Academic Startups: Best Practices for Innovation and High Impact Student Experiences

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Introduction. In 2005, the Hasso Plattner Institute of Design, also known as the d.school, was founded at Stanford University as a hub of “design and experiential learning” according to their website. Over the past 15 years post-secondary academic institutions globally have established – makerspaces, co-working environments, innovation laboratories, etc. Kurti et al. (2014) posits that “The maker movement in education is built upon the foundation of constructionism, which is the philosophy of hands-on learning through building things” (p.8). As university campuses evolve, industry and donors have challenged faculty and administrators to provide students with hands-on or experiential learning opportunities for all academic majors on campus. Twenty years ago, Breiter et al. (1996) challenged, “As educators plan the curricula of the future, they must develop ways to prepare students to be the innovators of the future (p.59). Educators have also realized to prepare student innovators for industry, students must be provided with facilities that support co-working and co-curricular team learning experiences. These spaces foster not only problem-solving and entrepreneurial mindsets, but also afford the students to gain agile business acumen in realistic experiences; skills imperative for students as industries, “institutions and organizational fields are subject to change” (Bouncken, et. al., 2018, p. 404) rapidly.

The authors’ academic institution, Iowa State University, has undertaken a five year project to design and construct center that is not only a makerspace, but an interdisciplinary facility that aligns with the institution’s pillars of *innovation* and *high-impact student experiences*. In the Department of Apparel, Events, and Hospitality Management, the authors are leading the development of two learning laboratories, which are start-up business in the center. The purpose of this abstract and the proposed presentation is to share best practices for academic departmental business startups in a large university facility, while maintaining alignment with the departmental, college, and university strategic initiatives.

The Process. The center is a multi-level, 149,000 square foot building, in which each of the eight colleges on campus have dedicated space or the opportunity to reserve space for student class and other curricular events as long as the activity “inspires students to innovate through experimentation, interdisciplinary collaboration, and the free exchange of ideas.” One of the authors was a member of the steering committee from the onset of the design of the center. During the process, the authors’ department had the opportunity to procure spaces for a student-operated café and student-operated lifestyle boutique. Both spaces are rare start-up businesses located in an academic department, which the faculty in the department and the authors to navigate processes and opportunities for the campus community, to provide the departmental majors with new experiential learning opportunities.

Figure 1. The Student Innovation Center at Iowa State University. Photo credit: Ken Tsai.

Taxonomy. The authors developed a taxonomy (see figure 1) to illustrate the main practices and values used to establish the café and lifestyle boutique. The values of *innovation* and *high-impact student experiences* guided each decision in developing both realistic retail learning laboratories. Students are involved in the development of products, such as university tartan products, ice cream products, specialty coffees, and specialty sandwiches for the spaces via *student competitions* and *product pitches*. A unique attribute of these department spaces is the development of cross-over products between majors and collaborations with other units in college and at the university. A student competition was held to develop a university tartan for a range of products for the lifestyle boutique. The tartan pattern is used on both textile, paper, ceramic, and on food products, such as brownies for sale in the café creating an opportunity for students in the apparel major and the hospitality management major to collaborate.

Figure 2. Elements of an Academic Startup Taxonomy.

In another instance, the authors have partnered with another academic unit in the college, in order to offer innovative frozen dairy products. A competition has been launched to tap into the creativity of campus students past and present. Students entering in the competition are challenged to propose an ice cream, frozen custard, frozen yogurt, or frozen dessert to represent their college. Students will be also giving the opportunity to pick their favorite base flavor (e.g., vanilla, chocolate, eggnog) and decide on other product characteristics such as fat content (nonfat, low-fat, full fat (10%), or premium (12-14%)), sugar content (e.g., no sugar added) high protein, corn, or egg ingredients, etc. Finally, students will be able to describe the flavoring formulation (variegates (e.g., caramel, chocolate) and/or inclusions (e.g., chocolate chips, cookie dough)). The process allows for students from two departments to collaborate in the development and marketing of the chosen frozen products.

Undergraduate and graduate students have been involved in the operation development of both spaces and will manage the spaces with guidance from faculty. Students will direct the development and selection of products for both spaces. During the fall 2020 semester, monthly, students will be given the opportunity to create a specialty coffee that will be sold the following month at the café startup. The student-operated café will offer monthly specialty coffees based

on students' feedback. A suggestion box will be placed at the counter so students can imagine the specialty coffee of their dreams. At the end of each month, as part of the operational experience, the suggestions will be analyzed by the café employees (students) and a monthly specialty coffee will be created based on both inputs.

Figure 3. SPARKS the student operated café. Photo credit: Ryan Reilly.

Significance. Both the café and the lifestyle boutique, “serves as a university showcase for potential students and other stakeholders, demonstrating how university students can develop professional competencies via practical experiences” (Josiam et al., 2017, p.68). The spaces and the authors’ taxonomy provides a model for dissolving silos between majors and departments on university campus. The significance of these spaces, as David Kelly, founder of Stanford’s d.school states is, “They’re learning about this team dynamic, about how you work on projects in a team...” (Camacho, 2016, p. 99).

References

Bouncken, R. B., Laudien, S. M., Fredrich, V., & Görmär, L. (2018). Coopetition in coworking-spaces: value creation and appropriation tensions in an entrepreneurial space. *Review of Managerial Science*, 12(2), 385-410.

- Breiter, D., & Dements, C. J. (1996). Hospitality management curricula for the 21st century. *Hospitality & Tourism Educator*, 8(1), 57-60.
- Camacho, M. (2016). David Kelley: From design to design thinking at Stanford and IDEO. *She Ji: The Journal of Design, Economics, and Innovation*, 2(1), 88-101.
- d.school History & Approach at Stanford University. Retrieved April 15, 2020, from <https://dschool.stanford.edu/fellows-in-residence/project-fellowship-history-approach>
- Josiam, B. M., Malave, R., Foster, C., & Baldwin, W. (2017). Assessing quality of food, service and customer experience at a restaurant: the case of a student-run restaurant in the USA. In *Hospitality Marketing and Consumer Behavior* (pp. 129-156). Apple Academic Press.
- Kurti, R. S., Kurti, D. L., & Fleming, L. (2014). The philosophy of educational makerspaces part 1 of making an educational makerspace. *Teacher Librarian*, 41(5), 8.