

STUDENTS' ASSESSMENT OF EXPERIENTIAL LEARNING IN AN ENTREPRENEURSHIP CURRICULUM: EXPECTATIONS VERSUS OUTCOMES

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ABSTRACT

Experiential learning has become a popular concept in curriculum design and delivery. There is a need to develop science-based assessment to validate learning outcomes and effectiveness when applying experiential learning in teaching entrepreneurship. This article shares one of the most successful experiential learning activities in a non-conventional entrepreneurship curriculum in a 4-year university in the United States. Each student received \$1 to work with 8-10 individuals in a team to design, plan, operate, and manage a small venture on campus in one semester. While all proceeds must donate to charity, each individual went through the same process of new venture creation and professional development as in real life. Through a series of assessment, students revealed that their expectations of the course was very different from their reality in finance, business process, entrepreneurship concepts, team work, communication, and transformation of failure. This article provides tools, strategies, and instruments for educators and scholars to further test the integrated nature of experiential learning in entrepreneurship education.

INTRODUCTION

Experiential learning and action-oriented learning programs have become increasingly popular in recent years designed and implemented by educators across disciplines. Most of the educators/teachers went through traditional education models primarily focused on reading, memorizing, and regurgitating information through examinations. We agree that there are significant values and benefits to support the traditional education models that offer fundamental

training for variety of learners at different learning stages to become familiar with the basic knowledge across disciplines. Unfortunately memorization and regurgitation only offer partial solutions for learning, and many students become accustomed in “learning from books” not knowing “how to apply knowledge and skills in real life”. Well-balanced and systematically designed experiential learning curriculum could fill the gaps between “knowledge” and “application”. A robust experiential learning program would support learners in a synchronized experience to “learn what they need to learn”, “learn how to learn”, and “learn how to apply knowledge and skills in real life” at the same time. We all need to be more cautious when thinking about introducing experiential learning to our teaching assignments, though. Not all learners are willing to or are able to comprehend the demanding nature of experiential learning in terms of interacting with people and issues beyond reading textbooks. One question has never been fully discussed in literature – what types of learners prefer experiential learning format, and how do we effectively assess learning outcomes?

This article provides an example from one of the largest experiential learning courses established in a non-conventional entrepreneurship program at one university in the United States. Many scholars have illustrated the importance of incorporating experiential learning in supporting entrepreneurship education (Chrisman and McMullan, 2004; Mian, 1996). Two of the most common examples of applying experiential learning in entrepreneurship education are the university-hosted incubator programs (Pokalo, 2011; Hisrich and Smilor, 1988) and the Small Business Institute consulting programs (SBI, 2016). The incubators provide adequate opportunities for students, educators, and stakeholders to work together to develop entrepreneurs beyond the conventional learning environment, while also broaden missions of educational institutions in addressing local/regional needs with respect to economic development and technology transfer (Mian, 1996). The Small Business Institute consulting programs directly connect student teams with local entrepreneurs who are seeking information to create new ventures and/or expand/grow existing ventures. Unfortunately not all universities and colleges have sufficient resources to establish, build, and operate micro-enterprise incubators on campus or off campus. Also most of the Small Business Institute programs have been limited to business schools.

This article shares a story about a successful experiential learning curriculum directly embedded in a non-conventional entrepreneurship program in a university in the United States. This article contributes to theoretical and practical development of entrepreneurship education. First, we have designed and implemented an effective assessment instrument as well as a strategic evaluation framework that could be broadly applied in other institutions. Second, we have collected data from one semester to demonstrate a systematic approach to (1) gather information from each student regarding their demographic and

entrepreneurial characteristics, (2) understand how and if experiential learning influences each student's learning expectations and learning outcomes, and (3) explore outcomes and effectiveness of experiential learning curriculum for teachers to create and implement new concepts that will simultaneously support entrepreneurship education and practices. Finally, we link students' reflections of learning expectations and outcomes to reveal and stimulate new ideas and new opportunities to adopt experiential learning in entrepreneurship education across disciplines.

LITERATURE REVIEW OF EXPERIENTIAL LEARNING AND ENTREPRENEURSHIP

There is a growing trend for educators to recognize the power of transforming knowledge to applications. More scholars advocate that entrepreneurship education requires practice. It would be essential to guide students to learn the methods as well as contents. "Learning a method, in our opinion, is often more important than learning specific content. In an ever-changing world, we need to teach methods that stand the test of dramatic changes in content and context. At the end of the day, perhaps we do not teach entrepreneurship the discipline. Perhaps we teach a method to navigate the discipline." (Neck and Greene, 2011).

The most challenging yet rewarding aspect of creating experiential learning components in any program is about establishing appropriate teaching style and pedagogy. We need to develop educators who could evolve from traditional learning and teaching environment, and who would be comfortable and competent to introduce a teaching style that is creative, dynamic, action-oriented, and supportive of opportunities for problem-solving and peer evaluation (Jones and English, 2004).

Student-operated businesses have been historically established and operated outside the curriculum or outside the education institutions (Daly, 2001). Some of these student-operated businesses receive institutional support and supervision. In recent years, more of these student-operated businesses have emerged within the curriculum as a tool for applying knowledge and providing service to the greater community through service-learning (Daly, 2001). Many studies have reported the benefits of participation in student-operated businesses, when well-guided and implemented, such as students' direct involvement and contribution to decision-making process, building stronger psychological ownership in learning process, enhancing self-efficacy, and nurturing higher level of confidence for students (Daly, 2001; Wood, 2003). Students who participate in business operation simulations also achieve higher cultural

awareness, leadership, empathy, compassion, pro-action, interpersonal and team communication, and community engagement (Hernandez & Newman, 2006; Stoddard & Risma, 2011; Wee, Yeo, Tay, Lee, & Koh, 2010). The instructors who offer students an experience in business operations also benefit from the real-world challenges by offering assignments that are more relevant to practical business environment and issues (Foster, 2004). Studies showed that students were able to complete higher quality work, became more dedicated to their assigned obligations, and were more satisfied in learning (Daly, 2001; Desplaces, Wergeles, and McGuigan, 2009; Foster, 2004; Grossman, Patel, and Drinkwater, 2010).

The Small Business Institute was started at Texas Tech University by a professor who saw the concept as a way to give his students a more direct experiential learning exercise in the early 70's. The idea was to provide small business borrowers management assistance with students under faculty supervision. The pilot program was funded by the U.S. Small Business Administration (SBA). As a result of the success of that program the SBA decided to expand the program to other schools as the Small Business Institute to supplement its management and technical assistant to borrowers. Shortly after that, a group of faculty directing programs met with SBA personnel and formed the Small Business Institute Directors Association. The program was one of the first experiential learning organizations in the country. "More than 500 universities and colleges have participated during the 25 year history of SBI, with approximately 350 schools participating in 1996; 220 in 1997; 230 in 1998; 240 in 1999. Approximately 3,600 students participated in the first full year of the SBI Program (1973) with more than 407,625 students benefitting from this learning experience through 1995." (SBI, 2016)

There is very limited research or empirical studies to analyze the impact of experiential learning incorporated in entrepreneurship education. Beyond student-operated businesses and some case studies, much literature focuses on student teams working with entrepreneurs to solve problems, design/create new products/services, or some types of students-entrepreneur collaboration (Cooper, Colin, and Gordon, 2004; Rae, 2012). This article reports a semester-long process to deliver and monitor an experiential learning curriculum that is directly embedded in an entrepreneurship course through new venture creation exercises. A few questions we would like to explore include:

- Do students really know if they are or if they have the potential to become successful entrepreneurs?
- Do students really learn from experiential exercises, and what do they learn in the process?
- From each individual student's point-of view, what is the difference between expectations and reality in an integrated experiential learning entrepreneurship curriculum?

RESEARCH METHOD

Course Description

A major degree and a minor degree in Community Entrepreneurship were designed and created in 2004 in the College of Agriculture and Life Sciences in a 4-year university in the United States. This is one of the first entrepreneurship programs established in the United States that offers terminal degrees of entrepreneurship outside business schools. A course, Introduction to Community Entrepreneurship, was created in 2005 to offer an intro-level course associated with Community Entrepreneurship degree. This course offers an integrated learning opportunity for students to explore entrepreneurship theory, entrepreneurial environments, entrepreneurial characteristics, and entrepreneurial opportunities. This course is one of the first entrepreneurship courses in the United States to truly incorporate experiential learning and fundamental knowledge of entrepreneurship through an innovative curriculum – Dollar Enterprise (Liang, 2015).

Dollar Enterprise is a nationally recognized award-winning curriculum and is very different from student-operated businesses. Dollar Enterprise offers students a dynamic experience of learning in one semester, from team building to new venture creation, through a well-guided cohesive and collaborative framework. Dollar Enterprise helps aspiring and nascent entrepreneurs learn more about being entrepreneurial, decision making, and why entrepreneurs fail. This course is offered every semester (twice a year) with 130-150 students in each semester since 2005. There is no restriction for any student in any major or any year to enroll. The purpose is to expose all students to the concepts and practices of entrepreneurship and community engagement. The instructor gives each student \$1 and 8-10 students to form a team with \$8-\$10 seed money, and no personal cash investment is allowed. The instructor gathers students' profile information on the first day of class – age, family background, personal interests and hobbies, work style, communication style, talents and special skills, preferred types of products to create, part-time jobs, school class schedule, extracurricular commitments, and preferred positions in a team. The instructor organizes team members based on personal inputs, and allows one-time switch if necessary. Once team members are confirmed, no one will be allowed to switch or to exit.

Here is a summary of the planning, execution, and evaluation of Dollar Enterprise:

- Instructor applies for location permit, food permit, and event announcement 8 months prior to the beginning of a new semester. A series of lectures and training workshops introduce course contents in the first 4-6 weeks of each

semester. Course contents include: brainstorm ideas, team building and structure, product design, workload assignment, communication strategies, resources and opportunities, business plan and business model, networking and competition, market and marketing, financial analysis, daily operations and quality control, and internal assessment/peer reviews.

Each team designs and conducts workshops to prepare for business plans, products, and market research. Arts and craft teams must use recyclable materials to create new products. Food teams must follow Campus Dining Safety using locally produced ingredients.

Each team runs their business for 4 weeks on campus (at least 3 hours every day from Monday through Friday, 8am-5pm) during the semester in various pre-reserved outdoor locations only. No school resources such as rooms, tables and chairs are utilized. Each team is required to identify a charity organization to which it will donate all proceeds, and to provide additional service-learning hours for the charity to create new programs, renovate existing programs, or offer other types of support.

Each team conducts daily/weekly team evaluations throughout the semester prior to, during, and after Dollar Enterprise activities by Teaching Assistants, secret shoppers/judges, peer reviews across teams, and community partners. Evaluation categories include quality of team work, planning and operation procedures, professionalism, effectiveness in communication, customer service, and innovation. At the end of the 4-week business activity, each team concludes with a business report, financial report, self- assessment, and final team member assessment.

Since 2005, over 4,000 students have participated in Dollar Enterprise and generated over \$50,000 for more than 300 charity organizations. Student teams have contributed over 30,000 service learning hours. More than 25 organizations have donated ingredients/materials to support student teams in the past 11 years.

Survey and Data Collection

The instructor has created a set of evaluation instruments to test and evaluate learning outcomes since 2005. The instruments have been tested and modified periodically following literature frameworks and practical applications (Scott-Ladd and Chan, 2008; Mason and Griffin, 2003; Rut Ulloa and Adams, 2004; Hoegi and Gemuenden, 2001; McCorkle, Reardon, Alexander, et al. 1999; Aggarwal and O'Brien, 2008; Locke and Latham, 1990). There are 4 sets of survey instruments for each student to respond to in each semester. The first set of survey instrument is distributed within the first week of each semester as soon as classes begin. The questions focus on demographic, family situation and influence, and other personal-oriented questions such as interests and preferences

of new products for Dollar Enterprise. The second set of survey instrument includes questions related to entrepreneurial characteristics focused on optimism, realism, decision making, independence, and risks (Liang and Dunn, 2014; Liang and Dunn, 2012). The second survey instrument is distributed in class right after students complete Dollar Enterprise activities. The third survey instrument asks each student to respond to “what they expected to learn before they participate in Dollar Enterprise” and “what they actually learned after participating in Dollar Enterprise”. The third survey is distributed in class near the end of each semester, however the expectations of learning was also distributed in the first week of each semester to validate answers later in the semester. Finally the fourth set of survey instrument requires each student to conduct weekly evaluation on teamwork and peer evaluation.

This article only reports findings based on one semester’s student demographic information, entrepreneurial characteristics assessment, and overall reflections on expectations and outcomes associated with various aspects of Dollar Enterprise – business planning, new venture creation procedures, finance, marketing, product, teamwork, communication, and general entrepreneurship concepts. The purpose of this article is to share information and research instruments for scholars to use in their own research.

Students Profile

In this particular semester, there were 110 students enrolled in the Introduction to Community Entrepreneurship course, and participated in Dollar Enterprise activities. For information purposes, there were seven craft teams - 3 craft teams each had 9 students, two craft teams each had 11 members, and two craft teams each had 10 members. There were also four food teams – one food team had 9 members, one food team had 11 members, and 2 food teams with 10 members each. We chose to analyze individuals to avoid assessment biases related to the vagaries of team dynamics. We want to focus on the overall class reflections based on self-evaluation of each individual in the same class in the same semester, regardless which team each student was assigned to.

Table 1. Demographic Information of Students (Total Number of Students in Class = 110)

Gender	No of Responses	% of Responses
Female	59	54.1
Male	50	45.9

Major by College		
Agriculture	78	70.9
Arts and Sciences	19	17.3
Business	5	4.5
Engineering/Math/Computer Sciences	3	2.7
Others	5	4.5
Year		
Continued Education	1	0.9
First Year	3	2.7
Sophomore	54	49.1
Junior	40	36.4
Senior	12	10.9
Family owns/owned business		
Yes	50	52.1
No	46	47.9
Family has influence on personal interests in entrepreneurship		
Yes	57	59.4
No	39	40.6

There were about the same proportion of females and males. Eighty percent of students took this course to fulfill major or minor requirements (this course is required by more than 6 majors and minors across different disciplines in this university). A majority students came from College of Agriculture, with some from Business School, Engineering/Math/Computer Science, and others. Most of enrolled students were sophomores and juniors. Many students came from family-owned business backgrounds, and many agreed that their family environment indeed influenced their own interests in entrepreneurship (Table 1).

Students' Self-Assessment of Entrepreneurship Characteristics

The instructor asked each student to respond to a set of questions related to commonly identified entrepreneurial characteristics in literature. A majority students agreed (including agreed a lot and agreed) that they were most likely to be optimistic and realistic in assessing their own perceptions to each question. Interestingly many students were not quite sure about failure, or being confident with their own decisions. This class seems to be more on the realistic side of

assessment. The instructor attempted to distribute this set of questions in various time periods within a semester – in the beginning of the semester, in the middle of the semester, and near the end of the semester. Interestingly there were no significant differences in each student’s responses to all questions. It is possible that each individual is very sure and certain about her/his choices regardless when we ask them these questions. Dollar Enterprise could be a very time consuming process. It seems that participation in Dollar Enterprise does not significantly influence individual’s own perception of characteristics. (Table 2)

Table 2. Self-Assessment of Entrepreneurial Characteristics – Optimism, Realism, General

	Agree a lot	Agree	Neutral	Disagree	Disagree a lot	Total
I am always optimistic about my future	26	41	22	5	0	94
I am not afraid of failure	17	23	25	22	7	94
I am creative and innovative	34	44	13	3	0	94
I am always confident about my decisions	16	32	39	6	1	94
I usually look before I leap	20	37	25	10	2	94
I am willing to take reasonable risks	26	50	13	2	3	94
When planning, I usually consider both negative and	39	34	16	3	2	94

positive outcomes						
I always seek new opportunities	24	39	26	3	2	94
I usually try to find as much information as I can before I decide what to do	22	41	22	7	2	94
I try to be reasonably certain about the situation I face when starting an important activity	28	44	19	1	2	94
I enjoy working with people in general	33	34	21	5	1	94
Overall I expect more good things to happen to me	40	34	13	5	2	94

Did Learning Expectations Match with Learning Outcomes?

Some of the most commonly cited reasons to take this introductory course is to learn about entrepreneurship and business planning. The instructor broke down more specific questions for each student to reflect on “what I expected to learn prior to participating in Dollar Enterprise” and “what I actually learned after participating in Dollar Enterprise”.

A majority students expected to learn about how to write a business plan, how to start their own business, and how to operate a business (Table 3). Many students actually learned about writing a business plan, even though they did not

expect to. A few students did not learn about starting and operating their own business, while they expected to learn these concepts and practices. This might be a reflection of personal dissatisfaction dealing with chaotic situation of each team's coordination and conflicts.

Table 3. Self-Assessment of Learning on Overall Business Practice – Expected to Learn versus Actually Learned

Writing a Business Plan			Write business plan – reality	
Chi-Square test sig .000***			No	yes
Write business plan – expectation	no	Count % within Write business plan - reality	4 40.0%	36 43.9%
	yes	Count % within Write business plan - reality	6 60.0%	46 56.1%
Start Own Business			Start own business – reality	
Chi-Square test sig 0.077*			No	yes
Start own business – expectation	no	Count % within Start own business - reality	9 42.9%	4 5.6%
	yes	Count % within Start own business - reality	12 57.1%	67 94.4%
How to Operate a Business			Operate business – reality	
Chi-Square test sig 0.503			No	yes
Operate business – expectation	no	Count % within Operate business - reality	6 42.9%	12 15.4%
	yes	Count % within Operate business - reality	8 57.1%	66 84.6%

Note: ***Significant at 0.001, ** Significant at 0.01, * Significant at 0.1

Financial analysis was and has been one of the most challenging aspects in Dollar Enterprise. Each team accepts cash, check (made to the university title), and credit card. Each team has its own bank account directly attached to the university account. Each team has its own credit card machine/program, and it is a full-size wifi state-of-the-art commercial credit card system. Every morning one team member of each team must open the accounting system to get ready for their daily operation. When each team closes for business every day, a member must meet with university financial manager to settle all accounts. It was a nightmare if any member could not count money in their own account correctly,

which would significantly delay the process of all teams and the university banking system.

Not very many students expected to learn about financial analysis through Dollar Enterprise activities. However many indeed learned about finance from daily routine and making/correcting errors. Interestingly many students did not expect to learn about making new products, while a majority of the class learned how to make new products. There were 7 arts and crafts teams, and 4 food teams in this semester. The arts and crafts teams often face more challenges to seek alternatives utilizing recycled/reusable materials in making new products that customers would buy. Food teams have to deal with constraints and food safety regulations – no overnight food, no protein ingredients including hot dogs, only vegetarian or vegan categories allowed. Creativity and innovation become two key elements that each team must work with all team members to succeed. There is no statistical significance in learning about decision making before and after participating in Dollar Enterprise. (Table 4)

Table 4. Self-Assessment of Learning on Specific Business Contents – Expected to Learn versus Actually Learned

Financial analysis			Financial analysis – reality	
Chi-Square test sig 0.296			No	Yes
Financial analysis – expectation	No	Count % within Financial analysis - reality	30 60.0%	13 31.0%
	Yes	Count % within Financial analysis - reality	20 40.0%	29 69.0%
Decision Making			Decision making – reality	
Chi-Square test sig 0.711			No	Yes
Decision making – expectation	no	Count % within Decision making - reality	16 55.2%	16 25.4%
	yes	Count % within Decision making - reality	13 44.8%	47 74.6%
Make New Products			Make new products – reality	
Chi-Square test sig 0.000***			No	Yes
Make new products – expectation	no	Count % within Make new products - reality	22 84.6%	26 39.4%
	yes	Count % within Make new products - reality	4 15.4%	40 60.6%

Note: ***Significant at 0.001, ** Significant at 0.01, * Significant at 0.1

Many educators use teamwork in different courses, and there are mixed reviews of teamwork in literature. Some emphasized the benefit of collaborative learning which could improve personal skills, while others argued about dysfunctional management and conflicts among team members which could hinder learning progress. In this one class, more than one-half of the students who did not expect to learn anything about teamwork, actually had positive learning experiences about teamwork and communication (Table 5). Industry reports often indicate employees lacking essential skills working with others – communication, negotiation, conflict resolution, and diplomacy just to name a few. Dollar Enterprise offers each team a real-life simulation in team building and collaboration through challenges and barriers. It is cumbersome to accommodate and coordinate 8-10 individuals with different ideas, values, priorities, preferences, interests, work ethic, family background, and personalities/characteristics. However most students were able to take advantage this rare opportunity to learn from each other throughout the semester, and in this once-in-a-life-time new venture creation process. Not surprisingly many team members have become friends in their future career and developed solid partnership in more business/professional collaborations.

Table 5. Self-Assessment of Learning on Teamwork – Expected to Learn versus Actually Learned

What Teamwork Is Like Chi-Square test sig 0.000***			What teamwork is like – reality	
			No	Yes
What teamwork is like – expectation	no	Count % within What teamwork is like – reality	14 77.8%	25 33.8%
	yes	Count % within What teamwork is like – reality	4 22.2%	49 66.2%
Effective Teamwork Chi-Square test sig 0.143			Effective teamwork – reality	
			No	Yes
Effective teamwork – expectation	no	Count % within Effective teamwork - reality	11 44.0%	24 35.8%
	yes	Count % within Effective teamwork - reality	14 56.0%	43 64.2%
Communication Strategies Chi-Square test sig 0.000***			Communication – reality	
			No	Yes
Communication – expectation	no	Count	15	30

		% within Communication - reality	68.2%	42.9%
	yes	Count	7	40
		% within Communication - reality	31.8%	57.1%

Note: ***Significant at 0.001, ** Significant at 0.01, * Significant at 0.1

Failure is a commonly cited factor that transforms entrepreneurs (Liang and Dunn, 2012). A statistically significant proportion of students admitted that they actually learned about and from failure and how to transform failure into successful opportunities (Table 6). The most unique feature of Dollar Enterprise is to offer all students a safe, protected, and trusting environment to fail. It is extremely difficult to establish a curriculum that aims to simulate real-life entrepreneurial experiences without helping students to learn about “failure”. Failure comes from all phases in the new venture creation path – start up, growth, or exit. Failure is a foundation of learning, and true learning occurs only after tasting failure. Traditional college students often come from well-protected family environment, where parents and relatives carry the load and burden to prevent failure of young people. In real life, we all need to take risks, make our own decision, and learn about picking our spirit up after failure to support learning from failure and the ability to transform failure into success. many, many times. It seems that Dollar Enterprise fills a gap in entrepreneurship education.

Table 6. Self-Assessment of Learning on Entrepreneurship – Expected to Learn versus Actually Learned

Fundamentals of Entrepreneurship			Fundamentals of Entrepreneurship – reality	
			no	Yes
Chi-Square test sig 0.851				
Fundamentals of Entrepreneurship - expectation	no	Count	14	13
		% within Fundamentals of Entrepreneurship - reality	48.3%	20.6%
	yes	Count	15	50
		% within Fundamentals of Entrepreneurship - reality	51.7%	79.4%
What It Is Like to be an Entrepreneur			What it is like to be an entrepreneur – reality	
Chi-Square test sig 0.839			no	Yes
What it is like to be an entrepreneur - expectation	no	Count	23	13
		% within What it is like to be an entrepreneur – reality	67.6%	22.4%

	yes	Count % within What it is like to be an entrepreneur – reality	11 32.4%	45 77.6%
Failure			Failure - reality	
Chi-Square test sig 0.000***			no	Yes
Failure – expectation	no	Count % within Failure - reality	29 78.4%	30 54.5%
	yes	Count % within Failure - reality	8 21.6%	25 45.5%
Transform Failure to Success			Transform failure to success – reality	
Chi-Square test sig 0.081*			no	Yes
Transform failure to success - expectation	no	Count % within Transform failure to success – reality	37 72.5%	26 63.4%
	yes	Count % within Transform failure to success – reality	14 27.5%	15 36.6%
Resource Constraint			Resource constraint – reality	
Chi-Square test sig 0.2			no	Yes
Resource constraint – expectation	no	Count % within Resource constraint - reality	47 81.0%	19 55.9%
	yes	Count % within Resource constraint - reality	11 19.0%	15 44.1%

Note: ***Significant at 0.001, ** Significant at 0.01, * Significant at 0.1

Table 7. Self-Assessment of Learning in General – Expected to Learn versus Actually Learned

No Expectation			No expectation - reality	
Chi-Square test sig 0.035*			no	Yes
No expectation – expectation	no	Count % within No expectation - reality	68 80.0%	6 85.7%
	yes	Count % within No expectation - reality	17 20.0%	1 14.3%
Learn Everything			Learn everything – reality	

Chi-Square test sig 0.014*			no	Yes
Learn everything – expectation	no	Count	24	11
		% within Learn everything - reality	47.1%	26.8%
	yes	Count	27	30
		% within Learn everything - reality	52.9%	73.2%

Note: ***Significant at 0.001, ** Significant at 0.01, * Significant at 0.1

Of course there are always a few people indicating that they had no expectations of this course. Many students interpret “no expectation” as “I am willing to learn whatever the instructor teaches”, or “I don’t know what to expect”. Some students expected to learn everything – everything the instructor teaches. Obviously no one can learn everything in one semester. Many individuals came to the class without specific expectations, left the class still without specific expectation. These individuals might be extremely open-minded, or really did not care about the course contents. (Table 7)

CONCLUSION, DISCUSSION, AND IMPLICATION

Many educators and scholars supported the notion of experiential learning, which offers a complimentary aspect of action-oriented curriculum on top of conventional classroom lectures and exams. There are very few empirical studies present data and evaluation from a large-scale of integrated experiential learning and entrepreneurship education. It would be essential to gather data to analyze the impacts of experiential learning on course delivery as well as positive/negative learning outcomes.

The purposes of this article were to share the story of a successful experiential learning program in a non-conventional entrepreneurship program at a university in the United States. The article contributes to the theoretical and practical development of entrepreneurship education in several ways. We have designed, tested, and implemented an effective assessment instrument that can be broadly applied in other institutions. Researchers often seek effective tools to conduct their own studies. Our instrument has been tested and validated in more than 10 years, and has lead to scholarly discoveries associated with entrepreneurial learning and entrepreneurial behavior (Liang and Dunn, 2012). Second, we have utilized data from one semester to demonstrate a systematic approach to (1) explore if students agree or disagree with many notions of entrepreneurial characteristics discussed in literature, (2) understand how and if experiential learning influences each student’s learning expectations and learning

outcomes, and (3) explore the outcomes and effectiveness of experiential learning support entrepreneurship education and practices. Finally, we hope to demonstrate that new ideas and new opportunities in entrepreneurship education could be inspired through students' reflections on experiential learning linking to entrepreneurship education.

We have shown that many students who took this class did in fact have entrepreneurial characteristics. Most of students agreed that they were generally optimistic, independent, and open to new opportunities. Most students were also realistic when considering risks and making decisions. Majority students in this class had learned more contents and skills that exceeded their expectations regarding (1) "Overall Business Practices", write a business plan; start a new venture and operate that venture; (2) "Specific Business Management Contents", financial management, decision making, and new product development; and (3) "Teamwork", what teamwork is, effective teamwork and communications and "Entrepreneurship", fundamentals, what entrepreneurship is, failure, transformation to success, and resource constraints. These findings pointed to a different direction for educators to design and implement pedagogy to include a variety of contents. We often want to make sure students learn sufficient materials in their own fields, such as Economics, Math, Sociology, Biology, and Medicine. It is equally important to provoke thinking and practices in people-to-people skills, quality of writing and presentation, professional manner, work ethic, and competency. These essential skills cannot be taught using textbooks or exams. Educators need to embrace the integrated nature of real-world environment when creating experiential learning components for different courses.

As philosophers have said, "we must to teach our children to nest in the wind" and give them "roots and wings." The results of this study convince the authors that students learn more and more effectively about real life from experiential education that engages them in learning for, not about, whatever career they choose and creatively and affirmatively engaging whatever changes they may face in their life than traditional lecture approaches to entrepreneurship education. As entrepreneurship educators we must be open, no aggressively seek, to new, creative approaches to help our young folks achieve their dream—we must not try to live our lives vicariously in theirs!

There are many other aspects we could study in understanding the impacts of experiential learning on entrepreneurship education or other disciplines. For future studies, new mechanisms will be developed to allow the

analysis to aggregate data over time to discover changes among and between semesters. Additionally, it will be interesting to follow students over longer periods of time to discover how this experiential learning exercise impacts their career choices and development in the future!

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