 (2000), p. 674
- Kuppuswamy, V. and Bayus, B.L. (2013), Crowdfunding creative ideas: the dynamics of project backers in Kickstarter, *SSRN Electronic Journal*.
- Marinova, Diana (2014). "5 Lessons Learned from My First IndieGoGo Campaign". *Dianamarinova.com*. Published on May 15, 2014. Last accessed on June 6, 2014 at <http://www.dianamarinova.com/5-lessons-learned-first-indiegogo-campaign/>.
- Massolution, 2015 Crowdfunding Industry Report, accessed at http://reports.crowdsourcing.org/?route=product/product&product_id=52 on October 7, 2016
- McKinney, Sarah (2012). "AMP's Crowdfunding Campaign: Lessons Learned." *Presidio Graduate School*. Published on October 2012. Last accessed on June 6, 2014 at <http://www.presidioedu.org/blog/amps-crowdfunding-campaign-lessons-learned/>.
- Meyer, R. (2013). "The Failures of Crowdfunding: No, Kickstarter Cannot Support an Opera Company." *The Atlantic*. Published on September 30, 2013. Last accessed on April 15, 2014 at <http://www.theatlantic.com/technology/archive/2013/09/the-failures-of-crowdfunding-no-kickstarter-cannot-support-an-opera-company/280118/>.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29 (1): 1-16.
- Morduch, J. (1999). The microfinance promise, *Journal of Economic Literature*, 37 (1999), p. 1569.
- Nilssen, Christopher (2011). "IndieGoGo Post-Mortem." *Dark Acre*. Published on January 2, 2011. Last accessed on June 5, 2014 at <http://dark-acre.com/2011/01/02/indiegogo-post-mortem/>.
- O'Conner, A., & Greene, F. J. (2012). Is there an association between business and entrepreneurship education and differing entrepreneurial groups in Australia? *Evidence from GEM Australia. Small Enterprise Research*, 19(1), 5-15.
- Park, A. (2012). "Crowdfunding a Cure." *Time*. Published December 3, 2012. Vol. 180, Issue 23. Last accessed on April 15, 2014 at <https://web.b.ebscohost.com/ehost/detail?vid=10&sid=8ffa40c1-636d-4e7f-adca-2dc5eb48ed98%40sessionmgr114&hid=126&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZSZzY29wZT1zaXRl#db=tth&AN=83713703>.
- Payton, R. (2012). "How Camouflaj save République's Kickstarter." *Gamasutra*. Published on August 20, 2012. Last accessed on April 15, 2014 at http://www.gamasutra.com/view/feature/176187/how_camouflaj_saved_rpubliques_php.
- Perez, Daniel M. (2011). "My Experience Using IndieGoGo: A TJGenCom Campaign Post-Mortem." *Highmoon's Ponderings*. Published on July 24, 2011. Last accessed on June 5, 2014 at <http://dmperez.com/2011/07/24/my-experience-using-indiegogo/>.
- Poetz, M. and Schreier, M. (2012). The value of crowdsourcing: can users really compete with professionals in generating new product ideas? *Journal of Product Innovation Management*, 29.
- Poswolsky, Smiley (2013). "From Kickstarter Rejection to the IndieGoGo Homepage." *What's Up Smiley*. Published on August 1, 2013. Last accessed on June 6, 2014 at <http://whatsupsmiley.com/2013/08/01/from-kickstarter-rejection-to-the-indiegogo-hom>

- Richmond, Anne (2011). "Lessons I've Learned from IndieGoGo." *This Is Art*. Published on July 19, 2011. Last accessed on June 7, 2014 at <https://www.indiegogo.com/projects/this-is-art-the-webseries>.
- Sarlandie, Thomas (2013). "Lessons Learnt on IndieGoGo." *TB Ideas*. Published on January 2013. Last accessed on June 6, 2014 at <http://www.tbideas.com/blog/2013/01/Lessons-learnt-on-Indiegogo/>.
- Schwienbacher, A. and Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures, SSRN Electronic Journal.
- Shambroom, Jonathan (2013). "ZEGO Crowdfunds on IndieGoGo." *ZEGO*. Published on October 1, 2013. Last accessed on June 7, 2014 at <http://www.zegosnacks.com/articles/2013/10/01/zego-crowdfunds-indiegogo>.
- Sigman, T. (2014). "A Darkest Dungeon Kickstarter Post-Mortem (Part 1)." *Gamasutra*. Published on March 5, 2014. Last accessed on April 15, 2014 at http://www.gamasutra.com/blogs/TylerSigman/20140305/211326/A_Darkest_Dungeon_Kickstarter_PostMortem_Part_1.php.
- Totten, Kristy, and Laura Carroll. "Written in the Starts." *Las Vegas Business Press* 30.42 (2013): n. pag. *ABI/INFORM Complete*. Web. 15 Apr. 2014. <<http://libraryproxy.quinnipiac.edu/login?url=http://search.proquest.com/docview/1468925077?accountid=13381>>.
- Villaorrol, David (2014). "Crowd Funding Lessons." *The Cauldron Kitchen*. Published on May 6, 2014. Last accessed on June 7, 2014 at <http://thecauldronkitchen.wordpress.com/tag/>

ABOUT THE AUTHORS

Dr. Dale Jasinski is an associate professor of entrepreneurship at Quinnipiac University. He earned his Ph.D. from the University of Colorado, Boulder, in Strategic Management and Entrepreneurship. His research interests include crowdfunding, sustainability, and innovations in business education.

Dr. David Tomczyk is an associate professor of entrepreneurship at Quinnipiac University. He earned his Ph.D. from George Washington University. His research interests include crowdfunding, digital media, social media, game theory and design, and innovations in business education.

Dr. Steven Dunn is a professor of finance and sustainability at the University of Wisconsin at Oshkosh. He holds a Ph.D. in Business Administration from Pennsylvania State University. He is currently the

Department Chair of the Finance and Business Law department and is the Director, Center for Sustainable Enterprise.