



# Innovative Educators: The State of Undergraduate Entrepreneurship Education in the United States

*Sara L. Cochran*

## 1 INTRODUCTION

Entrepreneurship education is a relatively new discipline in the history of higher education. It has been lauded the fastest growing discipline in the history of higher education (Kauffman Foundation, n.d.). Despite all the progress, we are still dealing with legitimacy today. As Charles Matthews, editor of the 2021 *Annals of Entrepreneurship Education and Pedagogy* described,

“I know of no other academic (or non-academic for that matter) discipline that has allowed itself to be so abused and ultimately hijacked by others when it comes to what the discipline actually is. As a result, the word “entrepreneurship” continually suffers a definitional crisis, which in turn, systematically obscures the core element of entrepreneurship education, and all that it encompasses” (Matthews et al., 2021, xvii).

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S. L. Cochran (✉)  
Indiana University, Bloomington, IN, USA  
e-mail: [Cochran9@iu.edu](mailto:Cochran9@iu.edu)

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Yet, in spite of this crisis, entrepreneurship education around the world is thriving. Because it is a worldwide phenomenon, educators around the world rely on one another to learn best practices, conduct research and understand the best ways to educate students. The United States (U.S.) is just one country which has experienced this growth, and this chapter will explore the innovative curricular and co-curricular initiatives taking place in the United States as evidenced by recent publications of the United States Association for Small Business and Entrepreneurship (USASBE).

USASBE is “an inclusive community advancing entrepreneurship education through bold teaching, scholarship, and practice” (United States Association for Small Business and Entrepreneurship, n.d.). While membership is open to anyone from any country, the majority of the members are entrepreneurship educators from the United States. USASBE holds a conference each year in January, offers year-round programming, and oversees scholarly publications including the *Annals of Entrepreneurship Education and Pedagogy* (*Annals*) and the journal of *Entrepreneurship Education and Pedagogy* (*EE&P*) whose sister journal is *Entrepreneurship Theory and Practice* (*ETP*). This chapter will focus on evidence from items published in the *Annals*, *EE&P* and *ETP*.

With existing knowledge of entrepreneurship education research as well as these publications, along with a cursory review of the articles, a priori themes were developed to be representative of the overall trends in the research. The articles were first evaluated against the location and date published criteria described below. The articles which met these criteria were systematically reviewed while seeking information related to the a priori themes. Because of the large amount of data within multiple of the themes, the data was then further categorised into sub-themes that emerged from the data.

The articles more fully reviewed for this study were those which explore programs, students or issues related to undergraduate entrepreneurship education within the United States, were written by authors representing U.S. institutions, and were published from December 2018 through April 2021. It should be noted that the *Annals* editions were dated 2018 and 2021, but were made available to the USASBE community in January 2019 and January 2021, respectively. Therefore, the time period covered in this chapter is effectively 2019 and 2020. This chapter is not meant to be an exhaustive literature review, but rather provides highlights of educational initiatives and innovations, both curricular and co-curricular, in the United States.

## 2 CURRICULAR PROGRAMS

Alabduljader, Ramani and Solomon (2018) found that entrepreneurship programs at four-year institutions are primarily housed within business schools with the most popular program choice of students to be a minor in entrepreneurship. However, much of the research shows schools to have majors, minors, and certificates. The publications reviewed feature model programs, award-winning programs, as well as other programs of interest, providing educators a variety of types of institutions and programs from which to derive best practices.

### *Highlighted Programs*

American University Center for Innovation was named a top twenty entrepreneurship centre in April 2017 by the Association to Advance Collegiate Schools of Business (AACSB) and in October 2017 as an “Oasis of Excellence” by the American Council of Trustees and Alumni (ACTA). The program includes an entrepreneurship minor for non-business students, entrepreneurship specialisation for business students, as well as programs for graduate students. The curriculum emphasises experiential learning with unique offerings such as social entrepreneurship courses with an included travel stay in Bergen, Norway and a FedTech commercialization course partnering students with cutting-edge inventions from the U.S. Federal lab system (Terjesen & Li, 2018).

North Carolina State University was recognised in 2017 by USASBE as Outstanding Emerging Entrepreneurship Program for the E-Clinic, a hands-on practicum. In order to prepare undergraduate students to work in the E-Clinic, students take courses designed to teach opportunity analysis and creation, new venture planning, and finance and accounting for entrepreneurs. During the E-Clinic practicum, students work with clients in a “teaching hospital” model in that the clients are the patients, and the students provide services under the direction of “attending physicians” or experienced professors (Pollack et al., 2018).

Grove City College has been recognised in rankings in Forbes, U.S. News & World Report, Money, Business Insider and The Princeton Review. Grove City College offers a major and several minors in entrepreneurship. The major includes courses in internet entrepreneurship, social innovation, social enterprise, social entrepreneurship and high-tech entrepreneurship. Additionally, corporate partnerships have

been leveraged to offer specialised courses such as corporate healthcare innovation and supply chain management where the students work on projects for companies (English, 2018).

Miami University employs a practice-based model in that students are immersed in experience throughout their entrepreneurship major coursework by having at least five real-world, real-time entrepreneurial experiences ranging from a Start-up Weekend or a client analytics project, or a semester-long immersion experience across the country or abroad. There are various specific courses to provide these opportunities, such as the Altman internship experience where students spend the summer working with high growth companies. Additionally, the accelerator launch course provides students an opportunity to work on their start-up in a top-ranked accelerator for credit and the semester immersion in San Francisco places students in internships in high growth companies. Miami University is unique in that it is one of the few top 25 entrepreneurship programs that does not offer a graduate program and simply focuses on undergraduate education (Smith & Holcomb, 2018).

Florida State University's (FSU) Jim Moran College (JMC) of Entrepreneurship was recognised as the 2019 USASBE Model Emerging Program and additionally by the Global Consortium of Entrepreneurship Centers for Exceptional Activities in Entrepreneurship across Disciplines in 2019. The JMC offers a Bachelor of Science in entrepreneurship with majors in commercial entrepreneurship, social entrepreneurship and retail entrepreneurship. Each student who earns a major in entrepreneurship must complete an internship and is strongly encouraged to have an international experience. Additionally, the JMC partners collaborate with various colleges and majors across campus to offer minors in entrepreneurship. The curriculum offers case study learning as well as hands-on applications (Fiorito & Plant, 2021).

The University of Missouri Kansas City (UMKC) Regnier Institute offers a major emphasis and minor and special courses with other disciplines (Hornsby et al., 2021). The Regnier Institute has taken a cross-campus approach through which an entrepreneurship professor partners with a discipline-specific area professor to develop a course in entrepreneurship focused on a specific discipline as part of a general education requirement. Courses developed include Biological Innovation and Entrepreneurship, Innovation and the Aging Population (a partnership with the nursing program) and Arts Entrepreneurship: The Music Business in Different Cultures and Industries. Since the launch

of these courses, enrolment in business courses by non-business majors has gone from 15 to 26 per cent, thereby exposing more non-business students to entrepreneurship concepts (Mendes et al., 2021). Additionally, the Regnier Institute offers the Entrepreneurship Scholars (E-Scholars) program for early-stage entrepreneurs to take their business ideas from concept to reality through a program for which they can earn up to six hours towards their major or minor (Hornsby et al., 2021).

### *Courses*

These previously mentioned programs, as well as numerous other programs around the United States, are teaching an innovative curriculum with unique courses, exercises and cases. The most popular forms of pedagogical strategies in the entrepreneurship classroom are discussions, creation of business plans, case studies and guest speakers (Alabduljader et al., 2018).

When looking at programs across the country Alabduljader et al. (2018) found that the most popular course in entrepreneurship programs is simply called “Entrepreneurship” (Alabduljader et al., 2018). While many schools offer courses in entrepreneurship, introduction to entrepreneurship, or the entrepreneurial mindset, there are several other courses being offered. Some innovative courses highlighted in the recent literature are included here.

The Creator Pedagogy at Georgetown University is an undergraduate course that teaches about entrepreneurship through authorship. Through the semester-long course, students learn the publishing process and publish a book that can “demonstrate their competency, credibility and expertise in a field” (PAGE) and long-term gives students necessary skills to launch successful ventures (Reid & Koester, 2018).

Barber, Harris, and Paynter (2021) describe a program through which service learning is used to increase the impact of student consulting projects in rural communities. The program includes grant-funded internships after two consulting-based courses.

California State University provides an experiential entrepreneurship opportunity through which students are placed in paid jobs with local small businesses (Woods & Burley, 2021). Similarly, the University of California Santa Cruz quickly developed the GetVirtual Local Business Assistance course to assist local businesses during the COVID-19 pandemic. This course was a community partnership to connect local

industry experts and mentors with students and the City of Santa Cruz economic development program to assist local brick-and-mortar businesses to go virtual rapidly (Miljkovic & D’Intino, 2021).

Utah State University’s Small Enterprise Education and Development (SEED) Program provides students an opportunity to spend 12 weeks in a developing country teaching entrepreneurs fundamental business. The program is open to students from any major and includes a consulting course before the travel experience (Holland & Glauser, 2021).

Grove City College offers a course in corporate healthcare innovation where students work with a corporate partner to develop and pitch business models to solve problems in the healthcare industry (English, 2018).

Miami University offers the Accelerator Launch Course where students attend class in an accelerator program at The Brandery accelerator in Cincinnati, OH. The program is taught by entrepreneurs and investors and facilitated by Miami University faculty. At the conclusion of the program, the students pitch in a Demo Day with judges (Smith & Holcomb, 2018).

### *Exercises*

While many universities, like those featured above, offer unique innovative courses, these and other educators are using a number of exercises, learning innovations and cases to teach entrepreneurship theories and principles, as well as help students develop an entrepreneurial mindset. There have long been innovative exercises to teach basic entrepreneurial principles, many which are still highly regarded and used today. In order to expand the topics covered, educators have developed the below exercises.

**Storytelling.** Story telling by having a classmate tell your story (Hart, 2018). Entrepreneurs frequently need to tell their story and express their vision for solving a problem for customers to journalists, investors, donors, prospective employees, partners and even customers. Recognising this, Hart (2018) describes an exercise during which students tell their life stories to a classmate and learn to craft a person brand through stories.

**Design thinking.** Zane and Zimbroff (2021) describe a human centred design exercise for ideation and brainstorming building something from

supplies brought into the classroom (Zane & Zimbroff, 2021). Meanwhile to teach serving customers and hidden assumptions, Winkel et al. (2021) describe an exercise to design a toothbrush.

**Gender and Diversity.** Solomon and Solomon (2021) describe an exercise that encourages diversity using personality tests. To enable classroom-based conversations about bias in the domain of entrepreneurship, Michaelis et al. (2018) present a learning innovation which explores gender bias in venture funding.

**Minimum viable products (MVP) and Scaling.** Through Hart's (2021) exercise, students design a minimum viable product and scale up and scale back as the need arises. Winkle, Wilcox and Teckchandri (2021) use an MVP exercise through which students work in teams to develop a landing page and video to gather information from prospective customers in just 60 min.

**Finance.** Tonhozi de Oliveira and Peak's (2021) exercise helps students strengthen skills in the areas of basic pricing and pricing strategy and learn how to use market research to make such decisions.

**Use of Films.** Solomon (2018) uses George A. Romero's 1968 *Night of the Living Dead* as a metaphor for entrepreneurship, finding it full of metaphors for topics such as competition, opportunity recognition, group dynamics, strategy and leadership (Solomon, 2018). Meanwhile, Vanevenhoven et al. (2021) use the film *Door to Door* because of its numerous learning points on topics such as perseverance, persistence, passion, and community and relationship building.

### *Cases*

**Family business.** *Continuing the legacy at Nordic Lodge: Succession planning at an iconic family-owned restaurant* covers family business and succession planning (Graham & Mischel, 2019).

**Social entrepreneurship.** Balachandra and Stoddard's (2019) *Rahama Wright and Shea Yeleen* covers topics on social entrepreneurship, women's entrepreneurship, start-ups in Africa, impact investing and non-profit versus for-profit organisation. Narapareddy and Berte's (2019)

*Entrepreneurship in a non-profit healthcare organisation* highlights non-profit entrepreneurship, social entrepreneurship, non-profit management and new venture feasibility.

**Technology entrepreneurship.** *Entrepreneurship in the digital era: Creating your own online business* teaches about digital entrepreneurship, creativity and innovation and technology entrepreneurship (Finkle & Olsen, 2019). Mancha et al. (2019) *LBRY, Inc: Scaling and monetizing a blockchain start-up* covers blockchain and digital platform.

**Entrepreneurial strategy.** Craig et al. (2019) *The impact of climate and weather on a small tourism business: A SWOT case study* covers topics of climate change, weather and SWOT analysis. While *Pokey O's: Determining the location and future structure of a dessert food truck* covers the industry life cycle and supplier threat (Artz et al., 2020).

**Marketing.** Anderson et al. (2019) *Pepper Place Farmers' Market and the need for research and strategy* covers marketing strategy and market research. Specific to the pricing strategy is *Do not leave your pricing strategy hanging: The Elevate Hammock Company* (Walker et al., 2019).

**Finance and investment.** *Breathometer: Shut down by the Federal Trade Commission* focuses on due diligence, investors, board of directors and startup success (Miller et al., 2020). While Noyes and Mandel's (2020) *Wefunder: Leading the growth of a new industry* focuses on crowdfunding, equity crowdfunding, opportunity creation, regulatory entrepreneurship, crowdfunding law, industry creation and entrepreneurial finance.

### *Training Faculty*

In addition to training students, Rowan University has developed a faculty certificate program to train faculty to train students. This program begins with a one-day boot-camp prior to the beginning of the fall semester and is followed by five sessions throughout the academic year. The program is designed for faculty outside of the business school to develop an entrepreneurial mindset and integrate such into their existing class content. Additionally, it provides an opportunity for faculty to develop relationships with entrepreneurially-minded faculty from other disciplines (Bodnar et al., 2018). Similarly, Iona College Hynes Institute



offers the Hynes Faculty Fellowship Program for faculty across campus to develop and implement entrepreneurial learning innovations within courses in their disciplines (Winkler et al., 2021).

### 3 CO-CURRICULAR PROGRAMS

In addition to the great work being done in entrepreneurship classrooms in the United States, programs are offering co-curricular opportunities to enhance the student experience and entrepreneurial learning. Outside the classroom, the most popular co-curricular opportunities for students include business plan competitions, entrepreneurship clubs and pitch competitions (Alabduljader et al., 2018) and programs offer these as well as many other innovative opportunities for students to apply their classroom learnings. Some unique and noteworthy offerings published about recently include these below.

**Technology Commercialisation.** Eastern Washington University's (EWU) Technology Commercialisation Academy (TCA) is an eight-week summer program for students to develop working commercialization plans based on patented technologies. The EWU's Centre for Entrepreneurship partners with local research universities to procure access to patented technologies and leads the students through sessions to understand the program and work on their ventures (Teague & Liu, 2021).

**Student Consulting.** Bear Studies is an undergraduate student-run consulting and design firm which employs student fellows who freelance for local start-ups and small businesses in business, design and technology services. It was developed by students, is managed by students, and, because of great success, is being developed on additional university campuses (Delaney et al., 2019).

**Incubator and Co-Working.** American University's Center for Innovation offers the AUCI Incubator which helps students build successful ventures, access mentors and gain access to funding (Terjesen & Li, 2018). Grove City College offers the VentureLab for students to work with coaches and mentors as they build their ventures (English, 2018). FSU's JMC offers the Greenhouse student business incubator through the InNOLEvation Center for Student Engagement (Fiorito & Plant, 2021). The Georgetown Entrepreneurship Initiative offers the Summer

Launch Incubator where students receive coaching and a stipend so they can focus on their ventures full-time (Reid, 2021). Iona College's Hynes Institute provides a collaborative workspace for students to work with fellow students, mentors and faculty as they develop their ideas (Winkler et al., 2021).

**Study Abroad.** Grove City College offers the GCC-Oniris Engineer + Entrepreneurship Collaboration through which students can combine their engineering and entrepreneurship expertise to address real-world engineering problems in Nantes, France (English, 2018).

**Living Learning Community.** FSU's JMC has an Entrepreneurship and Innovation Learning Community where first-year students live together in a residence hall with speakers, coursework and shadowing opportunities (Fiorito & Plant, 2021).

**Investing Apprenticeship.** The Georgetown Entrepreneurship Initiative Venture Fellows Program is an eight- to twelve-month apprenticeship within a local venture capital firm for students to work alongside active investors (Reid, 2021).

**Accelerator and Competition.** The Iona Hynes Institutes Iona Innovation Challenge is a two-month program for students to work on their ideas culminating in a competition where students compete for \$6,000 in prizes (Winkler et al., 2021). The Regnier Institute at UMKC offers the Regnier Venture Creation Challenge for students from all across the region to pitch their business model and compete for \$75,000 in total prizes (Hornsby et al., 2021). The Georgetown University Entrepreneurship Initiative also offers a competition called Bark Tank through during which eight selected teams pitch for \$100,000 in prize money for their ventures (Reid, 2021).

## 4 OUTCOMES

Scholars have long worked to understand the outcomes and impact of an entrepreneurship education and in this review, there were contributions to this body of research.

Lee, Kreiser, Wrede and Kogelen (2018) surveyed entrepreneurship students to understand their development of capabilities related to networking skills, self-confidence and proactiveness. The study found that

students' entrepreneurship capabilities had a significant correlation with entrepreneurial intentions, family background and GPA. Additionally, the study indicated that students' entrepreneurial capabilities are further cultivated the longer they are in school.

Similarly, undergraduate engineering students have been found to have an increased self-efficacy after taking an entrepreneurship course in all areas tested including searching, planning, marshalling, implementing people, and implementing finance. The strongest increased self-efficacy was in planning followed closely by finance (Shekhar et al., 2018).

In an experimental design, Burnette et al. (2020) randomly assigned students in an introduction to entrepreneurship course to either a growth mindset intervention or a knowledge-based control. Those students in the growth mindset group reported greater entrepreneurial self-efficacy on their main class project as well as increased academic and career interests in entrepreneurship. However, the intervention did not impact their performance on a classroom assignment.

When looking at the combination of curricular and co-curricular programs, Chandler and Broberg (2019) found that in a new venture competition judged on a ten-page business plan, teams with entrepreneurship students scored higher than those with no entrepreneurship students.

Shekhar, Huang-Saad and Libarkin (2018) studied undergraduate students in a co-curricular, five-month social entrepreneurship program in the United States and found them to have an increased self-efficacy after participating in the program. While they showed an increased self-efficacy in all areas: searching, planning, marshalling, implementing people, and implementing finance, the largest increases were for the marshalling and searching construct.

Cochran (2021) explored the role of gender in entrepreneurship education by studying women students' experiences in an undergraduate entrepreneurship program. The study found that women students are superwomen, similar to the dictionary definition of the word. These women successful and performed very well in the men-dominated area in that they were very responsible and coped successfully with multiple demands including schoolwork. They worked hard in school and were highly responsible.

## 5 CONCLUSION

This chapter has provided an overview of the latest initiatives and innovations in undergraduate entrepreneurship education in the United States as presented in three leading entrepreneurship publications: *Annals of Entrepreneurship Education and Pedagogy*, *Entrepreneurship Education and Pedagogy* (EE&P) and its sister journal *Entrepreneurship Theory and Practice* (ETP). This snapshot of recent trends shows that these innovations have included curricular changes from entire classes, exercises and cases, to co-curricular innovations such as programs, internships and study abroad opportunities. In order to understand the impact of entrepreneurship education and these innovations, scholars continue to research the field. Because entrepreneurship education has been lauded the fastest growing discipline in the history of higher education (Kauffman Foundation, n.d.), it is not surprising that the field continues to constantly innovate. While it is a relatively new discipline, it has had a strong hold for more than 30 years (Kauffman Foundation, n.d.). Because of this, there are standard theories, methods, principles and concepts being taught. But, by the very nature of the discipline, educators continue to innovate and act in entrepreneurial ways.

Anecdotally, these trends are consistent with what can be observed on entrepreneurship education by researching program websites, attending USASBE and other similar conferences, and visiting with colleagues from around the country and world. Because of the very nature of the discipline, entrepreneurship educators are constantly innovating programs and courses. The COVID-19 pandemic has caused educators to be even more innovative (McMurtrie, 2021), while the United States has seen an overwhelming surge in entrepreneurial activity (Ahuja, 2021) and a call for entrepreneurs to address the world's ailments (Miller, 2020). Entrepreneurship education was already changing, and these events are exacerbating this trend. Given these trends and current events, it is anticipated that the future will bring a continued rise and presence of entrepreneurship programs, more experiential opportunities in and out of the classroom, and a rise in the number of programs and initiatives using entrepreneurship to approach the world's wicked problems.

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