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# Entrepreneurship Education and Experiential Learning in Higher Education

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Entrepreneurship education (EE) programs in higher education have grown globally since 1947 when Harvard Business School offered the first entrepreneurship course (Kuratko, 2005; Nabi et al., 2017; Solomon, 2007). The growth is due to the increased recognition of university-based EE programs as well as the reinforcement of a set of potential entrepreneurial outcomes by higher education institutions (HEIs) (Nabi & Liñan, 2011, Nabi et al., 2017; Rideout & Gray, 2013) as they relate to industry needs. For instance, increasing students' knowledge, skills in venture creation and attitudes (Greene & Saridakis, 2008, Nabi et al., 2017), and overall job creation eventually contribute to economic growth and development (Bosma et al., 2008; Nabi & Liñan, 2011; Nabi et al., 2017). Global trends in the form of innovations, cultural value, and political expectations reinforce the demand for a focus of EE around the world. EE as a topic (Canziani et al., 2015; Ghobril et al., 2020; Gibb, 2011; Mandel & Noyes, 2016; Mwasalwiba 2010; Nabi et al., 2017; Sirelkhatim & Gangi, 2015) has gained traction and interest from the academic community.

The purpose of this exploratory qualitative study is to share five selected entrepreneurship project course examples at Southern New Hampshire University (SNHU) applying Kolb's experiential learning theory (Canziani et al., 2015; Kolb, 1984; Kolb & Kolb, 2017; Miettinen, 2000; Pittaway & Cope, 2007). The common instructional theme objectives presented include the learning environment, client interaction, course impact, reflection, student engagement, and subject matter expertise. The paper is organized in a literature review section dedicated to main theories of experiential learning (EL) and EE and some background information on the entrepreneurial landscape of New Hampshire (NH) and SNHU. The research scope and methodology section include specific course and project examples at SNHU. The key findings are presented using Kolb's experiential learning theory in the discussion section, and the final section includes a conclusion on the implication of findings and future steps.

## **Literature Review** *Experiential Learning*

The concept of EL -although based on many different theories- was inspired by

John Dewey in the quest to define the “theory of experience” (Kolb & Kolb, 2017, pp. 10). According to Dewey, the best way of learning is the combination of reflective thought and action of the learners (Miettinen, 2000). Canziani et al. (2015) particularly highlighted the influence of Dewey who incorporated experiential learning into traditional educational models and Kolb for developing the experiential learning theory, which became particularly popular. According to Kolb’s theory, “learning is the process whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 38). The theory addresses a cyclical model of learning through the four stages of doing, observing, thinking, and planning (see Figure 1) to facilitate the learning process (Kolb, 1984). Each stage supports and builds on the overall experience and learnings. The doing stage, referred to as *concrete experience*, is the moment when the learner is participating and experiencing the activity in the field or lab setting, and in general outside the classroom (Healey & Jenkins, 2007). The observing stage is

also known as *reflective observation* during which the learner reflects on his/her experience (Healey & Jenkins, 2007). During the thinking stage, referred to as *abstract conceptualization*, the learner presents a model or theory of what is to be observed (Healey & Jenkins, 2007). Finally, in the planning stage, known as *active experimentation*, the learner plans to study a model or theory as it relates to an experience (Healey & Jenkins, 2007).

The benefits of the experiential learning model are inevitable for both students and teachers. From the students’ perspective, the learnings accumulated are multifaceted. These learnings include but are not limited to the following:

- increased critical thinking and ability to make connections between theory and practice (Kolb & Kolb, 2017)
- opportunities to be more active than passive with their learning (Canziani et al., 2015)
- opportunities to receive immediate feedback, participate in group discussions, and experience teamwork towards a common goal (Meyers & Jones, 1993), and
- real-life experiences (Losapio & Koustas, 2017; Pittaway & Cope, 2007)

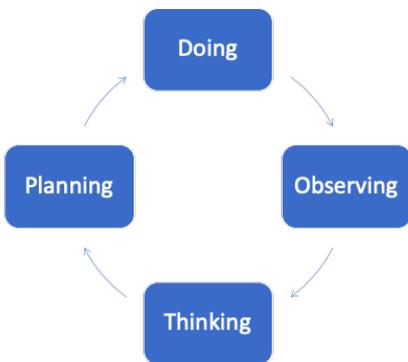


Figure 1. Kolb’s Experiential Learning Theory Cycle. Note. This figure was originally based on Jenkins (1998) and reproduced by Healey & Jenkins (2000).

From a teacher’s perspective, a reflective approach towards work models habits that will lead to continuous improvement, development of teaching skills, and awareness of different learning styles (Sharlanova, 2004). Besides identifying benefits for the learners and

teachers, the value of EL is obvious in both general education and particularly EE (Mandel & Noyes, 2016). However, there is minimal knowledge in the variety and abundance of experiential programs and courses offered in entrepreneurship at higher educational levels, as well as insights regarding the obstacles to launch such programs and courses or suggested solutions (Mandel & Noyes, 2016).

### *Entrepreneurship Education*

EE can be delivered in many ways depending on the purpose of the course and the learning outcomes (Sirelkhatim & Gangi, 2015). Some programs include traditional teaching approaches, while other opt for experiential and active learning to enhance the student's understanding of entrepreneurship (Canziani et al., 2015). Although there is limited literature on practices and programs specifically focused on EL in EE, several institutions have shifted to delivering their entrepreneurship programs in specially designed environments, using learning outcomes that are action specific, and most importantly creating experiences for the learner (Mandel & Noyes, 2016). According to Gibb (2002, 2011; as cited in Mandel and Noyes, 2016, p. 166) these experiential approaches require learners to embrace an entrepreneurial "way of life" by developing specific skills, behaviors, attributes, and cultivate an "entrepreneurial mindset".

As EE becomes a more popular research topic (Mwasalwiba, 2010; Solomon, 2007), the distinction between the different delivery approaches become more apparent due to the entrepreneurship program objectives (Sirelkhatim & Gangi, 2015). According to Sirelkhatim and Gangi (2015), EE can

be organized into three instructional themes of teaching *about*, *for*, or *through* entrepreneurship (see Appendix B). Each theme offers a particular purpose, unique learning objectives, specific teaching methodology, and different student engagement levels. The themes of teaching *for* and *through* entrepreneurship are built on the EL concepts of learning by doing and active student engagement. The main difference between these themes is when learning *for* entrepreneurship the student simulates being an entrepreneur whereas learning *through* entrepreneurship the student is an actual entrepreneur. Most researchers suggest that teaching *through* entrepreneurship is the best practice for EE.

EE activities allow for opportunities of engagement with mentors, customers, suppliers, and the team, as well as reflection and the exploration of other entrepreneurial opportunities (Mandel & Noyes, 2015). Measuring the impact of the activities can be challenging but possible. Assessing the impact on learners can be captured by administering a pre- and post-project survey on entrepreneurial behavior, entrepreneurial intent, knowledge, inspiration, and resources (Ahmed et al., 2020). At the institutional level, the impact of EE can be assessed by alumni engagement and financial support in entrepreneurship projects (Ghobril et al., 2020). The faculty is impacted by the significant shift of role they may experience and the potential systems in place to support or not support their work (Arellano & Jones, 2018). At the community level, impact indicators include the number and types of start-ups, the survival of these start-ups, and their contribution to society and the economy (Nabi et al., 2017).

### *Entrepreneurial Landscape at the State of New Hampshire (NH)*

The entrepreneurial landscape in NH has certainly changed over the years. In 2019, the national average rate of new entrepreneurs for each month was 0.31% with NH comparing at 0.28% (Kauffman Indicators of Entrepreneurship, 2020). As of 2020, according to the U.S. Small Business Administration Office of Advocacy, NH has 136,535 small businesses employing a total of 300,628 people (U.S. Small Business Administration Office of Advocacy, 2020). Overall, several HEIs in NH offer studies in entrepreneurship, entrepreneurial studies, or small business management and have active Centers for Entrepreneurship. Several entrepreneurship hubs have opened in the greater NH area (due to the easy access to the metro Boston area) and focus on software, biotechnology, and medical technology (Pilkey, 2019). The current NH entrepreneurial landscape is strengthened by meetups, networking events, start-up competitions, accelerators, incubators, hubs, co-working spaces, makerspaces, angel/VC groups, and training and development programs targeted to support business activity for all entrepreneurs, including minorities, immigrants, and women (Pilkey, 2019).

### *Entrepreneurial Landscape at Southern New Hampshire University (SNHU)*

Southern New Hampshire University is a private non-profit HEI located in Manchester, NH (USA). The institution was founded in 1932 as the New Hampshire Accounting and Secretarial School and later renamed to New Hampshire College in the 1960s. The continued growth of the school reached its peak in 1999 with the new

online program and changed its name to SNHU in 2001. The institution is continuously growing and currently has over 250 programs and 135,000 students (the majority of students are online).

SNHU offers innovative and practical experiences for its students and embraces EE in multiple ways. Such examples include the Coming of Age call for proposals to increase EL opportunities supporting field trips, service-learning projects, study abroad, internships, and community-based research and project experiences. In 2018, campus leadership approved the creation of the Experiential Education subcommittee with focus on the continued support of experiential initiatives, fostering a culture of EL, promoting experiential education as a primary advantage for students attending SNHU, and advocating the intentional embodiment of experiential practices in a holistic manner throughout every student's academic journey (SNHU Experiential Education Proposal, 2018). Since the summer of 2020, in the midst of the COVID-19 pandemic, SNHU's faculty and staff participated in the reimagining of the learner experience with the implementation of several new innovative experiential programs. The institution's success record with courses, project experiences, and new programs has led to the creation of the Learner Engagement Academic Innovation team (May 2021) also focused on improving and supporting EE practices. As of Fall 2021, the experiential Entrepreneurship degree program (BS. ENT) will launch at the university campus based on the team-based experiential academic model (t.e.a.m.) focusing on team learning, learning by doing, competency-based education (CBE),

coaching, badging, and other innovative tools (Entrepreneurship BS, 2021).

## **Research Scope and Methodology**

The purpose of this exploratory qualitative study was to provide an overarching understanding of experiential EE examples at SNHU. The sample population (five professors and an administrator) instructed courses related to entrepreneurship and delivered the course learning outcomes in an experiential environment.

The semi-structured interviews were conducted from May – June 2020. The research objectives aimed to (1) compile best entrepreneurial education teaching practices at SNHU, and (2) collect information on how instructors measure student engagement, course/project impact, reflection, and assessment practices. All questions were open-ended and focused on the instructor's personal inspiration, experience in entrepreneurship, an overview of the course, the project, the challenges, best practices, impact, student engagement, reflection, and assessment of practices (Appendix A). Using a purposive convenience sampling technique, a total of five courses were identified as experiential EE examples with a sample of 6 participants (one course had two professors). Being aware of the COVID-19 restrictions, participants had the option of being interviewed through a virtual platform (over Ring-Central) or responding to the questions via email. All participants were asked the same questions. The data were analyzed using a narrative analysis approach with a focus on the content shared by each participant separately. All findings are presented in the Discussion section.

## *Munchiez Food Truck*

The *Munchiez* food truck is operated by students in a Small Business Management (SBM) course in which they explore issues and challenges involved in starting and operating a successful small business. Students that successfully pass the SBM course are invited to continue in a management role for a specific department by enrolling in the Management Applications course. During this semester-long course, students from both courses are assigned to a department (sales & marketing, human resources and special events, operations, research & development, and finance).

Dr. Susan Losapio, professor and faculty champion for the course, has been instructing the SBM course since its inception. The SBM course was created by three seniors who pitched the *Munchiez* Food Truck idea to the SNHU President as part of a business plan preparation course. The pitch was successful and received the necessary funds to launch the business initiative in the form of a course. The greatest challenge has been the transfer of knowledge from one semester to the next. This issue was partially resolved by creating a Management Applications course which runs in parallel for students interested in learning to become managers and/or general managers of the food truck. The greatest opportunity has been that students experience interconnectivity of the departments and leave the course understanding the importance of breaking down silos, collaboration across departments, team-buildings, and constant communication.

Student engagement in the course was measured by having the stu-

dent-managers conduct two performance appraisals (mid and end of semester). Reflection papers, conversations, and feedback from peers, managers and the professor were also ways to measure student engagement. The impact of the course was measured by the achievement of the learning outcomes, generated profits over the semester, problem-solving confidence in the team, and participation in community events.

### *Cooperative Development for the Local Enterprise Assistance Fund (LEAF)*

The *LEAF and Cooperative Development* course focused on the triple bottom line, understanding the cooperative business model, income equality, and entrepreneurship. The semester-long course work included research, surveying, and the development of financial projections to help launch two new cooperatives in the Greater Boston market.

Dawn Cerrato, an entrepreneur and expert in cooperative models instructed the course bringing in her 20 years of knowledge in the areas of HR, talent management and development, marketing, communications, and member engagement. Some of the greatest course challenges included getting the students to select their best recommendation to move forward as well as the limited market information available on composting and hydroponic farming. The learning opportunities during the course included students gaining knowledge in business development, improving critical thinking, using financial programs, tools, and technologies (Statista, Excel, IBIS World, Survey Monkey, etc.).

Student engagement was measured

by the quality work of the individual and teamwork, the depth of the analysis, the questions asked during the process, and the group progress. Besides presenting the research to the client, the students reflected on the project and class experience. The impact of the project/course was measured by the achievement level of the learning outcomes and project sponsor feedback.

### *Inkwell Interactive Studio*

The *Inkwell Studio* was inspired and designed by faculty with industry experience and involved in the game development programs at SNHU to better support the transition of graduates into industry work. Students gain industry experience in a classroom and working in a project-based environment. Inkwell Interactive is a set of two three-credit courses that are taken concurrently. Students complete contracted projects for external clients.

Knowing the client and projects in advance, Professors David Carrigg and Ed Brilliant determine in advance the learning outcomes that a student developer could accomplish. The students have the freedom of exploration on how to deliver the project. One of the challenges is for students to understand that the learning setting is different, and content is discovered organically. Success in Inkwell Interactive is defined by the work created and not the grade achieved. The greatest opportunity is that students develop practical skills and discover new skills (for example: working in a team, working under pressure with a client, receiving and interpreting feedback, etc.).

In this course, engagement is not measured in a specific way because stu-

dents need to be present and active. Measuring the impact of the courses has been a challenge. Reflection on the experience is gathered by students presenting their work followed by a large group discussion to critique the work itself as well as the development process, and additional reflection sessions on their work and the course. Traditional course assessment and especially the two additional feedback sessions with the professors have assisted in changing and developing the studio experience during the semesters.

### *Business Across Borders*

The *Business Across Borders* project was part of an International Management course in collaboration with SNHU's Global Education Movement (GEM), an educational project targeted for individuals living in refugee camps. Project activities included a pop-up store to sell the products of eight global entrepreneurs and a fundraiser dinner to increase awareness of the GEM program. The goal of the project was to provide insights and learnings on international business activities.

Dr. Charlotte Broaden, an international business professor, has been teaching entrepreneurship courses for two decades and is a proponent of active student engagement in the classroom. The greatest challenges were the design and implementation of an inventory system to account for all sales by entrepreneur and cross-team communication. The opportunities that emerged from this course included learning more about the entrepreneurs, developing business operations at an international level, planning an event (gala, pop-up store), managing a project (planning, organizing, executing, etc.), assessing team skills, meeting with sub-

ject matter experts, and gaining awareness of SNHU's international initiatives.

During the project, a pre- and post-skills assessment, and training session on the use of a project management tool were conducted to assist in the project. Student engagement was measured by letting the teams be responsible for all major task assignments. If a team had completed their tasks, then the members would be required to assist other teams. The impact of the project was measured by meeting financial, marketing, and project goals. At the end of the project, as a final deliverable, the students wrote a reflection on their involvement and its impact on the success or failure of the project as it related to the previously mentioned goals.

### *The Fashion and Retro Room*

The *Fashion and Retro Room* course initially launched as a pop-up store and with the support of the Dean's office was later turned into a store with a permanent space. This project was designed for students enrolled in the Degree in Three (completion of a Bachelor's in Business Administration over the course of three years). Through the project/course students learned to negotiate with vendors, create a business, conduct market research, identify the best location, project, assess sales, and train in display decoration.

Dr. Eklou Amendah, a marketing professor with legal background studies, approached instruction by engaging students in projects inside and outside of the classroom. The course challenges emerged from the students themselves and the physical ability to complete the tasks at hand. The greatest opportuni-

ty from this course was the assessment and the validation of the teaching methodology when students communicate post-graduation with Dr. Amendah to share how the course learnings, skills gained, technologies, and training have helped them find employment in fashion.

Student engagement was measured by encouraging the students to take the lead. Dr. Amendah gradually removed himself and observed the students plan the project, create a team, select a theme, communicate with vendors, prepare space for opening interact, etc. Assessment is a major element in the project with a constant reflection of how students are learning effectively. The impact of the project/course was measured mostly by observing student performance for every single learning outcome (market research, merchandise selection, vendor interaction, store design, etc.).

## Discussion

This discussion is organized using Kolb's experiential learning stages. Kolb's model describes a learning cycle of four stages that demonstrate how concepts are interpreted into experience through reflection. Each stage is unique and important for the learner to make connections. The SNHU examples presented above have a common theme of *learning by doing*. The authors' assumption is that the design may have not been intentional to reflect on Kolb's stages (as depicted earlier in Figure 1) but certainly includes all main elements of doing, observing, thinking, and planning (Kolb, 1984) as mapped to the courses in Table 1 below.

In the first stage of *doing* (concrete experience), the learner experiences and engages with the activity outside of the class-

room. The courses mentioned above were set in different environments such as in the examples of the food truck (Munchiez), studio (Inkwell), boutique shop (Retro Room), venue (Business Across Borders Gala), and a company setting (cooperatives).

During the second stage of *observing* (reflective observation), the learner focuses on personal reflection. Popular reflection methods in the examples mentioned above were the submission of a reflection paper or a planned discussion (once or twice a semester), and as a follow up conversation, feedback from peers, clients, or the professor.

In the third stage of *thinking* (abstract conceptualization), the learner presents a model or theory to be observed. During this stage, the learners practically used the team and group development model (Natvig & Stark, 2016) to better work in their teams and departments to accomplish their tasks and goals. Additionally, the learners used Locke and Latham's goal-setting theory (Locke & Latham, 2002) to visualize, plan, and execute their respective projects.

In the fourth and last stage of *planning* (active experimentation), the learner is expected "to study a model or theory as it relates to an experience" (Kolb, 1984). During this stage, the learners tested the functions of management (Dolechek et al., 2019) by planning the project, organizing the tasks or themselves into teams, leading, and controlling each respective project by measuring the overall impact.

Reflecting on the EE instructional themes (Sirelkhatim & Gangi, 2015), the instructors in all the courses taught for entrepreneurship in practical-based en-

vironments, by teaching techniques for teamwork, starting a business, planning, identifying opportunities, product distribution, and networking (Fayolle & Gailly, 2013; Piperopoulos & Dimov, 2014, Sirelkhatim & Gangi, 2015). The *learning by doing* methodology for all course examples included business model simulations, consulting opportunities, project monitoring, and client networking.

**Conclusion**

The five selected entrepreneurship course examples mentioned above showcase the application of Kolb’s Experiential Learning Theory (Canziani et al., 2015; Kolb, 1984; Kolb & Kolb, 2017; Miettinen, 2000; Pittaway & Cope, 2007). The *learning by doing* methodology observed to deliver experiences is a characteristic in the learning *for* entrepreneurship instructional theme. These instructional theme objectives include: (a) environment (experiences are mostly delivered outside the classroom), (b) real-life projects and/or clients, (c) reflection (as an integral part of the learning process), (d) active student engagement, and (e) subject matter expertise (all instructors had industry experience).

As HEIs design undergraduate and graduate programs in entrepreneurship, it is essential that the instructional themes (about/for/through) are dis-

tinguished and supported by respective learning outcomes. Additionally, the selection and the role of the faculty member - as a subject matter expert with industry experience – can add value to the learner experience, inspire entrepreneurial activity, and further support the economic growth of their communities. Further assessment of teaching practices and content can be designed and integrated in collaboration with student learning (Salem & Frank, 2018) and subject matter experts (Tenenberg, 2010) to assist in the continuous development of the course experience.

Further research opportunities in EE can include a study on courses and projects at other HEIs (local, national, global) with a focus on entrepreneurship instructional themes (about/for/through) and Kolb’s experiential learning stages. Reflecting on the COVID-19 pandemic, restrictions posed by educational institutions, the shift in learning environments and course delivery, and government regulations may alter the way experiential EE is delivered and may require additional support (technology, finances, networking, training, faculty, staff, etc.). We anticipate future developments in HEIs to spark new opportunities in entrepreneurship education that may prove to be inspiring and groundbreaking. ■

*Table 1. Kolb’s Experiential Learning Theory and the five innovative EE examples*

EE SNHU example	DO	OBSERVE	THINK	PLAN
Munchiez Food Truck	✓	✓	✓	✓
LEAF	✓	✓	✓	✓
Inkwell Interactive Studio	✓	✓	✓	✓
Business Across Borders	✓	✓	✓	✓
The Fashion and Retro Room	✓	✓	✓	✓

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## Appendix A

### *Interview questions*

- What inspired you to engage in experiential entrepreneurship education related projects and coursework?
- To what extent have your academic studies or professional experience influenced your involvement?
- Please provide a short description of the project/course
- What has been the greatest challenge with this project/course?
- What has been the greatest opportunity with this project/course?
- What tools or technologies do you or your students use in your entrepreneurship project/courses?
- What is the overall impact of using tools and technologies in student learning?
- How do you measure student engagement?
- How do you measure the overall impact of the project/course?
- How is the overall teaching practice assessed?
- What are your thoughts on teaching practice assessments?
- Do you have any other thoughts to share on entrepreneurship related projects and courses?

## Appendix B

*Table A1: EE Instructional themes (Sirelkhatim & Gangi, 2015)*

<b>Instructional Themes</b>	<b>About</b>	<b>For</b>	<b>Through</b>
<b>Orientation</b>	Theoretical based	Practical based	Practical based
<b>Theme objective</b>	Introduce the characteristics of entrepreneurship, entrepreneurial attitude, and economic success (Piperopoulos & Dimov, 2014).	Train students on the procedure of running a business (Bennett, 2006).	Launch business ideas to investors and experience the life of an entrepreneur.
<b>Purpose</b>	Choose entrepreneurship as a career choice by providing general knowledge in entrepreneurship (Fayolle & Gailly, 2013) and build confidence in becoming a self-employed entrepreneur (Klapper & Tegtmeier, 2010).	Simulate being an entrepreneur by practicing a portfolio of techniques.	Empower students to be entrepreneurs upon graduation (Vincett & Farlow, 2008), support a start-up business (Lundquist & Williams Middleton, 2013), and develop entrepreneurial competencies in students (Bridge, Hegarty & Porter, 2010).

<b>Learning objectives</b>	Gain insight and knowledge in business planning (Honing, 2004), marketing, financial management (Kuratko, 2005), business management (Solomon, 2007), entrepreneurial traits, personality characteristics, and economic success (Piperopoulos & Dimov, 2014)	Learn techniques for teamwork, planning a business, identifying opportunities, product distribution, and networking (Fayolle & Gailly, 2013; Piperopoulos & Dimov, 2014).	Learn through “real-life” entrepreneurship by experiencing the process of being an entrepreneur.
<b>Teaching methodology</b>	Lectures, textbooks, and guest speakers (Fayolle & Gailly 2008).	“Learning by doing” and experiential teaching methods (Fayolle & Gailly, 2013), business model simulations (Honing, 2004), SME and instructor consulting, monitoring, and networking with students (Piperopoulos & Dimov, 2014).	Person-induced business simulations (Klapper & Tegtmeier, 2010), incubators (Vincett & Farlow, 2008), internships (Wang & Verzat, 2011), and projects with other companies (Chang & Rieple, 2013).
<b>Student engagement</b>	passive	active	active