The University of St. Thomas/Gener8tor Partnership: Integrating the Accelerator Model Into Entrepreneurship Education

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Following the success of accelerator programs in the start-up ecosystem, many colleges and universities have begun developing internal accelerator programs as part of experiential, cross-campus entrepreneurship education offerings. However, there are significant challenges to implementing accelerator programs in higher education that will likely prevent many colleges and universities from adopting these programs. This paper outlines the experimental partnership between the Gener8tor Accelerator Program and the University of St. Thomas to create a highly-impactful and replicable collegiate accelerator program. The results of the program to date are encouraging and can be used as a basis for further innovation and development.

Keywords: accelerator, entrepreneurship, experiential education, cross-campus programs

INTRODUCTION

The purpose of this paper is to outline the partnership between Gener8tor and the University of St. Thomas to create an on-campus accelerator program that can be used as a model for other colleges and universities. The significance of this model stems from the fact that it is relatively low-cost, it incorporates infrastructure and expertise that is already developed and proven in practice, and it provides an avenue for continued development and funding for program graduates. The paper begins with a brief literature review of accelerator programs and their significance in the start-up ecosystem, then discusses benefits and challenges of implementing accelerator programs into higher education, and finally discusses the University of St. Thomas-Gener8tor partnership, how it overcomes implementation challenges, its impact to date, and why this model can be replicated by other institutions.

LITERATURE REVIEW

Over the past ten years, the popularity of start-up accelerator programs has risen significantly. Accelerators are generally short-term, intensive development programs that are designed to "help ventures define and build their initial products, identify promising customer segments, and secure resources, including capital and employees" (Cohen, 2013). These programs evolved as a response to shortcomings in incubator models that provided office space without significant additional support, with many providing

seed capital to participating start-ups and placing a strong emphasis on connecting entrepreneurs with mentors (Pauwels et al, 2016). Accelerator programs often end with a "demo day" event as well that puts start-ups in front of additional potential investors. According to Hathaway (2016), "The accelerator experience is a process of intense, rapid, and immersive education aimed at accelerating the life cycle of young innovative companies, compressing years' worth of learning-by-doing into just a few months" (p. 2).

By providing entrepreneurs and their teams with access to these resources, accelerators have begun to play an important role in the development of entrepreneurial ecosystems in cities and regions around the world. From 2008 to 2014, the number of accelerators in the United States increased by an average of fifty-percent per year (Hathaway, 2016), and it was estimated that the number of accelerators at the end of that period was over 2000 worldwide, with locations on six of the seven continents (Cohen and Hochberg, 2014).

The increasing proliferation of these initiatives has been driven in part by decreases in the cost of building software, and in part by the accomplishments of early mentor-based immersion models (Geron, 2012). Y-Combinator, the first major accelerator program, mentored companies like Dropbox and AirBnb as start-ups and claims that the collective value of companies that went through its program in its first seven years was over $7 billion (Geron, 2012). Following Y-Combinator, other high-profile accelerators such as TechStars, which now operates in 21 cities, were founded using variations on the Y-Combinator model. Many of these accelerators focus on emerging market spaces like renewable energy and healthcare technology (see Appendix 1 for a list of the largest accelerator programs worldwide).

With their explosion in popularity, research on accelerators spaces has started to emerge, with many studies finding evidence that suggests these initiatives are largely successful. For instance, Radojevich-Kelley and Hoffman (2012) found that graduates of accelerator programs were more likely to continue receiving subsequent financing rounds than other start-ups, while Hallen, Bingham, and Cohen (2014) found that graduates of accelerator programs took less time to achieve customer traction, raise venture capital financing, and reach an exit than other start-ups. Winston-Smith and Hannigan (2014) found that the accelerator graduates were more likely to receive their next round of financing significantly sooner and were more likely to be acquired than companies that received angel funding without participating in accelerator programs.

In terms of economic development, 172 accelerator programs in the United States invested in over 5,000 start-ups between 2005 and 2015, with a median investment of $100,000, and graduates of accelerator programs raised over $19 billion in capital and created hundreds of thousands of jobs during this period (Hathaway, 2016). Additionally, Fehder and Hochberg (2014) found that the presence of accelerators in a region led to increases in funding activity for all start-ups (those that participated in accelerators as well as those that did not) and to an increase in the number of start-up investors.

ACCELERATOR PROGRAMS IN HIGHER EDUCATION

While there has been little research to date on university accelerator programs (Bresnitz and Zhang, 2019), there is reason to believe that they can have a positive impact on entrepreneurship education. Entrepreneurship programs have historically faced challenges with legitimacy among outside parties (Duval-Couetil, 2013), with some questioning whether teaching students to become entrepreneurs is "beyond the capabilities of an academic business school" (Rae, 1997: 199). One of the main challenges stemmed from a general perception that new venture creation should be the primary outcome for graduates (e.g., Duval-Couetil, 2013), when in reality, relatively few graduates were actually starting businesses (Miyasaki, 2014). Further, some research on the impact of entrepreneurship education found a disconnect between the skillsets graduates had learned versus the skillsets required to successfully navigate a role in an entrepreneurial firm (e.g., Matlay, 2008).

Part of this disconnect was a result of earlier models of entrepreneurship education, which largely revolved around the development of a business plan rather than its execution (Honig, 2004). Additionally, outside of the classroom, university support for student-led start-ups was generally limited and did not

include mentorship, network building, and connections to capital (Clarysse et al, 2005); in fact, 75% of college students in 2013 reported having no access to entrepreneurship resources on campus (Miyasaki, 2014). Because of this lack of support, university effectiveness in producing successful student-led start-ups has historically been limited (van Geehuizen and Soetanto, 2009; Soetanto and Jack, 2016).

In response, entrepreneurship education has evolved both inside and outside of the classroom to what some refer to as an "ecosystem" model (e.g., Brush, 2014). Focus has shifted to experiential learning, with a focus on innovation and value-creation skillsets (Neck and Greene, 2011), and an expansion beyond the business school (Duval-Couetil, 2013) to include students and faculty across campus, alumni, and the business community, along with curricular and co-curricular programming (Brush, 2014). Curricular and co-curricular learning now includes activities such as starting small on-campus ventures, consulting projects and internships with small businesses, and hackathons and business plan competitions, and it has been effective: the shift to experiential entrepreneurship education has had a positive impact on students in terms of their action-orientation, focus on problem-solving, and ability to cope with ambiguity, uncertainty, and failure (e.g., Kickul and Fayole, 2007; Politis and Gabrielsson, 2009; Higgins et al, 2013).

On-campus accelerator programs are a natural fit with this ecosystem (Soetanto and Jack, 2016). As their focus is on developing fundable businesses through product development, mentoring, networking, and showcase events, accelerators fill a critical gap in the ecosystem for student entrepreneurs. Additionally, accelerators are aimed at participants from across campus and provide a means for the university to connect with the business community in a meaningful way. Further, they provide non-founder students with opportunities to see pitches, work on start-up projects, and engage in the entrepreneurial process. Finally, they provide universities with a marketable program for recruiting students, creating campus-wide excitement for entrepreneurship, and sharing success stories with the public.

Because of the attractive attributes of accelerators listed above, many colleges and universities have begun to implement these programs via various models (see Appendix 2 for examples). For instance, some programs are intended for current undergraduate or graduate students only, while others are intended for alumni-led ventures or a mix of current students and alumni; some accelerator programs are run as part of a for-credit course, while others are run as summer programs; some provide funding for selected start-ups, while others do not; some are led by center directors or faculty members, while others hire community members as program managers. Additionally, programs vary in length, industry focus, and other dimensions (Legatt, 2019).

However, implementation of university-based accelerator programs is far from simple. Successful accelerators share several attributes: an experienced director, access to capital, meticulous program oversight, effective networking/mentorship, extensive outreach and application recruitment, and a staged selection process with external judges (Bresnitz and Zhang, 2019; Byrd et al, 2017). This presents many challenges for universities in building their own accelerator programs, beginning with the staffing of the director and support roles, and extending to program funding (dollars competing for other college/university needs), the need to develop community connections, and the need to create programming for accelerator participants (Byrd et al, 2017). Further, there is a need for a continuing path for development for graduates of university accelerators, which is generally outside the scope of higher education.

THE gBETA-ST. THOMAS MODEL

As a means of addressing the challenges described above, the University of St. Thomas and the Gener8tor Accelerator Program developed an experimental partnership program in the spring of 2019. To make a more significant impact on the entrepreneurship ecosystem of the university, the program was designed to incorporate more than just the accelerator itself. The details of the program along with results/impact to date are described below.

Program Overview

The University of St. Thomas and Gener8tor partnership (called gBeta-St. Thomas) is an on-campus accelerator program for current and former St. Thomas students. The program comes at no cost to

participants (in either fees or equity), and is designed to "Engage and Evangelize the Entrepreneurial Spirit" among university students from all majors and degrees, while at the same time grooming a pipeline of companies for Gener8tor's equity-based accelerator programs.

The gBeta-St. Thomas Program launched in February 2019 and completed its first accelerator class in early September 2019, and it is expected that the program will run again in 2020 and subsequent years. The program is managed by a full-time Program Director, who is a recent graduate of St. Thomas and a full-time employee of Gener8tor. It is integrated with Gener8tor's other offerings, which include multiple accelerator programs in sixteen cities/geographic regions, with niches in Medtech, music, and other verticals.

There are six main pillars that make up the gBeta-St. Thomas Program:

1) gBeta Accelerator: The accelerator program itself takes place during the summer. A cohort of six start-ups is selected to participate in the accelerator, which grooms them over a seven-week period for raising capital. It is anticipated that a number of these companies will go on to one of Gener8tor's equity-based accelerators in the future. The gBeta-St, Thomas accelerator is free for participants (no fees or equity taken by Gener8tor), but companies must have a founder who is a current student or alumnus of St. Thomas.
2) Internship Matching: Through all of its accelerator programs and other connections, Gener8tor has a pool of companies with open internships, and the gBeta-St. Thomas Program Director is active in matching current students to those positions.
3) Lunch and Learn Speakers/Panels: Every 2-3 weeks, a guest speaker or panel is brought in to have a conversation about a particular aspect of the start-up world. These programs are open for all students and alumni.
4) Mentoring (Office Hours and "Swarms"): The Program Director holds weekly office hours for any student on campus to get one-on-one input on their business ideas and/or career opportunities. gBeta also holds "Mentor Swarm" and "Investor Swarm" events for students, which are described as "speed dating" between students and mentors/investors.
5) Promotion and Support of Entrepreneurship Competitions: gBeta is active in promoting university competitions to students, such as the Ron Fowler Business Concept Challenge, and also draws on its network to bring mentors and judges in for these events.
6) gAlpha Program: The gAlpha Program is a four-week program that connects student teams with local companies to work on entrepreneurial projects. Teams are given "challenges" by the companies and present solutions to the companies at the end of the four weeks. During the project, teams receive guidance from gBeta on project execution. The vision is that this will eventually become a for-credit class.

Program Impact

In the first six months of this program, impact was observed in five areas:

1) Connecting Students to the Start-Up Community: One of the most significant areas of impact was connecting students to the start-up community. Through Lunch and Learns, Office Hours, Mentor Swarms and Internship Matching, gBeta provides a means for students to engage with start-ups *on campus*. Last spring, over 300 students participated in these programs, and anecdotal evidence indicated that they are inspiring students to want to try ideas of their own, enter business competitions, and/or pursue careers with start-ups.
2) Connecting Students to Mentors: Last spring, fifty-one students participated in Mentor Swarms and Investor Swarms, and 84 students visited the Program Director during Office Hours.
3) Increasing Entrepreneurship Interest/Involvement Across Campus: Students who participated in gBeta-St. Thomas programs represented thirteen different majors, six of which were outside of the business school.
4) Connecting Alumni-Led Start-Ups to St. Thomas: Anecdotal evidence shows that connection to alumni is often lost post-graduation, while many alumni start businesses 3-5 years after graduation. Twenty-three of the applicants to the inaugural gBeta-St. Thomas Accelerator

Program were founded by alumni who had graduated in the past ten years. Most of these alumni had lost touch with the university, and several have since become active contributors/speakers in the entrepreneurship program. Eight of the ten founders admitted into the gBeta-St. Thomas Accelerator were current or former St. Thomas students (six total start-ups).

5) Advancing Student- and Alumni-Led Start-Ups: Of the six companies that graduated from the inaugural gBeta-St. Thomas Accelerator Program, one completed a $1 million financing round, two others are nearing the close of open financing rounds, and the remaining three are preparing to open financing rounds in the near future.

Program Transferability

The gBeta-St. Thomas program can be replicated on any college campus. There are three key elements:

1) Funding: This program was designed to be low cost and high impact, and therefore appealing to donors. The total budget for the first year of the program was $80,000, which was funded by a single donor. The majority of the budget is spent on the Program Director's salary.
2) Accelerator Partnership: A major point of attraction with this model is the partnership with an accelerator program. For the college, it has the advantage of being able to capitalize on an accelerator's expertise and connections, while eliminating the need to re-create what an accelerator already does. The accelerator's brand also lends credibility to the program and is attractive to students. This model is also attractive to the accelerator, as it is an opportunity to expand its brand and to identify and groom participants for its equity-based accelerator programs (in fact, Gener8tor is already exploring opportunities for partnerships with colleges and universities in other cities). For this reason, we believe that partnership opportunities exist even for colleges outside of the metropolitan areas where accelerators generally operate.
3) Program Manager: In addition to the funding and partnership, the other vital piece of the program is hiring the right manager. The manager of the gBeta-St. Thomas Program is a recent, high-potential graduate of our entrepreneurship program, and is an excellent fit in terms of energy, career interests, and connection to other recent alumni. What makes this replicable is that the manager can be recruited by the university, but she/he is employed and trained by the accelerator, which eliminates the burden on the university for employee management and training.

CONCLUSIONS

Accelerator programs can make significant contributions to entrepreneurship in higher education, but they present many challenges in implementation, including funding, staffing, recruiting start-ups, the need to develop programming, and more. The partnership outlined in this paper is one model for bringing a potentially high-impact accelerator program to college campuses, and it is attractive because: 1) It uses limited funding that can be raised from donors as a specific point of programming; 2) It leverages the expertise, infrastructure, and network of an existing accelerator, which eliminates the need to develop these internally; 3) It addresses common gaps in entrepreneurship in terms of cross-campus programming and building new connections with the business community; 4) It provides a path for graduates of the accelerator to continue business development after completing; 5) It creates a marketable program that leverages the brand name of an existing accelerator. Moreover, this type of program provides clear benefits to the accelerator around marketing and grooming start-ups that become candidates for its equity-based programs, so there is incentive for accelerator organizations to engage in and execute on this type of program.

Moving forward, there is certainly room for development of this model and its replicability. For instance, there is a need for experimentation and direction on how a rural college or university might set up this type of accelerator partnership and have an on-campus management presence, and a need for examples of how a college might take this type of program and "make it their own." Additionally, research should also encompass the nature of individual university accelerators to provide a knowledge base for others to track, including the development of a "best-practices" and "lessons learned" for on-campus accelerator

programs. Finally, we believe that the success of this partnership model could be leveraged to other entrepreneurship programming, such as innovation or early-stage investment funds.

Most importantly, it is our hope that by sharing our experience, other institutions will be inspired to experiment with partnership models and, in turn, share their own experiences. Together, we can continue to innovate and find better ways to make an impact on campus-wide entrepreneurship education.

REFERENCES

Bresnitz, S., & Zhang, Q. (2019). Fostering the Growth of Student Start-Ups from University Accelerators: An Entrepreneurial Ecosystem Perspective. *Industrial and Corporate Change*, *28*(4), 855-873.

Brush, C. (2014). Exploring the Concept of an Entrepreneurship Education Ecosystem. *Innovative Pathways for University Entrepreneurship in the 21st Century*, *24*, 25-39.

Byrd, J., Herskowitz, O., Aloise, J., Nye, A., Rao, S., & Reuther, K. (2017). University Technology Acclerators: Design Considerations and Emerging Best Practices. *Technology and Innovation*, *19*, 349-362.

Clarysse, B., Wright, M., Lockett, A., Van de Velde, E., & Vohora, A. (2005). Spinning Out New Ventures: A Typology of Incubation Strategies from European Research Institutions. *Journal of Business Venturing*, *20*(2), 183-216.

Cohen, S. (2013). What Do Accelerators Do? Insights from Incubators and Angels. *Innovations*, *8*(3), 19-25.

Cohen, S., & Hochberg, Y. (2014). *Accelerating Startups: The Seed Accelerator Phenomenon*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2418000

DB: List of individual Seed Accelerator programs. (n.d.). Retrieved June 17, 2020, from https://www.seed-db.com/accelerators

Duval-Couetil, N. (2013). Assessing the Impact of Entrepreneurship Education Programs: Challenges and Approaches. *Journal of Small Business Management*, *51*(3), 394-409.

Fehder, D., & Hochberg, Y. (2014). *Accelerators and the Regional Supply of Venture Capital Investment*. SSRN 2518668.

Geron, T. (2012, April 30). Top Startup Incubators and Accelerators: Y Combinator Tops With $7.8 Billion In Value. *Forbes*.

Hallen, B., Bingham, C., & Cohen, S. (2014). Do Accelerators Accelerate? A Study of Venture Accelerators as a Path to Success? *Academy of Management Proceedings*.

Hathaway, I. (2016, March 1). What Start-Up Accelerators Really Do. *Harvard Business Review*.

Higgins, D., Smith, K., & Mirza, M. (2013). Entrepreneurial Education: Reflexive Approaches to Entrepreneurial Learning in Practice. *The Journal of Entrepreneurship*, *22*(2), 135-160.

Honig, B. (2004). Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. *Academy of Management Learning & Education*, *3*(3), 258-273.

Kickul, J., & Fayolle, A. (2007). Cornerstones of Change: Revisiting and Challenging New Perspectives on Research in Entrepreneurship Education. *Handbook of Research in Entrepreneurship Education*, *1*, 1-17.

Legatt, A. (2019, January 7). Five Amazing College Incubators. *Forbes*.

Matlay, H. (2008). The Impact of Entrepreneurship Education on Entrepreneurial Outcomes. *Journal of Small Business and Enterprise Development*, *15*(2), 382-396.

Miyasaki, N. (2014). Can Universities Really Help Students Start Ventures? In *Annals of Entrepreneurship Education and Pedagogy–2014*. Edward Elgar Publishing.

Neck, H., & Greene, P. (2011). Entrepreneurship Education: Known Worlds and New Frontiers. *Journal of Small Business Management*, *49*(1), 55-70.

Pauwels, C., Clarysse, B., Wright, M., & Van Hove, J. (2016). Understanding a New Generation Incubation Model: The Accelerator. *Technovation*, *50-51*, 13-24.

Politis, D., & Gabrielsson, J. (2009). Entrepreneurs' Attitudes Towards Failure. *International Journal of Entrepreneurial Behavior & Research*, *15*(4), 364-383.
Radojevich-Kelley, N., & Hoffman, D. (2012). Analysis of Accelerator Companies: An Exploratory Case Study of Their Programs, Processes, and Early Results. *Small Business Institute Journal*, *8*(2), 54-70.
Rae, D. (1997). Teaching Entrepreneurship in Asia: Impact of a Pedagogical Innovation. *Entrepreneurship, Innovation, and Change*, *6*(3), 193-227.
Soetanto, D., & Jack, S. (2016). The Impact of University-Based Incubation Support on the Innovation Strategy of Academic Spin-Offs. *Technovation*, *50-51*, 25-40.
Van Geenhuizen, M., & Soetanto, D.P. (2009). Academic Spin-Offs at Different Ages: A Case Study in Search of Key Obstacles to Growth. *Technovation*, *29*(10), 671-681.
Winston Smith, S., & Hannigan, T.J. (2014). Home Run, Strike Out, or Base Hit: How Do Accelerators Impact Exit and VC Financing in New Firms? *Academy of Management Proceedings*.

APPENDICES

APPENDIX 1
TOP 10 ACCELERATORS BY NUMBER OF GRADUATING COMPANIES

Accelerator Program	Location	# of Companies	$ Funded
Y Combinator	Silicon Valley	1801	$42.7 billion
Techstars	Worldwide	1336	
500startups	Silicon Valley	686	$3.5 billion
Alchemist Accelerator	Silicon Valley	359	$1.1 billion
DreamIT Ventures	US/Israel	197	$1.0 billion
AngelPad	San Francisco and New York	153	$2.3 billion
Startup Bootcamp	Worldwide	140	$87.7 million
Boost VC	Silicon Valley	138	$348.6 million
Seedcamp	London	118	
Blueprint Health	New York	78	$1.2 billion

Source: seed-db.com/accelerators

APPENDIX 2
SAMPLE OF UNIVERSITY ACCELERATOR PROGRAMS

University	Accelerator	Details
Cal-Berkeley	SkyDeck	Six-Month Cohort, up to $100,000 for accepted start-ups
Harvard	Venture Incubation Program	12-week program with mentoring and other resources; targeted toward current students; participants compete for up to $75,000 of funding
Harvard	Launch Lab X	Targeted toward alumni; participants compete for up to $100,000 of funding
MIT	delta v	Summer program with mentoring and networking opportunities; up to $20,000 in equity-free funding + $2,000 per month living expenses
Penn	VIP-X	3-month intensive program for students, with mentoring, seed funding, and coworking space; draws participants from Penn's VIP-C incubator

Source: Legatt, A. (2019)