EMPOWERING STUDENTS THROUGH ENTREPRENEURSHIP: ASSESSING SKILL ACQUISITION IN TARGETED PROJECT-BASED LEARNING

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Abstract

The COVID-19 pandemic has significantly transformed the educational landscape, with students, educators, and institutions adapting to new challenges and opportunities. As students navigate the academic terrain reshaped by the pandemic, they are in pursuit of educational journeys that blend hands-on, practical skills alongside foundational aspects of traditional academia, highlighting a shift towards more meaningful and applicable learning experiences. Entrepreneurship has emerged as a key area of interest, yet a gap exists regarding whether smaller liberal arts institutions can compete in the higher education landscape and make an impact by infusing targeted entrepreneurial projects into the curriculum, focusing on the skills acquired. Through qualitative analysis of end-of-term reflections and depth interviews with an undergraduate population engaged in entrepreneurial educational experiences and projects, using a tripart Entrepreneurial Skills (ES) model as a reference framework, themes emerged that can help form a better understanding of how students gain proficiency and compete in a global and digital world through entrepreneurial initiatives in higher education, including the ability to be open to novelty, to create solutions to emerging problems, and to communicate effectively.

Keywords

Entrepreneurial Education, Public Policy, Experiential Learning, Entrepreneurial Skills

Introduction

The post-pandemic educational landscape is characterized by a greater emphasis on meaningful experiences with a focus on practical skills alongside traditional academic learning (Núñez-Canal et al., 2022). The rise in college students seeking purpose and satisfaction in their lives, aspiring to devote themselves to endeavors they are passionate about rather than settling for unfulfilling full-time jobs, has been significant. With these developments, there is a growing trend towards entrepreneurial pursuits as a viable career choice.

According to a survey conducted by *Intelligent.com*, a significant 40% of graduates in 2022 believed that starting their own business could offer them better earnings prospects. Furthermore, 31% of respondents expressed their enthusiasm for establishing their own compensation and workplace guidelines, highlighting their desire to be self-employed and have autonomy over their work environment.

Higher education institutions are positioned at a crucial juncture to both acknowledge these trends and offer a meaningful experience to students transitioning from the pandemic (Krishnamurthy, 2020). As a result, institutions are adapting to these changing preferences by reevaluating their offerings, support services, and teaching methodologies to meet the evolving needs of students. Entrepreneurship in higher education is gaining traction within literature, yet a gap remains regarding which specific endeavors to initiate, and how to determine whether these endeavors are having an impact on entrepreneurial skills (ES) development.

Concurrently, research is indicating that entrepreneurship has the potential to "become the engine of economic and social development throughout the world" (Audretsch, 2007, p. 4). Globally, governments have aimed to implement various initiatives to encourage entrepreneurship within higher education (Greene & Saridakis, 2008) as entrepreneurship can play a major role not only in economic development (Lautenschläger & Haase, 2011) but also cultivate individuals who have potential to inspire a "socially responsible market economy" (Linder, 2018, p. 115).

Public policies related to entrepreneurship in higher education play a crucial role in shaping the environment in which universities and colleges operate, influencing their ability to foster entrepreneurial activity, innovation, and economic development. Effective public policies in this area can help create a supportive ecosystem that encourages entrepreneurship, drives economic growth, and addresses societal challenges. As argued by Ratten and Usmanij (2021), "Entrepreneurship education is an important way government can encourage economic growth in their regions."

Entrepreneurial education is increasingly recognized for its importance in fostering the skills and mindsets needed to navigate today's dynamic global economic landscape and has the potential to equip students with a broad set of competencies that are crucial not only for starting and running businesses but also for contributing innovatively and effectively in various professional contexts. However, Rattan and Usmanij (2021) argue that although significant progress has been made in the field of entrepreneurship education, there remains considerable potential for enhancing research related to teaching methodologies. Of particular relevance is the development of soft skills necessary for success in today's global landscape. In terms of fostering solid soft skills, entrepreneurial education has been exposed to "criticism, because most programs are about entrepreneurship and so usually disregard the students' context, interests, and abilities" (Charron Vias & Rivera-Cruz, 2020, p. 162).

This study seeks insight into student experiences and skills acquired as a result of the specific entrepreneurial initiatives actioned at a small liberal arts institution by utilizing the Global Entrepreneurial Skills (ES) model proposed by Jardim (2021) as a reference framework. This tripartite ES model focuses on the ability to be open to novelty, to create solutions to emerging problems, and to communicate effectively, while encompassing the following skills: creativity and innovation, the spirit of initiative, self-efficacy and resilience, strategic planning, and evaluation, resolution of problems and decision-making, transformational leadership, clear and visual communication, teamwork and networking, and digital communication.

Entrepreneurial Initiatives in a Small Liberal Arts University Setting

This research will look at two specific entrepreneurial instructional methods employed at a smaller liberal arts institution in New England. The resultant student experiences and competencies developed are documented.

An emphasis on Entrepreneurship continues to gain considerable momentum at this institution and has been increasingly integrated into the curriculum. Of particular significance is the department's progress towards establishing a competitive entrepreneurial community that benefits both undergraduate and graduate programs. Specific endeavors over the past 5 years include the establishment of a new minor in Entrepreneurship, a redefined concentration in Entrepreneurship as part of the graduate MBA program, a newly formed strategic partnership with a local co-working space / entrepreneurial hub, the introduction of an 'Entrepreneur in Residence,' as well as the procurement of an endowment designated to support entrepreneurship programming and curriculum at the University.

This focus has spurred continuous evolution within the curriculum relating to Entrepreneurship. This study examines two projects: The Senior Capstone Experience and the R.I.S.E. (RI Student Entrepreneurship) Summit.

Senior Capstone Experience

Historically, seniors across majors from the Business & Economics Department engage with local businesses for their final Capstone project. Throughout the semester, student groups collaborate with small business owners to craft a comprehensive business plan. The culmination of this project is a formal presentation of the business plan before a panel of business experts for evaluation. However, the COVID-19 pandemic had a profound impact on the small business community in the United States, affecting various sectors in multiple ways. The challenges and outcomes ranged from temporary closures to permanent shutdowns, economic hardships, and supply chain disruptions (Kalogiannidis, 2020). As a result, the pool of small businesses that students could engage with significantly decreased forcing the University to pivot pedagogically. To address this issue, the Spring 2022 semester saw the introduction of a strategy that incorporated entrepreneurship into the Capstone experience while maintaining the focus on experiential learning.

The new model which centered around entrepreneurial tenets commenced in the Spring 2022 semester. After receiving training in the methodology provided by 3DayStartUp.org, each student was tasked with developing a unique idea for a startup venture. Students created a short video pitching their ideas. The instructors selected the most promising concepts, which were then presented to the class. Based on interests, students formed 3-6 member teams. Throughout the semester, student teams built full business plans for their new venture ideas. The plans covered mission and vision statements, SWOT analyses, market research, and included a strategic plan, marketing strategy, staffing approach, financial forecasts, and an operational blueprint. The process involved engaging with the community to scout for business locations, understand relevant regulations, and identify funding opportunities. Business faculty mentors provided ongoing support and structure for the students.

The conclusion of the Capstone experience was celebrated in the University's first pitch competition where the top four teams vied for cash prizes. This event provided an opportunity for students to demonstrate their entrepreneurial skills and present their innovative ideas to the broader business community.

As argued by Bell and Bell (2020), "Experiential learning opportunities (e.g., venture creation experiences and work experiences) can help to develop such skills, (entrepreneurial) identity, and competence of the individual" (p. 993). This initial endeavor in 2022 indicated that students showed advancement across four dimensions when compared to the educational approaches of previous years: Engagement, Quality of Work, Team Cohesion, and Course Satisfaction (Bonoff & Sacco, 2022). This entrepreneurial model has continued in the Senior Capstone Experience over the next four semesters providing additional opportunities to explore competencies developed and noteworthy outcomes from a student perspective. Thus far, 340 students have participated in this entrepreneurial focused Capstone experience.

R.I.S.E. (RI Student Entrepreneurship) Summit

Students enrolled in an introductory class created as part of the new Entrepreneurship minor collaborate with a local entrepreneurial hub / co-working space to produce the R.I.S.E. (Rhode Island Student Entrepreneurship) Summit. This annual event launched in the Spring 2023 semester is designed to spark the entrepreneurial spirit among students from three local universities. The summit provides a platform for students to explore innovative ideas, connect with like-minded individuals, and gain insights from successful entrepreneurs.

For the inaugural event in 2023 as well as the second annual Summit held in Spring 2024, students were charged with the tasks of naming the Summit, creating the schedule of events, recommending speakers and presenters, designing promotional materials, choosing and ordering breakfast and lunch for Summit participants, crafting entrepreneurial workshops, and selecting students to participate in a pitch competition.

Fulgence (2015) posits that entrepreneurship programs within higher education should "integrate experiential learning and innovative techniques in the teaching and assessment processes and to involve students in extra-curriculum activities" (p. 239). Over two years, the R.I.S.E. Summit has generated enthusiasm and ownership from the students tasked with creating the Summit as well as the attendees from three Universities. Thus far, fifty students have engaged in the planning and execution of the R.I.S.E. Summit.

Methodology and Analysis

This research adopts a qualitative approach employing Qualitative Content Analysis (QCA). QCA is a research methodology used to interpret and systematically analyze text data, or qualitative content, in a way that aims to provide knowledge, insights, and understanding of the research subject. QCA focuses on the contextual meaning of the data, rather than merely quantifying frequency or occurrence of certain words or phrases. As Roller and Lavrakas (2015) posit, QCA involves "the systematic reduction of content, analyzed with special attention to the context in which it was created, to identify themes and extract meaningful interpretations of the data" (p. 232).

QCA offers capacity to blend inductive and deductive reasoning seamlessly, rather than favoring one over the other. This dual approach enriches research. Deductive reasoning facilitates the establishment of initial categories or themes based on existing literature, theories, and prior research. According to Berg (2001), leveraging concepts and variables from earlier studies proves advantageous, especially in the preliminary phases of data collection and analysis. Concurrently, inductive reasoning is instrumental in organizing raw data into coherent categories and themes, allowing analyzation of both manifest and latent content (Lune and Berg, 2017).

Purposive sampling was utilized, a non-probabilistic approach that doesn't prioritize representativeness or the ability to generalize findings statistically. Instead, participants were deliberately selected based on their ability to provide in-depth and meaningful information that aligns with the research study's specific goals, thereby improving the findings' overall depth and quality (Campbell, et al, 2020).

The data gathered for this study covers a three-year period totaling five semesters. 390 students participating in this study are undergraduate business students taking part in the Senior Capstone Experience and/or the R.I.S.E Summit.

Findings

Qualitative QCA findings are illustrated through the lens of the Global ES Skills model, pinpointing the "essential entrepreneurial skills that students most need to face the unpredictable challenges of the current global world and the ongoing digital transformation" (Jardin, 2021, p. 4). Select reflections of students are highlighted.

The first dimension of the model involves the curation of skills relating to a focus and openness to novelty, particularly through honing of "(a) creativity and innovation, (b) the spirit of initiative, and (c) self-efficacy and resilience" (Jardin, 2021, p. 5). These themes continuously resonated throughout the data with students actively expressing their increased confidence, motivation, and ability to overcome challenges. Self-efficacy in relation to entrepreneurship refers to an individual's belief in their own abilities to successfully perform entrepreneurial tasks

and achieve entrepreneurial goals. This concept, rooted in Albert Bandura's (1994) theory, is crucial for entrepreneurs as it influences how they approach business challenges, their resilience in the face of setbacks, and their overall persistence in pursuing their business objectives:

> I heard stories from students who took this capstone class in the past about how they worked with real clients from the community. I was looking forward to that and was a bit disappointed when I heard about the new focus of the class. However, after going through the process for the past semester, I can honestly say that my experience could not have been better. Working on a start-up venture that was my own creation was extremely rewarding. I allowed myself to take on something completely new, and I gained confidence in my abilities. I am so proud of the project my team presented to the panelists. I never really "got it" before this class. I couldn't quite understand how I could create something that was truly my own! I now definitely consider myself an entrepreneur and look forward to what the future might bring by following this path.
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> I endured crazy challenges with things that seemed to be out of my control throughout the semester, but as each week went by, my motivation grew stronger. It didn't matter what was thrown in front of me. I was so involved in the project that I felt that I could overcome any hurdle. I never knew I had this in me but am grateful for the experience that allowed me to discover this.
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> It's hard to imagine that we successfully got over 65 students from different Universities to come to the Summit we created on a Sunday morning. It was inspiring – we got to listen to several people speak on things they were doing to not only start their own businesses but also help society. I am so motivated to make my own mark through my venture in the future.

The second dimension of the model involves skills relating to value creation while focusing on "(a) strategic planning and assessment, (b) problem solving, (c) transformational leadership" (Jardin, 2021, p. 6). Strategic planning and assessment enable entrepreneurs to foresee market trends, allocate resources efficiently, and manage risks effectively, setting a solid foundation for business growth (Kuratko & Hodgetts, 2020). Problem-solving skills are essential for adapting to challenges and innovating, ensuring that the business can overcome obstacles and show continuous improvement. Transformational leadership empowers entrepreneurs to inspire and motivate their teams, articulate a clear vision, and cultivate a positive organizational culture (Paladan, 2015). Prevalent throughout the data were comments surrounding the development of these key skills:

> I always had it in the back of my head that I should start a business after my schooling was over. I was somewhat familiar with the concept and had admiration for entrepreneurs and their pursuits but never really understood the process or what it takes to come up with an idea that could possibly attract solid customers and simultaneously do good in the world. We were put into a position in this class to challenge ourselves, think "outside the box," and create something that might actually matter and have a positive impact on society. I am proud to say that I accomplished just that and look forward to actually trying to launch my social venture after graduation.
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> The competitive nature of this capstone project was a fantastic element. I am self-driven naturally, but this project really pushed my limits and helped me develop essential leadership skills. My team went through several challenges with proving the validity of our business venture idea, and we were forced to iterate again and again (and again!) I don't think I would have gotten as much out of this project if it wasn't for this process over several months.

The third dimension of the model involves skills for communicating effectively with a focus on "(a) clear and visual communication, (b) teamwork and networking, (c) digital communication" (Jardin, 2021, p. 7). Entrepreneurs with effective communication skills excel in several key areas that are critical to business success. First, clear and visual communication enables them to convey complex ideas succinctly and engagingly, ensuring that stakeholders easily understand and support their visions and strategies. Second, strong skills in teamwork and networking allow entrepreneurs to build and sustain productive relationships, both within their teams and with external partners, fostering collaboration and facilitating access to essential resources. Finally, proficiency in digital communication is increasingly vital in today's technology-driven market, as it allows entrepreneurs to leverage digital platforms for marketing, customer engagement, and remote team management. These communication competencies are essential for entrepreneurs to lead effectively, drive business growth, and adapt to the dynamic demands of the modern business environment and were featured prominently throughout the findings of this research. As posited by Pardo-Garcia & Barac, 2020, p. 2), "A global world implies that students should be more autonomous, be able to adapt to innovations, to work in groups, take responsibilities, have attitudes in favor of maintaining and renewing their skills, and be reflexive (thinking about experiences and perspectives to understand them better and respond with learning and behavioral changes)."

Our team was comprised of individuals from diverse majors and backgrounds, each bringing unique perspectives and skill sets. This diversity, while being a source of rich ideas and approaches, also posed challenges in terms of aligning our thoughts and strategies. We experienced moments of disagreement and conflict, especially when deciding on marketing strategies for our business plan. However, these challenges were constructively addressed through open communication leading to a more comprehensive and robust business plan.

Balancing different work styles, managing conflicting opinions, and coordinating schedules tested our ability to navigate interpersonal dynamics. Ensuring effective communication became a crucial aspect of our teamwork. Learning to appreciate diverse perspectives and finding common ground required patience and flexibility but ultimately enriched the quality of our work. It served as a microcosm of the real business world, where collaboration is essential for success. This experience has not only improved my strategic planning skills but has also equipped me with invaluable teamwork and leadership insights that will undoubtedly serve me well in my future professional endeavors.

Through my participation in this business class, I have gained invaluable insights and lessons. The most striking realization was the significance of teamwork. It overturned my previous notion that I needed to accomplish everything alone, emphasizing instead the importance of harnessing the collective strength of the team. I learned that by embracing everyone's unique qualities and strengths, an incredible synergy can be achieved. While I was confident in my skills in marketing, I discovered an aptitude for human resources work within the team dynamic.

Discussion and Future Research Opportunities

This research seeks to add to the literature by documenting specific pedagogical approaches to infusing entrepreneurship into the classroom in higher education as well as students' interpretations of learning outcomes. As Turner and Gianiodis (2018) state, "whereas the scholarship and pedagogy within the field of entrepreneurship education has matured considerably over the last 20 years, major gaps remain to what content to teach, how to teach it, who qualifies to teach, and to what type of student" (p. 131).

Findings indicate that specific entrepreneurial initiatives woven into the classroom at a smaller liberal arts institution bolster competencies in entrepreneurial skills as well as increase interest and motivation to tackle new ventures. This study provides a foundation from which to further explore entrepreneurial skills development and assessment in a higher education setting. While entrepreneurial skills clearly emerged in this research, future studies should involve the creation of more formal assessment tools and instruments to measure the extent to which these competencies are developed. Bringing student voice into the assessment process is also warranted. Wharton, Goodwin, and Cameron (2014) contend that students significantly prioritize assessment and underscore the necessity of integrating student feedback into the assessment process. They emphasize that those responsible for providing the learning experience must critically evaluate existing practices and initiate substantial changes if justified, stating that it is "incumbent upon those charged with delivering the learning experience to question current practice and instigate fundamental change if merited" (p. 81).

In conclusion, through entrepreneurial initiatives in higher education, students develop the proficiencies to thrive and compete in a global and digital landscape. These programs equip learners with critical, practical skills and an innovative mindset, essential for navigating the complexities of today's interconnected world. Robinson, et al. (2016) argue the importance of moving "away from entrepreneurship education as being teacher led to being more student-centered and focused on experiential and existential lifelong learning practices" (p. 661). By engaging in experiential entrepreneurial education, students not only learn to identify and seize opportunities but also gain a deep understanding of digital tools and platforms that are pivotal in modern business environments. This education fosters a spirit of adaptability, problem-solving, and resilience, empowering students to make significant contributions across industries and cultures. As a result, entrepreneurial initiatives serve as a bridge, connecting academic learning with the real-world demands of a globalized, digital economy, thereby preparing students to excel and lead in diverse settings.

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