The Need for Modification: The Impact of COVID-19 on Pitch Competitions

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Abstract
COVID-19 has had a dramatic impact on academics. Academic programs that require experiential learning, such as entrepreneurship, were presented with severe problems. At the time, the pandemic hit, Liguori and Winkler (2020) speculated on how entrepreneurship professors would respond to the challenge. Our article is an examination of how COVID-19 has impacted pitch competitions, a vital part of the entrepreneurship curriculum. We found that COVID-19 shut down pitch competitions for a year, and they returned last year using virtual web conferencing technologies such as Zoom. Our findings indicate that COVID-19 caused permanent changes to pitch competitions even though directors and other stakeholders may desire traditional face-to-face interactions.

Keywords
COVID-19, venture pitch competitions, entrepreneurship pedagogy

Venture pitch events are an essential part of the entrepreneurship curriculum because it provides students with an experiential learning experience and, perhaps more importantly, allow the university to function in the larger ecosystem through the creation

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of new businesses (Russell et al., 2008; Shirokova et al., 2017; Watson et al., 2018). Such exercises are usually delivered face-to-face (Gibb & Price, 2014). The restrictions due to COVID-19 have changed the nature of higher education, limiting hands-on and face-to-face venues in favor of virtual and socially distant deliveries. Such an approach has radically transformed the nature of the pitch competition (Ratten, 2020). The purpose of our research is to explore the peculiarities and significance of entrepreneurial venture pitch events in higher education during the COVID-19 era. In doing so, we expand on Liguori and Winkler’s (2020) speculation on the nature of COVID-19. Our research assesses the changing nature of venture pitch competitions in higher education by going beyond speculation and looking at collected data from a collection of institutions that have conducted these events before and during the pandemic. While our findings may appear to be quantitatively based, this study is largely qualitative in nature. Our results suggest that a shift in delivery mechanism for pitch competitions may not be temporary or tied to the timing of COVID-19. Furthermore, findings suggest some benefit in the changes represented in the results that reflects the reality of the post-COVID era.

We present a comprehensive overview of such events, discuss their unique features and aims, and provide an answer to the question of how the recent pandemic, COVID-19, has affected these events. We surveyed members of the United States Association for Small Business and Entrepreneurship (USASBE) to see how scholars have dealt with COVID-19 for two reasons: first, to explore the significance and function of pitch competitions in higher education, and second, to analyze the impact of COVID-19 on higher education and its effects on entrepreneurial education (Liguori et al., 2021; Smith & Muldoon, 2021).

A particular question that needs asking is whether entrepreneurial educators practice what they preach in terms of entrepreneurial resilience. Resilience is essential in entrepreneurial success because it allows marginalized groups to gain economic advantages that they would not normally have if not for entrepreneurship (Nisula & Olander, 2020; Pidduck & Clark, 2021). Therefore, like other entrepreneurial skills and desires, scholars have wondered about the extent to which educators pass these skills to their students (Hulsink & Rauch, 2021; Kaffka et al., 2021). Educators need to be authentic (Fernandes Fernandez, 2021). It would appear based on our data that entrepreneurial directors are resilient because when hit with an unexpected and devastating event, they made, in time, substantial changes to their competitions using new technologies. In addition, directors also took the opportunity to diversify judges.

**Pedagogy in Entrepreneurship Education in the Online Environment**

It is also essential to look at entrepreneurial education to analyze the factors that affect the entrepreneurial mindset of individuals. Entrepreneurial mindset (EM) is a concept that has taken center stage in recent times (Winkler et al., 2021; Pidduck et al., 2021; McGrath & MacMillan, 2000; Daspit et al., 2021) and looks closely at
entrepreneurial education. Early and foundational research conveys entrepreneurs tend to have different perspectives when compared to managers and other individuals (Mitchell et al., 2002), and paying attention to the differences that set them apart helps us understand the individual attributes of entrepreneurial cognition (Mitchell et al., 2002). At the intersection of these two concepts, entrepreneurship and cognition, is where early foundational research saw the emergence of EM (Baron, 1998; 2004; Baron & Henry, 2010). Winkler et al. (2021) has stated that entrepreneurial experience may not be the only factor that may result in venture success. Entrepreneurs must have a growth mindset that is robust, dynamic, adaptive, and guided by the principles of the social-cognitive model of self-regulated entrepreneurial learning (SREL), to be successful (Amato et al., 2017; Gielnik et al., 2020; Zimmerman, 2000, 2006). Pidduck et al. (2021) explain the relationship between entrepreneurial behavior and EM and its significance not only in the areas of organizational research (Carsrud & Brännback, 2009; Krueger, 2009; McGrath & MacMillan, 2000; McMullen & Shepherd, 2006) but also in education (Daniel, 2016; Solesvik et al., 2013). Researchers have recently linked EM to entrepreneurs’ emotional aspects and personality traits (Kuratko et al., 2020; Naumann, 2017). It is important to note that despite the popularity of EM as a consulting tool (Davis et al., 2016), there is still a considerable amount of work to be done with the theoretical foundations and conceptualization. Daspit et al. (2021) have attempted to define, review the progress, and define the future direction of EM as a consolidated study to understand the factors responsible for an individual’s EM. Here, researchers provide a systemic literature study on how EM shifted its focus from studying the traits contributing to an individual’s entrepreneurial success to defining EM as an array of skills, motives, and thought processes (Davis et al., 2016).

Overall, it is essential to note that entrepreneurial pedagogy is connected to EM pedagogy and is, therefore, necessary to consider the theoretical foundations of EM and its influence on the venture success of an individual.

Entrepreneurial education aims to empower students with the knowledge, skills, and confidence necessary to be successful entrepreneurs in various settings. Entrepreneurship can be classified into two broad categories: business owner and angel investor. The pitch competitions building blocks in a successful entrepreneurial education pedagogy because they aim to instill the values and skills necessary in students to think outside the box, build a business model, and convince a group of investors (judges) on why their business idea works (Shane, 2004). Pitch competitions embody the percept of pedagogical approaches of entrepreneurial education by focusing on empowerment and transformation.

It is well-known that entrepreneurial education is not static but highly dynamic (Morris & Liguori, 2016). Morris & Liguori (2016) has stated that entrepreneurial education and pedagogy are constantly evolving with the program and the diverse population of students and geographic area mix. The focus of entrepreneurship education is divided into three main categories or stages of emphasis: business basics, entrepreneurial basics, and most important, EM and its associated mix of entrepreneurial competencies (Morris et al., 2013b).
Education in the age of the pandemic brought about a seismic shift in the pedagogy and learning processes at educational institutions (Barber et al., 2021). New avenues and vehicles of effective education emerged as a “need of the hour” during this pandemic phase, where emergency remote teaching was the only continuing education option (Hodges et al., 2020). Trust and Whalen (2020) reported that most educational institutions were ill prepared to use technology for education. It was also reported that educators were put into scenarios of remote, online, and hybrid teaching modes without almost no training or prior experience (Barber et al., 2021). Out of the many lessons learned by educators during this systemic shift outlined in Ferdig (2020), the significant ones are that “educators need to find different ways to fight divisiveness (pg 12)” and “educators need to be the social and emotional connection behind the screen (pg 12).”

Entrepreneurial education pedagogy routine (Chen & Roldan, 2021) is said to go from teacher-led to student-centered (Robinson et al., 2016) scenarios and constructivism (Löbler, 2006). Chen and Roldan (2021) have outlined the emergence of synchronous and asynchronous learning technologies that aid effective entrepreneurial education and their corresponding percentage of use in online, hybrid, and blended courses. Further, they conducted a thorough systemic review was conducted to explore the different learning technologies used in online entrepreneurial education. Technologies such as cloud computing (Holinska et al., 2019), 3-D virtual reality (Lameras et al., 2015), learning analytics (Toledo et al., 2020), social media, and big data (Secundo et al., 2020; Sousa, 2019) all aided in effective learning. Chen et al. (2021) has discussed the role of each of these vehicles in online entrepreneurial education and the plethora of references listed as part of the systemic review.

Ismail et al. (2018) has discussed pedagogical approaches in entrepreneurial education and explored the paradoxical outcome of having a student-centric versus teacher-centered education. The study explained the positive and negative effects of using the two techniques in achieving subjective and objective outcomes of entrepreneurial education.

A big part of entrepreneurial education in higher education is in activities and courses that support experiential learning (Farooq, 2019). Most experiential learning activities, for example, pitch competitions, were traditionally conducted face-to-face until the start of the worldwide pandemic in 2019. There was a need to transfer these courses into a virtual environment while maintaining the same standards so that the students would receive the same outcomes of experiential learning, which is challenging. Barber (2021) has suggested some critical factors to consider while transitioning to the virtual environment, such as varying instructional strategies, breaking learning tasks and goals into manageable parts, and maintaining consistency among tasks. Van Merrienboer and Ayres (2005) have recommended making interactions stronger by using gamification and apps. A study conducted during the COVID-19 pandemic (Trust & Maloy, 2020) revealed disparities between educators and students who had the technology and skills to shift to the virtual environment compared to those who did not. These disparities are attributable to the digital divide. Several researchers have cited the digital divide as the reason for the inadequacy of technology and devices.
The inadequacy of internet technologies has been revealed to be an issue of not being a priority in both pre- and post-pandemic periods in education (Acevedo-Rincón & Flórez-Pabón, 2019; Barber et al., 2021; Emma, 2020).

Based on the works of Paolo Freire in the world of entrepreneurial education, and discussed in detail in Fletcher (2018) and Woolgar et al. (2009), reinforce that the popular Frierean mode of the pedagogical invention has the strength to provoke students to work through complex theoretical issues. It is also important to note that the traditional classroom pedagogy in entrepreneurial education is more effective when it moves toward an action-oriented pedagogy (Mukesh et al., 2020). The impact of both pedagogies was explored by measuring entrepreneurial self-efficacy and entrepreneurial intention. As expected, Mukesh et al. (2020) found that the group with action-packed pedagogy had significantly high entrepreneurial efficacy and intention when compared to the group using traditional pedagogy.

Ngwaka (2021) conducted a study in Nigeria on the effectiveness of virtual learning on teachers’ pedagogy and student learning. Many instructors and student-centered factors were considered in the study, such as the instructor’s technical knowledge in handling the class and converting its assessments to a virtual environment. Accordingly, both instructor’s pedagogy and student-teacher communication drove the virtual learning experience and its effectiveness.

A growing community in transnational education (TNE) is challenging the landscape of transnational entrepreneurial education (Pimpa, 2019). Researchers have explored the pedagogy and modes of content delivery to understand the effectiveness of entrepreneurial education in the structure of TNE. When examining the relationship between entrepreneurial education and entrepreneurial competencies, results confirmed that course development should consider skill development such as leadership, critical thinking, technology innovation, and use of digital technologies to achieve impactful solutions in the least amount of time (Bird, 1988; Modenov et al., 2018).

The Importance and Role of Venture Pitch Competitions in Higher Education

Pitch competitions are part of higher education entrepreneurship education and can be found in large research universities and small liberal arts colleges (Chan et al., 2020). They play an important role in higher education’s support for the entrepreneurial ecosystem (Shane, 2004). Venture pitch competitions are also known as business plan competitions, business plan contests, or case study competitions. They can be organized by universities, research institutes, governmental agencies, and private organizations. These opportunities provide students with the chance to build teams that may one day launch a new business. The goals of these competitions are twofold: first, to provide students with experiential learning opportunities, and second, improve the practice of entrepreneurship education (Kassean et al., 2015; Liguori et al., 2021; Neck et al., 2014; Neck & Greene, 2011). Such competitions allow students to be involved in deliberate practice, real-world immersion, and experiential approaches (Morris &
Pitch competitions allow entrepreneurial-mindset students to demonstrate their knowledge and skills by preparing a business plan or other formal presentation to be evaluated by judges or audience members. A monetary first prize carries prestige and may result in additional funding, turning a pitch idea into a business. Many pitch competitions in higher education include the following:

- Using business community members as judges in entrepreneurship education courses to increase experiential learning opportunities.
- Inviting alumni and current entrepreneurs who can provide mentorship to students.
- Focusing on other parts of the competition, such as a business plan or social value creation presented by teams—this, in turn, allows for the university to serve as a focal point in the entrepreneurial ecosystem.

Consequently, pitch events are beneficial for both students and the organizations that host them. Students benefit from mentoring provided outside the classroom by seasoned entrepreneurs or experienced judges. In addition to the skills acquired by competing, students may develop social connections with other entrepreneurs or judges. Competitors may also receive valuable feedback from judges on their business plans and presentations (Bullinger et al., 2010).

Universities and colleges benefit from hosting events because of potential opportunities for mentoring and networking, recognizing entrepreneurship achievement, and serving as a community role model (Neck et al., 2014). These opportunities benefit students with real-world advice from seasoned entrepreneurs and increase entrepreneurial self-efficacy through vicarious experience (Smith & Muldoon, 2021).

The community benefits from pitch competitions by having its entrepreneurial potential, entrepreneurship education practices, and visibility assessed by external stakeholders. For example, the local chambers of commerce can enhance their reputations as economic development organizations through entrepreneurial education initiatives (Tipu, 2019). Therefore, the educational value of entrepreneurial pitch events is not limited to students but extends to organizations involved in hosting these events. It is crucial to mention entrepreneurs themselves may be judges at pitching competitions, which enhances opportunities for experiential learning outside the classroom (Stenkjær et al., 2021).

The Impact of COVID-19 on Higher Education

The outbreak of COVID-19 had a significant impact on academia worldwide. The pandemic put universities and research institutions under stress-producing, unstable conditions, which significantly affected their ability to function. Universities and colleges must serve multiple stakeholders such as their students, faculty, staff, and external communities. COVID-19 has been an ongoing threat to stakeholders given short-term and unknown long-term health and economic impacts. Also, public universities have had to contend with shrinking budgets, increased demands, and the
emergence of new, cheaper formats such as accelerated programs and online education. Given the shutdown of the economy due to COVID-19, the constraints on a higher education organization’s operations have become more significant, bringing a near-global shutdown of the traditional model. The pandemic has brought severe and lasting financial repercussions and still partly unknown ramifications (Bhagat & Kim, 2020).

We do provide ideas on how to sustain educational quality. It does acknowledge that the immediate response by many institutions of higher education to deal with the physical threat of the pandemic was to move most, if not all, face-to-face learning opportunities and experiences to a distance learning venue to maintain the quality of the higher education experience for students. This movement happened as a continuation of an education effort, not to mention a short-term attempt to stave off financial elimination (Marinoni et al., 2020). Many venture pitch competitions were included in this move, but some were recast as hybrid affairs or canceled altogether.

**Impact of COVID-19 on Venture Pitch Competitions**

In addition to direct economic consequences, COVID-19 caused an entirely new set of challenges for those involved in running pitch competitions in higher education, such as direct loss of judges or mentors due to underemployment, unemployment, sickness, or death; selection bias because of reduced applicant pool size; and event cancellation (Braune et al., 2021).

As in the case of COVID-19, any natural disaster may cause a significant loss in human capital. Therefore, even if venture pitch competitors can compete, the lack of judges or mentors at events can dramatically affect the student entrepreneurs’ learning ability. It cannot be stated enough that a source of experiential learning is needed for students to learn critical thinking and communication skills. The entrepreneurship education literature also indicates that a new venture team cannot afford to waste time developing solutions to communication, organizational, or product development problems during the competition (Stayton & Mangematin, 2019). This statement highlights the need for experiential learning both inside and outside the classroom. Students must develop the ability to handle issues as they emerge in an actual business setting. This is particularly true in the case of pitching events because it allows student entrepreneurs to receive immediate feedback and develop their presentation skills. Additionally, while participating in a competitive environment, students can gain firsthand knowledge about what works and does not work when speaking with judges and investors (Stenkjær et al., 2021).

Challenges were navigated by rescheduling events to have a collection of presenters share their pitches either in an online venue, in-person venue (with all the safety protocols engaged), or some hybrid. These revised or new formats allow for more efficient use of time, given that there is limited availability for mentors and judges in general (Ratten & Jones, 2021). Although this allows for more learning time outside of the event, it does not allow for sufficient learning opportunities at the event itself because of their limited nature. Mentors and judges respond by providing feedback to
presenters using an online platform when participating virtually or in a hybrid mode. At the same time, they also offer their thoughts on how teams can improve upon their pitches.

Audience size can affect the quality of these competitions. There is a problem when an audience is significantly different, for example larger, than anticipated. This may lead to a lack of face-to-face contact, which causes issues with judges and mentors who, to provide thorough feedback, must be able to hear each presenter’s voice throughout the event. In some cases, the lack of mentors and judges has been filled by staff members. Staff members were asked to provide feedback on pitching events using an online platform (Smith & Muldoon, 2021). This lack of face-to-face contact with both presenters and mentors/judges shifted the focus away from experiential learning toward a competitive learning environment. The less time there is for actual learning, the more competitive the event becomes, resulting in students who come away knowing how to market themselves better than anything else.

Method

To analyze the impact of COVID-19, we surveyed USASBE’s membership. USASBE is a premier entrepreneurship organization dedicated to education in the United States. We sent out two emails to the entire membership. We received responses from 49 institutions concerning COVID-19. Respondents were encouraged to reply to our questionnaire, which included a set of open-ended questions. Data was collected through a survey using SurveyMonkey.com as the delivery mechanism. This survey did not seek statistical significance but gauged changing attitudes and behaviors.

Respondent Demographics

All (100%) of the respondents used the pitch competition as part of their entrepreneurial education curriculum. There were six categories of institution types (see Table 1):

Of the respondents, 84% reported direct responsibility for conducting a pitch competition and had an average of almost 9 years of experience running competitions at their respective institutions. Historically speaking, we find that a majority of the institutions conducted face-to-face events. Despite the onset of COVID-19, for the 2019–2020 academic year, only 12% of the respondents did not conduct some form of a venture pitch. That being the case, 72% of those institutions that ran an event

| Institution Type       | Public     | Private    | Total |
|------------------------|------------|------------|-------|
| 2 years                | 80.00%     | 4          | 1     | 5     |
| 4 years                | 57.14%     | 24         | 18    | 42    |
| Graduate program       | 72.00%     | 18         | 7     | 25    |
responded that it was changed due to the pandemic. The comparison between how the events were conducted traditionally, at the beginning of COVID-19, and during the height of the pandemic is not surprising (see Table 2).

The data shows a quick drop from face-to-face to other types of events. However, we also see a desire to maintain some sort of in-person event as evidence of a large contingent of respondents having a hybrid event. Nevertheless, an overwhelming respondent rate of 93.88% changed their competition, which means even those institutions that did not change the type of event conducted still altered some portion of their event in response to the pandemic. Ironically, if the old normalcy returns, 86% of respondents indicated a willingness to return to the pre-COVID-19 methods of conducting venture pitch competitions, with most (91%) willing to retain some of the activities created in the COVID-19 era, if possible. Full details of the survey can be found in Supplemental Table A1 and Supplemental Table A2.

Best Practices

Our survey revealed several best practices used by faculty. First, there was a significant focus on using technology (e.g., MS Teams and Zoom) to interact with students. Such interactions took place during virtual office hours and educational workshops. In addition, there was considerably more written communications with students and more one-on-one coaching. Second, the increased use of technology allowed the expansion of tracks to accommodate opportunities to explore more ideation to create better potential businesses. Third, online usage allowed for the increased availability of judges because it allowed judges to be recruited outside the college’s local area. Fourth, monetary awards as prizes incentivized students toward more engagement. Finally, the use of prepared announcements over live announcements allowed faculty to communicate information on a scheduled basis. This was seen as a way to structure the competitions using pre-determined announcements that coincided with milestones along the competition, while being able to push out live or late breaking announcements using the technology afforded by the platforms.

Student and stakeholder responses to the pandemic seemed to have mixed results. If students did not embrace the changes to the competitions at first, they seemed to accept

|                           | In-person (synchronously) | Virtual (hybrid) | Entirely online (asynchronously) |
|---------------------------|----------------------------|-----------------|----------------------------------|
| Pre-COVID-19              | 83.67%                     | 41              | 8.16%                            |
| During COVID-19 (2019–2020)| 20.93%                     | 9               | 34.88%                           |
| Height of COVID-19 (2020–2021)| 6.12%                     | 3               | 57.14%                           |
the transformation over time. However, many pitch competition leaders believed that any conversion was well done. Still, some faculty preferred to meet face-to-face with students. Among the benefits of the shift to going online was expanding the pool of judges and mentors. Some leaders also observed an increase in student participation in an online, asynchronous format. A downside was that the quality of the pitchers was better in the face-to-face model.

Discussion

Our findings indicated that schools initially struggled in the first year of COVID-19 because many were caught flat by the unique and unknown nature of the pandemic. This should not be surprising. When the lockdowns were announced, there was a belief that they would be temporary. However, directors responded in time and changed the format and nature of the competitions. Zoom and other video teleconferencing software programs were used to supplement delivery of content and engagement. Many schools mostly switched to an online format, and only a handful continued with the traditional face-to-face design. In addition, switching to a hybrid format enabled pitch directors to assign judges and mentors who were not from the geographic region. Such a move may be typical of how universities are going to a more online format, and such a process may considerably modify their role in the entrepreneurial ecosystem.

Such predictions should be tempered. That data also indicated a belief that stakeholders wish to return to face-to-face interactions. Indeed, face-to-face provides many advantages that even the best virtual system could provide. Students and other stakeholders are mixed on the debate between the benefits of face-to-face or online venues. One advantage is that the online competition encouraged students to develop better teleconferencing skills. The importance of these skills may increase in the future due to the increasing rise of teleconferencing in conducting business. Perhaps the best approach may be a hybrid; both have elements worthy of consideration. However, hybrid practices may disappear as life returns to “normal.” We argue that perhaps the development of new perspectives and skills indicates that the hybrid is preferred.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Supplemental Material

Supplemental material for this article is available online.

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