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The purpose of this journal is to assemble researched and documented ideas that help drive successful learning and motivate business students to learn. The intention is to draw ideas from across both methods and disciplines and to create a refereed body of knowledge on innovation in business education. As a result, the primary audience includes business education faculty, curriculum directors, and practitioners who are dedicated to providing effective and exciting education.

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Peter J. Billington
Editor

Business Education Innovation Journal

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Evaluating Financial Literacy Student Ambassador Program: A Student-led Approach to Promoting Financial Literacy

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ABSTRACT

The student-led Financial Literacy Student Ambassador (FLSA) program can provide an innovative, peer-to-peer education to college students and help address the challenges and needs faced by struggling, inexperienced college students who reside in underserved communities. This paper evaluates the effectiveness of the FLSA program at a minority-serving institution by measuring the financial knowledge level before versus after the presentation sessions conducted by student ambassadors. The topics of the student presentations include "Credit Management" and "Budgeting and Financial Goals." The empirical results show that FLSA program improves students' financial literacy level and the improvements are statistically significant for both topics.

Keywords: Financial Literacy, Peer-to-peer Training, Student Ambassador, Student Leadership, Financial Education

INTRODUCTION

Financial literacy, typically referred to as the knowledge and skills to make sound financial decisions, is essential to personal success and economic health. Studies have shown that financial literacy relates to positive outcomes, such as better academic performance and more wealth accumulation. However, financial illiteracy is widespread among youth and the situation shows little signs of improvement. A survey conducted by the Council for Economic Education (2018) reflected no growth in personal finance education in recent years. Xiao et al. (2015) concluded that young adults aged 18–24 consistently score low on financial literacy and financial capability. One study by Sallie Mae (2016) discovered that more than 80% of college students indicated they needed more education on financial management topics. These recent studies depict the status quo of financial literacy education and call for effective and innovative approaches to improve financial literacy among youth.

To address the pressing need of financial literacy education, the School of Business of South Carolina State University (SCSU) partnered with the Society for Financial Education and Professional Development (SFE&PD) to implement the Financial Literacy Student Ambassador (FLSA) Program in the fall semester of 2017. The program is aimed at educating students about financial literacy through a peer-to-peer approach to prepare students to make sound financial decisions. Student ambassadors serve as leaders to raise financial literacy awareness, encourage and facilitate financial literacy among communities, serve as mentors, and provide on-campus workshops and training sessions for other students. The peer-to-peer approach of the FLSA program is innovative, unique, and highly visible to college students and help address the challenges faced by struggling, inexperienced college students who reside in underserved communities.

The purpose of the paper is to introduce the FLSA program and evaluate the effectiveness of the program at SCSU, a minority-serving institution. We administered pre-test and post-test on students' financial knowledge for each presentation session conducted by the student ambassadors. The results show that that students' financial literacy levels on both "Credit Management" and "Budgeting and Financial Goals" are significantly improved after the presentation sessions.

The rest of the paper is organized as follows. First, we briefly review the literature. Next, we describe the FLSA program. Then, we describe the implementation of the program and present the empirical results. Finally, we conclude the research and provide discussions.

LITERATURE REVIEW

In this section, we briefly review the literature related to this study. Since SCSU is a minority-serving institution, we will focus on two literature streams on financial literacy, African American and youth. The details of the review are as follows.

Although studies of the effects of financial literacy education have raised attention over recent years, few have focused on African American. African American households differ from other ethnic groups regarding financial literacy and financial decision making. African-Americans on average have lower financial literacy (Hogarth and Hilgerth 2002, Mandell 2004, Lusardi, Bumcrot, & Lin 2011, Lusardi & Mitchell, 2011a, 2011b). They are less likely to hold high-return assets, such as stocks or equity funds (Haliassos and Bertaut 1995). They are also much less likely to own a home or apply for a mortgage (Charles and Hurst 2002, Lusardi 2005). The saving behavior of African Americans is also different from other population. Hurst, Luoh, and Stafford (1998) have documented that the wealth holdings of African-Americans are meager. Several other studies have shown that many African Americans accumulate very little wealth or financial net worth at retirement, own fewer assets, such as savings and checking accounts, CDs and other short-term securities, bonds, stocks, IRAs, and other assets (Smith 1995, Lusardi 2005). African Americans also tend to use more high-cost borrowing (de Bassa Scheresberg 2013).

As for financial literacy among youth, recent research shows that the financial illiteracy is more severe among young people in the United States and the trend has been consistent over the past decades. Inceptia (2013) conducted a National Financial Capability study among first-year college students, and two-thirds failed the test. The study also showed that forty percent of students did not know the meaning of "Net Pay," and more than half did not understand their credit score. The Program for International Student Assessment studied and showed that 22 percent of U.S. teenage students lack basic financial literacy skills (NEFE 2017). In 2014, the National Financial Educators Council (NFEC) conducted a financial literacy test on youth across forty U.S. states (NFEC 2014). Only one third passed the test, and the average score was 59.6%.

According to the reviews mentioned above, it is imperative for us to explore more effective approaches to help minority students improve their financial literacy. Martin (2007) concluded that financial education programs are most effective when they are tailored to the needs of the recipient and include face-to-face time, either with a counselor or in a classroom setting. Financial education programs that cover specific topics and teach skills are better than those covering more general subjects. Likewise, Shook and Keup (2012) pointed out that peer-to-peer training programs can provide many benefits to the university, students, and the community. Peer-To-Peer training programs can play a significant role in student success and can affect students' transition to college, satisfaction, learning and academic performance, and persistence and retention. The FLSA program is an innovative program designed to improve students' financial knowledge through peer-to-peer training. Since this program is relatively new, there is limited research investigating the effectiveness of the program. To bridge this research gap, we will introduce the program and assess the effectiveness of the FLSA program in the following sections of this paper.

FLSA PROGRAM: THE BASICS

The School of Business at the SCSU partnered with SFE&PD and implemented the FLSA program in the fall semester of 2017. One faculty advisor and four student ambassadors were involved in the program. SFE&PD is a nonprofit organization aimed to enhance the financial and economic literacy of individuals and households in the United States. SFE&PD conducts numerous financial education training in the workplace for the Federal government and private organizations. Since 2001, SFE&PD has presented personal financial management seminars to more than 300,000 individuals, including 260,000 students at 90 colleges and universities, primarily at Historically Black Colleges and Universities (HBCUs).

As part of the FLSA program at SCSU, four undergraduate students were hired as Financial Literacy Student Ambassadors to provide targeted outreach that involved coordinating formal and informal events to promote financial literacy among college students, youth in the community, and student organizations. One faculty advisor is assigned to support and oversee the program. SFE&PD provided on-site training sessions on selected personal financial management topics, such as credit and budget. Also, the faculty advisor conducted several information and

Q&A sessions for the student ambassadors. At the end of the program, student ambassadors and the faculty advisor received stipends for their services.

The responsibilities of the student ambassadors include, but not limited to, the following activities.
1. Participate in financial literacy training provided by a professional educator;
2. Develop instructional sessions for college, departments, student groups, and student organizations;
3. Conduct presentations to peers in a large or small group setting;
4. Provide on-demand counseling services and respond to questions;
5. Record attendance and collect evaluation/assessment information.

Although a financial literacy initiative can be implemented in many different forms within an academic environment, the formation of a student-led peer-to-peer FLSA program may provide the most significant ongoing benefits to all participants. Properly structured, this innovative approach can offer the following benefits.
1. Provide a positive learning environment and engage diverse perspectives;
2. Reinforce students' understanding of what they have learned via real-world application of the knowledge;
3. Provide invaluable resources of knowledge, skills, encouragement, and funding to deserving individuals;
4. Promote an understanding of civic responsibility within the student population;
5. Significantly enhance university and community partnerships.

The FLSA program provides a wide range of outreach and learning opportunities for students and faculty. The program's peer-to-peer focus offers a unique opportunity for students to learn from other students and is one of the program's key benefits. During the program, the student ambassadors can also strengthen their project-management skills, presentation skills, independent-learning ability, confidence, and leadership skills.

IMPLEMENTATION AND EMPIRICAL RESULTS

The FLSA program was implemented as follows. First, the student ambassadors were trained on the following two topics: "Credit Management" and "Budgeting and Financial Goals." Then, the faculty advisor met with student ambassadors to discuss related material and prepare them for future presentations. Next, the student ambassadors were asked to present the information they learned from the training sessions to their peers including community and student organizations. They conducted two presentation sessions for business students who enrolled in the Professional Development classes at SCSU. Their presentations comprise "Credit Management" and "Budgeting and Financial Goals." Each session lasted approximately one hour including a pre-test before the presentation, a post-test after the presentation and a short Q&A session.

To evaluate the effectiveness of the FLSA program for promoting financial literacy, we assessed students' financial literacy level before and after the student ambassadors' presentations. For each presentation session, we handed out the pre-test quiz to all attendees before the presentation and the post-test quiz after the presentation and Q&A session. Both the pre-test and post-test quizzes consist of ten multiple choice questions.

Based on the pre- and post-tests for both presentation sessions, we computed the average score for each test and listed them in Table 1 and Table 2. The class size is about 60 students, and the response rate is close to 100%. The result shows positive impacts of FLSA program on students' financial literacy.

As shown in Table 1, for the session of "Credit Management," the average score for pre-test was 68.8% with a standard deviation of 22.4%, as compared to 76.8% with a standard deviation of 17.1% for post-test. The average score improves with smaller standard deviation. The coefficient of variation of the test scores also shows the overall variability of the scores decreases by 10.3% after the presentation. We conducted a t-test to test the difference of quiz scores between pre-test and post-test. We found that the difference of quiz scores is statistically significant at 0.05 level of significance (p-value = 0.03).

As shown in Table 2, for the session of "Budgeting and Financial Goals," the average score for pre-test was 62.8% with a standard deviation of 25.4%, as compared to 75.2% with a standard deviation of 20.5% for post-test. The average score also improves with smaller standard deviation. The coefficient of variation of the test scores shows the overall variability of the scores decreases by 13.1% after the presentation. The t-test for the difference of quiz scores is statistically significant at 0.05 level of significance (p-value = 0.01). These empirical results demonstrate that

students' financial literacy level on both "Credit Management" and "Budgeting and Financial Goals" are significantly improved after the presentation conducted by student ambassadors.

Table 1: The Statistics for "Credit Management" Session

	Pre-test	Post-test	Difference	t-test (p-value)
Number of students	58	57		
Average Score	68.8%	76.8%	8.1%	2.17 (0.03*)
Standard Deviation of Score	22.4%	17.1%		
Coefficient of Variation (CV)	32.6%	22.3%	-10.3%	

The average test scores for pre- and post- tests are reported. The p-value of the t-test is listed in parentheses. *Significant at the .05 level.

Table 2: The Statistics for "Budgeting and Financial Goals" Session

	Pre-test	Post-test	Difference	t-test (p-value)
Number of students	55	60		
Average Score	62.8%	75.2%	12.4%	2.85 (0.005*)
Standard Deviation of Score	25.4%	20.5%		
Coefficient of Variation (CV)	40.4%	27.3%	-13.1%	

The average test scores for pre- and post- tests are reported. The p-value of t-test is listed in parentheses. *Significant at the .05 level.

The quiz results show that the average score improvements after presentation are 8.1% and 12.4%, respectively. This moderate improvement can be attributed to the following reasons: First, some students, particularly senior students, were exposed to personal finance course and other financial literacy training prior to the FLSA program. Second, the relative short presentation time, lasting about 30 minutes, can't guarantee that all the students have adequate time to understand the presentation. Third, the relatively large class size, approximately 60 students, make student ambassadors hard to ensure every student understand the material.

CONCLUSION AND DISCUSSION

In this paper, we introduced an innovative peer-to-peer student ambassador program for promoting financial literacy and explored whether the program improved students' financial literacy level through pre- and post-tests. Our empirical results show that students' post-test scores have improved after the student ambassadors' presentations on related financial literacy topics. These results suggest that the FLSA program is an effective approach to promoting students' financial literacy level. This program can not only build student ambassadors' leadership and public-speaking skills but also assist other peer students in understanding and learning the financial knowledge better. This program can be applied as a valuable complement to the existing approaches, such as lectures and workshops. Also, this program can be easily implemented in other institutions with the similar settings.

To further investigate the effectiveness of the program, we may evaluate the long-term effect of the program and the effect of the multiple-session offering. For instance, we can measure how well the students retain the knowledge through administering a similar test one month after training is completed. We can also evaluate the performance of the students who take multiple sessions of the program.

To further improve the FLSA program, we suggest that the program will be implemented in a smaller group setting to ensure the audience can understand the materials better. We also suggest that we increase the duration and frequency of the student ambassadors' presentations. In addition to this, we can supplement this program with one-on-one student counseling as well.

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Using The Profit To Teach Students How To Make A Profit

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ABSTRACT

The teaching potential of multimedia resources, when properly used to supplement an effective educational system, is endless. This paper focuses on the academic uses of a specific television show, The Profit, to teach Cost-Volume-Profit (CVP) analysis to undergraduate students enrolled in Managerial Accounting courses. To reach this goal, I provide a lesson plan, with three distinctive parts. The pre-activity offers a set of real life companies featured in different episodes of The Profit that can be used to introduce the basics concepts of the CVP analysis and show students how companies use the information produced by this analysis to make their business decisions. The main activity is an exercise I developed based on one of the companies featured in the episodes we previously discussed in class. This exercise will allow students to understand, through practice with different scenarios, how profits increase when higher margin rather than low margin items make up a relatively large proportion of total sales. In the last part of the lesson plan, I suggest additional activities that instructors can assign to reinforce the concepts their students just learned.

The feedback collected from students who participated in this activity confirmed that this lesson plan helped them put into practice the concepts we study in the classroom and close the gap between abstract concepts and current business practices through the use of real companies, thus increasing their level of engagement and motivation.

Keywords: Multimedia resources, television shows, managerial accounting, Cost-Volume-Profit analysis.

INTRODUCTION

Multimedia teaching strategies, when properly used to support an existing educational system, have the potential to enhance the learning process by expanding the boundaries of the traditional classroom. Videos, movies, and television shows have been consistently used in college teaching. While Champoux (2001) proposed the use of animated films because their specific features allow them to show organizational behavior and management notions in unique ways, other authors explored alternative approaches to utilizing videos as a teaching resource. In this sense, Tyler et. al (2009), and Donovan (2016) had their students locate video clips that illustrate different concepts covered in class, and discussed the numerous benefits of this approach for both instructors and students.

Several authors have focused on the potential of specific movies to teach different topics such as power, role conflict, and leadership (Harrington and Griffin 1990; Serey, 1992; Comer, 2001), motivation and influencing techniques (Huczynski, 1994), the theory of escalation (Ross, 1996), cultural issues, diversity and racial inclusion (Livingstone & Livingstone, 1998; Mallinger & Rossy, 2003; Bumpus, 2005), and gender relations and sexual harassment in the workplace (Comer and Cooper, 1998). Along the same lines, Gallos (1993) and Hunt (2001) offered many examples of popular movies and training videos that can improve the teaching/ learning process of management and organizational behavior concepts

The teaching capabilities of multimedia resources has significantly improved over the last years due to the increase of video formats, the ease with which technology can be used in the classroom, and the wide variety of video techniques an instructor can use (Berk, 2009). To this is added the fact that our students have evolved beyond the coined "TV Generation" (Gioia & Brass, 1985) to become members of the Virtual Generation; they were born in the digital age and have been interacting with digital technology from an early age (Prensky, 2001, 2010; Tapscott & Williams, 2008, 2010; Thompson, 2013). Therefore, multimedia resources, particularly movies and television shows, available in a variety of formats and provided by many web services, offer endless possibilities to facilitate the teaching and learning of management concepts.

Among many available options, "The Profit" stands out as one of the best educational shows that can be used to teach managerial accounting concepts to undergraduate students. The Profit is a CNBC American reality TV show featuring business leader and philanthropist, Marcus Lemonis. Premiering in July 2013, the show follows Lemonis

as he seeks to help small businesses succeed. There comes a moment in every episode when Lemonis presents the business owners with an offer of investment in exchange for partial ownership, financial control, or some variation thereof. The challenges and decisions faced by the real-life companies featured in each episode can be used as real-life examples to enhance the teaching/ learning process of managerial concepts.

This paper focuses on the academic uses of this television show to teach cost-volume-profit (CVP) analysis. CVP analysis is a crucial chapter in managerial accounting courses because it provides managers with the appropriate information to make many important decisions such as what products and services to offer, what prices to charge, what marketing strategy to use, and what cost structure to maintain.

This CVP analysis is applied in many of the episodes of The Profit, specifically when making decisions about the right combination of products and services offered by companies. Most companies have many products/ services with different profit margins. Hence, profits will depend to some extent on the company's sales mix; profits will be greater if high-margin rather than low-margin items make up a relatively large proportion of total sales.

With this paper, I will explore how The Profit can be used to teach students how to make a greater profit. More specifically, I will provide a lesson plan with three distinctive parts:

1. As a pre-activity, I present a set of examples from different episodes that can be used in class to show students how companies from different industries make decisions about the products/ services they offer after having considered their profit margins.

2. The central activity consists of an exercise I developed based on one of the companies featured in the episodes we previously discussed in class. This exercise shows how profits increase when higher margin rather than low margin items make up a relatively large proportion of total sales. We will use Excel to simulate the changes in the sales mix so that students can reinforce their technical skills.

3. As a post-activity, students who want to earn extra credit are encouraged to develop their own case study using as a reference another company from the episodes discussed in the pre-activity section of this lesson plan.

The final goal of this paper is to offer instructors alternative and innovative ways to put into practice the concepts we study in the classroom. The specific learning objectives of this activity are:

- Increase the level of engagement and motivation of students by helping them understand, with real companies, how the changes in sales mix may have a significant impact on the profits of an organization. When students realize how companies actually apply the accounting concepts we cover in class to make their business decisions, they understand the value of managerial accounting courses and how they can help them succeed in their future career. In addition, this higher motivation can lead students to explore additional business based TV programs such as The Mentor, Shark Tank, Beyond the Tank, and Undercover Boss.

- Close the gap between the classroom and the real world through the use of new and innovative teaching tools. By using multimedia resources, students understand that the learning experience is not limited to the traditional classroom. The fact that this show focuses on real companies, may increase the connections students can make between abstract concepts and real business practices because they can actually check their websites, and in some cases, they can even see and purchase their products online or in the stores.

- Inclusiveness of the activity. Based on the idea that each student has a different learning style, I try to include in my classes as many different activities as possible and I always try to find the appropriate balance between content, discussion and application. This is the strategy that I followed when I created this activity, based on the use of real examples selected from a business based TV show, in class discussions, critical thinking and development of technological skills through the use of Excel.

The rest of the paper describes the lesson plan outlined below.

THE LESSON PLAN

Pre-Activity

After a brief explanation of the basic concepts of the CVP Analysis, I showed my students how companies from different industries make decisions about the products and services they offer. To reach this goal, I used real companies featured in the following episodes of The Profit:

Season 2. Episode 2.01. Amazing Grapes.

Amazing Grapes provides a unique wine and craft beer experience by incorporating retail and restaurant under one roof. They offer an expansive inventory of fine wine and craft beer as well as a fun and rotating menu available after 4 p.m. in the wine bar. The main reason why the company is operating at a loss is because they do not have the optimum product mix. The bar, which is the business with the highest margin (40% profit margin) only uses 10% of the space while the retail sales, which is the lowest margin business, occupies the rest of the property. In addition, they sell wine online and this business seems to have relatively good margins.

According to Marcus, the bar should drive the retail sales. Accordingly, he suggests the expansion of the bar; the idea is to maximize the space dedicated to the highest margin business (bar & restaurant), and minimize the space dedicated to the retail business. This new layout would allow them to expand the kitchen so that they can overcome their capacity constraints and offer more choices in the restaurant.

Season 2. Episode 2.11: Swanson's Fish Market.

Swanson's Fish Market, a multi-generational family run fish business located in Fairfield Connecticut, has two different business lines with different profit margins: fresh fish (30% margin), and soups/ prepared foods (60%). Since the prepared foods part of the business generates more than double the gross profit of the fresh fish section, Marcus proposes the change of the current sales mix through the expansion of the prepared foods business. To reach this goal, he comes up with a very creative idea that will help another company in financial distress: Black Rock Café.

This café is one of the current renters in the Swanson's business building and is not a viable business. So Marcus has the idea of using it as a restaurant for Swanson's fish market prepared foods so that they can increase their capacity and satisfy their clients' demand. He also added some fresh product shelves for those clients that will want to get some fresh vegetables to go along with the fish increasing the amounts they spend per visit. As we can see in this example, by increasing the proportion of higher margin products (prepared foods) and introducing new business lines (fresh produce) the company is able to increase its sales and its profit.

Season 3. Episode 3.04. Standard Burger.

Standard Burger is an American restaurant located in Staten Island (NY) that specializes in serving customizable burgers, tasty potatoes and delicious shakes and ice creams. Their main problem is that they fully depend on burgers for profit. Burgers are currently 70% of their sales and, due to their low profit margin, the restaurant is facing serious financial problems. The solution here would be to change the current sales mix and favor those items with higher margins. The profit margins of French fries and ice cream are amazing, around 80%-85%, so the goal is to attach those items to as many burger orders as possible because that's where the money is going to get made.

The new sales mix will be 50% burgers, and 50% of products with margins of 80%-85% such as fries, potatoes, ice cream, and shakes. This new sales mix requires the creation of a potato bar that offers house-made potato chips, three kinds of fries and customizable baked potatoes, and a shake bar where customers can enjoy milkshakes, ice creams, and desserts. The new and improved menu, with more options and higher profit margins is so successful that Marcus plans to launch Standard Burger into other markets through a franchise model. For more information about this new business challenge, please watch Episode 3.14: Showdown at Standard Burger; Return to Standard Burger".

Season 3. Episode 3.10. Bentley's Corner Barkery.

Bentley's Corner Barkery is a retailer of high quality pet food and treats with no by-products or chemical preservatives. The main problems that Marcus finds when he visits the stores fall within two distinct categories: organizational dysfunction, and lack of product diversity that, coupled with its high prices, is keeping a wide variety of potential consumers from ever shopping at Bentley's. They need to carry products that meet everybody's needs and they need to promote the items that generate higher profits.

Their current sales mix is 60% pet food with a profit margin of 25%, and 40% treats, toys, and other items with much higher margins (around 50%-60%). If they want to improve their stores' profitability, they need to change their sales mix and get it closer to 50% - 50%. This change would bring the overall store profitability from 34% to a much more robust 39%. That 5% increase in profitability would result in an increase in gross profit. In order to reach this new sales mix, they need to change the layout of the store to promote the sale of the most profitable products. According to that idea, they reorganize the store in a way that allows customers to see the higher margin merchandise like clothes, toys, treats, and chew bars. In addition, they increase the product offerings; they start selling cheaper foods that, still meeting their quality standards, allows them to cover 60% of their market instead of the initial 20%.

Season 3. Episode 3.11: Blues Jean Bar

Blues Jean Bar, now Denim & Soul, used to be a denim retailer with the concept of serving jeans at a bar setting rather than drinks. But, with some issues such as lack of inventory, no solid leadership, and too aggressive business expansion, the Blue Jeans Bar is struggling to stay in business.

Marcus believes that adding new product lines with higher profits will help improve the financial situation of the company. The main product they currently sell, jeans, only has a 50% profit margin while other products, such as T-shirts and sweaters, have higher profit margins. If they are able to change the current sales mix and sell T-shirts (70% profit margin), and sweaters (68% profit margin), their sales will generate higher returns. The average profit margin of the company can increase from 50% to 62% ((50% + 70% + 68%)/ 3), assuming that the new sales mix is: jeans (33%), T-shirts (33%) and sweaters (33%). This new sales mix not only improved the profit margin of the company but it also transformed the old Blue Jeans Bar into a more sophisticated boutique that features various products for modern day-to-day living.

Season 3. Episode 3.18: Inkkas Global Footwear.

Inkkas, a company founded in 2013 and based in Brooklyn, NY, produces unique footwear using textiles and designs from around the world. This company is founded on the principles of fair trade and global philanthropy and its products are crafted with respect for the environment and the people who make them. The company is having financial problems because, despite having some designs that are huge sellers, it has accumulated too many shoes that do not sell well, weighting the company down with stagnant inventory. After a careful examination of the sales data, Marcus finds out that five models made up almost 80% of all their sales. Based on this information, he recommends to change the sales mix. The company should reduce its product lines and focus on the models that sell well.

In addition, this episode shows the significant impact that different distribution channels can have on the profit of a company. The store only makes up for 3% of the company's sales, with online sales making up under 30%, and wholesale accounts making up the rest. Based on this information, Marcus decides to shut down the physical retail shop because it is not profitable.

Season 4. Episode 4.02. DiLascia.

DiLascia is a Los Angeles-based t-shirt line that, as stated in its website, represents having fun through self-expression, and brings together social media and fashion trends using the forward-thinking wit of today's millennials. The main reason why they are not growing as they would like is their limited product selection. If they want to grow their business, they need to diversify their product offerings, and expand their lady section. Their

current sales mix is men (35%), women (20%), and children (45%). Marcus explains to Patrick, the designer of DiLascia, that the women's apparel market in the USA is twice the size of the men's market but it only accounts for 20% of Patrick's business. He recommends to increase that percentage to 50% as a minimum. By changing the current sales mix and expanding the options for ladies, DiLascia experiences a tremendous increase in sales and profit.

Season 5. Episode 5.02. Windward BoardShop.

Windward BoardShop, now Windward 82/ W82, is a Chicago based original board-shop founded in 1982 that offers a wide selection of snowboarding, skateboarding, longboarding, swimwear, footwear, apparel and accessories. They combine their large product selection with a team of knowledgeable gear specialists that make sure that customers find the right gear for their unique adventures.

This company is in financial distress because its overall profit margin is only 30%. Marcus believes that, in order for this business to be really profitable, they need to get to a 50% profit margin. The only way to do that is to eliminate the low margin merchandise and find items with profit margins greater than 50% that will allow them to land at 50% overall margin at the end of the year. This episode is interesting from a teaching perspective because it shows how the employees analyze the profit margin of the different products they currently offer so that they can determine the right sales mix that will help them reach their goal.

Main Activity

Once the students are familiar with the basic concepts of the CVP Analysis and understand its potential to provide the necessary information to make managerial decisions, it is time to practice with the following exercise.

Exercise.

Blues Jean Bar is a denim retailer that sells a single product, jeans, whose selling price is $170 and whose variable cost is $85 per unit. For our break-even analysis, we assume that running monthly costs of the store which include payroll, rent, utilities, interest expense on the funding loan, and an estimation of other running costs are $25,000 per month. Required:
a) Compute the company's contribution margin (CM) ratio.
b) Compute the monthly company's break-even point in both unit sales and dollar sales. How many pairs of jeans do they have to sell in a given month to break even? (Round your result to the nearest unit).
c) Imagine that you have been hired as the new manager of the company. Based on your knowledge of managerial accounting concepts, you believe that adding new product lines with higher profit margins will help improve the financial situation of the company.

As it was mentioned earlier, the only product sold at Blue Jeans Bar is jeans so you recommend to start selling more profitable items such as T-shirts, and sweaters. To support your recommendation you do some research and provide the following information:

	T-Shirts	Sweaters
Unit selling price	$60/ unit	$120/ unit
Unit variable cost	$18/ unit	$40.8/ unit
Unit CM	$42/ unit	$79.2/ unit
CM Ratio	70% ($42/ $60)	66% ($79.2/ $120)

Assuming that fixed monthly costs remain constant, prepare a report that shows the company's overall CM ratio and the new monthly company's break-even point in dollar sales and unit sales for each product under three different scenarios:
- Sales mix A: Jeans (70%); T-Shirts (15%); Sweaters (15%).
- Sales mix B: Jeans (33.33%); T-Shirts (33.33%); Sweaters (33.33%).
- Sales mix C: Jeans (20%); T-Shirts (40%); Sweaters (40%).

Use Excel to make your calculations and draw conclusions based on your results.

d) Refer to the original data. The owner of the company is considering the diversification of the store with the addition of a new line of handbags. This is a very profitable item; its variable cost is only $27 per unit and it can be sold for $180 per unit. Would you recommend adding this new product line? Assume that the new sales mix is: jeans (20%), T-shirts (30%), sweaters (30%), handbags (20%). Use Excel to make the calculations that will support your recommendation.

Solution:

a) Unit CM = Unit selling price – unit variable cost = $170 - $85 = $85.
   CM Ratio = Unit CM/ Unit selling price = $85/ $170 = 50%.

b) Unit sales to break-even = Fixed monthly cost/ Unit CM = $25,000/ $85 per unit = 294.11 units; the store needs to sell 294 pairs of jeans per month to break even.
   Dollar sales to break even = Fixed monthly cost/ CM Ratio = $25,000/ 0.50 = $50,000

a) Scenario A

	Jeans	T-Shirts	Sweaters	
Unit selling price	$170	$60	$120	
Unit variable cost	$85	$18	$40.80	
Unit CM	$85	$42	$79.20	
CM Ratio	50%	70%	66%	
Sales Mix (A)	70%	15%	15%	
Overall CM Ratio	0.554			
Fixed monthly cost	$25,000			
BEP ($)	$45,126.35			
	Jeans	T-Shirts	Sweaters	Overall
BEP in dollar sales	$31,588.45	$6,768.95	$6,768.95	$45,126.35
Unit selling price	$170	$60	$120	
BEP in units	185.814	112.816	56.408	

Scenario B

	Jeans	T-Shirts	Sweaters	
Unit selling price	$170	$60	$120	
Unit variable cost	$85	$18	$40.80	
Unit CM	$85	$42	$79.20	
CM Ratio	50%	70%	66%	
Sales Mix (A)	33.33%	33.33%	33.33%	
Overall CM Ratio	0.62			
Fixed monthly cost	$25,000			
BEP ($)	$40.322.58			
	Jeans	T-Shirts	Sweaters	Overall
BEP in dollar sales	$13.440,86	$13.440,86	$13,440.86	$40.332,58
Unit selling price	$170	$60	$120	
BEP in units	79.064	224.014	112.07	

Scenario C

	Jeans	T-Shirts	Sweaters	
Unit selling price	$170	$60	$120	
Unit variable cost	$85	$18	$40.80	
Unit CM	$85	$42	$79.20	
CM Ratio	50%	70%	66%	
Sales Mix (A)	20%	40%	40%	
Overall CM Ratio	0.644			
Fixed monthly cost	$25,000			
BEP ($)	$38,819.88			
	Jeans	T-Shirts	Sweaters	Overall
BEP in dollar sales	$7,763.98	$15,527.95	15,527.95	$38,819.88
Unit selling price	$170	$60	$120	
BEP in units	45.670	258.799	129.400	

As a conclusion, we can state that, as the sales mix shifts from low contribution margin products to high contribution margin products, the break-even point will decrease. Such a shift would cause the average contribution margin ratio in the company to increase (from 50% to 62%, and 64.4%), resulting in a greater total contribution margin for a given amount of sales. With a higher contribution margin ratio, the break-even point would be lower because less sales would be required to cover the same amount of fixed costs.

Scenario D

	Jeans	T-Shirts	Sweaters	Bags	
Unit selling price	$170	$60	$120	$180.00	
Unit variable cost	$85	$18	$40.80	$27.00	
Unit CM	$85	$42	$79.20	$153	
CM Ratio	50%	70%	66%	85%	
Sales Mix (A)	20%	30%	30%	20%	
Overall CM Ratio	0.678				
Fixed monthly cost	$25,000				
BEP ($)	$36,873.16				
	Jeans	T-Shirts	Sweaters	Bags	Overall
BEP in dollar sales	$7,374.63	$11,061.95	$11,061.95	$7,374.63	$36,873.16
Unit selling price	$170	$60	$120	$180	
BEP in units	43.380	184.366	92.183		

The company should start selling handbags because its higher profitability will increase the overall contribution margin of the store. Once again, we can confirm that, as the sales mix shifts to higher contribution margin products, the break-even point decreases.

Post-Activity

Once students have mastered the basics of the CVP Analysis and know how to calculate the break-even point in different scenarios, the instructor can assign additional activities to reinforce the concepts they just learned. These assignments can be based on the exercise they just did; students may be asked to create new scenarios and analyze the impact that the addition of new product lines, changes in prices, different market trends and sales mixes, would have on the overall profitability of the company and on its break-even point.

Another possibility would be to assign the episodes that were discussed at the beginning of the lesson plan to students or groups of students so that they can create an exercise similar to the one they just did about Blue Jeans Bar. But some of the companies featured in these episodes are currently out of business so students could do some research about them, analyzing what went wrong and why they had to close. To carry out their research, they can use many resources, such as the "The Profit Updates" (https://www.theprofitupdates.com/), which has all of the updates for businesses that have appeared on CNBC's The Profit, the web sites of the companies, and the comment posted by the businesses' owners in their social media.

EVIDENCE OF TEACHING EFFECTIVENESS

This section reports on the opinions and experiences of the students enrolled in sections A and B of the course Managerial Accounting in the Fall Semester of the 2017-2018 academic year (forty two students in total).

Students' perceptions of the benefits of this activity were explored through the following question:
- Do you favor the continued use of "Blues Jean Bar" exercise to analyze how changes in the sales mix may have an impact on the profit of a company?

In order to ensure the maximum number of answers, I included this question was included in their final exam and I explicitly told my students that their answers were very valuable for research purposes but they would have no impact on their final grades.

The vast majority of students (please see table below) stated that they found the activity very useful in understanding the concept of sales mix and would favor the continued use of "Blues Jean Bar" exercise to analyze how changes in the sales mix may have an impact of the profits of a company.

	Response Count
YES, I favor the continued use of "Blues Jean Bar" exercise to analyze how changes in the sales mix may have an impact of the profits of a company.	38
NO, I don't favor the continued use of "Blues Jean Bar" exercise to analyze how changes in the sales mix may have an impact of the profits of a company.	1
I don't know.	3
TOTAL	42

Some students went even further and provided detailed comments about their experience. The following are selected excerpts from their answers:
- The "Blue Jeans Bar" exercise did a great job of illustrating both what a sales mix profit comparison is as well as emphasizing the importance of learning this skill for real life product line situations. This exercise brought me right into the store, and I was able to use that familiarity to help me understand the sales mix and how it relates to contribution margin. Though I find this section of accounting challenging, it bettered my understanding so yes continue with this!
- Yes, it was an interesting way of taking a concept we learned and applying it to a unique situation. I would say you should keep using it and even do it more!
- Yes, I think that it was helpful because it was an easy concept to grasp and it took steps towards a more comprehensive answer.
- Yes, I favor the continues use of Blue Jeans Bar exercise to analyze how the changes in sales mix may have an impact on the profits of a company. I think that this exercise was really helpful in learning the sales mix, and I especially liked using it on Excel.
- Yes. I liked the exercise because it helped me make sense of the concepts more easily with the exercise. With real life ideas, it is much easier to understand
- I thought it was really interesting seeing how the contribution margin for a product affects net income by so much.
- Yes, I believe the "Blues Jeans Bar" exercise helps to show companies that try to expand their products (something very relevant today). It shows a variety of products and what happens when you produce them.

As a conclusion, after a careful analysis of my students' feedback, I can say that I feel very satisfied with the effectiveness of this activity because I reached the learning goals I was looking for.

CONCLUSION

The teaching-learning experience should not be limited to the traditional classroom; learning is a continuous process that can and should happen everywhere. Given the fact that our students are part of the so call Net Generation; they are digital natives, born in the digital age, who have been interacting with this technology almost from infancy (Prensky, 2001, 2010; Tapscott & Williams, 2010), many authors argue that we professors need to go where the students are, and take advantage of the benefits that Information and Communication Technologies may provide to stay effective as teachers (Hartman et al., 2005; Prensky, 2010; Tapscott & Williams, 2010).
In this paper, I explore how multimedia resources can be used to teach students managerial accounting concepts. I focus on a specific business-based TV show, The Profit, to design a lesson plan that can be used by instructors to teach CVP Analysis.

The good reception of this activity (91% of my students favored its continued use), lead me to think that I actually achieved the learning goals of this lesson plan. Students expressed that the activity had helped them put into practice the concepts we study in the classroom and close the gap between abstract concepts and current business practices through the use of real companies, and increase their level of engagement and motivation.

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Basic Guidelines for Common Business Statistics Metrics

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ABSTRACT

Over the past many years of teaching students and conducting workshops for managers, analysts, and executives in Business Statistics and Analytics, participants have frequently expressed the need for a simple set of guidelines regarding interpretation of common basic statistical metrics: coefficient of variation, skewness, correlation, and p-value. This article does just that in a single-page, user-friendly infographic. These guidelines are not flawless, so they are "first-level suggestions" and there are exceptions where our guideless may not be useful, but we believe they are generally accepted and work well for most common business applications. Brief overviews, descriptions, and origins provide perspective for each metric guideline.

Keywords: Teaching Business Statistics, Metrics, Coefficient of Variation, Skewness, Correlation, P-Value

INTRODUCTION

Many Business Statistics courses begin with discussions around descriptive statistics, the foundation for concepts and methodologies later developed. Visualizations and statistical metrics involving data set centers, dispersion, skew, and relationships between two variables are commonly involved in the basics of learning about business statistics or analytics. As study progresses to methodologies, the fundamentals of hypothesis testing are introduced as the deployment of these principles are required in the analysis and interpretation of methodology results. Central to these introductory discussions are basic statistical metric interpretations. Through our experiences teaching and conducting seminars in statistics and analytics, we have reviewed a wide variety of materials, resources, and student feedback. It is apparent that students and business analysts would benefit from having a handy guide available for basic, first-pass interpretation of some foundational statistical metrics. This article fulfills this need in a one-page infographic (see Appendix). There are exceptions to our suggested guidelines and cases where they may not always be helpful (Von Hippel 2005; Zhu 2012; Siegfried 2014), but we believe they are a good first step at interpretation and can be used effectively in a majority of basic business statistical applications.

Common measures of data set variation include: range, variance, standard deviation, coefficient of variation, interquartile range, and others. For basic business analysis, we believe the standard deviation and the coefficient of variation to be foundational to understanding dispersion in data sets. The standard deviation is used in numerous methodologies and its units are the same as the original data. The coefficient of variation is unitless and may be used to compare the dispersion in multiple data sets of different units and scale. For these reasons, in many business applications, the coefficient of variation is a great metric for describing spread in data sets. Our first guideline regards interpretation of the coefficient of variation.

Understanding the shape of data set is another fundamental building block in business statistical analysis. Are most of the values in the data set centered and spread out evenly? Are most of the observations in the smaller or larger ranges of the data set values? In many instances, for data sets that are in monetary units most of the observations are of the smaller values, with just a few observations that are of very high value. This asymmetry is referred to as a right or positive skew. Think of the few but very expensive homes in a neighborhood, or the top earning employees in an organization. These kinds of observations cause a skew or lean in a data set. Based on whether and how the data is skewed, different analyses are deployed. Skewness or the coefficient of skewness metric provides some sense of data set spread direction (lean), symmetry, or non-symmetry and is the focus for our second basic business statistical guideline.

Studying the strength of relationship between two continuous variables is another foundational concept typically introduced early in a business statistics course and then later used in many methodologies such as regression analysis. Although a high degree of correlation does not indicate that something causes something else, analysts are interested in understanding associations. If for example, consumers with larger incomes are associated with the purchase of more organic vegetables, a grocery industry analyst might target higher income customers with

advertisements for organic produce. A more technical application would involve dropping variables that are highly correlated in a regression analysis, as we don't need redundant predictors that can result in poor or distorted estimation models. Thus, our third guideline involves interpretation of the correlation coefficient.

P-values are used pervasively throughout a variety of settings in business analysis, from simple hypothesis testing to much more complex supervised learning techniques. When do results have some statistical support? Which explanatory variables may be useful in estimation or prediction? When is a difference large enough to substantiate a proposition? Some insight into the answers for these questions and many others lie in the interpretation of p-values, our final important guideline concerns this metric.

As a note, the famous British statistician, Karl Pearson (1857-1936) was instrumental in the origin and development of these metrics.

1. COEFFICIENT OF VARIATION

The coefficient of variation is a relative measure of dispersion in a data set. Using the coefficient of variation to describe variability rather than just the standard deviation may be more comprehensible for students (Trafimow 2014). Another major advantage of using this variability metric is that in many cases it can be used to easily compare the dispersion in data sets of different scale or units. A larger coefficient of variation metric implies more variability in the data. The coefficient of variation is simply the standard deviation expressed as a percentage of the mean:

$$COV = \frac{s}{\bar{x}}$$

If the standard deviation value is a large portion of the mean or in some cases even larger than the mean, the COV is relatively large and, in most instances, the data is considered spread out or dispersed. On the other hand, if the standard deviation value is only a small portion of the mean, the data set is considered less spread out or more concentrated. For any data set the units are always a decimal or percent form, so that disparate data sets can be compared on equal footing. Karl Pearson (1896) originally devised this metric for use in gender studies, i.e. comparing the variability of organ sizes for males versus females. Since the scale sizes are different between the two gender groups, it makes sense to use this relative measure when considering which group has more variability.

We propose the guidelines in Table 1 as an initial way to interpret this metric as the coefficient of variation is a quick, common output in many descriptive statistics software applications, including Excel. Of course, further analysis of data set dispersion would likely involve visualizations such as histograms, box-and-whisker plots, dot plots, and others.

Table 1: Suggested Coefficient of Variation Guidelines

Coefficient of Variation	Description
< 0.40	Data Concentrated Together
0.40 to 0.80	Data Slightly Spread Out
> 0.80	Data Spread Out

2. SKEWNESS

Skewness is commonly known to refer to the amount of distortion or asymmetry in a probability distribution. If a distribution is not skewed or is symmetric, the mean and the median are approximately the same number and roughly half the values in a data set will be on either side of the center. In positively skewed distributions a large proportion of the observations are of the smaller data set values with a few very large values. Positively skewed distributions are common with data sets that are in dollar amounts such as salaries or home values. The mean is larger than the median. The opposite is true in negatively skewed distributions. The origin and development of skewness dates to Karl Pearson (1895) who discusses a "skew curve" in his study of large data sets whose shapes

deviated from normality. Much simplified, Pearson originally suggested a comparison of the mean and mode as a metric of skewness (Kendall 1948):

$$\frac{\bar{x} - mode}{S}$$

Nowadays many statistical software applications including Excel use the following formula (Doane & Seward, 2011) in generation of the coefficient of skewness:

$$\frac{n}{(n-1)(n-2)} \sum \left(\frac{x_i - \bar{x}}{s}\right)^3$$

Technically this metric is called the *adjusted Fisher-Pearson standardized moment coefficient*. The formula or a software package generates the metric and the analyst is left to interpret its meaning. Certainly there is an art to skewness interpretation (visualizations such as histograms, dot plots, and box-and-whisker charts are helpful), but we believe the following guidelines are a reasonable way to interpret the skewness coefficient for basic business analysis in the majority of application scenarios.

Table 2: Suggested Skewness Guidelines

Skewness Coefficient	Description
< -1.0 or > +1.0	Skew
-1.0 to -0.50 or 0.50 to 1.0	Slight Skew
-0.50 to +0.50	Approximately Symmetric

3. CORRELATION COEFFICIENT

The correlation coefficient is a standardized measure of the degree to which two variables change together. This coefficient can be thought of as a measure of association and is obtained by taking the covariance between two variables and dividing by the product of each variable's standard deviation:

$$r = \frac{\frac{\Sigma(x_i - \bar{x})(y_i - \bar{y})}{n - 1}}{s_x s_y}$$

The attribution of the term and formula dates to Karl Pearson in 1897 (Pearson's product-moment correlation). There are references to discussions of a kind of correlation coefficient before Karl Pearson (Lovric 2011) regarding the works of Francis Galton in 1877. We found many sources suggesting guidelines for interpreting the correlation coefficient. Rumsey (2016) explains moderate correlation is indicated at 0.50 level and strong correlation is indicated at the 0.70 level. Levine (2013) suggests very weak correlation at values smaller than 0.30 and very strong correlation at values greater than 0.90. We believe our suggested guidelines are consistent with these and other widely accepted sources.

Table 3: Suggested Correlation Coefficient Guidelines

Correlation Coefficient	Description
< -0.80 or > +0.80	Strong
-0.80 to -0.40 or 0.40 to 0.80	Moderate
-0.40 to +0.40	Negligible

4. P VALUES

A p-value is a result of a hypothesis test and is an indication of how confident one might be in a proposal or claim of interest. The smaller the p-value the more support one has for the research proposition. In more technical language, a p-value is the probability of getting a result that supports a claim, known as H_1, when the opposite of the claim, known as H_0, is true. A p-value measures the likelihood of whether an observed result supporting a proposition can be attributed to chance (Nuzzo 2014) rather than the difference conjectured.

In practice, p-values are commonly used to assess the significance of a variety of statistical results such as;
- whether a model is useful (in estimation)
- acceptance of a claim
- whether or not a study provides evidence
- significance level of explanatory variables or predictors

The idea of a p-value originally dates back to the late 18th century (Stigler 1986) works of the well-known French scientist and mathematician, Pierre-Simon Laplace in his study of possible excess male births over female births. In the early 20th century Karl Pearson introduces a p-value in his chi-squared test (Stigler 1986). The p-value approach was later taken up by British statistician Ronald Fisher in the 1920s (Nuzzo 2014; Fisher 1958). Fisher states that for p-values greater than 0.10 there is no reason to suspect evidence against H_0. For p-values below 0.02 it is strongly indicated that that H_1 did not occur simply by chance when H_0 was true. Bowerman, et. al. (2017) state "some evidence that H_0 is false" for p-values between 0.05 and 0.10, and "strong evidence" for p-values under 0.05. Similarly, Keller (2014) deems results "significant" for p-values under 0.05 describes p-values between 0.01 and 0.05 as "strong evidence to infer that the alternative hypothesis is true." We found numerous sources for guidelines to interpret p-values and they generally follow along the lines shown below in Table 4:

Table 4: Suggested P-Value Guidelines

p value	Description
< 0.05	Strong Evidence
0.05 to 0.10	Moderate Evidence
> 0.10	Weak to No Evidence

These guidelines should be viewed as a "first order approximation" for interpreting p-values. As students advance in their analytic studies and practitioners gain more skills, they will recognize there may be some issues and caveats associated with the guidelines. Responsible faculty should point out caution to students perhaps after completion of the hypothesis testing topic.

There has been quite a bit of controversy regarding p-values (Lin, et. al 2013; Nuzzo 2014; Wagenmakers 2017) as a "gold standard" for judging the merits of a proposition. The American Statistical Association released an important statement (Wasserstein and Lazar 2016) regarding misconceptions and the misuse of p-values to solely judge a research claim. Thus, our guidelines here should be regarded as a basic, first-pass way to evaluate the results of a statistical test knowing that more in-depth considerations are appropriate. We believe our proposed guidelines are well-aligned to accepted interpretations.

SUMMARY

Breaking up any continuous metric into discrete parts for interpretation is always somewhat arbitrary. Questions such as how many divisions to make and appropriate cut-off levels need to be considered. There are certainly application-based nuances that could change any set of guidelines. Depending on the domain of the application, scholars and analysts will disagree on points of demarcation. Guidelines may fail or not be helpful in certain instances. We have thoughtfully chosen three basic regions for each of our metric guidelines. Three regions are easy to understand, are natural, and provide students and business managers a straight-forward way to interpret results. Three categories are extremely common in a multitude of domains. In project management, task completion times are estimated as optimistic, pessimistic, and most likely (Sanghera 2014). Political and social issues are often described under three points of view; conservative, liberal, and independent or other. In School House Rock©, even children learn that "three is a magic number" (past, present, future). There are the three major

Abrahamic religious groups (Partridge 2005); Christianity, Judaism, and Islam. Three fundamental types of business investments; ownership (equities, real estate), lending (bonds), and cash equivalents (savings accounts, money market funds). Three categories are common in sentiment analysis (Kim and Hovy 2004), positive, neutral, and negative comments (or Tweets). It is not the purpose of this manuscript to list all the areas where three categories are deployed, but to point out that the use of three categories is wide-spread and we can inherently relate to such groupings.

Categorization is a fundamental way we learn and interpret the world around us. Categorization is a foundation for cognition (Quinn 2011) and allows one to bring an order to things. Categorization is "primitive in all behavior and mental functioning" (Thelen and Smith 1994). Thus, there are natural, innate advantages in using categories to interpret and explain results that have a large continuum of possible values. For these reasons, in our fundamental set of guidelines for common statistical metrics, we have thoughtfully chosen three basic categories for each as a reasonable first-pass at interpretation and analysis of results for most common business applications. In our single-page, infographic (Appendix) we visually show four common metrics each broken into three groups. Since the skewness and correlation metrics can have negative values, there are three symmetric groups on each side of zero with similar interpretations. We believe these basic guidelines provide some clarity and are a good starting point for business students and analysts as the beginning of a successful journey in the art and science of applying statistics.

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Coefficient of Variation

Data Concentrated Together   Data Slightly Spread Out   Data Spread Out

0.40   0.80

Skewness

Left Skew   Slight Left Skew   Approximately Symmetric   Slight Right Skew   Right Skew

-1.0   -0.50   0.0   +0.50   +1.0

Correlation Coefficient

Strong   Moderate   Negligible   Moderate   Strong

-1.0   -0.80   -0.40   0   +0.40   +0.80   +1.0

P Value

Strong Evidence   Moderate Evidence   Weak to No Evidence

0.05   0.10
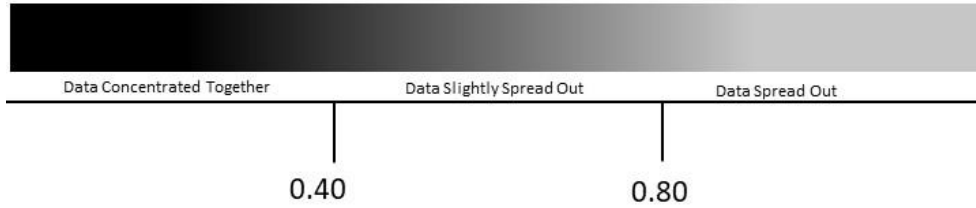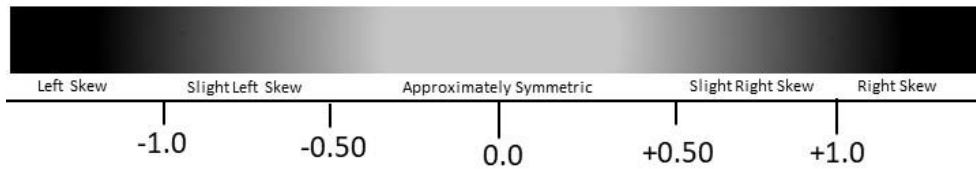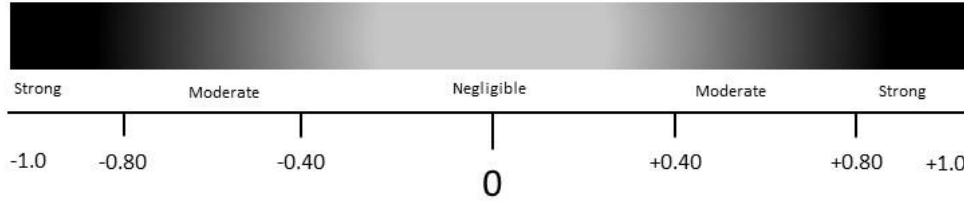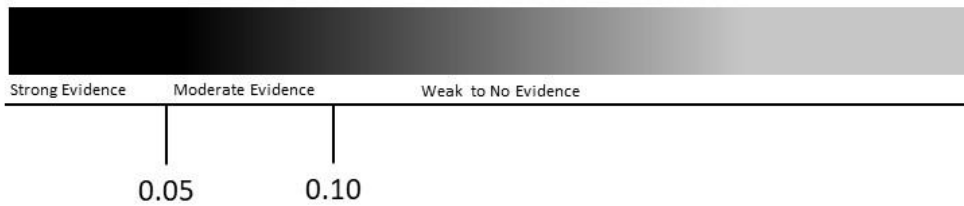
"Are there any Questions?" The Theory of Constraints as Justification for using Student Response Systems in a Required Operations Management Course

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ABSTRACT

While Student Response Systems (SRS) are among the most popular forms of educational technology, many faculty still question the value of using these systems. While the literature provides some evidence of success, it is far from conclusive. Meanwhile, the Theory of Constraints, originally proposed as a mechanism for improved manufacturing productivity, provides a framework for justifying the use of these systems.

Keywords: student response systems, theory of constraints, operations management

INTRODUCTION

A common complaint among faculty is the notion that students do not comprehend the material covered in class but also do not ask any questions. Normal questions concerning comprehension of material are answered by a couple of actively participating students. In addition, when asked "Are there any questions?" most students interpret this to mean that class is over. In both cases, the instructor is clueless as to the level of comprehension of the material covered. And, while tests and quizzes may provide this information, they typically occur after the conclusion of a section and are summative. Thus, they serve as a measure of performance, not a guide to improvement.

Student response systems provide one mechanism for achieving a formative assessment. This paper will discuss the nature of SRS and the impact that they have had in educational environments. It will also discuss the nature of a common core business course, Operations Management. Finally, the value of the response systems will be identified through a tool presented in the Operations Management curriculum, the Theory of Constraints.

STUDENT RESPONSE SYSTEMS

One of the most rapidly adapted technologies in higher education is the use of Student Response Systems (SRS). All systems feature a handheld clicker unit with a unique signal, allowing responses from each individual student to be recorded. Classroom use varies greatly, but often involves the instructor asking questions and then presenting summaries of responses from the entire class (after all students have been given an opportunity to respond) (Camey et al, 2008).

Examining the impact of these systems is somewhat difficult given the various goals of the instructors involved. Some instructors choose to have students register their devices. Being able to record specific students' responses allows the instructors to administer "pop" quizzes that are electronically graded. Others use the responses as a mechanism for taking attendance in large classroom. Finally, a number of faculty members use the devices to track individual student's performance, with particular attention on those who might be lagging. In each case, a major concern is that any difficulty with the technology could prevent a student from responding.

A second segment of instructors have chosen to have student respond anonymously. While this eliminates the opportunity for any form a grading, it provides the instructor with fast feedback on the level of understanding of the topic matter. In addition, it provides the additional feature of students responding without fear of retribution (or loss of points).

IMPACT OF SYSTEMS

Given the variety of uses of the systems, getting a clear measure of the educational impact of the systems is difficult. As a result, many studies concentrated on the attitude of students and instructors on the use of ARS (Rana & Dwivedi, 2015; Freeman, Blayney, Ginns, 2006; Stagg & Lane, 2010; Dunn, et al 2012; Stagg & Lane, 2010, Filer,

2010; Eastman, et al, 2011,). Works like Chatham and Davidson (2011) have found that students generally have a very positive feeling about the use of SRS. The same study found that instructors were pleased with the uses, particularly with respect to understanding the level of students' comprehension of new topic. Disadvantages, from the students' perspective, centered on the device itself including costs, possible loss, and technical difficulties which might impact their grade. On the instructor side, the biggest concern had to do with the integrity of results. A number of studies indicate the students attended class with multiple clickers.

Not surprisingly, a large number of studies have attempted to measure the impact on learning. Yourstone, Kraye, and Albaum (2008) found positive impact of SRS in a very limited experiment. Camey, et al, (2008) performed a small scale experiment and also found a statistically significant impact on learning. Both Premuroso, et al, (2011) and Chui, et al, (2013), found a positive impact on learning in an Introductory Financial Accounting class. Keough (2012) reviewed 66 studies and performed an independent experiment. Out of 34 studies that used objective measures of performance, 22 showed a significant improvement in performance. He also performed his own test and found a significant improvement in performance. However, as Nelson, et.al. (2012) found when conducting a meta-analysis, "The greatest effects on knowledge scores were seen when SRS was compared to non-interactive lectures; the differences between groups were less pronounced when non-interactive comparators were excluded. These results suggest that the positive effects of SRS on knowledge outcomes may also be produced by other interactive lecture styles or interactive modalities. These findings support previous studies that have hypothesized that increased interaction, rather than the actual technology, may be the mechanism by which SRS positively affects student achievement (Caldwell 2007)." Recently, two meta-analyses attempted to get an overall measure of impact. Hunsu, et al (2016) found that the SRS had a minor impact on cognitive and non-cognitive learning outcomes. Their findings indicated that the success of introducing this approach into the classroom is dependent upon the design of the questions and the nature of feedback and discussion of the results. Castillo-Manzano, et al (2016) found limited improvement of academic performance, much of which was tied to specific disciplines. They did note that some of the limitations identified in earlier studies, related to technological difficulties, no longer are a barrier to implementation.

OPERATIONS MANAGEMENT COURSE

Operations management is a discipline covered in almost all business school curricula. The course represents a challenge to many business students for a number of reasons. For one, a good portion of the course utilizes quantitative techniques. While all of the students have completed courses in both math and statistics, they have difficulty applying that knowledge to the problem types presented in this course. Second, the students do not have a frame of reference within the world of operations. With nearly half of the class concerned about the financial aspects of a firm (as accounting or finance majors) and a large portion of the remaining students concerned about marketing and promoting the firm, there seems to be little interest in determining what the firm actually produces and how. The course itself is a mishmash of topics. It doesn't have a progression of ideas that lead to a uniform view of the firm. Instead, given the wide range of types of operations settings and goal, the course is simple a toolbox full of techniques and approaches. Finally, the course is generally taken during students' last 2 semesters. Thus, with graduation and job offers on the line, failure is not an option.

THEORY OF CONSTRAINTS

The Theory of Constraints was developed by Eli Goldratt, a physicist. He introduced this approach through a novel, *The Goal,* in 1984. The book, still listed among the most influential books in business (Sale & Sale, 2013), highlighted the importance of bottlenecks in productive systems. Goldratt illustrated this notion through a series of stories; most notably one about a group of scouts on a hike. He demonstrated the significance of the bottleneck by showing that the most significant scout for the completion of the hike was the slowest hiker.

While the greatest application of TOC is in balancing production systems (avoiding bottlenecks), the analogy also applies to the field of education. Goldratt and Weiss (2005) presented the notion of utilizing TOC in secondary education. They examined a vocational school where the emphasis switched from recognizing and promoting the top students to the overall success of the class. They were innovative in making the connection between this scenario and the story of the slowest hiker.

Today's higher education environment aligns well with this approach. Historically, particularly for public universities, there was an attitude of survival-of-the-fittest. However, in recent years, schools of all types have put greater emphasis on retaining and graduating their students. One incentive for this change is the rankings of universities. Schools are judged (either by U.S. Department of Education, published ratings like U.S. News and World Report, or dozens of others) on their 6-year graduation rates. So, while schools will always promote stories of their outstanding graduates, more than ever they are concerned about the survival of all students.

USING STUDENT RESPONSE SYSTEMS IN AN OPERATIONS MANAGEMENT COURSE

The situation observed in this study is extremely limited. The use of clickers was introduced by one instructor who teaches 4-5 sections of the course each year. The instructor has made a number of choices as to how the clickers were to be utilized, based primarily on the feedback observed first-hand and that presented in the literature. One complaint often cited in the literature is the added cost of the devices. While the devices are not prohibitively priced, students don't necessarily see a value in the purchase. A second complaint identified was the concern about grading using the clickers. While this represents a speedy manner of grading for the instructor, both students and faculty have expressed concerns about technical glitches with the systems. Similarly, students have expressed the concern that the system was used simply to take attendance. As such, they received no value for their purchase.

For this scenario, all of the clickers were provided for the students. Their use was strictly anonymous; never used for grades, only for providing feedback on the learning process. Thus, the biggest student concerns about the use of this technology have been removed.

THEORY OF CONSTRAINTS AND AUDIENCE RESPONSE SYSTEMS

The value of the SRS to the instructor is knowing the students' level of comprehension of material. Typical questions posed in class may elicit a response from one student but do not provide information on the class's grasp of the material. Thus, rather than giving the instructor the formative assessment on how the class has comprehended the material covered, it provides only one data point; how well a single student comprehends.

Beyond concern for the class as a whole, particular attention should be placed on the students who never participate as they are likely to be the ones for which success is the greatest concern. Here the Theory of Constraints provide the perfect analogy. In TOC, the emphasis is be on bottleneck of the system. In higher education, that bottleneck is the learner that falls behind. Thus, for the success of the entire class, the instructor must be most concerned about that individual's performance.

The use of an SRS enables the instructor to understand where and when issues of comprehension occur. As such, it provides an opportunity to go back and "rescue" the class before moving forward. At the same time, because of the anonymous nature of the responses, the rest of the class is unaware of who is struggling and who is not. Finally, while all issues of comprehension cannot be addressed in the classroom, the student who is falling behind has a clear indication that they need to work harder to keep up with the rest of the class. (See Figure 1 for a sample question and result.)

Figure 1: Sample Question

CONCLUSION

The literature does not provide hard evidence that SRS have a significant impact on learning. As such, an instructor might assume that it is not worth the effort to employ such systems. However, the ability of the systems to identify the level of comprehension, allows the instructor to adapt their presentation to address key misconceptions. The fact that this feedback can occur during every class session is significant.

If D=936, S=$45/order, and H=$30/unit/year, what is EOQ?

A. 37.47
B. 52.99
C. 1404
D. 2808
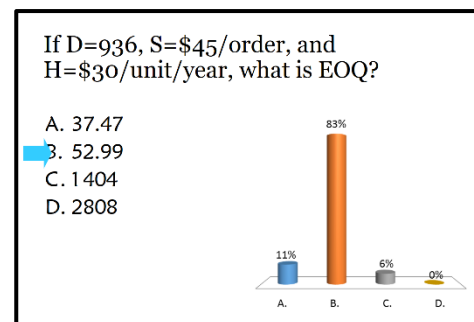
The Theory of Constraints provides a model that is good fit for educational achievement. It acts as a reminder that the biggest classroom concern is not identifying and rewarding the best students. Instead, it emphasizes the need to help the poorest performers, many of whom are non-participants. The use of SRS is one mechanism for identifying whether students are lagging behind. Clearly, it informs the instructor much better than asking "Are there any questions?"

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Embedding Ethics into MBA Marketing Coursework:
The Utility of a Trust Approach

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ABSTRACT

The marketing professions (especially advertising) are experiencing an erosion of consumer trust. Some surveys indicate that the majority of consumers distrust marketing and advertising professionals altogether. Although other contributing causes are likely, some evidence suggests that this distrust may in part be due to the way marketing is being taught in MBA programs. In direct response to this, we propose a "consumer trust" pedagogical platform for marketing education in MBA programs. We suggest that this platform is capable of helping to restore the trust of consumers and other stakeholders by way of training managers to prioritize ethical behavior and to emphasize long-term, as opposed to short-term, profitability. In addition to arguments in support of a trust-based teaching platform, basic pedagogical recommendations are provided stemming from the authors' experience in the MBA classroom.

Keywords: Trust, Trustworthiness, Business Ethics, Marketing, Marketing Education, Masters of Business Administration Degree, Consumer, Customer, Pedagogy

INTRODUCTION

Since 2002, the marketing professions (especially advertising and sales) in the United States have consistently been ranked among the least trustworthy out of 40 different professions (see annual Gallup Polls, 2017 and prior). In fact, only government lobbyists can boast of being consistently less trusted than marketing professionals- and the problem seems to be getting worse. According to a 2017 study conducted by *Trinity Mirror* and *Ipsos Connect*, approximately 70% of consumers were found to distrust marketing (especially advertising), with nearly half of these saying that they trust marketing less than they did in the recent past (see also Rogers, 2018).

Identifying Causes
Given this sobering situation, many questions arise, but chief among them are: 1) "why?" or "what has caused this problem?", and 2) "what can be done about it?" With regard to "why," it is difficult to point to a single cause. However, based upon the results of the Gallup Poll (as discussed above) alone, it seems likely that unethical behavior remains a real problem in marketing and that trust has suffered significantly as a result. Of course, the media diligently highlights the worst examples of deceptive advertising, unethical sales tactics, unfair pricing, marketing of dangerous products, and warranty scams, and it is likely this persistent coverage itself may be contributing, in part, to the high levels of distrust (most of the world, for example, followed the recent Volkswagen fiasco on their televisions and smart phones, which amounted to no less than the largest case of false advertising in history). Some argue, though, that the problem actually originates with the type of students that self-select into business schools (see Giacalone and Promislo, 2013). The argument is that business schools, with their traditional focus on short-term profitability, might actually be attracting people who are seeking short-term wealth as their top or singular priority and therefore who are less attentive to broader societal issues of corporate social responsibility and ethical conduct.

However, the problem of unethical marketing practices has also been attributed to the training top managers are receiving in their MBA programs. Some research indicates, for example, that MBA students are graduating from their programs biased against ethics, less ethical overall, and greedier than when they start them (e.g. Krishnan, 2008; Huhn, 2014). Although this research doesn't blame marketing coursework alone, whereas marketing has long been viewed as one of the least ethical functions of business (Laczniak, 1999) and many of the important issues facing current businesses can be thought of as ethical issues in marketing (Murphy and Martin, 2010), the potential problem of MBA training is something that cannot be ignored.

Indentifying Solutions
In attempting to answer the second question (what can be done about the lack of trust consumers have in marketing), some scholars (e.g. Giacalone and Thompson, 2006; Giacalone and Promislo, 2013) have suggested that MBA programs ought to be completely transformed in ways that help students better understand the importance of ethics and social responsibility in business. Whereas research clearly suggests that if marketing students are educated using principles of ethics while in business school, they will act more ethically when they enter the workforce (Yoo and Donthu, 2002; Ferrell and Keig, 2013), any approach that emphasizes ethics and a responsible worldview is likely to be worthwhile. A key question remaining, however, is how- how should ethics be embedded into MBA marketing coursework in a way that helps students avoid the ethical pitfalls mentioned earlier (e.g. deceptive advertising, unethical sales tactics, unfair pricing, marketing of dangerous products, warranty scams, etc.) in their careers?

In this paper, we propose an answer to this question, and a potential solution to the problem it identifies, by suggesting that trust theory, as a pedagogical platform, is uniquely capable of embedding and prioritizing ethics in MBA marketing coursework. We first provide some background on the basic psychology of trust, including a brief discussion of research that demonstrates the importance of ethical behavior to perceptions of trustworthiness in general. We then discuss the fundamental role that trust theory already plays in the marketing literature and in the marketing function of business. Finally, based upon our own experience teaching in MBA programs, we provide initial pedagogical guidance for embedding ethical (and long-term) thinking into MBA marketing coursework using a trust-based instructional platform.

THE PSYCHOLOGY OF TRUST

Trust and the Prioritization of Integrity and Ethics
In the most basic sense, trust is the "willingness to be vulnerable to others whose behavior one cannot control'' (Zand, 1972, p. 231). Trustor willingness occurs to the degree trustees are considered trustworthy by the trustor (Zand, 1972; Mayer, Davis, and Schoorman, 1995). Decades of research (see Colquitt et al., 2007) have arguably concluded that the key antecedents of trust are *integrity*, *ability*, and *benevolence* (see also: Mayer et al., 1995; Morgan and Hunt, 1994). The purpose of the "feedback loop" in Figure 1 is to depict the fact that, over time, trustors gain clearer pictures of these trustee attributes, and that all three of these "components of trustworthiness" drive trustor perceptions of trustee trustworthiness and subsequent trustor risk-taking.

While the research suggests that all three components of trustworthiness (integrity, ability, and benevolence) are vitally important (Colquitt et al., 2007), recent research suggests that integrity and benevolence may actually be more important than ability for trust-building purposes. Research has found, for example, that people who believe integrity and honesty are higher priorities than ability or performance, tend to behave more ethically, and that people are generally slower to forgive and forget trust breaches due to integrity-related failures than they are to trust breaches stemming from ability-related failures (Greenwood and Van Buren III, 2010; Kim et al., 2006; Janowicz-Panjaitan and Krishnan, 2009; Gillespie et al., 2014; Finegan, 1994). Intuitively, these findings make sense. After all, a person who is highly capable but notoriously lacking in integrity or benevolence can, in many cases, pose a greater risk to an organization than someone who is somewhat lacking in ability but highly reliable and benevolent.

Well-Placed Trust vs. Costly Controls
Research on trust also suggests that when or where trust is lacking in a business relationship, "controls" tend to be used instead, but typically at a significantly higher cost (Alm, 2015; Mills and Ungson, 2003; Das and Bing-Sheng, 1998). This holds true for all stakeholder relationships. For example, to provide an example from accounting, consider the ever-present need for independent, regulatory, and internal audit functions. The need for auditing in general would be much lower if complete trust were possible. In marketing, consider the trust an individual customer exhibits when purchasing a product or service. To the degree that he or she decides not to invest significant resources ensuring (e.g. researching) that the product or service being purchased is safe, reliable, of good quality, and offered at a fair price, he or she is expressing trust in the firm offering the product or service. By the same token, if the customer distrusts the firm offering the product or service based upon prior experience or reputation, he or she will likely invest, as a form of control, much more effort and/or resources into the purchase decision. In general, wherever trust is lacking in any human relationship, resources (costs) are typically deemed necessary to offset the risk of potential harm. For maximum economic benefit and exchange (see Figure 1 below),

therefore, trustors will trust trustees and trustees will be worthy of that trust (see Bjornkov, 2010; Stiglitz, 2013; Pervaiz and Chaudhary, 2015; Khalifa, 2016).

FIGURE 1 - The Psychology of Trust (Adapted from Mayer et al., 1995)
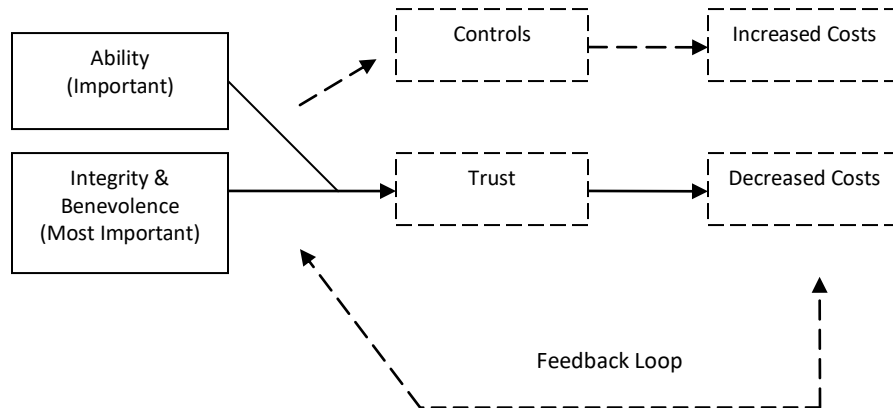
TRUST'S PROMINENT ROLE IN MARKETING

In the most basic sense, "marketing" is a relationship-based function by which people get what they want through exchanging things with other people (see Kotler and Armstrong, 2004). Traditionally, in an MBA marketing class, the relationship of primary focus is the one between the for-profit organization and the consumer. Whereas the ongoing maintenance of human relationships is crucial for any firm's success, it's not too surprising that marketing research has repeatedly demonstrated that trustworthy behavior is vital for maintaining and strengthening consumer relationships (e.g. Castaldo et al., 2009; Marin et al., 2009). In fact, since about the year 2000, the most important paradigm in marketing, according to several scholars, is the paradigm of *relationship marketing*, which views marketing as a long-term endeavor aimed at maintaining relationships with customers in a win-win fashion (see Agariya and Singh, 2011; Urban, 2006; Berry, Shostack, and Upah, 1983).

In general management literatures, trust is considered the defining indicator of effective stakeholder relationships (see Blau, 1964; Buchan et al., 2002; Fang et al., 2008; Hansen et al., 2011) and the same holds true in the marketing literatures, which specifically focus on the consumer stakeholder. Mouzas and colleagues argue that trust is "a significant, if not pivotal, aspect of business relationships" between a firm and its customers (Mouzas et al., 2007, p. 1016). Referring specifically to relationship marketing, Morgan and Hunt (1994) suggest that a trust perspective is vital because it naturally focuses all attention on customer relationships. In line with this theorizing, Glen Urban (2006) of the Massachusetts Institute of Technology (MIT), sometimes referred to as "the Father of Trust-Based Marketing," proposed that a "trust-based" paradigm for marketing would be the only sure strategic platform in the future capable of maximizing long-term profitability and viability. Urban (2006) went so far as to suggest that the wisest organizations would actually seek to strategically participate in various forms of "consumer advocacy," essentially seeking to put themselves in the consumers' "shoes," with the objective of deeply understanding them and thereby eventually acquiring their long-term trust. Parallel thinking is similarly found in the ethical corporate marketing literature which, taking a firm-level perspective, suggests that organizations be viewed as "trustees" for all of the firm's stakeholders (Hansen et al., 2011; Balmer et al., 2007), and as such, that marketing strategy itself should be based on a paradigm of trust-building (see Balmer et al., 2007; Garbarino and Johnson, 1999).

Given the vital role that trust theory already plays in marketing, and whereas psychological trust has been identified as the pivotal component of consumer exchange relationships, we suggest that it is reasonable for marketing education in MBA programs to focus on building consumer trust as a foundational teaching platform. Furthermore, whereas psychological trust encapsulates the basic psychological dynamics that actually strengthen and/or weaken consumer relationships, trust is a potentially a very practical paradigm through which to view consumer

relationships. Finally and most importantly, we suggest that a "consumer trust" approach to MBA marketing coursework can be a simple (see Figure 1) yet powerful tool to help students develop patterns of thought and behavior that *maximize long-term profitability via the prioritization of ethical behavior in consumer relationships*. In the following section, we discuss specific potential pedagogical applications.

TRUST AS A FOUNDATION FOR MBA MARKETING PEDAGOGY

As mentioned previously, trust is the key driver of economic exchange in general (Bjornkov, 2010; Stiglitz, 2013; Pervaiz and Chaudhary, 2015; Khalifa, 2016). The psychology of trust reveals that where trust is lacking in a relationship, controls tend to exist, but that these controls are typically costly. Over time, individuals (consumers) learn to avoid costly relationships with untrustworthy firms and those firms' products and services. Trust is, overall, a relatively simple psychological process (see Figure 1 above), which makes it especially useful for pedagogical purposes (see Bennis and O'Toole, 2005). Research demonstrates that trust is also a psychological process that is governed heavily by perceptions of ethicality; thus, while the capability to produce quality products and services is indispensible, ethical/benevolent behavior ought to be the *top priority* of any organization interested in building and retaining consumer trust. With these basic principles in mind, a few pedagogical recommendations can be made with regard to how common topics are approached in MBA marketing coursework. For purposes of brevity, we approach these topics in a simplified fashion, and we do so in the order that these topics are typically taught in an MBA marketing course: 1) strategic planning and branding, 2) pricing, and 3) marketing communications (including ethical corporate marketing, advertising, and sales):

Strategic Planning and Branding
To maximize long-term profitability, the foundation of any marketing strategy should be the acquisition and retention of long-term consumer trust (Agariya and Singh, 2011; Urban, 2006; Berry, Shostack, and Upah, 1983). However, in the MBA marketing classroom, short-term profitability is all-to-often the reigning paradigm (see Huhn, 2014; Krishnan, 2008; Laczniak, 1999). The problem with this tradition is that if ethical behavior is not the top priority from the beginning of the marketing process, where innovation, strategic planning, and market research (segmentation and targeting) begin to first develop a product and position it for sales and consumption, long-term stakeholder trust is *already* in jeopardy. Although it can take years or even decades, history suggests that markets and societies eventually tend to respond negatively to unethical products and services with controls (e.g. laws, media reports, etc.) intended to protect consumers. Examples past and present abound; below are a few we have found to be especially helpful:

- The tobacco industry invested heavily into the marketing of a product that would eventually prove detrimental to human health and to society. Most are aware of the legal and regulatory responses that have occurred against this industry.

- The sex industries (both illegal and legal) continue to invest heavily into products and services that victimize, demean, or otherwise harm some of the most vulnerable of our society. Governing bodies all over the world continue to struggle with these industries and how to protect the innocent.

- A variety of industries continue to be profitable as a result of "unfair trade" and forced/unethical and even illegal labor and employment practices in developing countries. Thus far, market forces have become the "controls" in this arena, with many manufacturers offering "fair trade" branded products and services.

- Organizations in Silicon Valley and some universities continue to abuse neuroscience to biologically and fundamentally change how children's brains function with the objective of getting children's brains to prefer digital addiction over actual life experience. Although science is beginning to identify the psychological disorders these addictions are causing, what controls will be instituted by government remains to be seen.

- A variety of products consumed worldwide continue to depend upon the subjection of animals to cruel experiments and treatment. Governments have taken some action on this issues already, but it is likely that additional controls will be instituted in the future.

- Major corporations and governments continue to invest heavily in fossil fuels that drive climate change and a host of resultant social, health and environmental problems that are increasingly destructive to society.

Extraordinarily ferocious and large forest/wildfires, along with widespread air pollution problems and associated health issues (heart, lung, brain, and cancer) are beginning to bring this problem to the world's attention, and action is being taken by many local and national governments.

Not all examples presented in the classroom should be negative. Including positive examples in classroom discussion, in addition to the negative ones, helps to reinforce the dynamics of trust in consumer relationships. When companies have placed benevolence towards consumers ahead of all else, prosperity has tended to naturally follow. Students should understand that, *most* companies that have remained profitable over a period of many decades are *also* socially and environmentally responsible companies. In addition, many companies that have had made serious errors or experienced major stakeholder trust crises for other reasons in the past have effectively turned their reputations around through careful, sincere, and sometimes heroic efforts. A few of examples of such companies follow:

- *Microsoft*, despite many past struggles with antitrust law violations and other issues, jumped to the #10 spot overall in Forbe's "most reputable companies" ranking of 2018, due to significant, visible and recent focus on aspects of corporate social responsibility and engagement with current societal problems.

- *LEGO*, the famous toy-making company, despite longtime problems of environmental pollution emanating from the manufacturing of oil-based toy products, has held the #2 position in Forbe's "most reputable companies" ranking for the last 2 years thanks to the company's recent and effective sustainability initiatives.

- *Johnson & Johnson*, the maker of Tylenol, suffered a major reputational decline in the early 1980's when seven people died after taking cyanide-laced pills. Tylenol responded by taking $100,000,000 worth of pills of store shelves, doing everything in its power to help find the responsible criminals and prevent future problems. The result was an amazing and almost immediate resurgence of customer trust and subsequent profitability.

Students should be made aware how easy it is, because of financial pressures, to focus on short-term profitability (the "ability" of the firm- see Figure 1) without paying adequate attention to the long-term welfare of consumers (the "integrity" and "benevolence" of the firm- see Figure 1). If a "consumer trust" approach to planning and branding processes is adopted from the beginning of the MBA marketing course, and long-term consumer trust replaces short-term profitability as the top philosophical priority in the classroom (where it should be according to trust research), students will be more likely to develop career plans and managerial decision-making *modus operandi* that work for society's welfare (including their welfare and their employers' welfare) rather than against it. Marketing students who become experts in the psychology of trust (Figure 1) and the various predictions this model makes possible, will be more likely to prioritize benevolent and ethical behavior in planning and branding activities. In short, the psychology of trust should be used to help students understand that the safest product or service, in terms of long-term reputation and subsequent profitability, is the product or service that is capable of providing the greatest long-term *benefit* to society (see Urban, 2006).

Students should also understand how effective social innovation and social entrepreneurship can be- where the objective is to simultaneously demonstrate benevolence (improve society) *and* capability (generate a profit). Examples of innovative companies that have successfully tackled societal problems or intentionally targeted poor segments of the world's population with innovative, standard-of-living-lifting products should be championed in the MBA classroom. (Potential examples include Robert Workman's *Goal Zero* Corporation, which has been profitable marketing portable power generation and lighting products to people worldwide who are living in poverty; and Rachel Brathen's *Yoga Girl*, which has profitably harnessed the power of social media to tackle societal problems.) Classroom discussions regarding the long-term profitability predictions the psychology of trust (Figure 1) makes possible with specific regard to social innovation can be very beneficial. A key takeaway from an MBA marketing class using trust as a teaching platform should be that as climate change and other social/environmental problems become more serious, effective social entrepreneurs will increasingly become both the wealthiest *and* the most esteemed people in our society.

Students should understand that trust is what drives exchange, and that companies that strategically align the entirety of their marketing function and purpose with this reality will be best positioned for long-term profitability.

Specifically, students should understand that, over time, and in accordance with the basic psychology of trust (Figure 1), consumer trust in them, their firms and their products, will be bolstered as they are environmentally and socially responsible (ethical and benevolent), and the natural long-term result will be a win-win situation where customers get what they want (for low cost since they do not have to invest in controls) and firms are able to sustainably generate profits.

Pricing

Pricing is one of the most difficult ongoing decision-making processes marketing professionals must engage in. Most MBA Marketing courses include some form of "the four P's" or the "marketing mix" (product, promotion, place, and price). Pricing is unique in that it is the only marketing mix variable that does not represent a cost to a firm. Developing a product, creating a promotional plan, and selecting a place (distribution) are all activities that cost a firm. However, pricing is extremely important because prices must be determined such that costs incurred to produce the product or service are recouped, but also such that a profit is possible while simultaneously sustaining consumer demand. Pricing allows a firm to "fund the firm's current value-creation activities, support research that will lead to future value creation, and generate a profit from the firm's activities" (Silk, 2006). With this in mind, marketing professionals know that sound pricing decisions are absolutely essential for profitability.

Because pricing decisions in large part determine a firm's bottom line, it can be quite tempting to charge a higher price than is warranted for the value provided. In fact, some of the most common unethical marketing practices involve pricing: price gouging, price fixing, hidden cost schemes, and bait and switch schemes: *Price gouging* occurs when a consumer needs a product and other alternatives are hard to obtain or do not exist, and a firm takes unfair advantage of the situation by dramatically raising prices, knowing that demand cannot decline. *Price fixing* occurs when firms set prices in conjunction with competitors such that consumers have no choice but to pay unnecessarily high prices. *Hidden cost scheme*s occur when upfront prices are low enough to draw customers in, but additional costs are then added *after* the customer has agreed to services/products. *Bait and switch schemes* occur when companies lure customers in with low prices but then charge them more by directing them to "actually available" or "better" products and services. There are many examples where these marketing practices have occured, and we have found that these examples can profitably be discussed and analyzed in the classroom using a trust-based platform. A few examples that we use include:

- Price Gouging Schemes: *Mylan*, a powerful pharmaceutical company, tried to increase prices of epipens from $100 to $600. Moreover, they tried to cheat the government by misclassifying the epipens for Medicare. Eventually they ended up settling with the Justice Department for $465 million, but not before losing the trust of thousands of customers, who in this case, depended upon the products for their lives.

- Price Fixing Schemes: *Bridgestone*, a powerful auto parts manufacturer, engaged in price fixing with 26 different companies. They pled guilty and were fined $425 million in 2014 after a lengthy investigation (see https://www.justice.gov/opa/pr/bridgestone-corp-agrees-plead-guilty-price-fixing-automobile-parts-installed-us-cars).

- Hidden Cost Schemes: *Delta Airlines*, a large airline company with headquarters in Atlanta, Georgia, frequently advertises low online fares, but customers learn later that additional fees, including high luggage storage fees, make up for any supposed ticket sales savings. (This is also a common tactic used by auto dealerships and hotels- initial prices seem competitive, but upon check-in or actual purchase, customers are charged "resort fees," "cleaning fees," "dealer fees" and the like.)

- Bait and Switch Schemes: *Dell*, one of the largest computer sales companies in the US, was hit with a class action lawsuit for systematically advertising low prices on computers and then ultimately finding (sometimes in conjunction with banks) a variety of ways to charge customers much more- including higher interest rates than agreed to- after they had placed their computer orders.

In these and other examples, unethical pricing often results in fines and/or other short-term expenses, but these setbacks typically amount to far less than the full eventual cost of the lost consumer trust that results from untrustworthy behavior. This underscores the value of using a trust paradigm to teach pricing in MBA marketing courses. Setting prices that are fair for both the firm and customer lead to long term relationships that effectively drive exchange between the firm and the consumer. From our experience, marketing instructors should utilize any

means available, especially case study examples, to demonstrate how a focus on consumer relationships leads to greater profitability in the long-term, even if the margins made with fair and ethical pricing are not as large as they could be in the short-term with less ethical pricing practices.

We have found that is also important to help students realize that a focus on long-term consumer trust does *not* suggest that capitalism and the fair pursuit of profit are somehow "broken" or "mistaken" ideologies. To the contrary, a trust paradigm suggests that profit margins are desirable and justifiable if the quality/value of the product justifies the price and reasonably retains long-term consumer trust. As long as marketing communications are truthful and transparent, consumer trust can be maintained, even increased, while the marketing firm simultaneously and consistently enjoys a measure of profitability. They key to be emphasized in the classroom is that no matter how firms set their prices, consumer perceptions of integrity tend to drive trust more than any other factor, and efforts should therefore be made to ensure consumers get a fair deal for their money. It may seem somewhat counterintuitive to students that putting ethics ahead of short-term profitability, especially when many firms currently (and mistakenly) focus so strongly on short-term results, is the best way to go. However, based upon our own experience, students are very content to adopt a consumer-trust perspective on pricing once they understand the role of trust in the pricing process (consumers who trust a firm to price ethically will keep coming back).

Marketing Communications: Advertising, Sales and Public Relations
The areas of advertising and sales present perhaps the greatest challenge (and opportunity) of all topics covered in the typical MBA marketing course. Laczniak (1999) notes that most of the ethical problems occurring in business in general are due to marketing-related issues, but most of these issues occur within the realm of advertising and sales. In line with this, Rogers (2018) argues that the poor reputation of advertising- especially among Millennials- has adversely affected the overall reputation of marketing as a field. Indeed, and as many scholars have already pointed out, the ethical issues in advertising and sales are many- marketing to children, sexuality in advertising, political advertising, deceptive advertising and sales, unethical sales tactics, credit/warranty scams, and the list continues.

This is in part why Urban (2006) proposed "consumer advocacy" as a new paradigm for trust-building in marketing capable of replacing myopic focus on short-term profitability (see also Greyser and Reece, 1971). Such an approach, taken overtly in the MBA marketing classroom, is precisely what we advocate based on our own experience: all classroom coverage of marketing communications- including advertising, sales, and public relations- should be kept in harmony with the overall, primary objective of long-term consumer trust. Assuming MBA students are already familiar with the general psychology of trust (Figure 1) from earlier discussions in the course (see preceding sections), and that ethical/benevolent behavior is the most important part of retaining consumer trust, key ethical issues common in marketing communications can be discussed with emphasis on why/how these unethical practices are detrimental to long-term consumer trust and firm reputation (and hence, profitability.) Some suggested discussion topics follow:

- Do firms seeking to build long-term consumer trust market/advertise unhealthy, unwholesome, or unhealthy products directly to children?

- Sex indeed sells, but should it? Who often gets exploited when sex is used to sell? What unintended consequences and implications might occur when sex is used to sell?

- Should firms seeking for a benevolent, trustworthy reputation engage in "political" advertising that attacks or otherwise seeks to harm the reputation of competitor products and services?

- Should firms seeking to build long-term relationships of trust with their consumers resort to unethical, less-than-truthful, or deceptive forms of advertising or sales?

- Are advertising and sales strategies that appeal to consumers' short-term whims, rather than their long-term welfare, effective? To what extent?

Our experience indicates that students should be provided with the opportunity to develop their own "plans" for how to manage these issues in their careers. Dennis Gioia (1992), a professor of ethics at Penn State University with first-hand knowledge of the Ford Pinto debacle of the 1970's, has recommended that business students seek to form potent "pre-scripts" or personal plans of action that will help *prevent* them from making poor decisions once they

leave the MBA classroom and are faced with the many prevailing "profit-at-any-price" pressures that exist in the workplace. Recommended discussion topics for this objective include:

- Why should I desire to retain the long-term trust of my consumers? Why is consumer trust important to me, personally (or is it)? Why is consumer trust important for my firm (or why should it be)? Why might agents in my firm feel incentivized to sacrifice long-term consumer trust for short-term profitability?

- What fail-safe system or "pre-script" can I put in place for myself and/or my team or organization to ensure that I/we do not get caught up in "groupthink" or otherwise succumb to pressures that result in decisions that harm consumer trust in the long-term? How will I and those I work with handle such situations when they come? Do I/we have a plan for preventing a department or corporate-wide shift away from long-term trust-building?

- What types of "pre-scripts" can I develop now to counter the ethical issues I am most likely to face in the specific future roles that I am interested in playing during my career? Am I committed enough to long-term consumer trust that I am willing to, especially once I possess significant influence in my organization, persuade my coworkers towards this objective? Am I willing to shift my career path toward firms that support long-term stakeholder relationships over short-term profitability?

We have also found that the MBA marketing classroom can be the ideal location to provide students with structured opportunities to learn how to strategically bolster a firm's "ethical reputation." We have found that a valuable, emerging tool for accomplishing this objective is that of "ethical corporate marketing" (see Balmer et al., 2011). Students should understand that when it comes to marketing communications, "walking the walk" is where long-term consumer trust begins, but that "talking the talk" to the appropriate degree and in the appropriate manner is also vital for the retention and growth of consumer trust. To this end, ethical corporate marketing (see Balmer et al., 2011) is a firm-level marketing philosophy focused on communicating ethical/social values that facilitate mutually beneficial exchange relationships with customers. According to Balmer and colleagues (2011), firm-consumer relationships develop as marketers anticipate and meet the needs of consumers by producing products and services that benefit society. Although ethical corporate marketing takes a "macro" approach to marketing at the firm-level with firm reputation among all stakeholders in mind, its themes are entirely consistent with "relationship marketing" theory as discussed earlier in this manuscript, which focuses specifically on building and retaining the trust between the firm and specific consumer groups.

Students should understand that companies that align all of their marketing communications with the psychology of trust will be best positioned for long-term success. Consumers judge companies by what those companies communicate through advertising and other sales and marketing efforts. Students should understand that it is their opportunity in these efforts to not only avoid breaching the trust of their consumers, but to become benevolent advocates for their consumers (Urban, 2006) and guardians of their companies' reputations. As they do so, in accordance with the psychology of trust (see Figure 1), consumers will feel less need to invest in costly controls to protect themselves, and this will benefit both the consumer and the companies serving the consumer in the long-term.

CONCLUSION

In this essay, we propose that the psychology of trust can be a useful pedagogical platform in MBA marketing coursework. Specifically, we suggest that a consumer-trust perspective to marketing education can serve to equip graduates with practical and powerful tools that can help them gain and retain the trust and loyalty of their customers. Whereas some surveys suggest that the majority of consumers now distrust marketing and advertising professionals altogether, such a tool has perhaps never been more needed. We suggest that a trust platform can restore and build consumer trust because of how it inherently prioritizes benevolent and ethical behavior in all classroom training topics and in the minds of future managers and marketing professionals. We further suggest that this approach will, in addition to benefiting society, naturally drive the long-term profitability of firms that install consumer trust as their top priority.

We accomplish this by outlining the fundamentals of trust psychology, including the research that: 1) clarifies trust's role as the ultimate driver of societal economic exchange, 2) suggests that consumer perceptions of trustee (firm)

integrity and benevolence are the most important drivers of consumer trust, 3) demonstrates that the lack of trust between parties can result in unnecessary costs and the loss of customers, and 4) explains that consumers tend to form opinions about the reputations of various firms that either drive or destroy long-term profitability. We also discuss potent existing theoretical platforms in marketing, such as "relationship marketing," "trust-based marketing," and "ethical corporate marketing," all of which underscore the value of a trust paradigm in the MBA classroom.

In addition to making the argument for the utility of trust as a pedagogical platform, we provide several specific recommendations, based upon our own experience in the MBA classroom, to the MBA marketing instructor, with the purpose of directly aiding with this task. Our recommendations center around an understanding of the psychology of trust and how to use this understanding strategically with the objective of maximizing long-term consumer trust (and therefore, profitability). Recommendations are provided for key topics covered in marketing, including strategic planning and branding, pricing, and advertising and sales (marketing communications). The over-arching theme of all our recommendations is that if MBA marketing students can learn that when companies align their marketing function with the research-derived realities of the psychology of trust (which mandate the prioritization of benevolent and ethical conduct), those companies best position themselves for long-term profitability and viability.

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Business Student Internships:
A Pathway to Resolving the Perils of Unpaid Placements

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ABSTRACT

Steady demand exists for business student internships. The for-profit, government, and nonprofit sectors seek to acquire business interns while assessing talent for future employment consideration. This article summarizes the pedagogical context that tends to treat all internships in a favorable light with no dark shadows. It links this form of service-learning to the often ignored unpaid internship realities embedded in the current legal landscape. It also casts a spotlight on an obscure corner of the employment market where those less affluent suffer the consequences of a competitive disadvantage when they can ill-afford an unpaid internship. Stakeholders have institutional and social obligations for student protection. Additionally, the article unveils the troublesome scarcity of internship data available to inform business schools and public policy-making. After highlighting the perils of unpaid placements, a pathway to resolving the uncompensated conundrum is outlined and the urgent necessity for more comprehensive data development and research advocated.

Keywords: Internships, service-learning pedagogy, business students, civil rights, social equity

INTRODUCTION

Business students have much to offer for-profit, government, and nonprofit entities. Keen competition exists among them for employment opportunities within these sectors. Advertised vacancies usually require qualifying experience. Internships provide a critical service-learning experience while opening a gateway for meeting some minimum job qualifications for entry level openings. They frequently catapult those with such experience ahead of the competition.

Despite the desirability of business student internships, a perilous cloud hangs over those that are unpaid. Internships are acknowledged as a high-impact practice in the service-learning arena, which finds tremendous support among business schools and employers. Internships expose students to varied, real-world organizational settings while facilitating interns to transition into regular employment. However, regardless of the educational value of internships and the career launching pads they offer, there are troubling issues that demand innovative attention. Concerns exist about the untenable legal status of unpaid placements as well as the inequitable treatment of some students. We argue for the adoption of a ground-breaking "paid only" internship policy for business schools until remedial civil rights protections are extended to unpaid interns. Further, a funding solution must mitigate the entrenched trend of blithely ignoring the competitive disadvantage that less affluent students suffer when considering unpaid internships.

This article unfolds as follows. It reviews the pedagogical value of internships and emphasizes quality placements in order to link theory and practice within applied settings under current law. Within this context and with a dearth of research on point, we outline the legal differences between paid and unpaid for-profit, government, and nonprofit internships. The discussion drills down on the perils of unpaid placements:

1. Ensnaring students in a civil rights "legal limbo" (Bowman & Lipp, 2000); and
2. Erecting a social equity barrier (Edwards & Hertel-Fernandez, 2010a) for some business students.

Additionally, the analysis directs attention to the lack of detailed data on business student internships by sector (for-profit, government, and nonprofit) and whether such internships involve compensation. This significant contribution grows in importance as the "internship economy" (Frederick, 1997) morphs with business cycles and society becomes more sensitive to the civil rights and social equity issues enmeshed with unpaid placements. We conclude that unpaid business internships result in interns at risk, both from the perspectives of civil rights as well as social equity. The critique calls for business schools and the Association to Advance Collegiate Schools of Business (AACSB), as well as other stakeholders (professional and student based associations, for-profit entities, all levels of

government, and nonprofits) to take action to remedy these perils of unpaid internships. A pathway to resolving the perils of unpaid placements is outlined and the conclusion discloses manuscripts limitations, data development needs, and suggests further research angles to pursue.

PEDAGOGICAL VALUE OF BUSINESS STUDENT INTERNSHIPS

The Association of American Colleges and Universities promotes internships as a high-impact, innovative educational practice (Kuh, 2007; Kuh & Schneider, 2008). Internships are considered a form of service-learning, or experiential learning,

> . . . that integrates knowledge and theory learned in the classroom with practical application and skills developed in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent. (National Association of Colleges and Employers (NACE), 2011, p. 2)

Across the field of service-learning, including business schools, internships reign as a valued pedagogical strategy (Bringle, Studer, Wilson, Clayton, & Steinberg, 2011; Eyler & Giles, 1999; Felten & Clayton, 2011; Fredericksen, 2000; Gallini & Moely, 2003; Strage, 2000; Ward & Yates, 2009, 2013; Yorio & Ye, 2012). They integrate relevant service, applied skill building, and critical reflection (Bringle, Clayton, & Hatcher, 2013; National Commission on Service-Learning, 2002). Internships promote problem-solving experiences, reinforcing relationships, and functioning as a predictor of personal development (Ward & Yates, 2012). Essentially, this type of service-learning elevates comprehension and produces changes in the intern (Kolb, 1984), which furthers effective action. Over 96% of schools accredited by the AACSB supply intern placements (Kim, Kim, & Bzullak, 2012).

The most beneficial internships come from quality placements. Eyler and Giles (1999) recommend the following guidelines for internship assignments:

1. Meaningful work assignments with important responsibilities;
2. Task variety and an opportunity to work with community partners;
3. Continuous support and feedback from those overseeing the intern's work; and
4. A sustained period of service.

Ideally, such placements link theory and practice in dynamic, real-world organizational situations. Typically, they (1) acclimatize interns to professional environments, (2) build skills, knowledge, and résumés, (3) facilitate development of support networks and references, and (4) connect campuses to a variety of organizational missions, structures, and cultures. Successful internships further careers through securing better "job fits," enhanced employment satisfaction, and more job stability (Gault, Redington, & Schlager, 2000; Richards, 1984; Rothman & Sisman, 2016).

BUSINESS STUDENTS SERVE IN FOR-PROFIT, GOVERNMENT, AND NONPROFIT INTERNSHIPS

There is a dearth of empirical research concerning business student internships by sector. Notably, no central registry of internships exists (Yamada, 2016). The Bureau of Labor Statistics, U.S. Department of Labor (DOL) does not track how many business majors intern in the for-profit, government, and nonprofit sectors. While many assume business student internships reside in for-profit organizations exclusively, business schools are well aware that some of their students intern with government or nonprofit employers also. This is particularly true for majors in accounting, management, procurement, and information technology. Governmental and nonprofit sectors nurture the development of social capital, "the forging of bonds of social and political trust and competence" (Elshtain, 2006, p. 9). Such internships encourage collaboration toward community, or organizational goals, while encouraging the give and take to reach common interests. Demand is high for these skills in business as well.

Only one study offers a small impression of business student internships by sectors and is insufficient to be generalizable. The Rothman and Lampe study (2010) surveyed 381 students who participated in internships through the School of Business Administration at a private liberal arts university. Responses indicate that the organizational

venue for these internships were as follows: 331 (87%) for-profit, 7 (2%) government, and 42 (11%) nonprofit.

BUSINESS STUDENT INTERNSHIPS ARE BOTH PAID AND UNPAID

The extant research is sparse (Gardner, 2010) with few studies that capture the contours of paid and unpaid internships (Grant-Smith & McDonald, 2018). That includes distinguishing between for-profit, government, and nonprofit sectors with respect to pay status. However, the Rothman and Lampe (2010) study, cited earlier, is helpful since it focused on business student interns exclusively. It reports that 194 (50.9%) were paid while 187 (49.1%) were unpaid. Another small NACE review (Crain, 2016) examined the pay status of internship participants at the University of Georgia. This study was not restricted only to business students but does provide another snapshot of the pay status of internships generally. Out of a sample of 204 internships, 103 (50.5%) were paid compared to 101 (49.5%) unpaid.

The largest available investigation, but once again not solely targeting "business" students but rather students from all majors, surveyed 21,194 students from NACE-member colleges (NACE, 2018). Responses from 4,213 (19.9%) graduating in academic year 2016-17 reported internships. The survey found 2,389 (56.7%) of the internships paid and 1,824 (43.3%) unpaid. In analyzing these data to comparable 2011 NACE data, the report noted an upward trend in paid internships. Levels of paid versus unpaid internships in 2011 were 51.3% and 48.7% respectively.

LEGAL DIFFERENCES BETWEEN UNPAID FOR-PROFIT, GOVERNMENT, AND NONPROFIT INTERNSHIPS

Although the Fair Labor Standards Act (FLSA) is intended to ensure basic wage standards, changes in the employment environment are testing the fairness aspect (Wage and Hour Division, 2016). The categories of student interns that are required to be paid in compliance with the law are limited. If the primary benefits go to the intern, or the intern is a volunteer, compensation is not required. Although the private sector has more mandates, there is wide room in the law for unpaid internships in the public and nonprofit sectors. We quote appropriate statutory and regulatory language extensively below because the literature generally suggests some stakeholders remain uninformed about the meaning of "employee" with respect to interns and changes to the associated federal guidelines.

Unpaid For-profit Internships
The Wage and Hour Division, DOL provides guidance on when public and private sector internships are permitted to be uncompensated. Fact Sheet #71 emphasizes that for-profit interns who qualify as "employees" must be paid the minimum wage and overtime under the FLSA (Wage and Hour Division, 2018). Interns who do not qualify as employees do not require compensation for their work. Unpaid for-profit interns may only operate within narrowly limited circumstances. They may only receive training for their personal educational benefit and are excluded from the provisions of the FLSA only if they meet certain criteria. Previously, the 2010 version of the Fact Sheet for the (Wage and Hour Division, DOL, 2010) criteria included the following factors of which all were required to be present:

1. The internship, even though it includes actual operation of the facilities of the employer, is similar to training which would be given in an educational environment;
2. The internship experience is for the benefit of the intern;
3. The intern does not displace regular employees, but works under close supervision of existing staff
4. The employer that provides the training derives no immediate advantage from the activities of the intern and on occasion its operations may actually be impeded;
5. The intern is not necessarily entitled to a job at the conclusion of the internship; and
6. The employer and the intern understand that the intern is not entitled to wages for the time spent in the internship. (Wage and Hour Division, DOL, 2010, p. 1)

The six criteria from the 2010 Fact Sheet reflects an "economic reality test" concerned with whether an intern is working for their own benefit (*Walling v. Portland Terminal Co.*, 1947). This means the for-profit employer may have to take time from bottom-line tasks to train and to supervise the intern where no advantage to the enterprise exists.

More recently the courts viewed these criteria to be overly broad. They used the "primary beneficiaries test" to determine whether an intern should be categorized as an employee on the basis of who is the primary beneficiary. This test allows more flexibility because although some of the benefit may go to the employer, the primary benefit must go to the intern (Honeubria, 2017). As a result the standards for for-profit internships changed and in 2018 the Wage and Hour Division, DOL, posted new guidance (Fact Sheet #71, 2018). The requirements are not intended to be rigid but, rather, a non-exhaustive list of factors (Easterly, 2018). Furthermore, no single factor is determinative and each case will have unique circumstances:

1. The extent to which the intern and the employer clearly understand that there is no expectation of compensation. Any promise of compensation, express or implied, suggests that the intern is an employee— and vice versa.
2. The extent to which the internship provides training that would be similar to that which would be given in and educational environment, including the clinical [applied] and other hands-on training provided by educational institutions.
3. The extent to which the internship is tied to the intern's formal education program by integrated coursework or the receipt of academic credit.
4. The extent to which the internship accommodates the intern's academic commitments by corresponding to the academic calendar.
5. The extent to which the internship's duration is limited to the period in which the internship provides the intern with beneficial learning.
6. The extent to which the intern's work complements, rather than displaces, the work of paid employees while providing significant educational benefits to the intern.
7. The extent to which the intern and the employer understand that the internship is conducted without entitlement to a paid job at the conclusion of the internship. (Fact Sheet #71, Wage and Hour Division, DOL, 2018, p. 1)

The DOL Fact Sheet #71 means compensated interns qualify as employees. Entitlement of civil rights in the employment domain attaches and will be discussed later in this article. Some argue that the FSLA may often go unenforced. Although random inspections may occur, unlike other employment situations, interns may be unlikely to report violations. They are in a particularly vulnerable position and may not want to hurt their reputations or future job prospects at the beginning of their careers (Bennett, 2011). In fact, Edwards and Hertel-Fernandez (2010b) argue that students usually suffer in silence about internship legalities. "The crucial role of internships in obtaining later employment and the highly competitive market for placement means that no one student has an incentive to report their employer . . . since another student will readily work for free" (p. 2).

Unpaid Government and Nonprofit Internships
Similar to for-profit organizations, the legal framework for paid versus unpaid government internships also resides within the FLSA (Wage and Hour Division, DOL, Fact Sheet #71, 2018). However, in stark contrast to the unpaid for-profit internships, FLSA permits students to "volunteer" their services to public agencies. "Public agencies" refer to the federal government, state governments, or state political subdivisions (e.g., counties, cities, and special districts) (Kuckes, 2014; Wage and Hour Division, DOL, Fact Sheet #7, 2011). Congress purposefully used the classification of "volunteer" in public agencies to allow for unpaid internships (Chrysler, 2014). Unpaid work for governmental agencies is permitted where there is no expectation of compensation (Wage and Hour Division, DOL, Fact Sheet #71, 2018).

The Wage and Hour Division, DOL, has extended the statutory exemption for volunteers at public agencies to cover volunteers at non-profit private groups as well (Fair Labor Standard Act Advisor, 2018). Thus, the volunteers who work for charitable, religious, and humanitarian organizations are permitted to work uncompensated. (Fact Sheet #71, 2018). Examples of charitable activities include:

. . . members of civic organizations . . . [helping out] . . . in a sheltered workshop; men's or women's organizations may send members or students into hospitals or nursing homes to provide certain personal services for the sick or elderly; parents may assist in a school library or cafeteria as a public duty to maintain effective services for their children or they may volunteer to drive a school bus to carry a football team or school band on a trip. Similarly, an individual may volunteer to

perform such tasks as driving vehicles or folding bandages for the Red Cross, working with disabled children or disadvantaged youth . . . . (FLSA Advisor, 2018, p. 1)

DESPITE LEGAL DIFFERENCES, UNPAID INTERNS ARE UNPROTECTED INTERNS

The available research suggests that the majority of business interns work for-profit enterprises and roughly half of them have unpaid internships (Rothman & Lampe, 2010; Crain, 2016). Although evidence across all fields generally suggests that paid internships are increasingly common, about 57% of the time (NACE, 2018), it is not clear that this is true for business interns. In contrast, according to an Intern Bridge study (Gardner, 2010), government makes about 48% of their internships unpaid while nonprofits use unpaid internships 57% of the time. This section reviews two negatives inherent in all unpaid business student internships, which result in serious consequences. Similarly to the previous section on legal differences, we extensively quote from relevant statutes because the literature implies some stakeholders are oblivious to the civil rights vulnerabilities of unpaid interns and the meaning of the word "employee" under federal law.

Legal Limbo
Unpaid internships create substantive problems. Rather than kindly providing business students with a supportive service-learning opportunity on the cheap, unpaid internships drag students into an unprotected civil rights "legal limbo" (Bowman & Lipp, 2000). They thwart efforts to establish "employee" standing for interns concerning legal rights in the workplace (Yamada, 2016; Heffernan, 2017). Court precedent and statutory definitions reinforce a lack of standing for interns and pose insurmountable obstacles (Hughes & Lagomarsine, 2015). Hence, unpaid internships exist in a legal void that leaves students vulnerable without recourse against harassment or other prohibited actions which are clearly illegal if interns were employees (Edwards & Hertel-Fernandez, 2010b).

Three areas of civil rights employment legislation get caught in the protection gap. The interpretation of the word "employee" controls in Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990 and the Age Discrimination in Employment Act of 1967. Although these three statutes shield different populations from discrimination, they have a similar definition of employee. An employee is someone who works for an employer (Rosenthal, 2016, note 25).

Title VII of the Civil Rights Act of 1964 mandates, in part, the following:

> It shall be an unlawful employment practice for an *employer* -
> to fail or refuse to hire or to discharge any *individual,* or otherwise to discriminate against *any individual* with respect to his compensation, terms, conditions, or privileges of *employment,* because of such *individual's* race, color, religion, sex, or national origin. (42 U.S.C. § 2000e-2sec 703 (A)(1)) [Emphases added.]

The definition of employer under Title VII of the 1964 Civil Rights Act.

> (b) The term "employer" means a person engaged in an industry affecting commerce who has fifteen or more employees for each working day in each of twenty or more calendar weeks in the current or preceding calendar year, and any agent of such a person. 42 U.S.C. § 2000e (701)(b)

The Americans with Disabilities Act of 1990 mandates, in part, the following:

> No covered entity shall discriminate against a qualified individual on the basis of disability in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment. 42. U.S.C. § 12112

The Americans with Disabilities Act of 1990 contains the following definition for employer:

> The term "employer" means a person engaged in an industry affecting commerce who has 15 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding calendar year, and any agent of such person, except that, for two years following the effective date of

this subchapter, an employer means a person engaged in an industry affecting commerce who has 25 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding year, and any agent of such person. 42 U.S.C. §12111(5)(A)

The Age Discrimination in Employment Act of 1967 mandates, in part, the following:

It shall be unlawful for an employer-
(1) to fail or refuse to hire or to discharge any individual or otherwise discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's age;
(2) to limit, segregate, or classify his employees in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's age; or
(3) to reduce the wage rate of any employee in order to comply with this chapter.
….
(b) It shall be unlawful for an employment agency to fail or refuse to refer for employment, or otherwise to discriminate against, any individual because of such individual's age, or to classify or refer for employment any individual on the basis of such individual's age. 29 U.S.C. §623 (1-3b)

The Age Discrimination in Employment Act of 1967 contains the following definition for employer:

(b) The term "employer" means a person engaged in an industry affecting commerce who has twenty or more employees for each working day in each of twenty or more calendar weeks in the current or preceding calendar year. 29 U.S. C. §630 (11)(b)

Rosenthal (2016) argues that merely applying the facts to the law on whether one is an employee or intern essentially leaves us in the same place where interns remain vulnerable. Employers will simply argue that there is no protection based on the interns' lack of status as an employee, whereas getting away from the analysis and establishing that interns and volunteers have protections under these statutes would change the game entirely. Courts have been unwilling to embolden interns through such precedent. The Society for Human Resource Management reports that "legal experts tend to advise employers to pay interns as the only sure way to avoid wage and hour litigation . . ." (Maurer, 2018, p. 1).

Taken together, relevant law protects the employment relationship (Rosenthal, 2016). Unpaid interns, however, are not employees and are not protected as employees. As a consequence, their civil rights are unprotected by virtue of their exclusion under the definition of employee. To change the status quo, Congress could amend the employee definition to carve out protection for unpaid interns associated with educational institutions.

Social Equity Pitfall
The unpaid for-profit, government, and nonprofit internships present a social equity barrier that likely falls unevenly among students (Perlin, 2012). Those who are financially better off are not burdened to the same degree as those who are poorer (Edwards & Hertel-Fernandez, 2010a, 2010b; Grant-Smith & McDonald, 2018). Faced with an unpaid internship, which may also incur transportation, wardrobe, and increased tuition expenses, the less financially advantaged are more likely to decline. Poorer students may increase educational borrowing or make other difficult adjustments (e.g., increased child care expenses, cheaper housing, moving back with parents, or added work hours at a paying job, etc.) to obtain the internship experience. Consequently, the unpaid status of some internships places the more impoverished students at a competitive disadvantage (Perlin, 2012) while exploiting their work (Yamada, 2016).

The social equity barrier of unpaid internships looms over the less fortunate harshly even post internship. A NACE survey (2016) reports that approximately 73% of interns receive job offers and the overall conversion rate from intern to regular employee is about 62%. Those precluded from participating in an internship in the sector of their choice due to their financial circumstances are substantially disadvantaged in receiving job offers. As one critic claims, unpaid internships can pose an impossible hurdle for poorer students, providing "a great way of giving children of affluence a leg up in life…[and] of reserving this advantage mainly for well-to-do families" (Akst, 2010).

Research indicates that paying interns radically changes internships (Perlin, 2012; Beard & Morton, 1999) thereby reducing the associated social equity concern. Paying interns motivates student interest and broadens the applicant pool. It allows "interns to focus on their work, enabling longer and more fruitful stints, and publicly marking the seriousness of the position" (Perlin, 2012, p. 210). Paid interns evaluate their internship more positively (Basow & Byrne, 1993). Compensation reinforces the notion of a "real" job (Hamilton, 1992). Pay also supports students in offsetting the losses from other work (Berger, 1992). Harvesting more out of internships may encourage benefiting organizations to boost internship programs further (Kim et al., 2012). For example,

> Local governments that contribute financially to the support of (an) internship are more likely to make meaningful use of the intern, to provide the intern with good supervision, and to demand more from the intern in terms of professional productivity. The more the intern is treated like an employee, the more valuable the internship will be to both the student and the local government. Providing financial support to the internship is also likely to increase the pool of potential interns from which the local government can choose. (International City/County Management Association, 2013, p. 9)

A PATHWAY TO RESOLVING THE PERILS OF UNPAID PLACEMENTS

Normatively, business schools and AACSB should be alarmed about the unconscionable legal exposure of students currently in unpaid internships. Rather than cavalierly turning a blind eye to the perils of unpaid placements, business schools and AACSB are positioned to navigate a constructive remediation path forward. Unpaid business internships require reconceptualization, regardless of the sector in which they exist. They could be refashioned to continue to supply service-learning experiences for students but with (1) the same civil rights safety-net granted to employees, and (2) a more neutral social equity impact. Strategies for both facets are outlined in the subsequent subsections.

Securing Civil Rights Protection to Resolve the Current Legal Limbo
The following measures can be taken to reconceptualize the legal status of unpaid business interns:

1) Business schools can advocate that AACSB accrediting standards endorse only paid internships as recommended practice until Congress enacts employee civil rights protections for students in unpaid internships.
2) Business schools and AACSB can inform and organize stakeholders to join them as advocates for internship protections. The goal is to convince Congress to craft and to adopt new federal legislation that would expand the definition of employee to include "uncompensated labor for the primary purpose of gaining experience or training" (Yamada, 2002, p. 238).
3) Business schools can use their unrestricted authority to cease unpaid student placements until civil rights protections are extended. This would result in significantly fewer business internships in the short run while unpaid internships are re-conceptualized under new federal law to protect student civil rights over the long term. This leadership initiative could create the momentum not only to remedy the present vulnerability of unpaid interns but also nudge the mobilization of stakeholders to push for the statutory reform suggested.
4) Until Congress adopts new legislation, business schools, AACSB, and associated stakeholders can monitor evolving litigation and file amicus curiae briefs on the perilous position of unpaid placements under the current law and judicial decisions.

Resolving the Social Inequity Inherent in Unpaid Internships
Moreover, while not of a legal dimension, the troubling social equity barrier inherent in unpaid internships requires urgent attention also. In an age of corporate social responsibility and ethical sensitivity in all sectors, the aspirational vision of business schools as "a force for good" in terms of engagement, innovation, and impact (AACSB, 2018, p. 1) needs to incorporate the following:

1) Engagement of increased diversity, including socio-economic status (p. 7) which underlies some of the current widespread use of unpaid business student internships;
2) Innovation of "effective career development support for students" (p. 29) including service-learning career activities (p. 34) such as civil rights protected internships that do not inflict a competitive disadvantage among students based on socio-economic status; and
3) Impact on society by remedying the social equity barrier among unpaid internships for the less affluent.

Another measure that business schools, AACSB, and associated stakeholders could take involves federal legislative advocacy for low income student subsidies for those accepting unpaid internships (Edwards & Hertel-Fernandez, 2010b). This could eliminate the competitive advantage that the more affluent automatically enjoy simply because they can afford to serve in an unpaid internship.

CONCLUSION

Internships have tremendous pedagogical value to business students. Quality placements link theory and practice while preparing students for employment and enhancing their job prospects. Legal differences among unpaid internships exist among for-profit, government, and nonprofit sectors. However, notwithstanding these differences, unpaid business interns are unprotected interns. They fall into a civil rights legal limbo outside of the protection of Title VII of the Civil Rights Act of 1964, the American with Disabilities Act of 1990, and the Age Discrimination in Employment Act of 1967 (42 U.S.C. § 2000e et seq.; 42 U.S.C. § 12101; 29 U.S.C. § 621 et seq.). Moreover, unpaid internships, particularly in government and nonprofit agencies because of their commonality, raise a social equity barrier (Perlin, 2012) among some business students. If a business student cannot afford an unpaid internship, and she/he is thereby thwarted from gaining service-learning experience in her/his sector of interest, that student likely will receive fewer job offers and experience less employability (Gault et al., 2000; Knouse & Fontenot, 2008).

A significant limitation of our research arises from the acute lack of data regarding business student internships. As noted, no central registry regarding internships exists (Yamada, 2016). Disappointingly, the DOL does not accumulate and report critical data on internships by major sectors (e.g., for-profit, government, and nonprofit) or by pay status. One large data set (NACE, 2018) reveals trends in unpaid versus paid internships generally. Nonetheless, it lacks the granularity to determine where business student internships occur by sector as well as the compensated versus uncompensated pay status necessary to inform higher education, public policy, judicial decisions, and practice in the field.

On the research front, much more is needed from business schools, AACSB, affiliated organizations, academic researchers, and policy-makers. If internships truly are valuable and enhance the job prospects of business students, then surely student civil rights must be protected. To enable equal access to internships, the competitive employment field must be leveled by a needs-based subsidy to overcome the current economic barrier that blocks the participation of some poorer students in unpaid internships. A starting point could be NACE, which routinely surveys higher education's engagement with employers in transitioning students to the work force. Collaboration could provide the route to requisite data and focus on problematic areas. Business schools, AACSB, and affiliated organizations could partner with NACE to study more fully the plight of unpaid business interns and innovative strategies toward improvement.

We need to know much more about business internships and student experiences. Surveys could hone in on the nuances of how unpaid placements exclude some business students from the internship experience. How does the intern job offer rate by sector compare to those without an internship in the first six months after graduation? What is the longevity rate of those converted from intern to regular employment by sector compared to those hired who did not serve an internship? Do internships ultimately result in better "job fits" between employees and employers and thereby preempt costly turnovers and worrisome vacancies for employers? Similarly, business schools could create their own data base regarding internship issues by sectors, geographic regions, and occupational groupings in their respective service regions. Legal experts also can explore the details of existing laws with respect to interns with the goal of equal protection for interns.

The time for addressing unpaid business student internship issues is now. Business schools collectively can be the trailblazer of change in improving more sustainable, socially responsible internship programs. In the absence of corrective measures, business schools, AACSB, and internship hosting entities may be vulnerable to law suits and subject to damaging social equity ridicule. Similar to the national TIME'S UP[TM] movement (2018), a societal backlash over the issue of unpaid interns is highly plausible, perhaps, only a sexual misconduct incident and a 24-hour news cycle away. Such backlashes can quickly gain media notoriety instilling hostility to the responsible organization(s), legal action, and reputational damage. Furthermore, unpaid internship stakeholders have a social responsibility obligation to maintain a competitive employee market by avoiding such an obvious equity barrier.

Sustained collaborative effort is needed to address the legal limbo and social equity perils of unpaid business student internships. However, in the interim, the quickest and most direct route for legal relief is the elimination of unpaid placements by business schools. This can be accomplished at their sole discretion, not only quashing the legal limbo issues but also erasing the social equity barrier erected by unpaid internships. Business schools and AACSB can step-up to lead the way to a better protected, more equitable future for unpaid business interns.

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Incorporating Digital Marketing in the Marketing Curriculum: An Approach for Small Colleges and Universities

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ABSTRACT

The rapid adoption of digital technologies in marketing practice has challenged the relevance of traditional marketing curriculum. While some schools have met this challenge with digital marketing courses, concentrations and majors, small institutions may face unique obstacles. This paper examines the extent to which small business schools have incorporated digital marketing courses in the curriculum, discusses obstacles small schools uniquely face, and describes how one small private institution addressed these issues.

Keywords: digital marketing, internet marketing, curriculum development, marketing curriculum

INTRODUCTION

It is hard to ignore the explosion of digital technology and its impact on marketing. The rapid adoption of Internet and social media technology by both the public and the business community has significantly altered the marketing landscape. There is strong evidence that the general population has adopted digital technology. A recent Census Bureau report shows that 89 percent of U.S. households use the Internet at home, while 76 percent have a smartphone (Census 2018). Facebook reportedly reached 2.23 billion monthly active users worldwide (Facebook 2018), with YouTube and Instagram reaching 1.8 billion and 1.0 billion users respectively (Gilbert 2018, Statista 2018). Regarding business use, Internet advertising revenues in the U.S. totaled $88.0 billion for the year 2017 surpassing TV advertising revenues for the first time (IAB Report 2018). Furthermore, according to the 2018 Social Media Marketing Industry Report, 9 in 10 companies use social media for marketing purposes.

Given the widespread use of digital technologies both scholars and practitioners have long argued for a revision of marketing curriculum that reflects the current marketing environment. As early as 2001, Mitchell and Strauss pointed out the growing demand for skilled employees who could develop and maintain Web applications. They stated, "Clearly, there is a growing demand for marketing graduates who are skilled in internet applications" (Mitchell and Strauss, 2001, p. 92). Wymbs (2011) later challenged institutions of higher education to offer a separate degree program or at least a course offering in Digital Marketing. He proposed a redesign of the marketing curriculum that was consistent with current business needs, thus, providing students with a competitive skill set. Building on the work of Wymbs, Parker (2014) proposed a process for establishing an Internet Marketing major at the undergraduate level. More recently, Rohm, Stefl and Saint Clair (2018) argued for a marketing curriculum overhaul that incorporated a "digital first" approach placing digital marketing at the center of the curriculum.

In addition to these recommendations, researchers have called for more deliberate incorporation of social media technologies in the marketing curriculum. Granitz and Koernig (2011) pointed out that since technology and marketing education are inherently linked, we should expect social media to play a relevant role in the marketing discipline. They stated that a lack of social media presence in marketing programs would reflect an important gap in curriculum development. To that end, Faulds and Mangold (2014) described a process for developing a social media and marketing course which educators could use as a framework for developing similar courses.

Finally, several researchers have addressed the growing importance of incorporating quantitative and critical thinking content in the marketing curriculum. Teer, Teer, and Kruck (2007) explained that organizations face an enormous challenge as they strive to implement strategies that use the abundance of available consumer data. As such, database management has become increasingly important in the marketing field. They suggest as more companies focus on collecting and analyzing data, the demand for marketing graduates who have exposure to DBM and analytical skills will intensify. Similarly, Spiller and Tuten (2015) explained that modern digital and social media formats have revolutionized marketing by producing a plethora of data, metrics, and new tools. This increased emphasis on metrics in the industry has produced a greater need for students to develop quantitative and critical thinking skills if they are to be prepared for the job market.

A REVIEW OF CURRENT PRACTICES IN THE CURRICULUM

While the demand for digital marketing, social media, and marketing analytic skills is apparent, both practitioners and scholars have pointed out a gap between the marketing curriculum and marketplace requirements. Evidence suggests there has been a disconnect between traditional marketing curricula and the skills businesses would like to see in new graduates (David, David and David 2011). Much of this disconnect has been due to the emergence of technology tools that have changed the way marketing is practiced, but to which marketing curricula in many universities have not yet fully responded. More recently, Frederiksen (2015) reported that university marketing departments were behind the curve. He suggested that current marketing graduates did not have the online marketing skills required in today's marketplace because these skills were chronically under-taught in universities. Likewise, research by Munoz and Wood (2015) revealed that course topics identified as important to practitioners were not being covered in the marketing curriculum. Their findings were corroborated by Duffy and Ney (2015) who found that marketing educators were not perceived as delivering on the technological and practical aspects of digital and social media marketing.

Contrary to these criticisms, some business schools have responded to practitioner needs by adding courses, concentrations, majors and/or minors within the curriculum. Duffy and Ney (2015) reported that in many academic institutions at least one digital marketing class provided some coverage of digital technology. A review of the top 10 marketing undergraduate programs in the United States revealed that all but one institution had at least one dedicated course in digital marketing (Best Undergraduate Business Marketing Programs, US News and World Report 2018). (See Table 1 for a list of digital marketing courses offered at these institutions). Furthermore, select business schools have chosen to broaden their coverage by offering a dedicated undergraduate or masters-level program. Outside of a traditional degree program, other colleges and universities have created digital related nondegree certifications. A review of national data from the Marketing Edge (2018) website revealed that at least 25 universities offered a major, minor, concentration or certification in an Internet marketing related program. (See Table 2 for a summary of the school data found on Marketing Edge's website).

Table 1: Top 10 Undergraduate Marketing Programs and Digital Marketing-Related Courses

Courses	Digital Marketing	Marketing Analytics	Social Media Marketing	Digital Mktg, Social Media & E-Commerce	Digital & Social Media Business Applications
University of Michigan	X	X	X		
University of Pennsylvania	X	X		X	
New York University	X		X		
University of Texas at Austin		X			
University of North Carolina at Chapel Hill					
University of California, Berkeley		X			
Indiana University Bloomington	X	X	X		X
University of Virginia	X		X		
University of Wisconsin-Madison	X	X			
Saint Joseph's University	X	X	X		

Table 2: Universities with Digital Marketing-Related Majors, Minors, Concentrations, or Certificates

School	Program
Arkansas State University	Minor in Electronic Commerce, B.S.B.S. with Major in Marketing
California State University – Fresno	B.B.A. with a major in Marketing Certificate in E-Business
Western Connecticut State University	B.B.A. with a major in Marketing; Interactive Marketing Option
Delaware State University	B.S. in Management, under a Marketing major with a concentration in E-Commerce
Aurora University	BA, BS with Minor in Digital Marketing, Master of Science in Digital Marketing and Analytics
Benedictine University	M.B.A. concentrations in Marketing Management or Internet Marketing; Internet Marketing Graduate Certificate
Columbia College	B.B.A. with a major in Marketing Communication; E-Commerce Minor
DePaul University	B.A. in Marketing; Pennebaker Direct and Interactive Marketing Certificate
Northern Illinois University	B.S. in Marketing - Interactive Marketing
Ferris State University	B.S. in Marketing concentration in E-Commerce Marketing; Certificate in Direct Marketing, course of study includes Introduction to Data Mining.
Madonna University	M.S. in E-Commerce
Walsh College	B.B.A. with a major in Marketing; offers a specialization in E-Marketing
Western Michigan University	B.S. in Marketing; E-Business Marketing Major
University of Minnesota – Duluth	B.B.A. in Retail Marketing Analytics
Fairleigh Dickinson University	B.S. Marketing with Digital Marketing Concentration; Digital Marketing Minor
Rutgers University – Camden	B.B.A. with an E-Marketing specialization
Fashion Institute of Technology	B.S. in Direct and Interactive Marketing
Mercy College	B.S.B.A in Direct and Interactive Marketing
Pace University	B.B.A. in Marketing; M.S. - Social Media and Mobile Marketing
SUNY – Old Westbury	B.S. in Marketing with a concentration in E-Commerce
Methodist College	B.B.A. with a concentration in E-Business
University of Akron	B.B.A. with a major in Integrated Marketing Communications; Direct Interactive Marketing Minor; M.B.A. with a concentration in Direct Interactive Marketing
Southern Oregon University	BS, MBA and MIM, Certificate in Interactive Marketing and e-Commerce
The University of Scranton	Minor in Electronic Commerce
University of Wisconsin-Whitewater	B.B.A. with a major in Marketing - Direct and Internet Marketing Emphasis

Source: Marketing Edge, formerly Direct Marketing Educational Foundation (2018)

Although many larger business schools have made progress toward developing digital marketing courses and concentrations, similar progress at smaller institutions may be less prevalent. The update of curriculum and incorporation of digital technology has likely been complicated by issues such as insufficient time, money, facilities and staff. While some scholars have reviewed current practices in social media and internet marketing curriculum development, no studies have addressed the extent to which smaller business schools have incorporated this content. Therefore, the purposes of this paper are: (1) to analyze the extent to which small business schools have implemented digital marketing and social media into the curriculum; (2) to discuss possible obstacles smaller

business schools uniquely face; and (3) to provide an example of how one small business school implemented digital marketing into the curriculum.

A DIGITAL MARKETING CURRICULUM AUDIT

Methodology
A sample of seventy AACSB accredited schools were examined to determine the extent to which small business schools had incorporated digital marketing courses or concentrations into the curriculum. Research designs using AACSB member schools have commonly been used in marketing education related studies (Hannaford, Erffmeyer and Tomkovick 2005). The process began by reviewing a list of 529 domestic accredited schools contained in the AACSB-Accredited Universities and Business Schools membership database. Membership profiles were reviewed to determine background data on schools. Only schools that participated in the 2016-17 AACSB Business School Questionnaire displayed data in most fields in the profile. Any school not containing a complete profile was eliminated from the list.

The next step was to select a sample of small schools from the list. AACSB defines a small school as one with 35 or fewer full-time faculty. Consequently, only those business schools which reported having 35 or fewer full-time faculty at the time of the survey were included in the sample. An effort was made to select a cross section of schools located in each region of the country. For each of the selected schools the membership profile was used to collect data on business school enrollment, location, faculty size, and whether the school was public or private.

Once schools were identified and profile data collected, the researcher reviewed marketing program curriculum requirements and course descriptions obtained from each school's website. Both a list of required marketing courses and marketing elective options were identified. Whether or not an undergraduate concentration, major, minor, or certification in digital marketing was offered was also recorded.

Findings
Business schools included in the sample had an average faculty size of 24 full-time faculty, with an average enrollment of 650 undergraduate and 147 graduate students. Fifty-three percent of the schools were categorized as public, while 47 percent were private. A cross section of schools from each of four regions of the United States were included in the sample.

Table 3 includes a list of digital courses offered by sampled institutions. Of the seventy schools examined, almost 33 percent offered one digital marketing related course with another 10 percent offering two or more. The most frequently offered digital marketing related course was entitled "Internet Marketing." A review of the course descriptions obtained from the school websites revealed that the main topic areas in this course included a general overview of digital marketing, website design, web analytics, digital advertising, and/or social media. While Internet Marketing was the most frequently offered course, 17 percent of the schools offered a specialized course in Social Media, with only 7 percent offering a course in Marketing Metrics or Marketing Analytics.

Table 3: Digital Marketing-Related Courses Offered by Small Institution Marketing Programs

Course	Total	Percent
Internet Marketing	12	17.1%
Social Media Marketing	12	17.1%
Digital Marketing	11	15.7%
Marketing Metrics	4	5.7%
Marketing Analytics	1	1.4%
Interactive Marketing	1	1.4%
Programs Offering 1 Digital Course	23	32.8%
Programs Offering 2 Digital Courses	5	7.1%
Programs Offering 3 Digital Courses	2	2.8%

Like Wymbs (2015) findings, schools located in urban areas tended to offer more digital marketing related courses than those located in more rural settings. For example, schools located near New York City were more likely to show interest in digital course offerings. No significant differences in digital course offerings were observed when comparing universities located in different regions of the country. For example, schools located in the South were no more or less likely to incorporate digital offerings in the curriculum than schools located in the Midwest or West.

With the exceptions of Arkansas Tech, Christopher Newport, and Saint Xavier, no schools offered majors, concentrations, or certifications in digital marketing at the undergraduate level. Arkansas Tech offered a track in digital marketing that included required courses in Management Information Systems, Digital Metrics, and Integrated Marketing Communications in a Digital Age. Christopher Newport offered a degree program specializing in direct and interactive marketing including courses in Interactive Marketing, Digital Marketing, and Database Marketing. Finally, Saint Xavier offered a concentration in digital marketing including courses in Digital Marketing and Social Media Marketing.

Discussion of Results
Given the results of previous research, it was expected that few small business schools would include a course, let alone a concentration, in digital marketing. Results, however, show roughly 43 percent of schools offering at least one course dedicated to digital marketing content. This suggests that at least some smaller institutions are attempting to address the skills gap and align marketing curriculum with actual business practice. Still, there is room for improvement with over half of the schools surveyed failing to offer a single digital marketing course. Furthermore, given the increased emphasis on metrics and data analysis in the marketing field, the lack of course offerings dedicated to these topics suggests a gap in the curriculum.

Previous research points to possible factors contributing to the lack of digital course offerings at these smaller institutions. Hannaford, Erffmeyer and Tomkovick (2005) conducted a survey among AACSB accredited schools to determine the prevalence and perceived importance of incorporating a dedicated technology-based course in the marketing curriculum. They found that while a majority agreed that teaching marketing technology was important, few schools offered a dedicated course on this topic. To that end they asked respondents to identify the greatest challenges in teaching marketing technology. Respondents cited several issues including: (1) lack of qualified faculty, (2) lack of manpower, (3) limited financial resources, (4) lack of an overall departmental/school strategy, (5) insufficient facilities, (6) rapidly changing technology, (7) the view that teaching technology was outside their area of expertise, and (8) lack of room in the curriculum. Other obstacles cited in the literature include limited faculty personnel, limited funds for hiring additional faculty, and lack of technology training among current faculty (McBane 2003, Parker 2014).

While these challenges are pervasive, they are particularly burdensome at smaller institutions where resources are more limited. Small faculty are hard pressed to find room in the curriculum to add yet another course to their teaching load. Limited financial resources constrain deans in hiring additional faculty with technology and/or digital marketing expertise. Current faculty juggle teaching, research and service obligations which leave little time to educate themselves on evolving digital marketing topics. Despite these challenges, marketing departments at several small institutions are developing creative ways to infuse digital marketing related courses in their curriculum. The following section describes one such approach adopted by the researcher's school.

DEVELOPING A DIGITAL MARKETING COURSE: A SMALL UNIVERSITY APPROACH

Conducting Concept Development
The development of a Digital Marketing course at our university was based on preparatory work over several months. As recommended by Faulds and Mangold (2014), we used an instructional design model called the Kemp Instructional Model to guide course development. Our first step was to discuss potential components of the course by identifying the major gaps between our marketing curriculum and marketplace requirements. We took a two-pronged approach including a review of current literature and a review of entry-level marketing job postings in our region. An Internet search of academic and trade publications provided us with a broad understanding of the skill sets and knowledge most desired by those employing marketing graduates (Crittenden and Crittenden 2015, Ward and Grant 2017, Wymbs 2015). For example, Frederiksen (2015) noted specific marketing software tools required

by employers including email marketing; social media management and analytics (specifically Google Analytics and Adwords); customer relationship management; and content management systems.

In addition to the literature review, we consulted online job listing sites to identify skills and technology required or preferred by employers. Like Ward and Grant (2017) we conducted a search using Monster.com and Indeed.com to identify current entry-level marketing positions within a 300-mile radius of our school. Job postings were eliminated if they required more than 3 years of experience as they did not fit the marketing position for which most students would apply.

We reviewed 30 job postings from a variety of industries and entered the most often requested technology and digital marketing related skills in a spreadsheet. Our results showed that 22 of the 30 postings (73%) listed Microsoft Office Suite, with 16 of the postings specifying Excel as preferred skills. Other technology listed included familiarity with WordPress (26%), InDesign (26%), and HTML (20%). Several postings listed familiarity with Google Analytics (43%) and Google Adwords (17%). In addition, skills with Social Media in general (40%) and HootSuite specifically (30%) were also mentioned. While some job postings mentioned specific software knowledge desired, others identified desired skills in general terms such as social media management, data analytics, SEO, email campaigns, and digital advertising. Table 4 provides a summary of the skills and software most often mentioned in the job postings reviewed.

In addition to reviewing literature and examining job postings, undergraduate digital marketing course syllabi were collected and reviewed. Data collection involved a web search for syllabi that focused on an introductory course in digital marketing. Syllabi were used as a source to identify potential learning objectives, course topics, class projects and assignments, as well as textbook and other content support.

Table 4: Business/Marketing Software Listed in Entry-Level Marketing Job Postings

Software	Number of Postings	Percentage of Postings
Microsoft Office	22	73%
Excel	16	53%
Adobe Suite	5	16%
InDesign	8	26%
WordPress	8	26%
HTML	6	20%
Social Media	12	40%
Hootsuite	9	30%
Email Campaign	5	16%
Google Analytics	13	43%
Google Adwords	6	20%
JavaScript	6	20%
SPSS	6	20%
Mailchimp	2	7%
SurveyMonkey	2	7%

Setting Course Objectives

Next, based on the results of the literature review, area job posting requirements, and collected syllabi, we outlined course learning objectives. A synthesis of the information collected during the concept development stage indicated that an effective digital marketing course would provide students with the opportunity to:

1. Understand how search engines work and how to make recommendations to improve organic search rankings (SEO).
2. Have a basic understanding of web analytics and how to determine appropriate KPIs (Key Performance Indicators) for websites
3. Understand search engine marketing (SEM) and how to create a search engine marketing campaign and evaluate its effectiveness

4. Understand the various methods of online display advertising
5. Know how to implement best practices in email marketing
6. Know how to use social media tactics to design an effective social media campaign

Developing Course Content and Activities

Our next step was to determine the course content and activities that would most help our students gain the desired knowledge and skills. Initial course concept development called for an experiential approach rather than a lecture format. After reviewing several digital marketing textbooks, we decided to use a digital courseware system called Stukent. Stukent provided a digital marketing bundle which included an online textbook updated multiple times a year, a video lecture series by experts in the industry, as well as the Mimic Simulation. This simulation allowed students to gain experience developing skills in email marketing, PPC marketing, keyword research, A/B testing and conversion rate optimization.

To further enhance student skill development, a Web Design/SEO project was developed. This project required that students use WordPress to develop a homepage, product page and blog post for a hypothetical retail website. Other outcomes of this project included learning conversion centered design and SEO, as well as how to use Google Keyword Planner, anchor texts, and meta descriptions. YouTube videos and tutorials were extensively used to help students learn the technology. For example, we frequently took advantage of free access and online tutorials offered by Adwords and Google Analytics. Links to tutorials were posted on the course management system so students could easily refer to content.

Implementing a Team-Teaching Instructional Strategy

One of the biggest obstacles to offering digital marketing courses at small institutions is a lack of faculty resources. For example, at our small, private university three marketing faculty split the responsibility of teaching 8 different marketing subjects. Adding additional courses to the curriculum, while potentially beneficial for students, could become burdensome for faculty. To address this issue, we decided to team-teach the new Digital Marketing course. As a result, no faculty member carried the total responsibility to learn new technology and content on changing Internet marketing topics. The semester long course was divided roughly in thirds with each faculty member teaching in their area of expertise. For example, one faculty member who taught a retailing and e-commerce course was responsible for covering web design and on-site and off-site SEO topics in the digital course. Another faculty member who taught Integrated Marketing Communications covered the paid search, display advertising and social media topics in the new digital course.

CONCLUSION

Businesses and consumers have embraced digital and social media as an important communication tool. As noted by others, this rapidly emerging digital environment has challenged the relevance of marketing curriculum at colleges and universities. While some schools have taken initiative to redesign the marketing curriculum and align it with the business needs of the 21st century, others are behind the curve. Previous research has identified the challenges institutions face as they attempt to bridge the gap between outdated marketing curriculum and the needs of marketing executives (Hannaford, Erffmeyer and Tomkovick 2005). The present research reports on the state of inclusion of digital marketing related courses in the marketing curriculum of small business schools. Results suggest that curriculum at most small business schools has not been updated to include digital or social media marketing related courses. Given the demands of the marketplace, graduates of marketing programs must be well versed in digital technology regardless of the size of the institution from which they graduate.

This paper describes a process used to develop and implement a digital marketing course at a small, private university despite limited resources. As recommended by Hannaford et al (2005), a team-teaching approach was used to overcome some of the challenges associated with adding a new course where faculty resources are limited. It is hoped that examples provided will prove helpful to other small institutions seeking to establish a digital marketing course or concentration.

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Bridging the Gap: Engaging Business Sophomores to Ensure Information Literacy Competency

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ABSTRACT

This project showcases a two-week series of assignments that are designed to illustrate the value of information literacy skills to undergraduate sophomore business students. We demonstrate how the project integrates with our business curricula and show how leveraging the expertise of librarians ultimately improves the quality of education for our students.

Keywords: Information literacy, library instruction, collaboration

INTRODUCTION

One of the primary concerns among business educators involves implementing strategies that ensure students learn and retain information literacy skills. Information literacy refers to the combined abilities to find information, understand how it is produced and use the information in an ethical manner (Association of College and Research Libraries [ACRL], 2015). It encompasses skills that require the researcher to understand the process involved for conducting business research, including knowing what data are needed, which databases may be used to identify data, assessing the reliability and quality of data, and the steps for converting data into meaningful and useful information. Ultimately, information literacy skills help ensure that businesses make timely and informed decisions.

Business educators recognize the importance of teaching information literacy skills to their students, although methods vary. A common approach involves providing specialized training in major-specific courses. Accounting students, for example, learn information literacy skills that accountants currently use in industry. Many business colleges require seniors to participate in a capstone project designed to emulate a real-world scenario. Senior capstone projects typically require students to demonstrate and apply their information literacy skills before graduating.

Teaching information literacy has evolved over time as trends and technologies have changed. We know, for example, that the methods employed to conduct effective business research changed dramatically after the widespread acceptance of the internet. Where once students relied on research performed in libraries utilizing books and other printed reference materials, students can now access more and better data without leaving their dormitories. Improved ease of access comes at a price, however, as today's students are tempted to work without proper guidance from course instructors and others trained in proper research methods.

When it comes to information literacy, librarians serve as the experts. Librarians are trained in these skills and stay abreast of current trends and technological innovations. Library instruction has transitioned from just teaching students how to use library resources to focusing more on evaluation of resources in order to sift through the abundance of easily accessible information. Further, most librarians actively seek opportunities to engage students and assist them in the learning process.

Current research proposes that effective teaching of information literacy skills to business students requires a collaboration between business faculty and librarians. This paper details the initial results of a project funded in part by a grant from Heterick Memorial Library at Ohio Northern University in which the course instructor for Management Information Systems and the College of Business liaison librarian collaborated on developing and providing a two-week series of assignments focused on information literacy for business students.

Heterick Memorial Library at Ohio Northern University began offering grants designed to foster information literacy initiatives within course curricula in 2017. An important requirement of the grant included the class instructor working with a librarian to create content with the aim of improving information literacy skills. Course instructors and librarians would tailor these materials to fit within their respective course subjects. The grant also emphasized the need for assessment. Librarians chose this particular project as a recipient of this grant for several

reasons, chief among them the opportunity to work extensively with sophomore students. This article provides details as to the merit of the project, the assignments developed, in-class instruction, and assessment results.

The project had three main goals, including (1) strengthening the connection between our students and our university's librarians, particularly the College of Business liaison librarian, (2) increasing student awareness of databases used to find resources and reliable methods to find quality web resources and freely available government documents, and most importantly, (3) emphasizing the importance of evaluating source material during the research process.

Timing of this training is vital to achieving these goals. We strive to develop a process by which our students are proficient in information literacy by the time they graduate. This requires us to begin the process early, while they are freshmen, and continue to build on it as they advance through their academic careers. Currently, all freshmen business students are afforded the opportunity to meet our librarians and learn basic skills as part of our transitional experience course, and all seniors are expected to demonstrate their proficiency conducting business research, but, prior to this project, a significant gap existed between their freshmen and senior years. We recognized that few opportunities existed for sophomores and juniors to reinforce the basic information literacy skills they learned as freshmen. For the current project, the course instructor proposed developing assignments to be offered in a core business course typically taken by sophomores, serving as a bridge between the introduction with the librarian provided to them as freshmen, subsequent assignments in other major-related courses, and ultimately the senior capstone experience.

For this grant opportunity, the faculty applicant proposed a two-week series of cumulative assignments, offered early in the academic term. According to the proposal, the project would require students to work in small groups on assignments that would introduce them to the business research process, databases commonly used, and the necessity of critical thinking to assess data worth. As the librarian would facilitate these class meetings, student acknowledgement and appreciation of her expertise would also increase.

PREVIOUS RESEARCH

Most information literacy instruction for business courses takes place in stand-alone sessions, or one-shots, as verified by Cooney's 2005 survey of business information literacy instruction. One-shot instruction sessions limit librarian input and inhibit true collaboration between librarians and faculty. However, this collaboration is one means of improving students' information literacy skills, as illustrated in a study by Bowers, Chew, Bowers, Ford, Smith, and Herrington (2009). Student observation of a librarian and a professor interacting as peers in class emphasized that the librarian and professor are faculty partners. Seeing this relationship encouraged students to seek out librarians outside of class, extending the learning environment beyond the classroom. Girven (2017) identified a need for academic librarians to prepare students for conducting research in a real world environment, including how to seek out assistance. One-shot instruction sessions may address the immediate need for assignment completion but often fail to prepare students for research outside of the classroom.

Students' lack of awareness of library resources is an obstacle to student use of resources. Spahr (2015) found that students were unaware of all available resources, and were overwhelmed and confused by what they knew was available. Students were also inexperienced in working with different types of business resources and had difficulty synthesizing sources. Librarians and faculty should identify specific resources for different types of information as students noted that they need more than general encouragement to use the library. Walsh and Borkowski (2018) surveyed undergraduate students in an introductory business course to identify factors that affected student database selection and use. They found that increased exposure to a database during instructional time or through an assignment was likely to have a positive effect on a student's decision to use the database outside of class. The authors also found that introducing new databases during instructional time improved student perceptions of the databases, and that students may be more receptive to new databases if the databases were similar to those students have used in the past.

Information literacy skills, particularly the ability to assess the validity of a resource, are vital to career success. Sokoloff (2012) conducted interviews with employers to identify the importance of information literacy skills in the workplace. The employers noted that Google was their primary research tool, suggesting a strong need for students to develop critical thinking and evaluation skills. Sokoloff concluded that librarians should make more of an effort to balance information literacy standards with practical training for the experiences that graduates will have in the workplace. An important element of this preparation is training students to carefully evaluate sources.

Kim and Sin (2011) conducted a study of undergraduate student source selection. While students were aware of the criteria that they should use to evaluate sources, they frequently did not apply them and opted for those that they perceived as easiest to access, generally free Web resources. As a solution, the authors recommended that information literacy programs provide more positive experiences with databases until students become more comfortable using them, suggesting that one-shot sessions are not the most effective way to change students' perceptions about library resources. Taylor and Dalal (2014) surveyed undergraduate students at their institution to determine whether or not students used criteria from the Information Literacy Competency Standards for Higher Education in evaluating Web resources, as well as whether or not students could actually find those elements in the sources. They found that students relied on Google for research and had difficulty identifying authorship of a source and the author's qualifications. Regardless, most students still felt that they were able to determine the objectivity of a source without that information. The majority (62%) of students felt that search engines usually contain accurate results. About the same number used the URL and domain as indicators of objectivity, showing that students are relying on easily identifiable surface-level details rather than careful evaluation.

RESEARCH DESIGN

Close collaboration through all steps of this project, from initial planning, to in-class instruction, to final survey, was critical to its success. This level of collaboration helped ensure that the project leveraged the experience and guidance of the librarian within the business course. This section provides details pertinent to the development, delivery, and assessment of our information literacy project.

Arguably the most important phase of this project involved initial planning and development. During these planning meetings, we discussed project goals, teaching methods, appropriate assignment structure, assessment, and many other items. This extensive preparation helped ensure the success of our project in achieving our goals.

The first step of our Information Literacy Project involved determining which source databases to use from those available through our library. We selected three databases commonly employed while conducting industry research: Business Source Complete, LexisNexis Academic (now NexisUni), and Mergent First Research. Realizing that many small businesses are unable to provide access to subscription databases, we also planned to include training on how to effectively utilize the Google search engine to identify both freely available general business data and government documents.

To further strengthen the concept of databases as repositories of information, we implemented a teaching aid, borrowing from the methods employed by Liu (2016). Liu used buckets in classes, each representing specific databases and each containing information common to those databases. This method provided a utilitarian and functional object to the students and enforced the notion of databases as repositories (buckets) of information. In addition, this method allowed for students to interact with the database content prior to interacting with a potentially unfamiliar interface. Within each bucket we placed documents that illustrated the different types of data and information found while conducting cursory research on Apple iPhone. We chose Apple iPhone as our topic as most of our students utilized Apple products and had at least a passing interest in their products.

After developing the necessary elements, we opted to utilize Google Drive as the repository for all assignments related to this project because of its accessibility across browsers and platforms, and Google apps are widely used across the ONU campus. We developed documents prior to the first class that served as assignment templates and placed these in each group folder. These templates provided instructions as well as standardized work areas for each assignment, and helped to use class time effectively. To gauge student attitudes toward information literacy as well as skills, the project implemented a brief anonymous survey both before and after its completion. The survey questions quantified the quality and extent of knowledge of the class regarding their experience with, and value of, information literacy.

We began the Information Literacy Project during the third week of the academic term, during regularly-scheduled class time. Table 1 provides a synopsis of the timeline for the Information Literacy Project. On Day 1, we divided each class into five groups according to their majors so that each group contained students of like majors (marketing, management, accounting, etc.). Each group chose a bucket and examined its contents. We emphasized to the class that each bucket contained resources found while researching Apple iPhone on Google, in government resources, or in the library database named on the outside of the bucket. In order to motivate students to thoroughly examine the contents of the buckets and facilitate the class discussion, groups listed the items within their bucket on a premade

document in their Google Drive group folders. The groups then discussed the kinds of information found in each database and potential uses for the information in a librarian guided discussion.

Day 2 further enforced the utility of the three library databases. We distributed the second assignment, which required each group to access and experiment with their respective databases and find three sources that answered questions pertaining to the cellular phone industry. During this assignment, each group identified sources within their respective database and recorded information related to their search process and the citation information. Rather than providing a demonstration of each database, the librarian circulated the classroom helping groups and pointing out library research guides that included tips for using the databases. The groups worked through the remainder of class time and presented their findings on Day 3.

On Day 3 the groups demonstrated to the class the methods they employed in finding their sources and why they selected a particular result. This initiated our ongoing discussion of the importance of evaluating items found during research. Groups recorded notes about the different databases, including search tips and types of resources included, in a shared document. After presentations concluded we divided the class into different groups so that each group contained at least one student from one of our business majors (marketing, management, accounting, etc.). This ensured that each group had at least one student with working knowledge of the utility and use of each library database.

We distributed the instructions for the third assignment, a SWOT analysis exercise (premade Google Slide) which was to be completed by Day 4. The scenario given to each group involved them pretending that they were employed by a leading smartphone company that was assessing the viability of acquiring an app made by an outside company. We instructed the groups that their SWOT analysis would help their company make the decision to acquire the app or not. For each SWOT category (strengths, weaknesses, opportunities, threats), each team was to find relevant and timely information using the library databases, government sources, or Google. We allowed the class to use the remainder of class time to brainstorm on how to best divide tasks associated with this assignment. A two week hiatus from the library after Day 3 allowed for two full weeks to work together on the research and presentation required for this assignment.

The second week of the Information Literacy Project exercises began on Day 4 with group presentations of the SWOT analysis. We continued to emphasize to the class the importance of evaluation during the research process by asking groups about some of the sources used. After group presentations, we distributed the instructions for their final assignment. The instructions required they conduct research on their own time and be prepared to present in class on Day 6. As with the SWOT analysis, we provided a pre-made Google Slide template for them to use. We provided the research topic, which was to perform an assessment of Samsung telecommunications. Each group was required to find at least one relevant and current source from each of the resources covered in the buckets from Day 1. Groups decided amongst themselves how to divide responsibilities.

On Day 5 we reserved class time for discussion of the importance of evaluation during research, finding government resources, and instruction on using Google effectively. The librarian demonstrated how to use Google shortcuts and advanced searching to conduct more effective searches and to find government resources. The class discussed how government resources could be used and the librarian emphasized that government resources are freely available to everyone, so students are able to access them after graduation. To help students evaluate sources, the librarian explained how the Five Ws (Schrock, 2011) could be used to help look for key information. The Five Ws are the same basic questions used in a variety of situations, modified here to be a formula for evaluating sources:

- Who wrote the source?
- What is its purpose?
- When was it written?
- Where is it coming from?
- Why use it in your paper?

A research guide for the course includes a more detailed list of questions to help with evaluation that were discussed in class. To reinforce the need for evaluation, each group was given a source used in the SWOT analysis by students in the other section of the class to evaluate using the Five Ws criteria.

The final day, Day 6, of the Information Literacy Project exercises began with groups presenting their fourth assignment. In addition to presenting the research, each group was also required to give an assessment of one source

using the Five Ws. We emphasized the importance of the skills learned during the two weeks of training, and especially the importance of consulting with the liaison librarian.

The students retook the information literacy survey during the following class. The questions remained the same. As before, student answers were gathered anonymously and aggregated for each question.

RESULTS

This project had three main goals for our students: (1) strengthen the connection between our library's librarians, particularly the College of Business liaison librarian, and our students, (2) increase student awareness of resources used to find sources, and most importantly, (3) emphasize the importance of evaluating sources during the research process. With regard to the first goal of this project, it is clear that our assignments improved student familiarity with and appreciation of our university's librarians and their expertise. Figure 1 shows that student perception of librarians as experts rose from 2.88 to 3.05 (out of 4.00). We also observed that interaction and question quality improved during the course of the project.

The second goal of the project pertained to increasing student awareness of databases used to find resources, as well as how to use search engines to find government resources and quality Web sources. Survey data (Figure 1) reveals that student recognition of databases as repositories of credible information rose from 3.73 to 3.90 (out of 4.00). Further, the percentage of students who identified a business-specific database such as Business Source Complete as the appropriate library tool for finding business information increased from 72.5% to 92.7% (Figure 2).

The final goal of our project emphasized the importance of evaluating source material during the research project. Our surveys (Figure 3) show that the percent of students who stated that they were very confident using databases rose from 20.6% to 60.8% while those who initially indicated before the exercises that they were "not at all" confident stated after the project that they were at least "somewhat" confident. This indicates that the students are more confident in utilizing resources that will help them find credible information. More importantly, by the final assignment, students demonstrated their familiarity with identifying timely and pertinent sources.

DISCUSSION

Given the success of the project, the instructors decided to continue providing information literacy training as part of the general curriculum within the course. We currently offer the training early in each term, divided among six class meetings which account for two of the fifteen weeks in the semester. Pre- and post-surveys continue to gauge the impact of the training, and provide the primary means for assessment.

Many aspects of the project worked very well during the initial implementation. Careful preparation beforehand proved especially beneficial. As with cooking, *mise en place* matters as it allows instructors to manage resources effectively. For this project, we met many times well in advance of its implementation date and discussed goals, teaching strategies, existing resources, scheduling issues, assignment development, and assessment. Developing and utilizing templates for assignments proved especially beneficial as it effectively eliminated the potential for confusion among students.

Students also appreciated reminders that they would continue to utilize information literacy skills in future courses, that successful senior capstone research depended on learning these skills, and that employers actively seek graduates who understand the value of effective research methods. At certain points during this project, we showed the class sections within the capstone syllabus to emphasize the importance of information literacy. As sophomores, our students cringed at seeing the senior capstone syllabus, but when asked indicated that they appreciated this gesture as it helped prepare them for what was to come.

Some of our methods required revisions. For example, we decided to swap assignment 3 (SWOT analysis) and assignment 4 (research project) as we discovered that students tended to put more emphasis on evaluating sources while performing the SWOT analysis then they did for the final research project. We felt that the final project should emphasize evaluation, so using the SWOT analysis as the final assignment seemed appropriate.

CONCLUSIONS

The main goals of the Information Literacy Assessment project were to increase awareness of the librarian as a resource while conducting research, of databases used while conducting industry research, learn methods to find

freely available, credible web resources and government documents, and also increase the practice of evaluating sources identified while researching. The results of the project strongly suggest success in these areas. The survey scores related to these goals increased dramatically. More importantly, the performance exhibited on the various activities associated with the project demonstrated that our students were eager to learn the proper methods for conducting industry research, the relevant databases at their disposal, and the methods in which professionals evaluate the quality of identified sources.

Assignment development assumed that students would capitalize on existing experience pertaining to information literacy, and also that each assignment would build on that knowledge. Assignment 1, for example, introduced our business students to resources commonly used in research, while subsequent assignments built on this knowledge and ultimately required students to identify timely and pertinent sources. By the final assignment, most students demonstrated their ability to accomplish this goal.

The training proved beneficial to our business sophomores. To date, two students who participated in the Information Literacy Project have engaged in the capstone experience process. Both have expressed their appreciation for the training we provided in the course; they utilized these skills in other classes, but did not fully appreciate their value until they used them as part of the capstone project. We expect additional positive feedback as more students advance through their upper-level courses. We are currently devising methods for assessing the application of these skills in other classes, including the capstone experience.

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Table 1. Project Timeline.

Timing	Activities
Pre-training Development	Buckets, assignment templates, group lists
	Pre-survey administered
Project Week 1	
Day 1	Class divided into groups (majors)
	A1 (buckets, in-class)
	Database research discussed
Day 2	Review
	Database use guides online
	A2 (Database research) instructions distributed
Day 3	A2 presentations
	Class divided into groups (capstone model)
	A3 (SWOT) instructions distributed
Training Week 2	
Day 4	A3 presentations
	A4 (research project) instructions distributed
Day 5	"Five Ws" and library literacy discussion
Day 6	A4 presentation
	Post-survey administered

Figure 1. Results of Question 8.

8. Score the following people and resources for credibility or expertise.
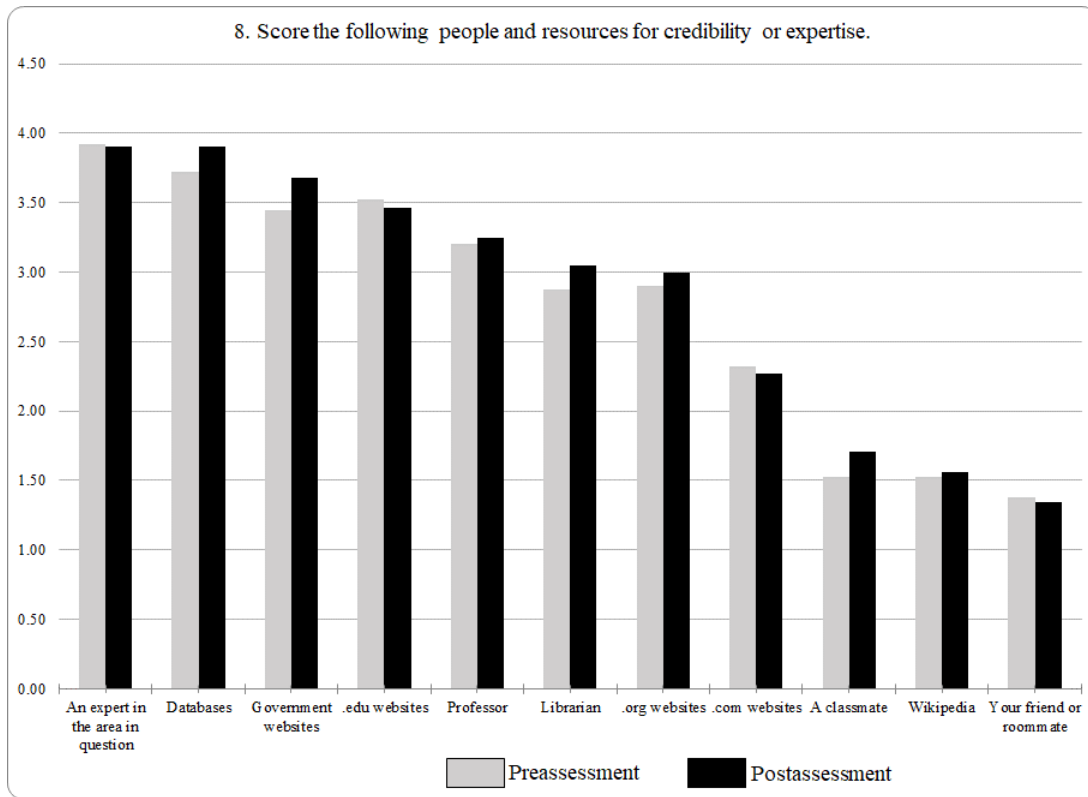
Figure 2. Results of Question 5.

5. The best library database to use for finding scholarly articles pertaining to business is:
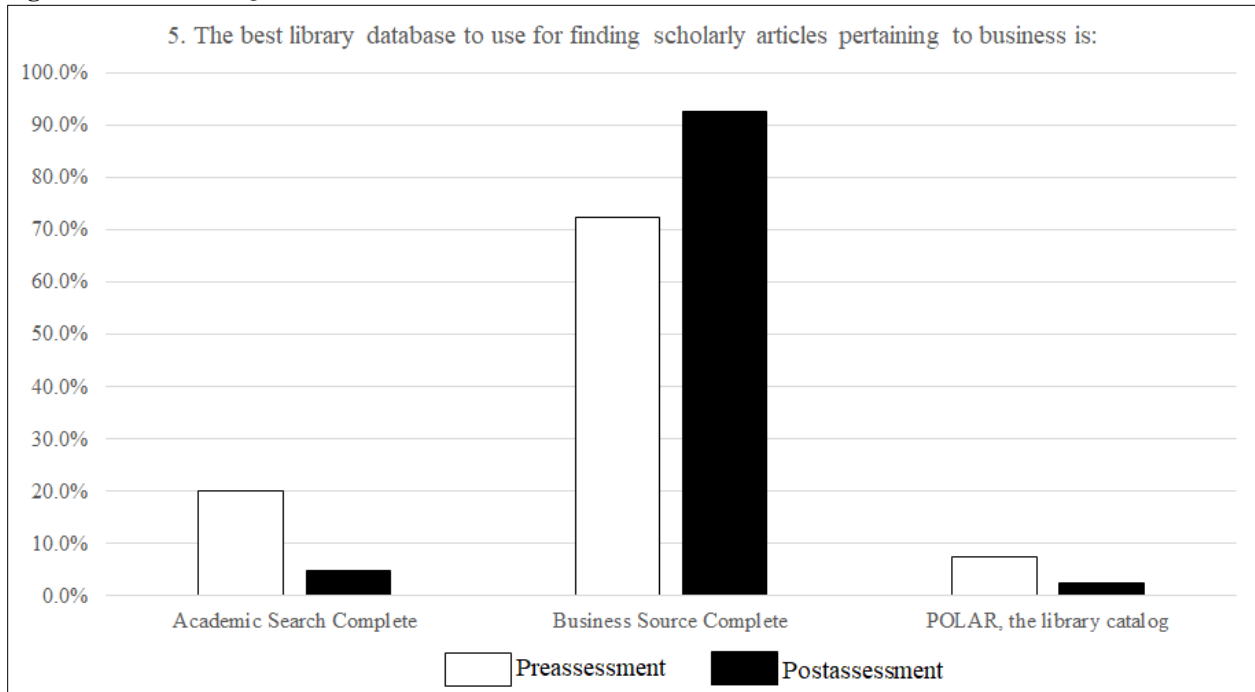
Figure 3. Results of Question 6.

6. How confident are you in searching for and accessing the full text of a scholarly article in the library databases?
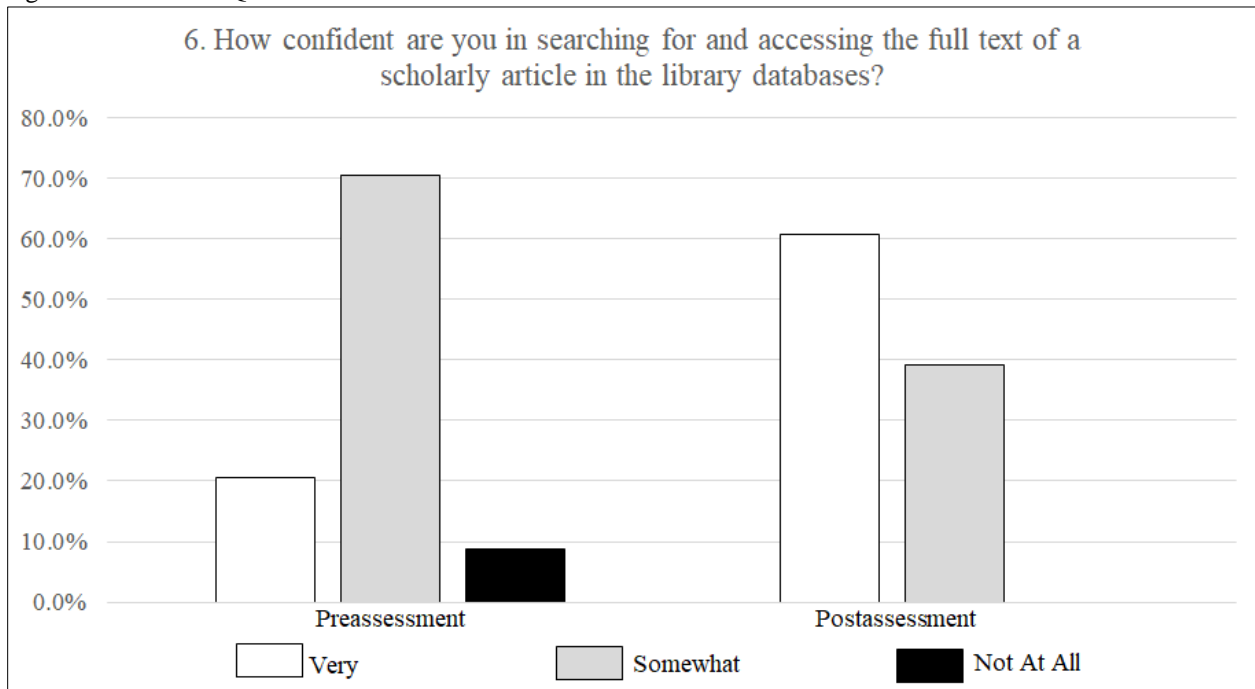
Recommendations from the Field: Expanding Business Education in the Small School Environment

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ABSTRACT

Due to changing market conditions, the overall demand for the traditional MBA is in decline. The trend is even more troublesome for small business schools as applicants seek well-known "name brand" programs. The combination of a declining MBA applicant pool and an increased demand for individualized experiences has led smaller business schools to consider executive education programs as an alternative to or supplement to the traditional MBA. This paper describes an established, non-degree granting certificate program that engages the community in learning the general areas of business. In addition to describing the program and its inception, the paper provides practical guidance for small business schools that are entering the market for executive education.

Keywords: Business Certificate Program, Executive Education, Business Skills, Business Education

I took 18 months of Botany in college, but not a single business class… For me, this is developing a part of my professional self that was severely anemic….

Pediatric Neurologist

I am an avid learner and had some exposure to most of the subjects presented. However, it wasn't until completing the Business Advantage Program that those ideas became more crystallized and expanded. I am excited to be able to take this new information and advance the ideas further.

Architect

INTRODUCTION

According to the Graduate Management Admissions Council (GMAC, 2017), the overall demand for the traditional MBA is currently in decline. As the labor market has improved since the Great Recession, more individuals are entering the job market directly from an undergraduate program and those who are in the job market are less likely to seek the MBA. In addition, the international applicant pool to MBA programs in the US has declined as these students seek MBAs in Europe, East and Southeast Asia as well as India (GMAC, 2017). A further challenge to smaller business schools is that applicants in recent years have tended to migrate toward larger, more well-known MBA programs. GMAC (2017) reports that large programs are experiencing increases in applications compared to the smaller programs that report decreased applications.

Increasingly, business organizations are seeking impactful, immersive and local professional development opportunities for employees rather than the traditional MBA program. Former AACSB Board Chair William Glick predicted in 2015 the increasing popularity of just-in-time education compared to the more traditional degree-based programs (Glick, 2015). Voicing a similar forecast, Executive Core LLC (2015) noted that "the biggest threat to business schools…is…not proactively developing new services that meet the evolving needs in the market place." These demands create opportunity for business schools to meet the needs of the market and serve the larger community. Business schools with well-established executive education programs can serve these needs within their existing contexts. Smaller business schools or those new to executive education may find significant opportunity for revenue growth in this space.

While the opportunity for a new revenue stream may be appealing, business schools must be cautious about ensuring that these undertakings align with their mission. AACSB International (2017) focuses on business programming that is engaged, innovative and impactful, given the fundamental precept that each business school should operate in a way that is consistent with its respective mission. Accordingly, the allure of a new revenue stream must be balanced with the business school's focus and desired outcomes.

Small business schools new to executive education must carefully plan and consider their resources and capacity before moving forward. This paper describes the Business Advantage Program (BAP), an established, non-degree granting certificate program that leverages faculty size and expertise while fulfilling the business school's mission to engage the community in business education. The BAP is offered at Millsaps College, a small, nationally ranked, liberal arts college that also has an AACSB-accredited school of business. Following a description of the BAP and its genesis, this paper provides practical guidance for small business schools that are entering this market.

OVERVIEW OF THE BUSINESS ADVANTAGE PROGRAM

The Business Advantage Program (BAP) is the only program of its kind in the state and, to our knowledge, the only program of its kind in contiguous states. It is not an advanced degree program nor is it the traditional executive education offering, but borrows elements from each, being both immersive in a breadth of general knowledge and yet immediately practical. The BAP is not a bridge or feeder to the MBA program. Southern Methodist University, Wake Forest University, the University of Richmond, Miami University and Dartmouth offer business "boot camps" to prepare undergraduates for their respective MBA programs. Nor is it one of the certificate programs that proliferate in the online environment. For example, "Mini-MBA" programs are offered by numerous business schools including the University of North Carolina at Chapel Hill, Rutgers, the University of Buffalo and the University of St. Thomas in Minnesota (Friedman, 2016). The Millsaps BAP fills a niche between these two broad alternatives.

The genesis of the BAP was a strategic planning retreat in which business faculty and representatives of key constituencies brainstormed ideas that would provide additional sources of revenue for both the school and its faculty while fulfilling its mission. The strategic planning team considered the faculty's historic role as quality educators and consultants in the business community as well as the state's need for economic development. Part of the mission of Millsaps College is to "make a difference in every community." Consistent with that mission, the Else School of Management mission focuses on developing "leaders who positively impact our communities." From its inception, the BAP emerged as the natural intersection of the business school's mission and resources and community need in the local area. The program enhances economic growth in the Jackson, Mississippi metro area by developing leaders who can contribute more fully to that community.

Currently having completed its ninth year and boasting approximately 180 alumni, the BAP seeks individuals without business degrees who find themselves in leadership or entrepreneurial positions where they could be much more effective with added competencies in business skills. These professionals usually cannot undertake or do not desire a full degree program, and they come from diverse professional, economic, and cultural backgrounds. They have in common that they have trained deeply in some area – such as theology or medicine – but they need practical business acumen to leverage their professional skills.

In two three-hour classes each week over sixteen weeks, the BAP helps professionals make the best decisions for their organizations. Participants learn to grow their organizations and businesses, identify trends, interpret data, and solve problems applicable to any size business. Specifically, faculty engage students to explore key theoretical concepts and practical application in accounting, economics, finance, marketing, supply chain management, management, and strategy. In becoming more effective business leaders, they also spur economic development for the state of Mississippi.

The BAP targets natural constituencies of Millsaps College, a Methodist-affiliated liberal arts institution in the state's capital. It is within a stone's throw of the state's largest medical center and Jackson's Midtown community – a redeveloping community with a mix of residential housing, businesses, and non-profits. Many of the Midtown businesses are part of the creative economy and include welders, culinary artists, video producers, and glass artists. Thus, the pool of BAP candidates has grown to include health care professionals, artists, attorneys, architects,

teachers, non-profit directors, ministers, and other rising managers and emerging entrepreneurs. While each cohort has a blend of professions, health professionals tend to comprise roughly 40 percent of each class.

As the faculty initially planned, revenues generated by the BAP have been sufficient to cover its costs and provide additional compensation to faculty at a time when raises have been scarce. In addition, revenues from the BAP have created a source of funding to support faculty development, technology enhancements and facilities upgrades.

KEYS TO SUCCESS

Fundamental to the success of the BAP has been its consistency with the mission of the business school and college. Over the nine years the program has served the state capital, several lessons have become apparent. No venture of this nature is directly transferrable to another institution, but several features of the BAP lend themselves to similar small business programs elsewhere that may be seeking to expand their business education offerings.

Select Strong Leadership

Behind any successful venture is a proactive leader. Within this context, the BAP Director, a school of business faculty member, intentionally plays a separate role from that of teacher in the program.[1] The Director's responsibilities include hiring faculty, coordinating curriculum, and most importantly, recruiting and molding the composition of the cohort. In the program's infancy, promotion and recruiting relied more heavily on web presence, radio spots, and print media. While not wholly ineffective, in this geographic area recruiting class participants required face-to-face discussions with medical, non-profit, and educational leaders, many of whom are now continuing partners. Once established, the BAP alumni have been some of the program's best advocates. Even so, recruitment and program development continue to require intentional and sustained work over a twelve-month period by the BAP Director.

The BAP Director selects faculty staffing for the program based on their proven success in the classroom and their ability to convey the practicalities of the business community. In other words, the BAP participants receive the best of the business school's faculty resources. Most are full time Millsaps faculty members, and the majority have active consulting or volunteer activities that give them the "hands-on" ability to translate the evidence-based best practices from academic literature to the community leaders.

For quality faculty, teaching in the Business Advantage Program comes with a recognized opportunity cost since teaching in the BAP does not count as part of a faculty member's required teaching. To attract committed faculty, the BAP compensates at rates competitive with alternative uses of time.

Mold the Cohort

To the extent possible, mold the class to best meet the program's objectives with regard to institutional mission and audience. One of the first issues to consider is the planned size of the cohort. Given Millsaps College's focus on significant face-to-face student interaction with faculty, each BAP cohort is limited to no more than 24 students. This class size encourages an interaction, discussion and collaboration, all of which are part of the ethos of the College. While the first cohort drew only 17 students, since that time, each cohort has been at or close to full enrollment.

In the context of the BAP at Millsaps College, a primary objective is to reflect the diversity of the community in industry, race, and gender. Within the BAP, the breadth of participant backgrounds continues to be one of the keys to success as indicated by the demographic information from a recent survey of the BAP alumni presented in Table 1.[2] Most participants are mid-career professionals with 31% identified as mid-senior management and 18% as

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[1] In other settings, an administrator with significant teaching and practical experience could direct the program. The key is to find a leader who understands the market, the curriculum and faculty leadership and cooperation.
[2] An online survey of the BAP alumni was conducted in Spring 2017. Seventy-eight of the 167 alumni (48%) completed the survey.

upper-management.[3] Roughly 64% of alumni are aged 31-50, 28% over 50 and a relative few (roughly 8%) are less than 30. While not a specific goal of this program, this represents a wide age range for the participants.

The participants represent a broad range of self-reported industries with the two largest groups being health and pharmaceuticals and education.[4] The diversity of industry backgrounds is important for two primary reasons. First, the class retains a relevance to all students rather than becoming a *de facto* healthcare management course that may have little applicability to others in the class. Second, the range of backgrounds serves as a community-building experience that extends beyond the duration of the semester. Health professionals benefit from interacting with entrepreneurs, non-profit directors and local high school teachers. At the same time, educators and community leaders benefit from engaging with top-flight medical professionals.

In addition to diversity of industry, the BAP has achieved racial and gender diversity. In a state that still has far to go in terms of investing in women and racial minorities, the BAP has been successful in providing opportunities for both. Roughly half of the BAP alumni are racial minorities and women. As discussed later in the paper, the diversity of the BAP participants is often cited by those participants as one of its great strengths.

Managing student expectations about the program and curriculum on the front end has been important to success. During inquiry and admission phases, prospects are aware of the intense time commitment of the program (two nights a week for 16 weeks). While there are few traditional tests and student presentations in the program, attendance is mandatory. A student will not receive a certification of completion if she or he does not meet the participation requirements. The BAP experience has shown that students are less likely to miss class if they are aware of this requirement well before the program begins.

Price and Partner Thoughtfully

Pricing and community partnerships have been key to BAP's success. Executive Core, LLC (2015) notes that these kinds of partnerships with businesses investing in talent management provide stability for program offerings. The BAP was first offered in 2009 during the Great Recession when many entities were cutting staff development programs. Some participants were able to bear full program costs. The BAP Director, however, was proactive in partnering with larger employers and thinking through scholarships and other discounts that would attract a diversity of students.   Historically, most participants have been self-funded with the exception of those sponsored by large employers. Once operating costs are covered, nonprofit representatives receive significantly reduced tuition. Even with discounts, the BAP has been profitable.

Craft the Content Carefully

The curriculum of the Business Advantage Program gives working professionals an exciting and comprehensive exposure to the most essential business topics. Participants explore key concepts in accounting, economics, finance, marketing, supply chain, management, and strategy. The content is introductory in nature, but delivered using the case method, much as one might expect in an MBA program. Each discipline has unique learning goals. Faculty are intentional about content, however, ensuring to the greatest extent possible that students understand the connections between the disciplines. In one offering, for example, each module included case studies of the same company to illustrate the cross-disciplinary nature of solving problems in a business setting. The BAP Director periodically brings together faculty to discuss overlaps in modules and how to capitalize on those for a seamless flow in content. The small size of the Millsaps business faculty supports material collaboration as all faculty are housed together.   Practical implications are at the forefront in communicating the learning goals.

The BAP is offered as two three-hour classes each week over sixteen weeks. One class meets each Monday for five weeks while another meets each Thursday for each five weeks, with a new rotation beginning the sixth week. This format allows the opportunity to for information to soak in before moving on. According to Sims (2007), "that means we have to internalize the experience and think through how it applies in the real world we live in." Osterman (1990) espouses the use of "reflective practice" as a way to "positively affect professional growth and

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[3] Many respondents identified as educators or clergy rather than specifying their job level as owner, executive management, or senior management.

[4] The data reflect self-reported industry. Many of the healthcare participants are employed at an academic hospital. It is unclear whether these self-reported as a part of the health or education profession. Some of the educators are secondary school teachers who participate through a partnership with the Mississippi Council on Economic Education. Thus, even within the industry category "education" there is a great deal of diversity.

development by leading to greater self-awareness, to the development of new knowledge about professional practice, and to a broader understanding of the problems that confront practitioners." The timing of BAP courses allows students to mull over the concepts, talk informally about them, and contemplate before the next class.

Table 2 provides survey feedback on program content. Ninety-one percent of the BAP alumni rate the overall content as "Extremely" or "Very" helpful. All individual disciplinary content received high ratings as well. The survey also shows that an impressive 71% used the material "Extremely" or "Very" quickly while another 23% responded "Somewhat quickly." Clearly, the BAP curriculum addresses the needs of its target audience.

Assess and Make Improvements
Recognizing the importance of measuring the transfer and impact of learning (Executive Core, 2015), the Else School of Management practices careful assessment and refinement of the BAP. The BAP Director has implemented a number of assessment tools for the initiative. Assessment includes detailed anonymous surveys that provide qualitative data and important participant feedback. Participants rate professors, class content, and program relevance as well as how the BAP responds to participant needs. One of the ways in which the director ensures a vigorous assessment process is that participants provide feedback on content and faculty after each unit of study. The BAP Director compiles the information and shares it with the faculty so that they can put the information to immediate use in refining the program.

Because of participant input, the BAP added the supply chain management module in the fourth year of the program and made major changes in the strategic management unit in the third year. Overall, participants give the program high marks for the case study approach, the quality of the faculty, interactive learning, pacing, and scope of content.

The BAP Director also polls the BAP alumni for a retrospective review. The results of the most recent survey (Spring 2017), some of which have already been discussed, are found in Table 2. Of particular note is the extent to which participants also report they put their new competencies to immediate use, and anecdotal evidence indicates that employers often hire and promote based on the BAP. The BAP director also has ongoing conversations with sponsoring employers, one of whom features BAP on its web site as a leadership development tool. These conversations are also used to help assess and improve the program.

Stay in Touch
To provide participants with continuing business education and to maintain connections with the program, the BAP hosts an annual alumni event. The event is typically a luncheon with a speaker discussing an issue of interest or an entrepreneur presenting challenges and solutions of his or her business model. Topics have included the implications of electronic "money" such as Bitcoin, the unique position and model of online newspapers, and the start-up story of an artisanal distillery. Stress management techniques were the emphasis of one reunion with a yoga instructor providing practical tips appropriate for the workplace. The reunion events keep alumni connected to Millsaps and provide a networking opportunity for cohorts who would not otherwise know each other.

DISCUSSION AND CONCLUSION

The Business Advantage Program is the only business certificate program in the state of Mississippi and, to our knowledge, the only program of its kind in contiguous the states. It is not an advanced degree program nor is it the traditional executive education offering, but combines the immersion of the MBA with the immediate practicality of executive education programs. The BAP has met many of the objectives identified in the initial strategic planning meeting and supported by AACSB accreditation standards. It is a novel certificate program focused on elevating Jackson, Mississippi's community and entrepreneurial leadership, consistent with the mission of the business school, by leveraging the strengths of a small faculty. It has the added benefit of providing a consistent revenue stream for the Else School of Management.

The BAP increases community awareness of the Else School of Management and Millsaps College. Professionals who might not otherwise seek out the Else School now view it as a vital partner. Though not intended to be a feeder to other Millsaps programs, several of the BAP alumni have enrolled in the Millsaps MBA, Executive MBA, or other executive education certificate programs. In addition, the children of the BAP alumni have become active undergraduate prospects.

As the BAP enters its tenth year, there are synergies with other business school programs and offerings that were not originally apparent. It began as a stand-alone program with limited overlap with other programs. That is no longer the case. The BAP alumni have become recruiters for the BAP and other executive education programs offered by the business school. In addition, they have provided industry expertise in the development of other executive education programs. The BAP closely aligns with ELSE*Works*, the Else School's entrepreneurship program. ELSE*Works* often refers entrepreneurs to the BAP and the BAP often suggests that ELSE*Works* provide business assistance to its participants. The BAP participants now serve the undergraduate program as guest speakers and as mentors for internships.

As noted in BizEd (2013), "Business school administrators are constantly re-examining their funding models for ideas about where they might find new sources of revenue." This paper demonstrates that the search for new revenue streams can be successful when informed by strategic planning and balanced with the business school's mission and available resources.

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Table 1. Who Participates in BAP?*

	%
Age	
<30	7.69
31-40	39.74
41-50	24.36
51-60	16.67
>60	11.54
Gender	
Female	46.15
Male	53.85
Industry	
Creative Economy	7.69
Education	15.38
Food and Beverage	1.28
Government	6.41
Heatlhcare and Pharmaceuticals	42.31
Legal	2.56
Manufacturing	2.56
Nonprofit	8.97
Retail	0.00
Other	12.82
Current Job Level	
Owner	6.41
Executive/C-Level	12.82
Senior Management	15.38
Middle Management	24.36
Entry Level	2.56
Educator	23.08
Clergy	3.85
Other	11.54

* Alumni survey results from Spring 2017
provided feedback from 78 respondents.

Table 2. Program Feedback
Percentage of Respondents*

	Extremely Good	Very Good	Good	Fair	Poor
Overall, how would you rate your experience with the Business Advantage Program?	52.56	41.03	6.41	0.00	0.00

	Extremely Helpful	Very Helpful	Somewhat Helpful	Not So Helpful	Not at All Helpful
Overall, how helpful was the accounting content?	41.03	41.03	17.95	0.00	0.00
Overall, how helpful was the economics content?	39.50	41.03	20.51	2.56	0.00
Overall, how helpful was the finance content?	25.64	55.13	17.95	1.28	0.00
Overall, how helpful was the management content?	42.31	43.59	11.54	1.28	0.00
Overall, how helpful was the supply chain management content?**	25.93	40.74	16.67	14.81	1.85
Overall, how helpful was the marketing content?	44.87	34.62	19.23	0.00	0.00
Overall, how helpful was the strategy content?	32.05	43.59	17.95	5.13	0.00
Overall, how helpful was the overall content?	46.15	44.87	7.69	0.00	0.00

	Excellent Value	Above Average Value	Average Value	Below Average Value	Poor Value
Overall, how would you rate the value of the Business Advantage Program for the money?	60.26	30.77	6.41	0.00	0.00

	Extremely Quickly	Very Quickly	Somewhat Quickly	Not So Quickly	Not At All Quickly
How quickly were you able to use the material learned in the Business Advantage Program?	25.64	46.15	23.08	5.13	0.00

Which words describe your experience? (Can choose more than one category.)

High quality	71.79
Useful	75.64
Good value for the money	41.03
Unique	42.31
Overpriced	0.00
Impractical	1.28
Ineffective	0.00
Poor quality	0.00

* Alumni survey results from Spring 2017 provided feedback from 78 respondents.

** Supply chain added to the program in 2012, thus only 54 respondents answered this question.

5 S Framework: Great Assignments Made Easy

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ABSTRACT

This paper presents a practical framework (5 S) that can be used to create effective group and individual assignments in several disciplines and across several types of pedagogy. Assignments that use the 5 S framework naturally embody the requirements of both psychological (Kolb's Cycle of Learning) and physiological (Co-Constructed Developmental Teaching) theories.

The 5 S method of designing assignments can be used independently in any curriculum but is especially effective when integrated into an experiential learning course. Originally promoted as a framework for team assignments in the Team-Based Learning pedagogy (Michaelsen, L.K., Knight, A. & Fink, L.D., 2004), the authors suggest ways to use it for both team and individual assignments. First, the paper will give an overview of Kolb's Cycle of Learning (1985), which has 4 stages; 1) Concrete Experience, 2) Reflective Observation, 3) Abstract Conceptualization and 4) Active Experimentation. Then it presents the basic tenets of Co-Constructed Developmental Teaching Theory (CDDT). Next, the 5 S method of creating effective team assignments is explained. To be effective, the team assignments must meet five conditions: 1) Significant Problem, 2) Same Problem, 3) Specific Choice, 4) Simultaneous Report, and 5) Salient Problem. We demonstrate how both a learning style theory (Kolb) and a neuro-cognition theory (CDDT) are supporting the increasingly difficult task of preparing students for careers that require content depth to launch startups or content breadth to consider 'big picture' strategic problems. The learning foundation must ensure that students master a broad range of content such as marketing research, financial planning, and other elements of a business model. However, the reality of entrepreneurial or business strategy decisions, especially those that are technologically innovative, requires that students must also be prepared to deal with increasingly complex problems and to work in teams made up of peers who come from many different business disciplines and embrace the requirements of multiple organizational functions. As a result, business educators must design their courses to give students experience working in teams and on problems that reflect the complexity of the business environments in which they will be employed. The 5 S model can be used in almost any business course for both individual and team assignments. Examples of effective team assignments using the 5 S framework for courses in Capstone Strategy and Entrepreneurship, and examples of using 5 S framework to create effective individual assignments are given.

Keywords: experiential, group assignment, team-based learning, Kolb, Co-Constructed Developmental Teaching Theory, 5 S

INTRODUCTION

Business educators face an increased use of teams that are working on complex problems that reflect the business environments in which they will be employed. The 5 S framework can be used in almost any business course for both individual and team assignments. It is especially useful since team work and team-based learning has increased in business pedagogy.

LITERATURE REVIEW

Team skills

Management has found that successful teamwork can produce greater returns. This is especially true in organizations dealing with more tacit information (Chuang, Jackson & Jiang, 2016). Not surprisingly, teamwork is considered a required skill among prospective employers and, therefore, in business education. In a 2016 survey of 144 employers, the desire for teamwork skills increased from 4.4 in 2015 to 4.6 in 2016, out of a scale of 5 (*NACE*, 2015). As the workplace has become more team-oriented, an increasing number of business faculty have begun to incorporate small group work in their courses.

Recent studies show that successful innovations are now the domain of teams. The complexity of science, the costs of development, and our vast knowledge base encourages the use of teams for innovation and inventions. In a study of 19.9 million peer-reviewed papers and 2.1 million patents from the last 50 years Wuchty, Jones, and Uzzi (2007) found that more than 99% of scientific subfields, from computer science to biochemistry, have experienced increased levels of teamwork, with the size of the average team increasing by about 20% per decade.

The other reason for using small groups is that numerous studies over the past 30 years (Slavin 1983, Johnson, Johnson & Smith, 1991; Lynam, Michaelsen & McCord, 2010; Millis and Cottell, 1998; Bruffee, 1999; Michaelsen, Watson, Cragin, & Fink 1982; Michaelsen, 1992; Michaelsen & Black 1994; Michaelsen, Black & Fink, 1996; Michaelsen Knight & Fink, 2004) have argued that, compared with traditional instruction, using appropriately structured small group assignments and activities generally increase learning, retention and even the ability to learn from subsequent courses and experiences.

Experiential learning

Lecture-based courses expose students to the conceptual foundation that students need, but don't assure that students either retain the course knowledge or that they can actually apply what they have learned to solve the kinds of problems they will face when launching and/or leading a business. Experiential education, by contrast, is a process through which a learner constructs knowledge, skill, and value from direct experience (Luckman, 1996, p. 7). "Experiential learning" is often used to refer to a structured learning sequence which is guided by a cyclical model. Kolb and Fry (1975) suggest that the learner can enter the cycle at any point and that most learning occurs in unstructured situations - something described in everyday language as "learning from experience" (Atherton, 2002). Student movement through the cycle creates 'learning spaces' that promote growth-producing experiences (Kolb, A. Y., & Kolb, D. A., 2005). Integrating experiential learning with assignments using the 5 S framework can be done for any course in which students must go beyond passing the content exams and apply sound business concepts to solve complex business problems. To be effective, the team assignments must meet the Five S conditions: 1) Significant Problem, 2) Same Problem, 3) Specific Choice 4) Simultaneous Report, and 5) Salient Practice

Psychological learning theories

Business pedagogy has embraced experiential learning theories based in psychology; especially Kolb's Learning Styles Inventory (Reynolds, 1997 pg. 116.) Academe has argued over whether Kolb's approaches are a quadrant map of 'styles' (Deciantis & Kierton, 1996 pg. 818), constructs used to empirically test learner's styles categories (Curry, 1983, Freedman & Stumpf, 1980, 1981), a valid and reliable test of student learning (Geiger, M.A., Boyle, E.J., & Pinto, J., 1992), or simply a shared language to ease discussion (Sadler-Smith, 2001, Riding & Sadler-Smith, 1992, 1998). Some terms in both theories are used interchangeably, such as learning styles, learning modes, and/or learning cycles. The proliferation of meanings has led to confusion. Another psychological theory often cited is Cognitive Style, which takes into account individual preferences in learning. These preferences are present at birth or fixed early in life (Riding & Rayner, 1998).

Biological learning theory

Using biological methods to explore learning is newer, but very promising. It is less confusing than psychological theories because neurological tools such as EEGs allow us to see what is happening in the brain as learning takes place (Immordino-Yang, Christodoulou & Singh, 2012). These biological methods do not replace, but complement and augment the psychological theories, because the biological theories are used to explain what is actually going on in the learner's brain (Hirsh-Pasek & Bruer, 2007). Rather than argue theories or syntax, this paper will present a practical framework (5 S) that can be used in several disciplines and across several types of pedagogy. We use both psychological (Kolb's Learning Theory) and biological theory (Co-Constructed Developmental Teaching Theory) (Schenk & Cruikshank, 2014) to show the strength of the 5 S approach.

Kolb's cycle of learning

Kolb's Cycle of Learning (KCL) (1984) supports the importance and impact of experience in learning. The cycle can begin at any point. Kolb's Learning Cycle includes concrete experience – a particular action is carried out. The learner then reflects on the experience (reflection observation), draws conclusions (abstract conceptualization) and finally enters a phase of active experimentation where ideas and conclusions are tested. For example, a programmer

learns the concepts of computer language syntax and procedure in the classroom, which is abstract conceptualization. The concepts are put into active experimentation by the student's trying to code a program and debugging their code. Eventually, the learner has a working program, and the concrete experience of watching it run and execute commands. Afterwards, the student reflects on the usefulness and purpose of the output (reflective observation), and the cycle begins again.

Kolb updated his description of his model in 2005, where he departed from the idea of stages, and used the word "modes" in describing experiential learning as "a process of constructing knowledge that involves creative tension among the four learning modes that are responsive to contextual demands. This process is portrayed as an idealized learning cycle or spiral where the learner "touches all bases" in the learning spaces – experiencing, reflecting, thinking, and acting – in a recursive process that is responsive to the learning situation and what is being learned. (Kolb, D.A. & Kolb, A.Y., 2005 p. 194)."

This paper uses Kolb's Cycle of Learning to categorize activities that meet specific conditions (which comprise the '5 S' framework) for experiential team learning and development. By integrating the 5 S framework of effective team assignments an instructor will take teams through all four stages of Kolb's learning cycle, and consistently produce assignments that motivate the team and provide the opportunity to learn in group settings.

Co-constructed developmental teaching theory (CDTT)

Based on neuropsychology, cognitive neuroscience and brain imaging, the Co-Constructed Developmental Teaching Theory (CDTT) supports some elements of Kolb's cycle such as novelty, active learning, holistic learning, and emotional connection (Immordino-Yang, 2011, Immodino-Yang & Damasio, A., 2007), while showing no evidence to support other theories such as learning styles (Pashler, McDaniel & Rohrer, 2008). The CDTT uses biology to reconstruct theories of experiential learning. Hypotheses surrounding the validity of CDTT's learning activities can now be tested. CDTT, like Kolb, is cyclical in nature. Each learning experience includes Framing, Activity, Direct Debriefing, Bridge Building, and Assimilation. Pauses are built in between Direct Debriefing and Bridge Building, and between Bridge Building and Assimilation to allow a student's brain some time for absorbing and applying the learning (Immordino-Yang, Christodoulou, & Singh, 2012).

Figure 1: Co-Constructed Developmental Teaching Theory
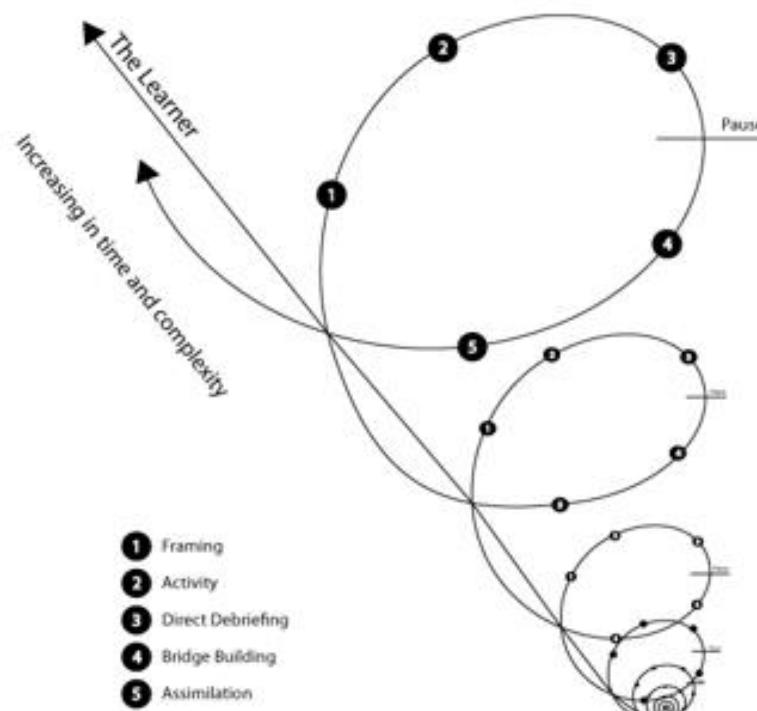
1. Framing: An explicit goal in mind that takes into account environment, history, student motivation and emotional stress aspects of the activity.
2. Activity: Experiential Learning (EL) activity is clearly aligned with the teacher's learning goals.
3. Direct Debriefing: Critical reflection focuses on what the student takes away from the activity. "Pause"
4. Bridge Building: brains will automatically look for patterns. To achieve the desired learning goals, these patterns need to be guided. IE: what did you learn? What is the link between your experience and the learning goals? "Pause"
5. Assimilation: Practicing the skills learned through the EL activity. Reflection questions include: what will you do differently next time you are in a similar situation? What did you discover about yourself?

THE 5 S FRAMEWORK OF TEAM ASSIGNMENTS

Michaelsen et. al (2004) created the 3 S framework of creating effective group assignments as part of the Team-Based Learning pedagogy method (pg. 51). The fourth S was added when team-based learning (TBL) rapidly expanded in medical education – partly because student buy-in occurred so readily when the significance of what they were learning was so obvious. The level of student learning was much greater when the decisions students were making were directly tied to specific patient outcomes as opposed to theoretical questions. (Michaelsen, Parmalee, Levine & McMahon , 2008). Since then it has been expanded to the 5 S framework. Further evidence on the effectiveness of TBL can be found in Haidet, Kubitz and McCormack's (2014), review of 130 articles on Team-Based Learning from 1996 to 2014. They found that TBL pedagogy demonstrated positive educational outcomes such as knowledge acquisition, participation, engagement and team performance. As a subset of TBL, and as the guiding way to create TBL assignments, similar outcomes can be expected from appropriately designed 5 S assignments. Although the impact of 5 S assignments is diminished when taken out of the TBL context, the framework can still improve assignment design and impact.

No matter the type of content being taught (marketing, financial analysis and planning, strategy, etc.) the 5 S framework can be used to create assignments that consider both psychological and biological learning factors. The 5 S framework creates accountability, enhances motivation and fosters discussion, and, in combination, constitutes guidelines for creating and implementing effective assignments. These are: 1) assignments should always be designed around a problem that is **significant** to students, 2) all of the students in the class should be working on the **same problem**, 3) students should be required to use course concepts to make one or more **specific choices**, 4) groups should **simultaneously** report their choices, 5) the topic must be personally **salient** to each student on the team. The 5 S framework is explained in the following paragraphs, with explanation of how it fulfills requirements from Kolb's cycle of learning and from co-constructive developmental Teaching Theory. Table 1 shows how the 5 S framework touches on each element of the two theories.

Significant problem

Effective assignments must capture students' interest. Unless assignments are built around what students see as an interesting and/or relevant problem, most students will view what they are being asked to do as "busy work" and will put forth the minimum effort required to get a satisfactory grade (C) (Lamborn, Newmann, & Wehlage, 1992). Integrating Kolb's cycle and CDTT with the 5 S framework, the relevant "concrete experience" mode (Kolb) and "framing" stage (CDTT) aligns with each team member embracing the group experience as a significant problem worthy of personal effort, one that will create a true, concrete experience and benefit in the form of a decision or action. Framing the group problem as relevant to each student's future career enhances individual learning from the group experience and increases the potential of individual contribution to the group effort.

Table 1: 5 S Framework Fulfills Learning Theory Needs

5 S Assignment Design Element	Significant Problem	Same problem	Specific Choice	Simultaneous Report	Salient Practice
Psychological Learning theory re: Kolb's Learning Cycle	Concrete experience	Abstract Conceptual-ization	Active Experiment-ation	Reflective Observation	Concrete Experience
Biological Learning theory re: CDTT	Framing	Framing	Activity	Direct Debriefing Bridge Building	Assimilation

Co-Constructed Developmental Teaching Theory (CDTT)

Framing: An explicit goal in mind that takes into account environment, history, and emotional stress aspects of the activity.

Activity: Experiential Learning activity is clearly aligned with the teacher's learning goals.

Direct Debriefing: Critical reflection focuses on what the student takes away from the activity.

"Pause"

Bridge Building: brains will automatically look for patterns. To achieve the desired learning goals, these patterns need to be guided. IE: What did you learn? What is the link between your experience and the learning goals? "Pause"

"Pause"

Assimilation: Practicing the skills learned through the EL activity. Reflection questions include: What will you do differently next time you are in a similar situation? What did you discover about yourself?

Kolb's Learning cycle

concrete experience – a particular action is carried out

reflection observation - learner then reflects on the experience

abstract conceptualization - learner draws conclusions

active experimentation - ideas and conclusions are tested

Same Problem.

One of the essential characteristics of an effective group assignment is the necessity for discussion both within and between groups (Michaelsen, et al. 2004, p 82; Shaw, 1971). It is through such discussions that students receive immediate feedback regarding the quality of their own thinking both as individuals and teams. To facilitate such an exchange, groups must have a common frame of reference. That commonality is derived from working on the same problem. Unless everyone is working on the same problem there is no basis for comparison, first between group members, and then between groups. Further, having everyone work on the same problem provides a basis for students to learn from both giving feedback on their peers' choices and receiving peer feedback on their own thinking. Kolb's "abstract conceptualization" mode and CDTT's "Framing" stage applies. The only way students can draw conclusions from their own and others' decisions (Kolb abstract conceptualization) is if the instructor frames the assignment so all students are working on the same problem (CDTT Framing). As a result, the groups/individuals engage in discussion, feedback and adjustment. They prepare and think deeply, knowing that their methods of arriving at conclusions will be examined and dissected by other, dissenting groups. Often groups consider several options, choosing between best and second best in a series of active decisions.

Specific Choice

As previously discussed, research on cognitive style shows that learning is greatly enhanced when students are required to engage in higher level thinking. Athanassiou, McNett, and Harvey (2003) discovered that although problems with integration and complexity are central to college and university content, most students have not mastered the higher-level learning skills to tackle them. Even after students completed some college core classes and major core classes, they did not put higher level thinking, such as synthesis and evaluation (from Bloom's taxonomy) to use. The ability to think tends to be course or discipline specific, and not readily transferred. To challenge students to process information at higher levels of cognitive complexity, we must provide them with assignments that create those challenges.

In general, the best method to accomplish this goal is to word the assignment in such a way that students are required to use course concepts to make a specific choice as they "make sense" out of a complex problem situation—in much the same way as a criminal jury must sift through a large set of issues to come to a verdict of guilty or not guilty. Kolb described this as the "active experimentation" stage of learning. Teams and individuals actively experiment by taking course concepts and theories, and making specific models and decisions. This also incorporates CDTT's "Activity" stage. The experiential activity is forced to align to a teacher's goals when the teacher chooses the range of choices from which students must choose. We will provide both several examples of "make-a-specific-choice" assignments and a rationale as to why they work so well in promoting both student learning, and also development as a team player.

Simultaneous Reports

Once groups have made their choices, they can share the result of their thinking with the rest of the class in one of two ways: sequentially or simultaneously. One significant disadvantage of sequential reporting is that the initial response—even if incorrect—often produces "answer drift" (Sweet, Michaelsen & Wright, 2009) because later-reporting teams tend to slant their presentation to emphasize areas of agreement with information that is already on the table. When this happens, the entire burden for providing feedback falls on the shoulders of the teacher and students lose the opportunity to learn from both challenging and from being challenged by their peers.

On the other hand, requiring groups to simultaneously reveal their answers virtually eliminates answer drift. Requiring teams to make simultaneous public commitment to a specific choice increases both learning and team development because each team is: 1) accountable for their choice, 2) motivated to defend their position and, 3) the more difficult the problem, the greater the potential for disagreements that are likely to prompt give-and-take discussion between the groups. For example, in a recent study using clickers for simultaneous report after group discussion, there was a significant increase in correct answers and student gains in conceptual understanding (Smith, Wood, Adams, Wieman, Knight, Guild, & Su, 2009).

Deep discussion allows all students to simultaneously touch on the "reflective observation" mode of Kolb's cycle. Students are forced to commit to a decision, but also must reflect on the "how and why" of their decision, and the differences between their decision and others. In the same way, students' critical reflection matches the Direct Debriefing stage of CDTT. In this stage, the instructor guides the discussion relative to the original problem, asking teams of students to discuss their reasoning. At the same time, students look among the decisions simultaneously reported and look for connections and gaps in the patterns of the decisions made. This comprises CDTT's "Bridge Building" phase, where students adopt new attitudes and perspectives which can be applied to other current situations or to future problems.

Salient Practice

Salient Practice was added to the assignment design model recently. When salience, or personal meaningfulness, is part of the instructional process, the student pays especially close attention. A student, as a result of past experience or expectations of future experiences, will give importance to salient information. The brain has limited capacity, or working memory, to attend to current matters. Salience is operative when the learner's brain has determined that current information is personally relevant (Baddeley, 2003). The human brain has evolved processes to make this determination, based on the myriad possibilities available for attention at any given moment. When salience is present, so is motivation, and learning is more likely to take place. Salience alone is not enough; all elements of the 5 S framework are necessary for optimum learning to occur, but in the same fashion that salt added to food enhances

the flavor and the desire to consume, so does salience add impetus to engagement in all of the modalities of the learning process. Establishing this as an additive to the learning process, to continue the culinary metaphor, increases the likelihood of deep learning. The student sees the relevance (salience) of the learning activity and embraces it. There is also evidence that salience, or meaningfulness, persists over time through other learning experiences (Bodoff, 2013), carrying learning forward.

Salience increases when the student realizes how the insight can be applied, which leads to Kolb's mode of concrete experience. The applicability comes when the instructor asks what action can be taken that promotes active experimentation in Kolb's Cycle of Learning. This can be promoted with questions such as "What might I do if confronted with this experience again?" "How did others handle the activity, and what do I learn when I compare their choices to my choice(s)?" These experimentations lead the student to relevant and meaningful, or salient, concrete experiences.

Designing spaces into the learning experience for priming and goal setting on the front end, as in CDDT's Framing, or Kolb's Concrete Experience (both in Figure 2), focuses the learner's mind on the important knowledge to be gained. Building in pauses at each part of the learning stages of CDDT allows the brain to discern the salience, or most meaningful points, of the new knowledge. The learner benefits from the focusing and pausing produced by these methods, to allow the brain time and to encourage attention, so that it may absorb the appropriate lessons (Kirschner et al., 2006).

EXAMPLES OF GROUP ASSIGNMENTS USING THE 5 S FRAMEWORK

The following group assignments are examples of how to use 5 simple 'check box' tools – the 5 S framework – to assure students experience all the psychological modes of Kolb's Learning Cycle and all the biological states of Co-Constructed Developmental Teaching Theory. The first experiential assignment, 'Product Choice' is for a real, hands-on student business startup used in a practicum course. The second assignment, 'capstone simulation' is a computer simulation game of real-world dynamics, used in a capstone business strategy course. Both exercises stimulate class discussion (reflective observation) and apply and test ideas via role-playing and model building (abstract conceptualization). The discussion, physical movement, and observable results provide the missing link of active experimentation to complete the Cycle of Learning (Peterson, K., DeCato, L., & Kolb, D.A., 2015).

Product Choice

In a practicum course taught using Team Based Learning (TBL), students are divided into groups of five to seven members and then four groups are combined to form a company. Same problem: Each group completes a feasibility study that includes profit margin, financial forecast, and Business Model Canvas to justify their choice of a product for their student company. To avoid the work being assigned out to a just a few students, each individual was required to bring descriptions of their own product ideas, with vendor information, and profit margins computed to the group discussion. All groups were given the same bare bones financial statement as well as instruction on how to calculate financial ratios.

This assignment is significant to the students because they actually do form a company and sell a product in the context of the Integrative Business Experience (IBE) program (Michaelsen & McCord, 2006). They acquire a real bank loan and must present their financial information to a loan officer while all students are present during the presentation. All students are working on the same problem simultaneously using class time. Specific choice: The Company selects the best product, given financial ratios and vendor stability, and presents an accurate financial statement for use in a presentation to a panel of bankers to persuade them to provide the needed capital. As the project, or business execution, unfolds, students experience how their decisions work out in a real business situation, and learn patterns and attitudes for approaching similar situations in the future (Salience).

Capstone Simulation

The Capstone game is a simulation of "real world" dynamics, where processes to achieve outcomes are not well defined at the beginning of the course. Students learn by interacting with a "model" of real-world business dynamics. This is enacted through the CAPSIM simulation, which students work with for six weeks. Student learning comes through the decisions they make, the process of doing a pro forma and then submission in a competitive market. Instructor acts as coach, asking Socratic questions to guide students to make better decisions.

Simulations are commonly divided into three categories—top management games, functional games, and concept simulations (Wolfe, 1993). The game chosen for this class, the Capstone simulation, sold by the CapSim Corporation, is a top management game, where student teams take the role of a top management team to make far-ranging business decisions. It was chosen from a host of alternatives for its capacity to produce three kinds of dynamics:

1. requiring students to make decisions with real consequences (business outcomes such as market share and net profits, all associated with classroom grades);
2. requiring students to learn and employ the mechanics of playing the game, including complex interactions among business variables such as pricing, market saturation, competition, designing to customer specifications, promotion, sales, marketing, and financing to support one's decisions; and
3. requiring students to experience the give and take of negotiation, compromise and collaboration required in a team decision-making setting.

In summary, the game is designed and deployed in such a way to produce demands, pressures, behaviors that are much like the conditions that students will encounter in the business world, post-graduation. This is consistent with the top two classroom learning objectives of simulations which have emerged over the last decade (Kriz, 2017), which are 1) to immerse students in an experience similar to what they will experience in the real post-education world, and 2) to require students to formulate and execute strategy.

The instructor's aim was to teach and coach students to be more resilient in the face of these demands, to push through ambiguity, conflict and the struggle to understand how to play the game in a competitive environment, to mastery of the behaviors, concepts and decisions required to run a successful business.

In using a business top management simulation as a proxy for real life business experience, each team works on the same problem or business opportunity, and actively experiments with making specific choices that are simultaneously compared to the other, competing teams as the game proceeds through a number of rounds. At the game progresses, students have opportunities to form salient conceptualizations as they see what did and did not work for their team, and how their significant individual inputs helped or hindered successful group choices. The instructor plays an active role in pointing to decisions that were made and what the outcomes were, and in guiding students' discovery of which assumptions guided those decisions, and how that played out. The salience of each outcome becomes apparent as the results are compared in real life business scenarios, similar to those that students will face in their careers.

Examples of Individual Assignments Using the 5 S Framework

In addition to group projects, the 5 S framework can be used to energize individual assignments or classroom discussions. For example, instructors and students can become bored with lectures or Socratic delivery. Inserting a 5 S activity to reinforce the material can bring energy and enthusiasm to a topic that might otherwise not be very exciting. The following examples show how to use the 5 S framework in this context.

Role Play Assignment

Significant: The students are creating a company that actually sells products as part of the course. By understanding the difference between primary and secondary activities, they are equipped to divide labor within their groups to best serve the needs of the company and customers. Same problem: One example is applying Porter's Value Chain (Porter, 1998) in a way that is fun and engages the students. The class is told to imagine they are a company specializing in t-shirt sales. Each student is given a job that is found in the company such as salesperson, president, webmaster, warehouse worker, accountant, etc. Each job is printed on a different sheet of paper in large enough type to be seen by all students in the class. The papers are distributed to students. Specific choice: Each student is instructed to decide if their job involves primary or secondary activities according to Porter's model. Simultaneous report: After a few minutes of discussion, students with jobs that they decided to classify as primary are instructed to stand. All students look at what other students classified as primary and compare it to their own classification decision. The class then discusses why some jobs are primary and others are not. Salience: The student then use this knowledge to form an organizational chart of their company.

General Questions

Another example of using the 5 S framework in class is to engage individual students or teams in a Socratic teaching method. Many times, an instructor will ask a guiding question of the class, to be met with silence, or to be answered by the same two or three students that answer the majority of the time. When this happens, the instructor can change the guiding question that was directed to individuals into a 5 S decision exercise. Significant: Students are told they have a certain amount of time to make the decision and must report when the instructor calls time. To motivate discussion, a clock timer counting down to zero is displayed overhead. Same problem: All groups will be answering the same guiding question. Specific choice: The instructor provides three to five possible solutions and numbers them 1-5. When the timer hits zero, each individual or group must have chosen one, and only one, of the options given. The instructor quickly creates a PowerPoint or whiteboard tabulation of the different choices provided by the students. Simultaneous report: To display group choices, the groups must hold up one paper indicating the number of the solution they have selected. If used for an individual assignment, they can also hold up fingers showing their numerical choice, etc. If groups are not unanimous in choosing a solution, the groups defend their selection. Salience: Now, the discussion is energized and students will begin to explore more complex solutions, suggesting other solutions than the ones given by the instructor.

CONCLUSION

Experiential activities and teams have become an important part of business education, but their use, especially with team assignments, is not always positive for either the instructor or the students. By using the 5 S framework, instructors have a clear and practical framework for creating assignments that incorporate both Kolb's modified learning cycle and CDTT. Instructors can use the 5 S framework to deepen students' learning and promote the development of high-performance learning teams. This method also serves to provide students opportunity to learn patterns and concepts that can be applied in the future. In addition, these types of application-based assignments increase student motivation and create the opportunity to acquire learning that can be carried forward into their careers. With properly designed assignments, the final result is increased learning and retention (Roberson and Reimers, 2011), as evidenced by greater proficiency in "analytical reading, critical reflection and analytical-argumentative writing" (pg. 129). This method will also produce higher satisfaction for students and a much greater sense of accomplishment for instructors (Watson et al., 2018) .

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Teaching Leadership Through Philanthropy:
The Experience of an MBA Course

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ABSTRACT

Many MBA programs offer one or more courses focused on leadership. In these courses, professors draw upon a variety of resources to teach leadership concepts. These resources range from the theoretical and empirical research to case studies to popular movies. This paper details an innovative experiential exercise based on philanthropy to develop MBA students' understanding of leadership. Importantly, the philanthropy project allows students to research, collaborate, resolve conflicts, and make decisions in an environment with actual consequences. Specifically, students allocate actual funds to a nonprofit organization. This paper describes the philanthropy exercise and student reflections on the project as a tool for teaching leadership.

Keywords: Case Method, Decision-Making, Leadership, MBA, Teamwork, Philanthropy

INTRODUCTION

Professors in MBA programs utilize a number of instructional tools and techniques to teach courses focused on leadership. Some leadership courses emphasize the theoretical and empirical literature. Many use case studies. Indeed, the case collection from Harvard Business Publishing contains more than 1,800 cases on leadership. In addition, publishers from Virginia's Darden School of Business, INSEAD, the Stanford Graduate School of Business, and others offer a plethora of cases on the subject. Topics for leadership cases range from the historic, such as Ernest Shackleton's 1914 Antarctic expedition (Koehn et. al, 2003), to the current, such as Mark Zuckerberg's challenges with fake news (Wells & Winkler, 2017).

In a variation on the traditional case method, some professors utilize contemporary media to prompt discussions on leadership. For example, popular movies are frequently utilized in leadership courses. Studies confirm that feature films covering relevant leadership content—including teamwork, problem solving and other management concepts—result in richer class discussions (Smith, 2009).

Both traditional and media-based case studies require students to project themselves into specific situations, analyze the leadership skills exhibited in those situations, and consider different courses of action. What those methods do not do is allow students to make actual decisions with actual consequences.

This paper describes an innovative instructional technique—an experiential exercise based on philanthropy—that develops MBA students' understanding of leadership. The philanthropy exercise requires students to research, collaborate, resolve conflicts, and make decisions that have actual consequences. Teams of MBA students practice leadership skills by researching a large list of nonprofit organizations and ultimately narrowing the list to one organization that will receive $1,000 in funding. The philanthropy project is a real-world experience offered within the framework of a leadership course. The exercise provides opportunities for students to reflect on the theoretical and empirical literature used throughout the course while engaged in an experience with real consequences. The details of the philanthropy exercise and student responses to the project are described in the following sections.

LEADERSHIP AND PHILANTHROPY PROJECT

Prelude to the Philanthropy Project

Designed and taught by the author, the leadership course described in this paper is an elective course in an MBA program at a state university. Based on entrance requirements, all of the students in the MBA program have relevant work experience, and the vast majority of students are currently working professionals. Approximately a quarter of the students enrolled in the MBA program choose to take the elective course in leadership.

During the first week of the course, students complete a leadership assessment that evaluates their propensity to use one of six leadership styles: directive, visionary, affiliative, participative, pacesetting, and coaching (*Leadership Styles Workbook*, 2017). The students also read a research paper examining the relative effectiveness of each of the six leadership styles in different situations (Goleman, 2000). Importantly, each student determines an aspect of his or her own leadership style to focus on during the remainder of the course. The readings used for the remainder of the course are reviewed. At the conclusion of the first week, the details of the philanthropy project are presented to the students.

An Overview of the Philanthropy Project

Students form teams of three or four people. The task of each team is to direct $1,000 in funding to a single nonprofit organization. Private donations fund the exercise. The university development office has been able to fund the project on an ongoing basis. Donors are attracted to the project because their donations have a double impact. Donations provide MBA students with a meaningful learning experience; and, at the same time, the donations benefit the nonprofit organizations that receive funding through the exercise.

Each team must evaluate a list of nonprofit organizations with the final goal of funding one nonprofit organization that will make the greatest positive impact on the community. The definition of positive impact is intentionally vague because part of the leadership exercise teaches students how to deal with ambiguity. Indeed, one of the primary tasks for each team is to determine how to measure positive impact. In making their evaluations, teams are free to use any mix of qualitative and quantitative criteria.

Because the field of nonprofit organizations is large and varied, students are directed to limit the scope of their focus to nonprofit organizations working to alleviate poverty. The alleviation of poverty must be at the core of the nonprofit's mission; poverty cannot be an ancillary concern. In addition, the students must select a nonprofit that has a presence in the community surrounding the university. The focus on poverty is not central to the crux of the philanthropy project. It is simply a device to narrow the universe of nonprofit organizations. The set of possible nonprofits could just as well be limited to organizations focused on the environment, public health, or any number of other areas. However, limiting the set of nonprofits to a reasonable number of somewhat homogenous organizations allows students to move to the core of the exercise more quickly.

Teams must examine a minimum of 16 organizations. The initial screening process relies on secondary information, typically information provided on the organization's website. As the screening process advances, teams must gather primary information. They are required to make site visits to, and interview the administrators of, at least three nonprofit organizations. While students are not specifically required to volunteer at any of the nonprofits, many choose to do so. Ultimately, each team selects one nonprofit organization to receive $1,000 in funding.

To complete the project, teams must grapple with a variety of decisions. What will be the criteria used to evaluate the organizations? What specific information will be gathered to assess the organizations? How are responsibilities for the various tasks assigned? Is one individual responsible for a specific task, or is responsibility shared among team members? What timeline will the team establish for completing tasks?

To answer these questions, teams must tackle a number of leadership issues. Will the team attempt to reach consensus? Will the team rely on a democratic process to make decisions? Will the team have a primary leader? If so, how will the team select the leader?

The Relevance of the Philanthropy Project for Leadership Education

Several factors make the philanthropy project especially relevant for leadership education. The philanthropy project is an experiential exercise that provides a real-world experience with actual consequences. The decisions the student make produce tangible results. This real-world experience is especially valued by students who are working in the business world.

Moreover, corporate philanthropy has become an important element in the strategies of many companies. Drucker made the case that corporate philanthropy was consist with corporate self-interest (1989). Survey research has found that the majority of corporations engaged in philanthropy indicate that their philanthropy efforts are a component of corporate strategy (Marx, 1999). Sullivan notes that corporate philanthropy has become an important tool for

building brand image (2017). Yet, self-interest is not the only motivation for corporate philanthropy. Porter writes, "Indeed, we are learning the most effective way of addressing many of the world's pressing problems is often to mobilize the corporate sector in ways that benefit both societies and companies" (2002). Thus, corporations are increasingly concerned with philanthropy because they have an authentic desire to better society, and involvement in charity and philanthropy can enhance corporate profits.

For these reasons, the project has direct relevance for the students in their current jobs. Most of the students enrolled in the MBA program work for organizations that value community service and expect their executives to be involved in the community. Many of these corporations have formal philanthropy programs. Conversely, a number of students in the MBA program currently work for nonprofit organizations. The philanthropy project gives these students an opportunity to study other nonprofits, and to see how their classmates view the world of nonprofits.

Deliverables and Objectives

Throughout the project, students draw from the readings used throughout the course. Two deliverables are presented at the conclusion of the exercise. First, each team makes a presentation detailing the team members' experience with the project and announcing the team's final decision. Second, each student writes a reflective essay describing how the project enhanced his or her understanding of leadership theories and influenced his or her leadership style. After the team presentations are completed, students submit their reflective essays.

The Team Presentation

During the team presentations, students describe the process used to arrive at their final decision. The interactions of the team members and the interplay of different leadership styles are discussed. The presentations allow an assessment of whether the team practiced sufficient due diligence to evaluate the different non-profit organizations the team considered. At the conclusion of the presentation, each team's final decision is announced.

A secondary purpose for the team presentation is to allow the students' work on the philanthropy project to be shared with a broader audience. At various times, the university president, provost, donors and representatives from the non-profit community have attended the presentations.

Appendix A provides the guidelines for the class presentation.

The Reflective Essay

While the class presentation is descriptive, the reflective essay asks students to deeply consider what they learned through the philanthropy project. The reflective essay is based upon a model for guided reflection and assessment (Ash and Clayton, 2004). The model is designed to move students beyond shallow interpretations of complex issues and to guide students toward a meaningful demonstration of learning. The model is especially well suited for experiential exercises. Research has demonstrated that a student's reflection on an experiential exercise produces more meaningful learning outcomes (Eyler and Giles, 1999).

Students are asked to reflect upon four different questions regarding the ways the philanthropy project could have contributed to their learning.

Did the philanthropy project enhance your understanding of leadership concepts and theories?

Did the philanthropy project enhance your own leadership skills and capabilities?

Did the philanthropy project change your prior assumptions about leadership, the community or philanthropy?

Based upon the philanthropy project, are you likely to do anything differently in the future?

The questions are connected, but answering one question does not necessarily require dealing with any other specific question. At the same time, addressing multiple questions produces a richer reflection and greater documentation of student learning. An analysis of text contained in the student essays over the four-year period in which the

philanthropy project has been used reveals that the philanthropy project contributes to student learning in a variety of ways.

A preponderance of students, 95 percent, address at least one of the four questions in their reflections. The small number of students who do not reflect upon at least one of the questions, write descriptive essays rather than reflective essays; they discuss what they did rather than what they learned.

In the student reflections the most frequently addressed question is whether the exercise enhanced their understanding of the leadership concepts and theories covered throughout the course; 83 percent of students discuss how the project deepened their understanding of class readings and the leadership theories discussed in class. A majority of students also address the other questions with 69 percent reflecting upon their own leadership style, 73 percent reflecting upon how the project changed their prior assumptions, and 75 percent indicating that they will take actions to change future behaviors.

The content of the essays was also analyzed to determine the context in which leadership was used. The text of the each essay was reviewed to find the number of times the terms lead or leadership appeared in the essay. Then, the context in which the terms were used was noted. In the vast majority of cases, the term leadership was used when students reflected upon their own leadership behaviors or the leadership behaviors of others engaged in the project.

The analysis of the reflective essays demonstrates that the philanthropy project deepens students' understanding of leadership theories and concepts. Students have an opportunity to reflect upon readings and classroom discussion in a real-world situation. By doing so, students conceptualize leadership theories within the context of their own performance and the behaviors of others. Further, students consider how their learning will influence their future actions and thinking.

The specific guidelines for the reflective essay are provided in Appendix B.

Examples From Student Reflections

Feedback from students indicates that the students benefit from being able to apply leadership skills in a setting where their decisions have actual consequences. Brief excerpts from four students' reflective essays are provided below. These four excerpted comments illustrate the four different areas of reflection, specifically reflections on: leadership theories, the student's own leadership style, changes in prior attitudes and values, and future actions.

> Student 1: When I first read the syllabus with the outline of the philanthropy project, I assumed it would be a theoretical exercise or case study. I was surprised and nervous to find I was actually going to be tasked with finding a deserving charity to award a donation. It is rare to have real-world consequences associated with your performance on a school project, and it made me take the project very seriously. As I was reflecting back on the experience and asking myself what I have learned, the concept of "Sense Making" came to mind (Ancona et.al, 2007). I had to rely on data from a variety of sources to get the best information I could to make my decision. I also involved others by using my circle of friends and family to gather information and get different perspectives. You do not get always get the perfect amount of data and time to make a decision in a real situation.

> Student 2: At the beginning of class when we scored ourselves in the leadership style workbook, I scored high on the authoritative leadership and democratic leadership styles (Goleman, 2000). This project helped me enhance these already existing leadership skills. This project also helped me acquire new leadership skills such as becoming a more authentic leader (George, 2007). I felt the project was able to help me reflect on leadership skills and creative thinking to achieve goals. By understanding how to effectively observe and use the leadership skills we learned in class for this project, I will be able to better use those skills for future projects. This experience has helped influence my future professional development goals and objectives by helping me recognize my leadership skills and how different leadership skills in others and organizations can influence the community.

Student 3: When starting the philanthropy project, I assumed that the work with the nonprofit organizations would be the most impactful and time-intensive part of the project as a whole. It did not take long for me to realize that the philanthropy project was more than working with nonprofits; it is also about working with others in our class. Both of the classmates that were on my team are very smart and talented, and they both had things that they wanted out of the project, as I did. I learned that the most difficult part of this project would be to satisfy the goals of everyone on the team while meeting the requirements of the project itself.

Student 4: As for how I will use this experience in my professional life going forward, I plan to reach out to the HR department at my work to discuss our monthly denim day. Our dress policy is business dress Monday through Thursday and business casual on Friday. Once a month on Friday, we can wear jeans to work if we donate $5 to the charity of the month. My desire in talking to our HR department is to get them to diversify the list of charities chosen to receive the donation. They typically have the same charities every year. This project has opened my eyes to the vast needs in our communities. I think it would help to form a committee from the various departments that could propose worthwhile charities for our denim day. I also want to help my wife get more involved. As I explained the project to her, she has become excited to participate in any way that she could. I want to help her have the time to reach out to charities that she wants to help. I think it is impossible to really be involved in a project like this and not be changed as a person. I think it was an amazing project and hope it continues in the future.

CONCLUSION

This paper presented the experience of using an innovative exercise titled the philanthropy project to teach leadership to MBA students. The project is unique because it allows students to make decisions in a real-world environment where choices have actual consequences. Further, because an increasing number of corporations have formal philanthropy programs, the exercise has direct relevance for working MBA students.

The experience of using the philanthropy exercise over several years indicates that it is a powerful tool for enhancing students' understanding of leadership. An analysis of student essays over four years indicates the philanthropy project provides an experiential exercise that causes students to deepen their understanding of the leadership theories discussed in class. The project also provides an opportunity to for students to practice and reflect upon their own leadership skills.

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Appendix A: Guidelines for the Team Presentation to the Class

Your presentation should address the following issues and questions. For the most part, the class presentation will be descriptive.
1) Describe the project.
2) What initial group of nonprofit organizations did you select? How was the selection made?
3) What criteria did you use to narrow the initial group of organizations to a smaller set of organizations? Which organizations were selected for site visits?
4) Describe both the process and criteria used to screen the smaller list of organizations and make the final selection.
5) Teams were directed to allocate the funds to create the greatest benefit for the community. To what extent did your criteria focus on depth (greatest good) versus breadth (most people)? To what extent did your criteria attempt to measure the lasting effect of the allocation?
6) How were the organizations reviewed? What was the process for due diligence?
7) In the process of screening the organizations, what did you learn about the nonprofit organizations you reviewed?
8) Each member of the team should provide a brief statement of what was learned from the project. (This is a very brief overview of the individual's reflective essay.)
9) Based on the team's experiences with the project, do you recommend any changes for future projects?

Appendix B: Guidelines for the Individual Reflective Essay

Reflect on the Knowledge Gained or Enhanced Through the Philanthropy Project
1) What leadership concepts and theories covered in the course were clarified during the philanthropy project?
2) Were any concepts or theories especially useful? Were any readings especially useful?
3) During the project, you likely observed people in nonprofit organizations acting in some type of leadership role. Could these people benefit from any of the concepts or theories covered in the course?
4) How did the experience differ from your initial expectations? (It may be helpful to note your expectations at the start of the course.)

Reflect On Leadership Skills Used, Gained, or Enhanced Through the Philanthropy Project
1) What leadership skills did you bring to the team to help accomplish the goals of the project?
2) How did your skills contribute to the various skills of the members of the team?
3) Did you acquire new or enhance existing leadership skills?
4) Was this an easy or challenging project?

Reflect On Attitudes and Values Related to the Philanthropy Project
1) What prior assumptions regarding leadership did you bring to the project?
2) Did any of your prior assumptions change?
3) What effects, either positive or negative, did you have on other members of the team?
4) Do you feel like you changed, or will change, in any meaningful way because of the project?

Reflect On Future Action Resulting from the Philanthropy Project
1) Did the experience have any influence on your future professional developments, goals, and objectives?
2) Because of the experience, are you more, or less, likely to engage in activities relating to philanthropy and/or nonprofit organizations?
3) Based on your personal experiences with the project, do you recommend any changes in the project?

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Building a Professional Development Conference for Students and By Students

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ABSTRACT

Despite the growing economy, students remain skeptical about their career preparation. To better prepare students for the future, a professional development conference was created with the intention of exposing students to career paths and skills not explored within the curriculum. GEAR, Grizzlies Engaged, Active, and Ready, was planned by selected students and attracted more than 140 participants in its inaugural year. This paper describes the process of directing a student planned conference with particular focus on the division of responsibilities across student subcommittees. Next, the topics, speakers, and alumni panel are discussed. Participants' feedback is then summarized. Finally, the authors discuss key areas in which the conference could be improved should others choose to implement the process, specifically (1) greater campus collaboration, (2) improved faculty oversight of student planning committee, (3) enhanced communication between student subcommittees, and (4) clearer establishment of roles and responsibilities.

Keywords: Professional Development, Student Engagement, Student Conference, Career Readiness

INTRODUCTION

Not all students enter college with the same career competency and college readiness (Council for Aid to Education, 2018). Even after completing coursework, students may not feel ready to make the transition from college to career. In the Strada-Gallup 2017 College Student Survey, a representative sample of more than 30,000 students, just over half (53%) responded that their major will lead to a good job. Of those in business related majors, less than 40% strongly agreed with the assertion, "[I am] Confident I will graduate with knowledge necessary to be successful," in the job market and in the labor force (Strada-Gallup, 2017). A separate set of surveys conducted by the Association of American Colleges and Universities demonstrates that employers are even less satisfied about the degree to which colleges are preparing students for entry level jobs and future career advancement than students (Hart Research Associates, 2015; Selingo, 2015).

Recognizing that the status quo is insufficient, schools are developing innovative professional development programming (Klobes, 2018; Rodriguez and Fekula, 2017; Borden, 2015; Majeske and Serocki, 2009). One such example is GEAR, Grizzlies Engaged, Active, and Ready. This one day professional development conference designed by business students for their peers was developed by two business faculty members attempting to offer greater professional development opportunities to our students and improve student career competency.

The purpose of this paper is to describe our experiences working with students to build a professional development conference, including summaries of the conference surveys and lessons learned, thus enabling faculty at other institutions to build similar or better events. We begin this paper with a brief discussion of literature pertaining to career readiness. Then, we present information on our school and the GEAR program structure. We outline student involvement and division of responsibilities across various subcommittees. Next, we discuss the day of the conference, elaborating on the topics and speakers selected. Following the description of the conference, we evaluate the satisfaction of those in attendance using feedback from post-event surveys. Finally, we describe major lessons learned that will inform future iterations of the conference and finish with concluding remarks.

LITERATURE REVIEW

Professional development improves students' career readiness. It extends beyond technical training and includes a greater focus on networking, soft skills, and other career development tactics (Jamison, 2010; De Witt, 2018). Whether an individual is learning a new skill, refreshing an old one, contributing to the development of new ideas, or adding an official certification or degree to her resume, professional development represents an opportunity for

growth in a selected career. While still in college, professional development also entails career exploration, attending non-required career development workshops, participating in student organizations, and openness to new ideas (Blau et. al. 2015; Lapidus, Towell, & Hayes, 2015).

Career services can assist students' transition to their first professional job. Unfortunately, these career services are often under used, with almost 40% of students reporting no interaction and another 20% using services only once (Strada-Gallup, 2017). Of those that do go, less than half report the session as being very helpful (Strada-Gallup, 2017). That said, there is a bright spot. Black, Hispanic, and first generation college students generally found interactions with faculty and staff regarding career planning and advice more beneficial than other demographic groups (Strada-Gallup, 2018) - likely a reflection of receiving less information from external networks.

Faculty play an important role in assisting students with careers as well. For instance, some institutions are developing curricula for specialized classes that center on career exploration and readiness (Klobes, 2018; Rodriguez and Fekula, 2017; Borden, 2015; Majeske and Serocki, 2009). Other institutions are measuring the degree to which students are participating in activities outside of class to promote further learning or professional development engagement (Blau et. al., 2016; Bullen et. al., 2018). Finally, faculty and staff can hold deliberate conversations with students about career options. Students reporting at least one personal conversation about career options with faculty or staff expressed greater confidence in the road ahead (Strada-Gallup, 2017).

CAMPUS OVERVIEW AND GEAR STRUCTURE

At our institution, a 4-year public institution founded in 2007, student engagement is a hallmark. Each student is assigned a faculty mentor, with the intention of fostering conversations such as the ones referenced above. As of Fall 2017, just over 12,000 students were enrolled at Georgia Gwinnett College. One-third of these are part time students. Forty percent of our student body consists of freshman. The student body is diverse, with 32.6% identifying as Black / African American, 31.7% Caucasian, 20% Hispanic, and 11.1% Asian. Seventy percent of our students reside in our county, and more than 120 countries are represented on campus (*Georgia Gwinnett College Office of Institutional Research, 2018*). Many of our students are first-generation college students.

Graduates from Georgia Gwinnett College are entering the labor market with a disadvantage. Despite receiving a high-quality educational experience which has earned AACSB accreditation, our students are up against large, loyal alumni networks from other institutions in metropolitan Atlanta. Our students lack the networks that help many college graduates gain access to opportunities. To address this gap, we established GEAR, a professional development program for School of Business students.

GEAR Structure
Planning the GEAR conference was a yearlong event. During the Fall semester, we focused on building awareness of the GEAR program and recruiting students for a cross-disciplinary Student Planning Committee (SPC). During the Spring semester, we focused on conference planning. The structure of the GEAR program is elaborated on in this section.

Faculty Advisors
Although GEAR is largely student planned, two faculty advisors oversee the development of this conference. Their responsibilities include securing resources for the event, serving as advocates for the conference to faculty and administration, ensuring compliance with school rules, and designing a positive learning experience for participants.

Recruitment Coordinators
In the fall semester, two students were hired as part-time Recruitment Coordinators (RC) with the following duties:
1. Prepare recruitment materials for the GEAR student planning committee, including flyers, emails, application, and web site
2. Coordinate and lead informational sessions for students interested in serving on the planning committee
3. Conduct brief presentations about the program when invited to classrooms and other school events

Student Planning Committee (SPC)
The SPC was charged with planning, implementing, and assessing the GEAR Conference. SPC members were selected on a competitive basis after completing an online application and a 30-minute interview with the faculty

advisors. The goal was to create an SPC committee with members representing a variety of business concentrations, a cross section of class levels (sophomore, junior, and senior), and a gender and racial/ethnic diversity that matches that of our institution. Minimum eligibility included a GPA of at least 2.8 on a 4.0 scale, completion of at least 3 introductory level business courses, and 45 earned credit hours.

Fifteen students were selected for the SPC and were assigned to one of four subcommittees – Assessment, Marketing, Speakers, or Systems – each with a chair appointed by the faculty advisors. To ensure that participating students could dedicate the time required to make GEAR successful, SPC members were required to enroll in a 3 credit-hour special topics course led by the faculty advisors during the Spring semester. Class periods consisted of subcommittee meetings, group sessions, and lessons from external speakers. Each subcommittee prepared timelines and mid-term reports, and all students submitted individual reflection papers. Tasks for each subcommittee are provided in Table 1 below.

Table 1: Subcommittees and Responsibilities

Subcommittee	Key responsibilities
Assessment	Design post-conference survey to assess conference and session effectiveness Manage distribution of survey link and encourage survey participation Complete analysis of survey
Marketing	Design and implement marketing plan for GEAR including creating promotional flyers, designing program materials, and using social media Provide a short pitch to students in School of Business classes
Speakers	Identify and communicate with all guest speakers Select themes for breakout sessions Assemble the conference program and finalize the schedule
Systems	Establish a registration system that solicited students' preferences and attendance information Assemble registration packets for participants and lead conference day registration Prepare personalized schedules and name badges for registered participants

We were committed to keeping GEAR free for students while also incorporating select features typically associated with professional conferences. We solicited and received funding from several offices across our campus. Internal grant funding from the Provost's Office covered salaries for our student recruitment coordinators, professionally printed full-color programs, and supplies imprinted with the GEAR logo (i.e. scratch pads, pens, name badges, and padfolios). The Office of Student Involvement provided catering for student lunches during the conference while the School of Business Dean's Office paid for food for faculty, alumni, and guests. In addition, the School of Business provided thank you gifts for guest speakers and gift cards as an incentive for student survey participants. This level of funding distinguished GEAR as a unique professional development opportunity on campus.

CONFERENCE OVERVIEW

Held on a Friday in April, the GEAR Conference attracted over 120 students and faculty as a result of a well-planned and executed program. There were three breakout sessions, opening and closing plenary sessions, and an alumni panel during lunch. The professional ambiance was in and of itself part of the experience. We requested attendees wear business professional clothing, and many brought resumes to share with the presenters. Registration opened at 8:30 am, and students that pre-registered received pre-printed name badges, schedules, and a registration packet with a program, customized notepad and pen. The conference concluded at 3:15 pm.

We opened with a plenary session led by the Director of Education and Talent Development from the local Chamber of Commerce. After speaking about the leading skills employers desire based on a national survey, the presenter addressed issues pertaining to local economic development and the job market. He identified the county's targeted industries and highlighted the ways our college, only 11 years old, helps meet community needs.

The breakout sessions presented an opportunity for students to select topics or themes that were of particular interest. Our goals with these sessions included exposing students to concepts not taught in the traditional classroom environment with presentations by professionals from a variety of fields. Session topics were selected by the SPC based on discussions of what professional development topics interested students. There were four hour-long presentations offered concurrently during each of three sessions, with 2 sessions before lunch and one after.

The topics and speakers, both selected by the SPC, represent an impressive array of industries including real estate, marketing, the nonprofit sector, and hospitality management. Among the speakers was the current Vice President of Purchasing for a national organization of restaurateurs and former CEO of a state-level restaurant association. A second speaker works as a consultant in hotel asset management. Over her career, she closed more than $1 billion in transactions. Considering that our campus offers no courses in hospitality management, securing speakers of this caliber provided our students with valuable information regarding these industries and the associated career paths. The credentials of each speaker provided a greater level of validity to the event.

Some sessions focused on skills rather than career-specific knowledge. For example, a Senior Director from a major hotel corporation presented a one hour workshop on the usefulness of Tableau and data analytics. Another consultant introduced students to Scrum and Agile practices. Finally, an alumni whose family business generated more than $4 million in revenue to date discussed the basic processes and skills of becoming an entrepreneur.

All attendees were provided a lunch, during which a diverse panel of alumni discussed courses, internships, and post-graduate initiatives that led to their successful outcomes. Alumni represented concentrations such as International Business, Marketing, and Economics, to name a few. Current job titles for the alumni included Portfolio Management & Product Strategy Specialist at CNN, procurement analyst at UPS, Talent & Organizational Planning Change Consultant at Accenture, and software engineer at NCR. We ended the day with a closing plenary presented by the CEO of on online company that works with students and young adults to identify potential career paths, necessary skills, and training opportunities.

EVALUATION OF THE CONFERENCE

Throughout the conference, we requested that attendees fill out surveys at the conclusion of each breakout session and the end of the conference. The survey was conducted using Google Forms, and a link was created so that attendees could complete the survey through their phone. We received a total of 147 responses from 61 individuals. Multiple responses were possible if someone provided feedback for individual breakout sessions separately. Students were entered into a drawing for one of three Amazon gift cards for each survey completed. Attendees were overwhelmingly positive about the conference.

Guest Speaker and Faculty Analysis
Six guest speakers completed an evaluation of their experience. All of them indicated that they strongly agreed with the statement, "Overall, this conference was a positive experience, and I would consider returning in the future." On a scale of 1 to 5, with 5 being the highest, the average rating for student engagement in the breakout sessions was 4.75. When asked for additional comments, one of the guest speakers responded, "Well organized, students were professional and asked great questions." The reviews from the guest speakers, however, were not perfect. Of the six, one commented on unanswered questions that she had emailed to her student point of contact prior to the event. Another commented on attendance. These shortcomings are addressed further in our Lessons Learned Section.

Although there were 13 faculty, administrators, and employees of the College's Foundation in attendance, only two submitted evaluations through our link. Their responses were all positive. Several faculty members in attendance informally commented on the impressiveness of our endeavors and the Student Planning Committee's efforts.

Breakout Session Analysis
Approximately 30 percent of students submitted evaluations of the breakout sessions. The number of responses for each session along with ratings are provided in Table 2 below. Students were asked the extent to which they agreed with the following statements, with 1 being strongly disagree and 5 being strong agree:
- "The session provided knowledge beneficial to my future career plans."

- "The speaker was informative and engaging throughout the session,"
- "I would encourage other students interested in my field to attend this session as is."

Table 2: Student Evaluations of Breakout Sessions

Breakout Session	Number of Responses	Beneficial Knowledge	Informative & Engaging	Others should attend
A1: Hospitality Management - Restaurants	15	5	5	4.87
A2: Tableau	10	4.2	4.5	4.2
A3: Social Margarita - Marketing	9	5	5	5
A4: Start-Ups	6	4.83	5	5
B1: Social Margarita - Marketing	6	4.67	4.83	5
B2: Hospitality Management - Hotels	5	4.8	5	5
B3: Human Resources	22	4.64	5	4.77
B4: Agile, Scrum, & Lean	8	5	4.88	5
C1: Real Estate	5	4.8	4.8	4.8
C2: Entrepreneurship	15	4.93	5	4.93
C3: Rock, Paper, Scissors (Marketing)	6	4.67	5	5
C4: Non-Profit Management	3	4	3.67	3.67
Total	**110**	**4.75**	**4.89**	**4.81**

Students were overwhelmingly in support of both the topics and the speakers selected by the Student Planning Committee. With the exception of one topic, evaluations consistently averaged between 4 and 5. Modal responses indicate that students strongly agreed to all three statements, finding the sessions engaging and beneficial. Almost all students would encourage their peers to attend in the future.

When asked whether a session on a similar topic should be offered at a future conference, only 3 of the 110 respondents said no. Each No response was for a different session, and interestingly, two of the three no's still suggested that the speaker should be invited back in the future. Five of the responses suggested that we not invite back the current speaker, with 4 of the five still saying they approved of the topic for the following year.

When requesting feedback for the conference, we did not request information on the respondents' demographics, but as mentioned in the description of our campus, our student body is very diverse. Recall, too, that career advice and planning are reportedly more helpful to members of minority groups, specifically Blacks and Hispanics (Strada-Gallup, 2018). Given the diversity of our campus and those attending the conference, it is not surprising that the vast majority of sessions were rated favorably, and students reported obtaining pertinent information for their future.

General Conference Survey Analysis
General conference surveys were submitted by 25 students. Again, the reviews were generally positive. There were four evaluation questions administered on this survey. Students were asked the extent to which they agreed with the following statements, where 1 is strongly disagree and 5 is strongly agree. Only one of the 25 students expressed moderate disappointment rating the conference a 3 in two of the four dimensions. All other responses were fours or fives. Average responses are located in Table 3 immediately followed with students' feedback on the experience.

Table 3: Student Evaluations of the Conference

Statement	Average Response
Overall, this conference was a positive experience, and I would recommend that others attend in the future.	4.8
This conference better prepared me for a career after college through exposure to new ideas or industry-specific knowledge.	4.76
The conference was organized well and sessions were an appropriate length.	4.8
Plenary speakers were engaging and discussed topics of interest to me.	4.84

Table 4: Responses to Open-Ended Prompt

Theme	Comments
Positive Perceptions	"Loved the entire presentation, it was very seamless, and effective. It did not seem like the first one."
Expansion	"[Plenary Speaker] was awesome, and answered a lot of lingering questions that have been on my mind about careers, he should have his own breakout sessions and last longer. There should also be sessions on free training and where it is available. I need more training in Excel and would love to learn QuickBooks without having to pay for them" "I would look into having more topics and different career paths there." "Learning how to network, public speaking, international business" "Other Topics need to [be] researched and done at conference"
Location	"I would have liked all the events to be in one building. It's a pain to go between two locations." "To set the lectures and meeting in one building"
Miscellaneous	"Have copies of the guest speaker's presentation" "Later start time" "This conference was pretty fun. I missed the lunch session because of my class. I wish you guys serve [snacks] during the breakout session."

LESSONS LEARNED

While students in attendance reported an overwhelmingly positive experience, it was the Student Planning Committee that likely experienced the greatest growth in professional development. Depending on their committee assignment, members of the Student Planning Committee gained expertise in skills such as writing professional emails, designing survey questions, and demonstrating greater proficiency in programs such as Excel, Access, and Adobe Illustrator, all of which constitute sound professional development for college students (Blau et. al. 2015; Lapidus, Towell, & Hayes, 2015). From a program level, we contend that the GEAR Conference was a success, but as is always the case, there was room for improvement. We recommend planners of future conferences consider these four lessons learned to create an even more impactful event.

1) Partner with others across campus to enhance the success of the program.
Internal collaboration is necessary for a successful event. For example, faculty support was critical for driving student attendance; in fact, 60% of students listed a professor's name to receive bonus points. Since only 13 out of 49 faculty members offered extra credit for attendance, getting additional faculty buy-in would undoubtedly increase attendance. Additional options for internal collaboration include using outside departments and staff members. For instance, representatives from our Office of Human Resources served as breakout session presenters. Additional non-academic departments should be considered for career-track break-out sessions such as Departments of Budget and Planning or Purchasing. We also suggest incorporating an institution's Career Development or Advising Center,

inviting them to provide information about their services and upcoming events, conduct resume reviews or mock interviews on site, or make available professional attire from a Clothing Closest. Many students may lack awareness of services readily available on campus, and by better incorporating these institutional-level programs with our own, the benefits to students are even more likely to persist after the one-day event (Lau, 2003).

2) Carefully balance student ownership with faculty oversight.
A key principle for the GEAR Conference is that it be "by students and for students." To encourage student ownership, the GEAR faculty advisors initially gave the student subcommittees quite a bit of autonomy. We frequently adopted a model where the student subcommittees would create an initial draft for feedback, refinement, and approval before moving forward. For example, the Marketing Committee went through several rounds of comments before we signed off on the final GEAR logo. The Systems Committee drafted text for submitting to the school web site that was reviewed and edited before sent to the web master. However, there were a few instances where this did not always work, as illustrated by the following example with the Speakers Committee.

The Speakers Committee was given responsibility for communicating with potential speakers, assigning their workshop times, obtaining information about the session topic and title, and collecting presenter bios for the program. Early in the semester, the committee developed email scripts for inviting guests that were reviewed for sending to an approved list of potential speakers. However, when the students actually emailed the initial invitations, the faculty advisors were not cc'd, leaving advisors in the dark. Subsequently, we discovered that the students had ventured away from the pre-approved messaging and had, in some cases, sent emails with grammatical or spelling mistakes. This was particularly true when students were responding to reply emails from guest speakers. While not egregious, these communication issues did not represent our school in the best possible light.

From experiences such as these, we were reminded of the importance of consistent oversight. Faculty need not be included in all committee discussions, but should receive weekly updates summarizing progress and decisions reached by each assigned subcommittee along with a prioritized list of tasks to accomplish over the next couple of weeks. When more than one faculty member is overseeing the planning, it might be beneficial to specifically assign subcommittees to each participating faculty member. Establishing a cleaner chain of command along with specific instructions for subcommittee chairs might improve the flow of information between committees and faculty supervisors.

3) Improve internal communication across subcommittees.
Teamwork and collaboration are among the soft skills that the National Association of Colleges and Employers identifies as being most important. Although 85.1% of seniors rate themselves as proficient in teamwork, only 77% of employers agreed that students had the necessary skills (Bauer-Wolf, 2018). Our experiences with subcommittees failing to always work together when appropriate demonstrates why employers do not feel that students are as capable of teamwork as students perceive themselves to be.

The subcommittees generally worked well together on tasks with clearly defined responsibilities. For instance, in creating the final program, the Marketing Committee designed the front and back covers while the Speakers Committee provided information about the event timeline and speaker bios. However, when there were tasks that could fall within the purview of two subcommittees, there was sometimes duplication of effort due to insufficient communication. For example, during the process of designing the web site, the Systems Committee created a flyer for GEAR, not realizing that the Marketing Committee had been actively working on the same task. In another instance, the Marketing Committee extracted bios for speakers from LinkedIn accounts for our social media promotions instead of asking the Speakers Committee to provide this information.

From our experiences, both positive and negative, we learned the importance of communicating across the subcommittees. In the future, we need to ensure that the entire Student Planning Committee knows what each subcommittee is responsible for and that we encourage the subcommittees to work together. To that end, here are several ideas that we will consider for strengthening communication.
- Have subcommittee chairs or designees provide oral reports on a weekly basis to the class regarding their progress towards goals, activities they are working on, and information they need from other subcommittees in order to move forward.

- Conduct meetings of the subcommittee chairs on an ongoing basis.
- Discuss with students the need to develop the skillset of requesting information from others. Also, make responding to requests from other teams an important part of how students will be evaluated.
- Designate floating members. Individuals responsible for tasks on two separate committees without being the chair of either could still help each committee better understand the progress of another committee and improve the flow of information between the various subcommittees.
- Create tasks that are intended to foster interaction such as data analysis for an Annual Report as a joint effort between the Systems and Assessment Committees.

4) Establish student roles for day of conference early and manage expectations about what it would be like.
Most of the Student Planning Committee members had not attended professional conferences before and lacked insight into the many different roles required for that day. Many of the students developed their own ideas regarding their responsibilities for the event, but unfortunately, their expectations were not always in line with reality. For example, all members of the SPC committee were not able to attend their preferred breakout sessions. Some students would need to man the registration table or greet arriving guests in the parking lot. These positions were not coveted but necessary in ensuring the GEAR conference ran smoothly. In the week leading up to the conference, the faculty advisors took the lead in defining the following student roles:
- **Conference Director**: Organize the entire team, maintain time tables, maintain hospitality suite, and serve as liaison with faculty advisors
- **Registration Assistant**: Welcome attendees, ensure everyone is registered, perform sign-in duties, and hand out name tags and conference folders
- **Alumni Panel Moderator**: Ask initial questions of the participants in the alumni panel
- **Floaters**: Shepard speakers from hospitality suite to classrooms, greet speakers at the parking lot and walk them to the assigned location, assist with crowd control and directions, and other duties as assigned
- **Session Moderators:** Two students were assigned to each break-out session to focus on either:
  - *Logistics*: Ensure that feedback survey links are distributed at each breakout session, give speaker their gift bag at the end of the session, ensure time table is kept, and stay in contact with Conference Director.
  - *Operations*: Stand outside classrooms to direct people into the appropriate session, manage sign-in sheet, and introduce the speaker

Role assignments were made based upon our understanding of students' strengths as well as the knowledge they had gained through SPC membership. For instance, the student assigned as Conference Director had experience working as a retail manager, thrived in a fast-paced environment, and had excellent communication skills. We paired Session Moderators who had complementary skills – one who was more outgoing and familiar with the invited speakers and another who exhibited strengths in being more systematic and familiar with assessment. Most of the Registration Assistants had served on the Systems Committee.

When the role assignments were initially announced, the majority of students seemed fine but others verbally expressed disappointment. The session moderator roles seemed to be the least desirable by students who wanted to interact with a variety of speakers, listen to a different session, or would have preferred the floater role. In addition, there was some resistance to the student selected to be Conference Director. It became clear that some students did not differentiate between *working* at a conference to meet the team's needs versus *participating* in the conference to attend to their own needs.

To address these concerns, one of the faculty advisors spoke frankly with the students emphasizing the need to collaborate and do what was required to get the work done. An analogy was made comparing the event to athletics. Everyone cannot be a quarterback or star pitcher, but all roles and positions are necessary for a successful outcome. Because time was short, the faculty advisors decided to stick with the assigned roles rather than trying to make adjustments to meet what the students thought they wanted to do. Last minute issues such as those faced in the inaugural year could be avoided by clarifying expectations and roles earlier in the process. Ultimately, each student played the role assigned, and the event ran smoothly. The students banded together to meet each need that arose, and all of the tasks that needed to get done for each session were completed.

In the future, we plan to do a much better job of managing student expectations upfront regarding logistics for the event day. We will explain these roles and their importance. We will give students the opportunity to rank their top

choices but clarify that the decision of the faculty advisors is final. The Conference Director role can be given as an honor/incentive for the student who has shown leadership throughout the course. By assigning these roles earlier in the semester, we will also be able to have students practice some things such introducing speakers, closing a session, speaking with a microphone, and engaging in small talk with speakers.

VI. Conclusions

Overall, the GEAR professional development program successfully engaged students, faculty, and alumni with a focus on career readiness. SPC members worked on subcommittees prior to the conference and adopted other assigned roles during the conference to lead to its success. Many expressed pride and satisfaction in the resulting product. The emphasis on student leadership and planning allowed GEAR student planning committee members to develop professionally and personally (Blau et. al. 2015; Lapidus, Towell, & Hayes, 2015), improving future endeavors.

Since the first planning committee in Spring 2018, we have witnessed several students obtain good jobs after graduation or head off to graduate programs. Anecdotally, we were informed that for two of our students, job interviewers were interested in their experience on the Student Planning Committee. Another student who came to us with no leadership experience is now an officer in one of the Business School's most active professional organizations, and a separate student who learned about professional communication on the Speakers Committee successfully cold-called several local organizations and scheduled internship interviews. It is possible that each of these students would have achieved the same success without the GEAR program, but we believe the skills and confidence gained through the experience are likely contributing the students' current success.

A larger set of students benefited from attending the conference. We exceeded our initial target of 100 participants by twenty percent, and we are aiming for 200 student participants in the coming year. The students' post-conference surveys indicated that the sessions provided knowledge beneficial to their future careers, and the speakers were engaging and informative. The GEAR conference provided a way for students to network with industry professionals in a low-pressure environment. Institutions serving primarily minority and first generation college students are likely to create an even greater impact (Strada-Gallup, 2018) with a conference connecting students to industry professionals.

Efforts to increase the number of participants will fall on the Marketing Committee through some new tasks and initiatives. We will expand social media marketing beyond Facebook to include some combination of other outlets such as SnapChat, Instagram, or Twitter. The Marketing Committee was also responsible for in class presentations, but as we work to secure greater faculty support, we anticipate the number of classroom presentations to increase. The Marketing Committee will still design the in-class presentation, but they will train all Student Planning Committee members to enter classrooms and pitch the event. This simultaneously increases our coverage while enhancing the skills of all SPC members.

Greater efforts will be made to reach freshman who are yet in business classes, too. Again, this is a responsibility of an enlarged Marketing Committee. Like many institutions serving diverse and first-generation populations, our institution struggles with retention. Programs such as this conference contribute to a greater sense of community between students, faculty, alumni, and professionals, and may create measurable effects on retention (Tinto, 2006; Lotkowski, et. al, 2004). Ties to the community could also benefit the institution if connections generate future funding, internships, or involvement.

Faculty and alumni provided valuable support to GEAR's inaugural conference. A core group of School of Business faculty allowed GEAR students to market the conference during their class times and provided extra credit for attendance. The GEAR conference also brought alumni back to campus to participate in a meaningful way. Strengthening this connection with alumni is a positive for the school. A representative from our Alumni Relations office made valuable contacts and plans to follow-up with them about additional ways of getting involved. Moving forward, we hope to increase the number of faculty and alumni who actively participate in the program.

As we reflect on the previous academic year's experience and review research addressing student professional development, we are reconsidering the tasks assigned to each committee. The lessons learned section details several of the changes we are considering. In addition, we plan to have students more involved in the creation of documents such as an annual report and budget. Select students may be asked to speak about the GEAR program in front of the Business School's corporate partners, gaining experience and exposure.

In conclusion, we believe that faculty members at other institutions who are similarly committed to student engagement and professional development could institute similar programs on their own campuses. This paper provides instructions on what a conference might include, how to generate sufficient support, and how to incorporate students in the process so that a select number have an even more meaningful experience than attendance provides. Adaptations to an institution's student body and overall community needs are easy to make, and we anticipate and encourage future discussions identifying potential problems, solutions, and further innovations. Our inaugural conference was a success, but our reflections and alterations teach students the importance of continuous improvement. Students come to us looking for better futures, but their success is partially determined by our ability to create a community and programs that encourage greater engagement and involvement both inside and outside of the classroom. A professional development conference for students and by students is one of many ideas that builds communities, but at least on our campus, it is one that has garnered the interest of administrators, our peers, alumni, the community, and most importantly, the students we serve.

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Teaching Statistical Computing with Python in a Second Semester Undergraduate Business Statistics Course

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ABSTRACT

Python has become one of the leading programming languages used by Data Scientists. As such, Python has also become a highly marketable skill for business students entering the job market. This paper describes efforts to incorporate statistical computing with Python into a second semester undergraduate business statistics course in which most incoming students have limited programming experience. Two free learning platforms, datacamp.com and repl.it, are trialed among students with mixed but generally favorable results in terms of classroom utility and student learning outcomes. An analysis of course evaluations indicates some students are reluctant to embrace statistical computing, preferring a traditional mathematics class structure, while others are grateful for the opportunity to learn new marketable technology skills.

Keywords: Teaching, Business Statistics, Analytics, Data Science, Python

INTRODUCTION

In the author's institution, an AACSB accredited School of Business within a regional state University, two semesters of applied statistics are required for undergraduates pursuing a business degree. In the past, these types of business statistics courses would include applied data analysis using statistical software like SAS, SPSS, Minitab, Stata or other commercially produced software programs. But, as with most commercial desktop software offerings, these programs are becoming less relevant as applied statisticians and data analysts have increasingly turned to free, open source statistical computing platforms. In an attempt to make statistics as relevant to future business careers as possible, I began teaching a statistical computing module using Python as part of the second semester statistics course. This paper describes my efforts to incorporate statistical computing with Python into the curriculum and to teach programming skills to undergraduate students, many with limited, if any, programming background. The efficacy of two free learning platforms, datacamp.com and repl.it, are evaluated in an effort to contribute to statistical computing pedagogy and to provide a resource for instructors with interests in teaching Python programming. In addition, I analyze student evaluation data in an effort to understand student perceptions and attitudes toward Python programming.

LITERATURE REVIEW

In response to strong demand for programming and data analysis skills in business (Davenport and Patil, 2012; Manyika et al., 2011), AACSB-accredited Business Schools have begun teaching courses and offering programs in business analytics (Zhao and Zhao, 2016) and universities have begun offering courses in Data Science (Brunner and Kim, 2016). In parallel, statisticians have argued that computing concepts should be incorporated within undergraduate statistics curricula (Nolan and Temple Lange, 2012; Donoho, 2015).

While some statisticians advocate use of the R language (R Development Core Team, 2006) in the statistics curricula (Nolan and Temple Lange, 2010), Python has become an increasingly popular option for teaching Data Science (Brunner and Kim, 2016). Python is relatively easy to learn, has tremendous community support and, as a general purpose programming language like Java or C++, can be used for a wide variety of purposes (Perkel, 2015) whereas R is restricted to statistical computing applications. More generally, the advantages of teaching introductory programming with Python versus Java are evaluated quantitatively by Jayal et al. (2011) and their analysis indicates that Python is the preferred language for teaching basic (procedural) aspects of programming while Java is more appropriate for teaching object-oriented programming.

According to the Python Software Foundation (2018), "Python is an interpreted, interactive, object-oriented programming language which combines remarkable power with very clear syntax." In comparison to R, Bruner and Kim (2016) state that "Python (especially when using the Pandas library) is capable of performing most, if not all, of

the data analysis operations that a data scientist might complete by using R" (p. 1948). In addition, they note that Python "is a general purpose programming language, while R is generally limited to tasks within the realm of statistical computing" (p. 1948). More recently, the Institute of Electrical and Electronics Engineers (IEEE) ranked Python as the #1 overall programming language (Cass, 2018). IEEE points to R's slight decline in their rankings as part of the reason Python continues to succeed, stating "the existence of high-quality Python libraries for both statistics and machine learning may be making flexible Python a more attractive jumping-off point than the more specialized R."

The advantages of Python seem to be further borne out by usage statistics. According to Stack Overflow (2018), a popular online forum for programmers, growth in the use of Python versus other popular programming languages is unsurpassed since 2012. Stack Overflow estimates Python's usage among developers grew rapidly from 4% in 2012 to 10% in 2018. In contrast, Java usage was relatively flat starting and ending between 9% and 10%, C# declined from 9% to 7.5%, php declined from 4.5% to 4% and C++ declined from 4% to 3.5%.

COURSE DESCRIPTION

Advanced Business Statistics is described in the University catalog as follows: "Development of advanced statistical techniques to support business decision-making. Topics include advanced multiple regression analysis, analysis of variance and nonparametric techniques." The course is the second in a required two-course sequence beginning with *Inferential Statistics and Problem Solving* as the prerequisite first semester course offered within the same department.

In Spring 2018 the course was taught in a computer lab classroom with 45 Dell Personal Computers (PCs) connected to the internet, running Microsoft Windows and equipped with the Microsoft Office suite and other popular software applications for business productivity. The course runs for 15 weeks meeting 2 times per week for 80 minutes in a traditional format. Although web materials and web applications were used frequently, the course is not an officially designated "hybrid" or "online" course and students were expected to attend class in person. There were two sections of the course with the first section beginning at 11:15 a.m. and the second beginning at 1:00 p.m. each Monday and Wednesday of the semester. A total of 79 students were enrolled in both sections combined. Students were encouraged to work together on assignments but required to submit their own work. Three exams were used to assess student proficiency. A course syllabus and individual lesson plans with detailed assignments, including Python programming assignments, are available by contacting the author.

COURSE CONTENT

Though a detailed accounting of every aspect of the course content delivered in the Advanced Statistics course during the Spring 2018 semester is beyond the scope of this paper, in this section I will describe the Python-driven statistical computing content presented to students.

To introduce students to Python and its use in statistical computing, I took advantage of free video and interactive programming lessons provided at no cost for classroom use at datacamp.com (DataCamp, 2018). Students began with "Intro to Python for Data Science" where they were introduced to Python Basics, Lists, Functions, Methods and Packages, including NumPy, an extension module created to facilitate numerical computation (Oliphant, 2006).

After completion of this introductory course I began assigning simple Python programming assignments on repl.it (2018), a platform for writing and teaching programming in a variety of languages including Python, Java, C#, Ruby and dozens of other languages and technologies. The web interface on repl.it enabled me to write programs for demonstration purposes during class and to share these programs with students via a simple web address. It also allowed me to generate assignments that could be "submitted" on repl.it and automatically checked for completion. I experimented with this functionality but it was difficult to set up grading criteria for automation. Instead, I had students create a directory of programs to be checked for accuracy and completeness.

Students continued with DataCamp by completing a follow-up course titled, "Intermediate Python for Data Science" which introduced students to Matplotlib (for generating charts), Dictionaries (a data structure), Pandas DataFrames (for generating numerical arrays), and Logic with Control Flows and Loops (for generating iterative computational operations). In parallel students were given assignments on repl.it to facilitate learning how to import and export

comma separated values (CSV) files, how to generate and modify data graphics with Matplotlib, and how to build a program to simulate a simple dice game.

The dice game simulation served as an introduction to Monte Carlo simulation (Manly, 1991) and students were introduced to the use of randomization and repetition to simulate a distribution of potential outcomes and the ability to make probabilistic estimates. Probabilistic thinking was further emphasized in an additional DataCamp course entitled "Statistical Thinking in Python" where thinking probabilistically was emphasized along with graphical and quantitative exploratory analysis, parameter estimation, bootstrapping and hypothesis testing.

Another key topic we covered throughout the course is the use of Matplotlib and Seaborn (Waskom, 2018) modules to generate data graphics. We learned to use histograms to visualize univariate distributions. We explored boxplots, stripplots, swarmplots and violin plots for comparing multiple distributions. We generated scatterplots to understand bivariate relationships and to illustrate linear and curvilinear fits. We also used scatterplots to evaluate predictive models, comparing forecast and actual values to identify model strengths and weaknesses.

STUDENT EVALUATIONS

Although a formal experimental design with control groups is beyond the scope of this paper, in this section I examine anecdotal evidence from student evaluations submitted near the conclusion of the course. Student evaluations at the author's institution are voluntary so respondents are self-selected, not randomly determined. Students select ratings on a scale with 5 options (i.e., Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) for 18 different categories and are then prompted to provide text responses reflecting on instructor approachability, what works well and what to improve.

Out of 79 possible respondents, 35 students completed an evaluation yielding a response rate of 44%. Of the 35 evaluations completed, 28 students provided text comments to in response to the "What works well?" prompt with the word "Python" appearing 6 times. And, 29 students provided text comments to address "What to improve?" with the word "Python" appearing 11 times. Comments submitted mentioning "Python" are listed below.

Question: What works well (only comments including the word "Python")

everything except *Python*
I liked learning how to use *Python*
I loved Data Camp and *Python* as well as Phat equations being y=mx+b excellent stuff.
Python learning for statistics
Learning *Python* was useful.
The non-use of a textbook was refreshing. The use of *Python* was very helpful and while it was a very steep learning curve, the material I learned in this class will (more than likely) be applied in the future.

Question: What to improve (only comments including the word "python")

More time to learn the material in *Python*, more in class examples and follow along type of work.
Maybe take a little more time on *Python*, I felt like it was a lot of stressful work all at once since coding doesn't come easy to me.
not doing *Python*
Having more tutors for the *Python* course. With *[the instructor]* being involved with so many things outside of class, he has limited time in which he can be available.

i didn't enjoy *Python* but i understood its application to the class and don't feel it should be removed. it was just a hard thing to learn and understand going into it without any kind of coding history
I wish we went a bit slower learning *Python*, or that he spent more time covering it during lecture rather than relying on DataCamp
I hate doing *Python* programming. I'm supposed to be in a math class, not a programming class.
Just a little less *Python*.
Don't try and teach programming in a business statistics class. Trying to learn unfamiliar concepts of statistics when being told to learn a programming language is unrealistic in my opinion. Also, it seemed that the CIS/Computer majors were assumed to know how to program on *Python* and the business majors appeared to be treated differently when it came to the programming
DataCamp was not a useful way of learning *Python*.
Python seemed to trip a lot of people up. Mostly seemed to be a lack of participation or want to do the assignments. Not the instructors fault.

Clearly Python was not consistently popular or unpopular with all students. While some comments specifically mentioned Python in a positive light, other comments mentioning Python were critical of the use of Python programming as part of the course. That said, it's difficult to know whether the same students might have complained about being forced to endure extensive time running and interpreting multiple regression models in SPSS or similar.

During the prior Fall term, roughly the same cohort of students took an introductory statistics course at the same time and with the same instructor. The table below compares ratings between the two courses. Instead of looking at the numerical rating averages I have simply provided the proportion of students indicating they "Strongly Agree", the highest (best) rating possible, with each question about the course.

Question Text	No *Python* **Inferential Statistics**	***Python*** **Advanced Statistics**	**Difference**
Pace of course (is appropriate)	0.83	0.54	0.29
Grading system is fair	0.79	0.71	0.08
Prompt grading of work	0.71	0.71	0.00
Instructor was prepared	0.83	0.83	0.00
Instructor made use of class time	0.88	0.74	0.14
Made difficult material understandable	0.71	0.60	0.11
Communicates ideas clearly	0.79	0.63	0.16
Responded to student questions	0.79	0.74	0.05
Available outside of class	0.54	0.69	-0.15
Set and maintained high standards	0.67	0.71	-0.04
Encouraged critical thinking and analysis	0.75	0.74	0.01
Instructor facilitated class participation	0.75	0.57	0.18
Treated students with respect	0.83	0.83	0.00
Communicated enthusiasm for the course	0.79	0.77	0.02
Teaching strategies enhanced learning	0.75	0.63	0.12
Text was effective	0.54	0.26	0.28
Instructor was a successful teacher	0.83	0.66	0.17
Learned from the course	0.79	0.66	0.13
Average	**0.75**	**0.67**	**0.086**

These course ratings seem to indicate the Advanced Statistics course was less popular than the preceding introductory course. The differences may be due to variation in instructor performance, variation in attitudes toward coursework in general during Spring term versus Fall term, or variations in attitudes toward more challenging or less familiar subject matter.

DISCUSSION

One of the major challenges in teaching business statistics is the wide ranging levels of salient academic preparation. Certainly, varying levels of mathematics training has an impact in the business statistics classroom. This challenge is amplified when it comes to computer programming. While all college students are required to have had some minimum level of training in mathematics, the same is not true for computer programming. For many students, this introduction to Python programming was their very first introduction to computer programming. For other students, this may have been their first exposure to the Python language but they had already received training or acquired programming skills using other programming languages. Perhaps one or two students out of a cohort of eighty students had previous experience with programming in general and with the Python language in particular.

The DataCamp platform was a source of useful content but it was also, at times, a source of frustration for students. The DataCamp courses used to teach Python deliver a combination of video instruction, written instruction and interactive learning exercises. The interactive learning exercises cause frustration for the students when getting something "correct" is required before moving to the next question, section or chapter. Occasionally, a question requiring a student to enter Python syntax in a particular way would not be accepted as correct by the DataCamp system. Although the correct syntax was entered and should have resulted in a working program or snippet of code, the system was unable to recognize it as correct and blocked progress. Some of these instances may have been due to bugs in the DataCamp platform while others may have been due to student error or misinterpretation. In any case, this generated complaints from students and, in reviewing and testing the material, I witnessed some of the same issues first hand. I still recommend DataCamp as a good source of material for training Data Scientists but I do not suggest relying on the interactive exercises as a reliable indication or measurement of student comprehension.

Rather than attempt to coordinate local installations of a Python development environment in every PC in the lab classroom and rather than attempting to support students installing a local Python development environment on personal laptops or home office desktop computers I decided to use repl.it platform as a development environment and "sandbox" where students could write and run Python programs. Repl.it makes web-based programming environments available at no cost to students and beginners and provides some functionality for teachers who want to generate assignments and automate submission and grading of programs. I did not attempt to make use of the automated submission and grading capabilities because the initial fixed setup costs appeared, at least to me, to be too high relative to the time savings I might accrue, even with 79 students to grade. However, repl.it turned to be an excellent platform for writing code interactively with students during lectures and with a simple web link I was able to share completed programs with supporting input files and generated output files available at a single, simple URL. Combined, DataCamp and repl.it provided a robust set of learning tools and, despite some limitations, enabled dedicated students to learn the material and demonstrate proficiency.

CONCLUSION

Students are divided in their willingness to embrace Python programming as part of a second semester course in business statistics. Based on the student evaluation data, it seems clear that many students understood the benefits of learning the statistical computing material. At the same time, many of the same students would likely have preferred to omit Python programming in favor of other topics.

Despite student reluctance, I plan to continue incorporating statistical computing and Python into the required business statistics curriculum. Not only is statistical computing more relevant than traditional textbook statistics to students with a specific interest in data analysis, programming has become an essential workforce skill. Perhaps one semester of exposure to programming in Python won't steer many students toward careers as data science professionals but it might make students more confident about asking questions in business meetings or pursuing a second opportunity to learn more about advanced data analysis methodologies and technologies.

In my next attempt to teach statistical computing as part of the required business statistics curriculum I plan to make two key changes and publish results of these efforts. First, I will incorporate statistical computing concepts and Python programming tools from the very beginning of the course instead of introducing these concepts after an initial six week module. This will give students, especially those with limited background in programming, more time to gain familiarity and proficiency. Second, I will explore different approaches for assessing proficiency and comprehension. Traditional in-class exams are not entirely able to properly assess student learning of statistical

computing concepts and Python programming skills. Analogous to assessment of readiness for a driver's license, the written exam does not substantiate issuance of a license to drive. Likewise, the ability to pass a written test does nothing to validate the ability of a student to write a program from scratch, fix a bug or modify a working program. Unfortunately, the interactive web tools I've tried are easily manipulated by students more interested in completing tasks efficiently than achieving comprehension. This mentality when present however, does seem to persist in more traditional learning models as well, and so could be an inevitability of any learning model to which that student is exposed.

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Integrating Service-Learning in Business School Curricula

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ABSTRACT

The pedagogical value of service-learning in higher education is widely known (Fullerton, Reitenauer & Kerrigan, 2015; Grotrian-Ryan, Ryan & Jackson, 2016; Perry & Katula, 2001) and a number of universities include service-learning courses in business curricula (US News and World Report, 2018). To support the expanded use of service-learning in business schools, this article outlines the design and delivery of a non-profit consulting course. The outline includes high-level course design, engaging with potential non-profit clients, scoping projects, developing student consulting skills, supporting and facilitating service-learning projects, determining student success, and post-project client follow-up. The article pertains to a service-learning course which instructors can offer at the undergraduate or graduate level.

Keywords: service-learning, business school, curricula, course design, non-profit consulting

INTRODUCTION

Service-Learning has several definitions including, Service-learning is a teaching and learning approach that combines valuable community service with instruction and reflection to enhance the learning experience, teach civic responsibility, and strengthen communities (Seifer & Connors, 2007); and the Carnegie definition, "The collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity"(Campus Compact, 2018). In a business school setting, service-learning is often employed to provide students with opportunities to apply academic concepts and theories in projects for non-profits.

CONSULTING-BASED SERVICE-LEARNING COURSE DESIGN

There are six steps to integrating service-learning in business school curricula through a semester-long non-profit consulting course:

1. Establishing relationships with non-profits and exploring project opportunities
2. Scoping non-profit projects
3. Developing student consulting skills
4. Supporting and facilitating service-learning projects
5. Determining student success and service-learning project value
6. Service-learning client follow-up

Establishing Relationships with Non-Profits and Exploring Project Opportunities

During the semester that precedes the service-learning course, instructors work to identify non-profit clients and projects. To achieve course success, one service-learning project is required for every 4-7 students who work as a team to accomplish project goals. Typically, each client has one project which results in 4-5 clients per class with an average class size of 25. It is viable for one client to have two projects. The instructor must have a good working relationship with the non-profit so that, if necessary, the instructor can support students in overcoming significant challenges that may arise. On-going relationships with non-profits based on project success and instructor non-profit personal relationships serve as the basis for future semester projects making additional course delivery more efficient. Instructors locate potential non-profits interested in supporting service-learning through personal service experience, colleague referrals, and networking. There are typically viable on-campus service-learning clients and project opportunities, as well.

Initial discussions with non-profits include an explanation of the win-win approach that service-learning with business school students achieves. Non-profits in need of project support are typically highly competent in delivering on their value proposition. They do not, however, typically have in-house, on-staff business acumen that students can provide. Once the mutually beneficial non-profit-business school relationship is understood,

conversation about project opportunities ensues. The instructor guides the conversation towards projects in which business students can excel, deliver value, and complete within a semester.

Scoping Non-Profit Projects

There are two levels of project scoping required for successful service-learning projects. The first high-level scoping effort occurs between the instructor and the non-profit staff. During this effort the project is analyzed for appropriate business student acumen and project requirements fit. Scope negotiation may be required to align the project with student capabilities. Realignment can mean removing requirements that are beyond student capability or removing items that are deemed too menial or low-value for students to accomplish.

During the requirements discussion, the instructor is continually assessing whether the project can be completed within one semester. Projects that require multiple semester effort can be broken down into phases accomplished by different student teams over time. This too represents a valuable learning opportunity as each team completes their project phases and prepares the next team to engage. The high-level scope negotiations are easier when a good relationship exists between the non-profit staff and the instructor. At this time the instructor has identified a non-profit with a project that is ready for business students to complete in a timely manner. The identification and scoping process continues in the semester preceding the course until a sufficient number of non-profits and projects are identified.

Developing Student Consulting Skills

Preparing the students to work effectively with non-profit clients and deliver to expectations requires about three weeks of course time. During that time students also review non-profit project proposals and form teams to initiate work. Week one content focuses on a service-learning overview, and value creation for students, clients, and stakeholders including the instructor, university, and community. Also covered is customer segmentation and value propositions both from the consultant (student) and client (non-profit) perspective. Week two discusses relationship building and management as team members and consultants through exploration of emotional intelligence and personality assessment. The second week concludes with a project management primer including defining objectives and deliverables, project planning, client communication, stakeholder reporting, and change management. The final project preparation week focuses on project timelines and designing and executing client meetings. As the last preparatory week comes to a close, students engage with experiential learning and reflection principles to enhance the learning and value they derive from the project work. While additional and/or different consulting skill development can take place prior to project initiation, students convey that the content prescribed herein is sufficient to support project success.

Supporting and Facilitating Service-Learning Projects

During weeks four through thirteen, students work in their teams and with their non-profit clients to define and accomplish project deliverables. Initially teams refine scope and determine deliverables via discussions with non-profit staff and additional research. Once deliverables are confirmed, the team proposes a project timeline that they review and finalize with the non-profit. Teams create a project plan and assign work amongst team members. Depending on project complexity and team dynamics, including team meeting scheduling challenges, one team member may serve as the project manager. Teams engage with the instructor via bi-weekly progress reports that include work updates as well as identified challenges. The instructor reviews the reports and provides appropriate feedback that assists the team in completing their project as well as deepening their learning. Either the team or the instructor may request a team-instructor meeting at any time to ensure projects remain on course. Regardless of ad-hoc meetings, the instructor meets with teams every four weeks to review work to date, challenges, changes in project scope, and development of client deliverables. If required and teams agree, the instructor may intervene with the client to discuss significant challenges to the project, deliverables, or the completion timeline. Teams come to class during week nine to present their projects, accomplishments, and challenges as a learning and feedback opportunity for other teams. Students present their client deliverables and project summary during the last week (14) of class. Throughout the course and client-interactions, the instructor seeks opportunities to enhance student learning, support creation of valuable project outcomes, and build long-term relationships with non-profit staff.

Determining Student Success and Service-Learning Project Value

University faculty are tasked with assessing and reporting student learning success via course grades. While any number of grading criteria can be employed for this course, pre-class reading quizzes, student reflections, project written assessment, final project deliverables and presentation, class participation, team contribution from team member perspectives, and client feedback are used. Assignments and the grading process are used as a means of providing student and team feedback to enhance learning. Instructors attend the final client presentation and facilitate team-client discussion in terms of expectations, outcomes, communication quality, missed opportunities, and improvement suggestions. The instructor discusses final presentation student learning goals with non-profit staff to ensure they are prepared to offer valuable feedback at the presentation.

Table 1 – Sample Service-Learning Projects

Service Learning Project	Project Outcome
Plan a teaching kitchen and business support center for a commercially licensed co-operative kitchen used by new food business start-ups.	Project outcomes were used to apply for grants and increase non-profit clients.
Enhance recognition and attendance for an opera company.	Increased opera attendance 20% in first year.
Increase university service-learning usage by conducting market research and developing a strategic plan.	Informed the university service-learning strategic planning process.

Service-Learning Client Follow-Up

Following course and semester completion, the instructor reflects on the overall project, derived student value, and identified non-profit value. In addition, the instructor considers the current client relationship and whether working with the client throughout the semester was draining or energizing. Those characteristics are often based on client-student and client-instructor interaction ease and success. In time the instructor decides whether they are interested in continuing project work with each non-profit. Upon making that decision, the instructor schedules a follow-up discussion with the client. The discussion agenda includes client insights regarding perceived project value, client perspectives on project communication, and ease of working with students and the instructor. If the instructor reflection and client insights gained from the follow-up call are positive a discussion regarding potential additional projects ensues. If continuing work is not warranted the instructor conveys appreciation to the client and moves on to other opportunities. At that point the process begins anew to plan and execute the next course delivery.

KEY ASSUMPTIONS

Since there are differences regarding business school design and delivery of curricula, key assumptions for successful service-learning non-profit consulting course success follow:

1. Semesters are 15 weeks long
2. Class time per week is three hours and course credit is three
3. Class size is limited to 25 students unless teaching assistant support is available.
4. Instructor is familiar with consulting and client management
5. Instructor has a history of success engaging with students and facilitating experiential learning
6. Students are juniors, seniors, or graduates to ensure sufficient business acumen for projects
7. Service-learning methodology is harmonious with university culture and norms

Lack of assumption alignment need not preclude a service-learning pilot, however adjustments may be appropriate to support course success. For example, universities with trimesters could reduce project scope or might require two sequential courses to complete project requirements. Instructors with limited consulting experience would enhance

study in that area and/or ask a consulting-experienced colleague to serve as a coach throughout the course.

Table 2 – Course View by Week

Week	Instructor	Student/Team	Assignment
1	Service-learning; Value creation; Customer segmentation		Pre-class reading quiz
2	Relationship building and management; Project management		Pre-class reading quiz
3	Project timelines; Client meetings; Experiential learning; Reflection		Pre-class reading quiz
4	Ad-hoc team support	Project scope and deliverables	
5	Report feedback; Ad-hoc team support	Project timeline	Bi-weekly report[1]
6	Ad-hoc team support	Project work	Reflection
7	Report feedback; Ad-hoc team support	Project work	Bi-weekly report
8	Instructor meeting	Project work	Instructor meeting; Reflection
9	Report feedback; Ad-hoc team support	Project work	Mid-project class presentation Bi-weekly report
10	Ad-hoc team support	Project work	Reflection[2]
11	Report feedback; Ad-hoc team support	Project work	Bi-weekly report
12	Instructor meeting; Assessment feedback	Project work	Instructor meeting; Written assessment
13	Report feedback; Ad-hoc team support	Client presentation	Bi-weekly report
14	Ad-hoc team support	Final Class Presentation	
15	Finals week	No Activity	

[1] Bi-weekly reports consist of two-week progress, obstacles, questions, and key next actions

[2] Reflections consist of answering three questions (Reflections in service-learning, 2018):

1. What personal qualities (e.g. leadership, communication skills, empathy etc.) have you developed through service-learning?
2. What contribution can you make to public understanding of this issue based on your service-learning experience?
3. In what ways are you finding your involvement with service-learning difficulty? What have you found that is helping you follow through despite the difficulties you encounter?

CONCLUSION

Both students and clients convey significant value from working on non-profit service-learning projects. Clients gain access to business competencies that they typically don't have or don't have in sufficient quantity. Students appreciate the opportunity to provide valuable contributions to worthy non-profits by applying their growing business acumen while being accountable for success. Comments from previous course students include: "I think this course is great, as it gives you real world experience before we actually delve into the real world and have real jobs."; "This course was one of my favorite courses and I think every business student should take a course like this so they can apply their skills to make an impact on a real business.", and "This course was interesting, it reflected how projects go in the real world well." Future employers appreciate the project work that business students complete as they believe that having students work on a significant applied learning project in college improves the quality of learning and the students' preparation for entering the workplace (Hart Research Associates, 2015). Similarly, employers are more apt to hire graduates who have completed an applied learning or project-based course. (Hart Research Associates, 2015).

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Introduce Non-GAAP Metrics to Business Students

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ABSTRACT

The use of measures that are not considered generally accepted by the accounting profession has become widespread and is increasing. This paper informs business educators and instructors about these metrics so they can introduce it to their students and expand their students' understanding of how it relates to the accounting profession. Even though the financial community has begun the use of and justification for the publication of financial statements with what are commonly called non-GAAP metrics, many business educators and even accountants old and new to the profession are not informed about these differing forms of non-GAAP nor have an idea of its potential benefit or harm. With this paper, educators and students can learn more about the description of non-GAAP, some of its history and the regulatory response to its use. The paper will also provide some examples of non-GAAP and reflect on how they may effect business reporting.

Keywords: Business Education, Accounting Profession, Financial Reporting, Non-GAAP Metrics

INTRODUCTION

The Security Exchange Commission (SEC) requires public companies in the United States to report earnings according to standardized accounting principles that are generally accepted referred to specifically as Generally Accepted Accounting Principles (GAAP). GAAP is also supported by the American Institute of CPA's FASB Codification of Standards for non-public companies. GAAP embraces a basis of accounting that is accrued meaning companies report revenue when a sale or service occurs and report a liability when the obligation is made. Expenses incurred then are matched with the appropriate revenue in the same fiscal period. GAAP also requires appropriate disclosure of detailed information related to the recording of account balances in footnotes of the company financial statements.

A result of GAAP is that investors have what is hoped to be a reliable and sufficient information source to make appropriate investment decision. However, since late 1990s, many public companies in the United States began using measurements that could be and often are not according to GAAP as a supplement to GAAP financial statement reporting referred to now as non-GAAP metrics. Both new emerging companies and some established companies have increased the use of non-GAAP metrics in their financial statements. Data collected by the management consulting company McKinsey & Company shows that many companies including all of the 25 largest U.S. - based nonfinancial companies are increasingly reporting some form of non-GAAP related earnings.

Professionals began debate on the use of non-GAAP metrics in the late 1990s. Accounting standard-setting bodies are conducting research on the topic as concern has developed over how to or whether the use of non-GAAP metrics should be regulated. The official ruling body, the Financial Accounting Standards Board (FASB), claims that

"The continuing proliferation of non-GAAP metrics is a topic that is raised regularly by various members of the financial reporting community" (Siegel 2014).

In this paper, we will (1) introduce non-GAAP metrics, (2) explain the benefits and concerns of its use, (3) discuss possible ethical issues related to the use of non-GAAP, (4) discuss related regulatory actions and (5) illustrate some existing uses and publication material.

Benefits and Concerns

The U.S. Securities and Exchange Commission defines a non-GAAP measure as follows:

A non-GAAP financial measure is a numerical measure of a registrant's historical or future financial performance, financial position or cash flows that: [1] excludes amounts, or is subject to adjustments that have the effect of excluding amounts, that are included in the most directly comparable measure calculated and presented in accordance with GAAP in the statement of income, balance sheet or statement of cash flows (or equivalent statements) of the issuer; or [2] includes amounts, or is subject to adjustments that have the effect of including amounts, that are excluded from the most directly comparable measure so calculated and presented. (Final Rule: Conditions for Use of Non-GAAP Financial Measures 2003)

Non-GAAP then is a disclosed amount that excludes or adds to certain components generally accepted as reported on financial statements. Some of these non-GAAP measures in no way a non-exhaustive list have been loosely titled and are described as

- Core earnings is revenue derived from a company's main or principal business, less all expenses and revenue from what the company view as non-core activities.
- Free cash flow is operating cash flow with capital expenditures deducted.
- Pro forma earnings is some projection of earnings based on certain assumptions.
- EBITDA is operating earnings before interest, taxes, depreciation and amortization.
- EBIT is earnings before interest and taxes, and
- FFO are specific funds from operations that define cash flow mostly used by real estate investment trusts (REITs).

The manipulative and flexible nature of non-GAAP metrics has led to many derivative versions, for example, operating income can exclude "nonrecurring" items such as restructuring expenses and impairment charges or an adjusted EBITDA that adds back non-cash charges such as shared-based compensation.

Companies will often emphasize non-GAAP financial measures in an entity's Management's Discussion & Analysis (MD&A), earnings releases, and other communications as an attempt to be more meaningful and effective in (1) communicating with investors, analysts and business partners, (2) providing insight into the business and (3) supplementing increasingly complex GAAP results. The use of non-GAAP is becoming widely accepted also in academia. At an Institute of Management Accounts conference in New Orleans in June 2013 Paul Bahnson of Boise State University and Paul Miller of the University of Colorado at Colorado Springs, urged both corporate managers and investors to "focus on measures that have less noise and are clear drivers of the future direction of business" (CFO Journal 2013).

Chief financial officers (CFOs) have continued to advocate for their use of non-GAAP metrics. They reason that investors clamor for information not always conveyed by financial statements and assert that using non-GAAP can mitigate disconnect between the needs of investors and financial statement issuers. CFOs say that GAAP can be outdated and not as relevant to users often citing that the use of historical cost that relies on past transaction provides inadequate information about the present. What they present, they claim, is more important and relevant to measure full market value of assets and that the process for changing existing GAAP simply takes too long (Chasan 2013).

Many companies like to show what earnings would have been if a condition was not met or an unusual event did not occur. Some explain, for example, the exclusion of an expenditure from earnings in an effort to depict what earnings would be under what is often referred to as "normal" circumstances. While this description of what is normal may be appropriate in some circumstances, it could be said that some companies may be using these descriptions and diversions in GAAP presentation to the point of being misleading.

Even though companies may indicate that they use non-GAAP metrics to better inform their audience on management's standpoint of business, they may incite unintended consequences. The concern is that in many cases management often attempt to provide supplementary information without a completeness of data that, if presented in a bias way, could mislead the financial statement users (Johnson 2013). Companies have the flexibility to choose what type of non-GAAP measure to report and may use differing methods to calculate such measures. Therefore,

non-GAAP measures have inherent limitations in that they are subjective. Investors, who often compare financial statements, could not completely understand the differences in presentation with non-GAAP and could make them not comparable to others in that industry. The lack of transparency and inconsistency in the calculations limits the efficacy of non-GAAP metrics, or may even lead to bias or misinterpretations without correct context and explanation (pwc.com 2014).

However, increasingly companies will use non-GAAP measurements to adjust GAAP results. Over 90% of S & P 500 companies recently used their own metrics to report on performance. And the information provided could possibly give additional insights into companies' business, its past results and any narrative about potential future performance. However, investors say all this non-GAAP limits their ability to compare therefore their ability to properly analyze. For this additional information to be truly useful to investors, companies could improve transparency to better explain the definition and the use of non-GAAP measures as well as be consistent with recurring non-GAAP measures to allow for investor calm over time. The characteristics of useful non-GAAP could better facilitate users' understanding and assessment of companies' underlying operational performance, cash flow, and financial positions (Sidibe, 2016).

USE OF NON-GAAP: ETHICAL ISSUES

The nature of non-GAAP financial measures has led to an ongoing debate on the ethical implications of their presentation. These measures lack comparative value among other companies in an industry, are created by company management, appear alongside GAAP figures, and are not required to be audited. The presentation of these figures could potentially confuse investors and the degree of control over the calculation of these measures by management could possibly lead to opportunistic manipulation. These issues are at the heart of the ethical debate surrounding non-GAAP financial measures.

In the early 2000s, overuse of non-GAAP metrics led to a discussion of related ethical problems for an average investor. For example, the former SEC Commissioner Isaac C. Hunt, Jr. said in a relevant speech to the Federation of Schools of Accountancy in 2001:

> [R]ecent years have seen an increasing use of "pro forma" earnings, essentially unaudited financial statements or statements not in conformity with GAAP. The growing use of pro forma earnings has undoubtedly been fueled by management's desire to paint a rosier picture than GAAP might otherwise allow. Investors who are overwhelmed by the sheer volume of filing information might not understand the difference between pro forma earnings and audited financial statements or may not fully comprehend the importance of audited financial statements (Hunt 2001).

The volume of information available to investors combined with the unaudited status of non-GAAP financial measures increases the required level of investor competence to be able to make informed financial decisions using non-GAAP metrics. To mitigate the risk of deception, the SEC requires companies to reconcile their non-GAAP metrics to the most relevant GAAP metric. This requirement does not necessarily protect investors from misleading information, however. To fully comprehend a non-GAAP figure, investors would need to reconcile each adjustment of GAAP to non-GAAP, compare these reconciliations for at least the past five years, and then compare the reconciled items to the company's business model. Unlike with GAAP measures, the extra effort required to validate the integrity of non-GAAP measures becomes a burden of the investor, not the company (Schwab, 2016). And that investor would need to deeply understand audit related techniques and be competent in their assessments.

The use of non-GAAP metrics is management's influence. This could be an increasing potential for opportunistic disclosure. A majority of issuers supplement their GAAP metrics with non-GAAP figures, and 82% of the time these figures increase company income. Because management can choose which expenses and revenues to include in the adjustment, there is opportunity to add back certain expenses and overlook the deduction of certain revenues in computing non-GAAP. Inconsistencies in adjustments to financial statements are what auditors are keenly aware of measuring management's assertion related to transactions balances. Inconsistencies in adjustments to unaudited non-GAAP are one of many ways management can use to show a better, possibly misleading, financial position (McCann, 2016).

"Opportunistic disclosure" could be the main determinant of why non-GAAP metric usage has become widespread. In academic research on the topic, Jeffrey S. Miller defined an "opportunistic disclosure" as "the propensity to seek advantages, through disclosure choices, that accrue specifically to either the firm, management, or a subset of investors" (Miller 2009). An "opportunistic disclosure" could be more favorable to managers for example, in particular the one whose compensation is based on stock performance, than helpful to investors. Investors could perhaps be misguided to purchase shares of overvalued companies, only to see the values of the stock decline in the future if a presented non-GAAP non-substantive bias is relied upon.

Whether or not it is ethical to use non-GAAP metrics to meet or beat market expectations is a matter of debate for managers. Proponents of non-GAAP metrics use often argue that their responsibility is to the increase value of stocks to current shareholders. This view implicitly suggests that pro forma earnings management are presented ethically and that non-GAAP just presents the financial information in a more concise readable format. Opponents argue that a manager's responsibility is to increase value to both current and potential shareholders of the company, not just to current shareholders. This broader viewpoint stems from traditional accountants that would suggest that overly optimistic pro forma measures may be unethical and unfair because such measures may not be beneficial to "potential" investors. The objective of the SEC to "protect investors who are considering the purchase of company's securities as well as those who currently own the securities" also supports the broader viewpoint (sec.gov).

M Barth, I Gow, and D Taylor, examined the motives for non-GAAP metrics, particularly on exclusion stock-based compensation expense. After examining the two possible explanations: opportunism (managers exclude the expense to manage investor perception) and predictive ability (analysts exclude the expense to better predict future performance), the study demonstrates that a positive relationship exists between use of non-GAAP metrics and incentives for a company to meet or beat market expectations, and therefore concludes that companies tend to utilize non-GAAP metrics for their own benefit. (Barth, Gow and Taylor 2012).

NON-GAAP REGULATIONS

The use of non-GAAP measurement has been an important subject to the SEC for many years. In 1973, the SEC issued Accounting Series Release No. 142, "Reporting Cash Flow and Other Related Data." This release discouraged management from presenting non-GAAP measures as this results in "many different concepts and numbers which could not be used meaningfully by investors to compare different candidates for their investment dollars." 142 also required management to justify any Non-GAAP information presented by providing "an explanation of the reasons and a description of possible alternatives which might be used to measure results may be presented to shareholders and potential investors to supplement conventional financial data." (Proposed Rule: Conditions for Use of Non-GAAP Financial Measures 2003).

On July 30, 2002, President Bush signed into law the Sarbanes-Oxley Act of 2002 (SOX). One of the objectives of SOX was to enhance the financial disclosures of public companies. Pursuant to Section 401 (b) of Sarbanes-Oxley Act 2002, SEC was adopting strict rules and amendments to govern the use of Non-GAAP metrics, effective March 28, 2003. Three rules were implemented to govern the disclosure of non-GAAP metrics in publicly registered companies' financial statements. These rules included the addition of (1) SEC Regulation G, (2) amendments to Item 10 of SEC Regulation S-K, Item 10 of SEC Regulation S-B and Form 20-F, and (3) the addition of Item 2.02 of SEC Form 8-K (Smetanka 2012).

Regulation G applies to any form of company communication, such as press releases, webcasts, and even conference calls. The rule forbids companies from making disclosures that contain or neglect material, financial amounts which make the presented information misleading. However, Regulation G does not forbid the inclusion of non-GAAP metrics. In order to disclose non-GAAP metrics, a company is required to "provide (a) the most directly comparable financial measure determined in accordance with GAAP; and (b) a quantitative reconciliation of the differences between the non-GAAP measure and associated comparable GAAP measure.

The SEC amended Item 10 of Regulation S-K which applies to public companies, Item 10 of Regulation S-B which applies to small business issuers, and Form 20-F which applies to foreign issuers. These amendments provided additional guidance for registered companies to include non-GAAP measures in filings with the SEC. The requirements became stricter for disclosure on companies' annual reports (10K), quarterly reports (10Q), and

required registration statements in which registered companies must specifically state management's use for the measure disclosed and why this disclosure would be useful for financial statement users. (Final Rule: Conditions for Use of Non-GAAP Financial Measures 2003).

The SEC also added Item 12, "Disclosure of Results of Operations and Financial Conditions," to Form 8-K. This item requires all registered companies to furnish all earnings releases or announcements disclosing material non-public information to the SEC, including but not limited to non-GAAP measurements (Smetanka 2012). These new rules strengthened controls on non-GAAP reporting, but a difference in application resulted in inconsistencies in disclosures in SEC filings and other information made available to the public.

Regulation G is the broadest of the new rules applying to all public communications of an issuer. The disclosures required under Regulation G also require less explanation, and they do not have to be filed with the SEC. The amendment to Item 10 of Regulation S-K and the addition of information to Form 8-K require detailed explanations of usefulness and proof of use by management and only apply to information disclosed in SEC filings. This difference allowed companies to release critical non-GAAP information to the public in press releases while avoiding inclusion of non-GAAP information in their filings with the SEC, thus reducing the credibility of the SEC report to investors (Johnson, 2010).

An effort to improve the quality and usefulness of information in reports issued by the SEC was made in January 2009, and by January 2010 the SEC had issued revised Compliance and Disclosure Interpretations (C&DI). This revision relaxed non-GAAP reporting requirements in Item 10 of Regulation S-K in two major ways. First, the new C&DI permitted the adjustment of recurring items, which are items of revenue or expense that are likely to occur again over the normal course of a business. Second, the SEC allowed for the presentation of financial measures not used by management. These two interpretations substantially reduced the burden of proof required of issuers in filing non-GAAP financial measures in documents registered with the SEC (Adjusted EBITDA Is Out Of The Shadows As Staff Updates Non-GAAP Interpretations 2010).

FINDING A BALANCE BETWEEN APPLICATION, REGULATION AND ETHICS

Many accounting professionals hold the opinion that the changes in guidance from the 2010 C&DI updates represented a significant loosening of reporting standards on the use of non-GAAP metrics. Under these C&DI, more companies were able to take liberties with non-GAAP disclosures. Since the 2010 updates to the C&DI, more companies have been reporting non-GAAP measures in their filings with the SEC. Concerns materialized that these non-GAAP financial measures may be being misused to artificially inflate income and be misleading to investors.

For example, Black Box Corporation (NASDAQ:BBOX), a leading technology solutions provider based on Pittsburgh, PA, disclosed a figure titled "Adjusted EBITDA (as adjusted)" in a press release on January 29th, 2013. As previously stated, EBITDA is a commonly used non-GAAP measure. But Black Box has taken this seemingly harmless measure and took a few steps further (Weil 2013). As shown in figure 1, Black Box first added back interest, taxes, depreciation, and amortization, as EBITDA suggests, and then a goodwill impairment loss and a joint

FIGURE 1 – Black Box Corporation					
A RECONCILIATION OF NET INCOME (LOSS) TO EBITDA (AS ADJUSTED) AND ADJUSTED EBITDA (AS ADJUSTED)					
	3Q13	2Q13	3Q12	3QYTD13	3QYTD12
NET INCOME (LOSS)	8,518	7,133	(283,443)	21,583	(258,976)
PROVISION (BENEFIT) FOR INCOME TAXES	5,222	4,370	(14,101)	13,229	(1,655)
INTEREST EXPENSE (INCOME), NET	1,133	1,893	1,856	4,956	3,690
INTANGIBLES AMORTIZATION AND DEPRECIATION	4,777	4,821	4,547	14,427	13,581
GOODWILL IMPAIRMENT LOSS			317,797		317,797
JOINT VENTURE INVESTENT LOSS	2,670			2,670	
EBITDA (AS ADJUSTED)	22,320	18,217	26,656	56,865	74,437
STOCK COMPENSATION EXPENSE	1,791	1,735	2,087	6,397	7,505
ADJUSTED EBITDA (AS ADJUSTED)	24,111	19,952	28,743	63,262	81,942

Black Box Corporation. (2013). Form 8-K, Exhibit 99.1. Retrieved from SEC EDGAR website
        http://www.sec.gov/edgar.shtml
https://www.sec.gov/Archives/edgar/data/849547/000084954713000009/exhibit991_earningsxmaster.htm

venture loss to arrive at an intermediate line item titled "EBITDA (as adjusted)". The similarity of names between EBITDA and EBITDA (as adjusted) could misguide financial statement users to believe that this figure is actually EBITDA, not EBITDA with adjustment effect.

Unfortunately, EBITDA (as adjusted) was not the final line item. The company continued adding back stock-compensation expense, finally arriving at another line item called "Adjusted EBITDA (as adjusted)". The following is Black Box's explanation:

> *"Management believes that EBITDA (as adjusted), defined as Net income (loss) plus provision (benefit) for income taxes, interest, depreciation, amortization, the goodwill impairment loss and the joint venture investment loss, is a widely-accepted measure of profitability that may be used to measure the Company's ability to service its debt. Adjusted EBITDA (as adjusted), defined as EBITDA plus stock compensation expense, may also be used to measure the Company's ability to service its debt. Stock compensation is an integral part of ongoing operations since it is considered similar to other types of compensation to employees. However, Management believes that varying levels of stock compensation expense could result in misleading period-over-period comparisons and is providing an adjusted disclosure which excludes stock compensation expense."*

According to column of yield-to-day figure to third quarter of fiscal year 2012 in Figure 1, this measure transformed a $259 million net loss on line one, Net Income (Loss), into a $82 million net income on line nine, Adjusted EBITDA (As Adjusted).

Many analysts criticized Black Box's use of Adjusted EBITDA as earnings management. For example, Jonathan Weil said in an article he wrote for Bloomberg that his rough translation for Black Box's explanation of Adjusted EBITDA (as adjusted) is "we do this to make earnings look better" (Weil 2013). Other analysts cynically speculate from Black Box's use of adjusted EBITDA that the next logical line item for earnings management will be "earnings before expenses" (Smetanka 2012). The attention analysts gave to this presentation of non-GAAP provision caused

FIGURE 2 – BLACK BOX CORPORATION					
A RECONCILIATION OF NET INCOME (LOSS) TO EBITDA AND OPERATING EBITDA					
In millions and may not foot due to rounding	3Q15	2Q15	3Q14	3QYTD15	3QYTD14
NET INCOME (LOSS)	5.3	3.2	6.7	12.4	19.1
PROVISION (BENEFIT) FOR INCOME TAXES	2.4	2.6	2.5	8.6	12.7
INTEREST EXPENSE, NET	1.2	1	1.2	3.3	3.5
INTANGIBLES AMORTIZATION	2.6	2.6	2.9	7.9	9.3
DEPRECIATION	1.7	1.7	1.6	5.1	4.6
EBITDA	13.3	11.2	15.0	37.4	49.3
STOCK COMPENSATION EXPENSE	1.3	1.3	1.5	4.9	5.5
GOODWILL IMPAIRMENT LOSS					
JOINT VENTURE INVESTMENT LOSS					0.8
OPERATING EBITDA	14.6	12.5	16.5	42.4	55.6
Black Box Corporation. (2015). Form 8-K, Exhibit 99.1. Retrieved from SEC EDGAR website http://www.sec.gov/edgar.shtml https://www.sec.gov/Archives/edgar/data/849547/000084954715000002/exhibit991_earningsxmaster.htm					

Black Box to first change the format of adjusted EBITDA by removing the intermediate line item in press release on October 29, 2013 and then renamed the adjusted EBITDA as operational EBITDA on January 27, 2015. Figure 2

represents an updated version of Blackbox's EBITDA. As shown in the column of YTD figure to third quarter of Fiscal year 2014, the use of non-GAAP method nearly tripled the company's net income, from 19.1 million to 55.6 million. The similar situation happens to the YTD figure to the third quarter of Fiscal year 2015 as well.

Other companies also used non-GAAP metrics to raise their non-GAAP earning figures. As shown in the final column of Figure 3, Tesla Motors (NASDAQ: TSLA), a fast-developing electric sports car manufacturer, reported around $19 million net loss, under traditional GAAP metrics as of June 30, 2013. However, after adding in all the future fees paid over the life of leases rather than just fees that had already been paid, Tesla Motors was able to report a non-GAAP income of around $42 million.

FIGURE 3 – TESLA MOTORS, INC RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL INFORMATION (UNAUDITED IN THOUSANDS)					
	THREE MONTHS ENDED			SIX MONTHS ENDED	
	June 30, 2014	March 31, 2014	June 30, 2013	June, 30 2014	June 20, 2013
NET LOSS (GAAP)	(61,902)	(49,800)	(30,502)	(111,702)	(19,254)
STOCK-BASED COMPENSATION EXPENSE	35,783	37,038	19,259	72,821	34,127
CHANGE IN FAIR VALUE OF WARRANT LIABILITY					(10,692)
NON-CASH INTEREST EXPENSE RELATED TO CONVERTIBLE NOTES	23,639	8,393	1,791	32,032	1,791
EARLY EXTINGUISHMENT OF DoE LOANS			16,386		16,386
NET INCOME (LOSS)(NON-GAAP) INCLUDING LEASE ACCOUNTING	(2,480)	(4,369)	6,934	(6,849)	22,358
MODEL S GROSS PROFIT DEFERRED DUE TO LEASE ACCOUNTING (1)(2)	18,607	21,384	19,349	39,991	19,349
NET INCOME (LOSS)(NON-GAAP)	16,127	17,015	26,284	33,142	41,708
Wilhelm, A. (2014). *Tesla beats in Q2 with non-GAAP revenue of $858M on delivery of 7,579 cars*. Retrieved from http://techcrunch.com/2014/07/31/tesla-beats-in-q2-with-non-gaap-revenue-of-858m-on-delivery-of-7579-cars/					

A similar situation applies to LinkedIn (LNKD) as well. According to column of fiscal year 2014 in Figure 4, LinkedIn, the world's largest professional network on the Internet, had net loss of around $16 million under GAAP. However, by removing stock-based compensation and amortization of acquired assets in calculation, the company reported a non-GAAP net income of $254 million.

FIGURE 4 – LINKEDIN CORPORATION TRENDED RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL MEASURES (UNAUDITED IN THOUSANDS)							
	THREE MONTHS ENDED					YEAR ENDED	
	December 31, 2013	March 31, 2014	June 30, 2014	September 30, 2014	December 31, 2014	December 31, 2013	December 31, 2014
GAAP NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS	3,782	(13,445)	(1,034)	(4,263)	2,995	26,769	(15,747)
ADD BACK:							
STOCK-BASED COMPENSATION	57,177	67,769	74,828	82,910	93,626	193,915	319,133
NON-CASH INTEREST EXPENSE RELATED TO CONVERTIBLE SENIOR NOTES					5,916		5,916
AMORTIZATION OF INTANGIBLE ASSETS	4,056	4,813	7,224	9,986	12,612	16,406	34,635
ACCRETION OF REDEEMABLE NONCONTROLLING INTEREST		126	100	101	100		427
INCOME TAX EFFECTS AND ADJUSTMENTS	(16,776)	(11,914)	(17,827)	(22,661)	(37,884)	(45,198)	(90,286)
NON-GAAP NET INCOME	48,239	47,349	63,291	66,073	77,365	191,892	254,078

Linkedin. (2015). *Linkedin announces fourth quarter and full year 2014 results*. Retrieved from https://news.linkedin.com/2015/linkedin-announces-fourth-quarter-and-full-year-2014-results

Statistics also shows that more companies are reporting non-GAAP measures in Initial Public Offerings (IPO). IPOs are issued when a private or public company is raising capital by offering sales of their stock. Nearly 60% of IPOs completed between 2011 and 2013 include at least one non-GAAP measure. The SEC has been issuing an increased number of comment letters related to IPOs as seen from last two columns in Figure 5.\

FIGURE 5 – NON-GAAP RELATED COMMENT LETTERS				
YEAR	IPOs THAT USED NON-GAAP METRICS	IPOs THAT RECEIVED NON-GAAP COMMENT LETTERS	% RECEIVING NON-GAAP LETTERS	NUMBER OF SEC LETTERS (UPLOAD ONLY)
2010	56	35	63%	56
2011	67	39	58%	67
2012	76	31	41%	54
2013	113	58	51%	94
2014	127	52	41%	84
TOTAL	439	215	49%	355

Usvyatsky, O. (2015). *Use of non-GAAP metrics in IPO prospectuses: SEC comment letters*. Retrieved from http://www.auditanalytics.com/blog/use-of-non-gaap-metrics-in-ipo-prospectuses-sec-comment-letters/

SEC staff might use the letter of comment to ask the company to provide further supplemental information so they come to a stronger understanding of the company's disclosure and its implications. A good number of companies received SEC comment letters related to use of non-GAAP metrics in their S-1 filings. But the increase of SEC comment letters did not stop companies from use of non-GAAP metrics.

An example of IPO use of non-GAAP is Groupon's creative uses of non-GAAP earnings. Groupon filed Adjusted Consolidated Segment Operating income (CSOI), upon initial filing of Form S-1 with SEC in the IPO in 2011. In the calculation of Adjusted CSOI, Groupon excluded certain online marketing expenses, acquisition-related costs and stock-based compensation expense, claiming that "We consider Adjusted CSOI to be an important measure of the performance of our business as it excludes expenses that are non-cash or otherwise not indicative of future operating expenses" (Groupon, Inc. 9).

From middle column of Figure 6, we can see that Groupon was able to raise non-GAAP income of $420 million from net loss of $ 61 million under GAAP metrics for the year ended Dec 31, 2010. There's an inherent risk for the use of Adjusted CSOI: Groupon suggested that they could exclude online marketing expense as a more accurate way of evaluating performance, but Groupon is an online based company that relies heavily on marketing to raise awareness. To suggest that the exclusion of the online marketing expense is beneficial in determining actual operation performance for this online company may be ludicrous (Savitz 2011).

FIGURE 6 - GROUPON ADJUSTED CSOI IN S-1 FILINGS					
	YEAR ENDED DECEMBER 31,			THREE MONTHS ENDED MARCH 31,	
	2008	2009	2010	2010	2011
	(IN THOUSANDS)				
(LOSS) INCOME FROM OPERATIONS	(1,632)	(1,077)	(420,344)	8,571	(117,148)
ADJUSTMENTS:					
ONLINE MARKETING	162	4,446	241,546	3,904	179,903
STOCK-BASED COMPENSATION	24	115	36,168	116	18,864
ACQUISITION-RELATED			203,183		
TOTAL ADJUSTMENTS	186	4,561	480,897	4,020	198,767
ADJUSTED CSOI	(1,446)	3,484	60,553	12,591	81,619
ADJUSTED SEGMENT OPERATING INCOME:					
NORTH AMERICA	(1,446)	3,484	88,036	12,591	38,610
INTERNATIONAL			(27,483)		43,009
ADJUSTED COSI	(1,446)	3,484	60,553	12,591	81,619

Groupon. (2011). *Form S-1*. Retrieved from http://www.sec.gov/Archives/edgar/data/1490281/000104746911005613/a2203913zs-1.htm

SEC did not approve Groupon's "creative" accounting. After receiving comment letters from SEC, Groupon eventually amended their S-1 filing to exclude altogether any mention of an Adjusted CSOI figure (Agrawal 2011).

These examples of research and presentation indicate an increased awareness that investors had begun to notice that many companies may be intending to provide financial statements with "untrue presentations" to misguide users. In addition to Groupon, and in the months leading up to its IPO Twitter used an "Adjusted EBITDA" to report a non-GAAP income of $21.4 million from actual EBITDA according to SEC rules with a net loss of $69.3 million in

2012 (Sluty 2014). So this is non-generally accepted by accounting standards measures that are clearly being adjusted for favorable results.

CONCLUSION

The earnings releases of social media companies provide a good source of non-GAAP financial measures. These technology companies have garnered attention for their use of stock options as compensation and identifying and adjusting for nonrecurring costs. Groupon, Twitter, Linkedin, Facebook, Pandora, and Yelp, provide an example of why the SEC may have felt an update to the C&DI might be necessary. As seen in Figure 7, the five years (2011-2015) non-GAAP adjustments scaled by market value of equity (MVE) as a basis for comparison have trended upward over time for all companies (Henry, Rosenthal & Weitz, 2017).

FIGURE 7 – SOCIAL MEDIA COMPANIES						
NON-GAAP ADJUSTMENTS SCALED BY MARKET VALUE OF EQUITY (DOLLARS IN MILLIONS)						
		2011	2012	2013	2014	2015
Facebook	Non-GAAP adjustments	$164	$1,234	$702	$1,773	$2,830
	Market value of equity		$63,142	$139,191	$218,222	$297,758
	Non-GAAP adjustments/MVE		2.00%	0.50%	0.81%	0.95%
Groupon	Non-GAAP adjustments	$89.053	$105.014	$168.468	$125.817	$70.302
	Market value of equity	$13,289	$3,193	$7,860	$5,569	$1,815
	Non-GAAP adjustments/MVE	0.67%	3.29%	2.14%	2.26%	3.87%
Linkedin	Non-GAAP adjustments	$24.576	$78.727	$165.123	$269.825	$539.294
	Market value of equity	$6,394	$12,475	$26,096	$28,723	$29,722
	Non-GAAP adjustments/MVE	0.38%	0.63%	0.63%	0.94%	1.81%
Pandora	Non-GAAP adjustments	$13.686	$25.500	$49.527	$73.596	$190.252
	Market value of equity	$2,157	$1,987	$5,198	$3,728	$3,017
	Non-GAAP adjustments/MVE	0.63%	1.28%	0.95%	1.97%	6.31%
Twitter	Non-GAAP adjustments	$62.769	$44.208	$610.993	$678.891	$797.660
	Market value of equity			$36,276	$23,042	$16,062
	Non-GAAP adjustments/MVE			1.68%	2.95%	4.97%
Yelp	Non-GAAP adjustments	$4.903	$15.238	$28.382	$16.524	$61.805
	Market value of equity		$1,197	$4,887	$3,991	$2,188
	Non-GAAP adjustments/MVE		1.27%	0.58%	0.41%	2.82%
Henry, T.F., Rosenthal, D. A., & Weitz, R. R. (2017). Recent Trends in Reporting Non-GAAP Income: An Example from Social Media Companies. *CPA Journal*, *87*(6), 60-64. Retrieved from https://www.cpajournal.com/2017/07/05/recent-trends-reporting-non-gaap-income/						

In September 2016, the SEC issued a new Compliance and Disclosure Interpretations to address common misinterpretations of rules that have potentially misleading effects. The 2016 C&DI banned (1) the exclusion of "normal, recurring, cash operating expenses," (2) disallowed the change in definition of company specific non-GAAP financial measures without proper disclosure and potential prior year restatement, (3) required objectivity in excluding both expenses and gains of the same nature, and (4) disallowed the premature recording of revenue based on future billings. Clarification is also made regarding presentation with equal or greater prominence of GAAP measures (or disclosures when the GAAP measure cannot be reasonably obtained) most directly related to the non-GAAP measure presented. The 2016 C&DI update bans presentation of per share EBIT and EBITDA and reiterates the SEC's prohibition of liquidity measures presented on a per share basis (Graban & Flow, 2016).

Business educators and students should know that non-GAAP financial measures at their best can be a helpful supplement to GAAP financials. They can provide management insight into current and predicted business

conditions. When these measures are free of bias and opportunistic disclosure and presented in an understandable manner with all necessary disclosures, non-GAAP can be a powerful tool of in-company analysis for investors. Educators of business students must emphasize that these measures are not, however appropriate for use in the comparison of companies as they lack definitional uniformity. Measures presented are selected by company management which allows for bias and opportunistic presentation.

Student of business should also know that the ethicality of non-GAAP disclosures has been a topic of debate for quite some time. There is a reason there is GAAP, those measures that are generally accepted are most reliable across an industry. Non-GAAP has a tendency to shift the burden of proof from the company to the investor by requiring investors to display a much higher level of competency than that required for GAAP. This information is prominently displayed on company earnings reports and has potential to cause confusion rather than benefit for investors. Management bias is another contributing factor in the conversation of the ethics of non-GAAP. A propensity exists for management to show non-GAAP figures that increase income in order to boost existing shareholder value. This is problematic because these possible inflated income figures can be deceiving to potential investors.

For years the SEC has attempted to regulate company use of non-GAAP while still allowing management autonomy. In finding balance between useful and misleading information, the SEC has had periods of strict regulation followed by periods of relaxed regulation. Following the most recent period after a 2010 C&DI update, the SEC worried that the balance had tipped in favor of misleading. The 2016 updated C&DI was issued in hopes of restoring usefulness to the information companies were providing while reducing the misleading non-GAAP information. Further research is needed to determine the effectiveness of these newer updates.

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Student Investment Fund: AACSB and Experiential Learning, Using An Alumni Perspective

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ABSTRACT

Student managed investment funds (SMIFs) are part of many AACSB business school programs. This study introduces the innovative structure and operation of the University of the Pacific's Student Investment Fund (SIF) and discusses how the course is structured to help achieve the AACSB's goals of engagement, innovation, and impact. Different from past SMIF research, we also survey SIF alumni regarding their perspectives of this experiential learning experience. The survey results confirm that the structure, operation, and other activities in SIF help achieve the AACSB's goals of engagement, innovation, and impact. Implications and future research directions are explored.

Keywords: student investment fund, learning outcomes, alumni reactions

INTRODUCTION

Business schools are continually grappling with the challenge of how best to ensure that their students gain the tools and knowledge necessary for a successful, fulfilling career. One response is to provide students with meaningful and focused experiences. Doing so is congruent with the Association to Advance Collegiate Schools of Business (AACSB) requirements that accredited programs engage in innovation, impact and engagement. As such, schools strive to ensure that students can and will apply their classroom knowledge in a variety of settings. On the employer side, recruiters are looking for students with technical skills who can demonstrate their ability to utilize them. Although business school faculty have historically been involved in applying experiential methods to teach content, the demand has never been greater. As a result, business schools are engaging in a wide range of activities to try to deliver this type of content, whether it be through simulations, class activities or case studies (Reising & Dale, 2017). One technique is to simulate positions that students will occupy once they graduate so as to experience the kinds of analytical and decision-making activities that they will experience in the workplace. This type of practice and experiential learning is seen as critical for student success (Baldwin, Pierce, Joines, & Farouk, 2011; Kosnik, Tingle & Blanton, 2013). Furthermore, student feedback makes it clear that they enjoy these types of experiences and seem to learn more than in a traditional lecture format.

Experiential learning can take many forms, one of which is the student-managed investment fund (SMIF). The first SMIF was created at Gannon University in 1952 and currently there are more than 300 SMIFs internationally with total assets under management valued at more than $400 million. Accompanied with this rapid growth of SMIF's, a stream of studies has showcased the structures and operations of the funds in diverse university settings (Block & French, 1991; Kahl, 1997; Lawrence, 1994, 2008; Macy, 2010; Clinebell, 2013). However, little research has been carried out about the students' long-term skill development and career success after participating in a SMIF. This study is explicitly designed to address this gap by surveying alumni from the Eberhardt Student Investment Fund (SIF), an experiential learning course at the University of the Pacific. To our knowledge, this is the first study to use SMIF alumni's feedback to examine the degree to which its graduates believe it has enhanced their careers. By asking alumni to reflect on their past experience in an innovative student fund, they provide information about how they utilize the knowledge that they obtained in the class to their career. Alumni are uniquely positioned to provide this perspective as opposed to current students who may not have had the opportunity to apply these skills in the work world. We believe this feedback is crucial for AACSB-accredited business schools seeking to make more efficient experiential learning courses to serve the changing needs of today's increasingly dynamic business community.

Established in 2007, the University of the Pacific's Eberhardt Student Investment Fund's goal is to expose undergraduate and graduate students to the world of investing. While many business schools use the term Student Management Investment Fund or "SMIF", at the University of the Pacific, we use Student Investment Fund or "SIF". The SIF course at the University of the Pacific is different from many other classes that are taught at the university as it is 1) student run 2) a hybrid between classroom and simulated real life 3) combines both undergraduate and graduate students and 4) requires the students to utilize a wide range of skills that they have been exposed to in their other classes. While the majority of participating students are business school students, some non-business students have also enrolled in the course. The inclusion of both undergraduate and graduate students as well as non-business students and the practical nature of the course achieve all three of the AACSB's critical success factors: cultivating an intersection between academia and practice, connecting with other disciplines, and being an innovator in higher education.

The success of the program can be measured through both the performance of the fund (since its inception in 2007, it has averaged over an 8.5% annual return which is roughly in line with its benchmark) and its alumni's experiences. Alumni perspective can be especially insightful as these former students apply what they have learned in their work lives. Based on 38 survey responses from the 112 SIF alumni, our data shows that SIF promotes students' application of book knowledge to a practical business decision making process that enhances their learning outcome. Students' feedback demonstrates how SIF amplified their overall learning experience in the business school and the university. The positive relationship between academia and practice is reflected in both satisfactory job placement and the extent to which SIF alumni agree that they use the knowledge and skills they learned in SIF on a daily basis. Overall, the unique structure of SIF at Pacific helps to answer the AACSB's call for business schools to foster engagement, accelerate innovation, and amplify impact (AACSB, 2017).

RESEARCH ON STUDENT INVESTMENT FUNDS

The first student-managed investment fund was established at Gannon University in 1952 and was followed by a stage of slow growth with 12 in 1969 and only 34 by 1993. The size of funds varied greatly during this time, ranging from $6,000 to more than $8,000,000 (Lawrence, 1994, 2008). As more business schools tried to mirror real world experiences, SMIFs enjoyed a period of fast growth. Neely and Cooley (2004) reported that by 2003, 134 SMIFs had been established in the US alone. According to Lawrence (2008), by 2008 the number of SMIFs internationally had increased to 314 and more than $407 million in assets were being managed. Funds can be structured in multiple ways, however, 62% of all SMIFs worldwide are composed as part of a university's endowment (Lawrence, 2008). Other SMIFs are funded through a variety of means including investment clubs, bank loans, grants and retained earnings (Block & French, 1991; Bhattacharya & McClung, 1994; Kahl, 1997). The structural flexibility, along with the fact that SMIFs provide students with a unique hands-on experience in managing real money as well as enhancing a school's ability to meet AACSB criteria, may explain this rapid growth.

Previous studies on SMIFs can be divided into a variety of categories. Some discuss how SMIFs are organized and operate at different types of universities. Many of these focus on issues that their SMIFs have faced and the lessons learned to enhance student learning (Block & French 1991; Kahl 1997). Other studies take a curricular approach and discuss how to effectively integrate and use SMIFs in a finance curriculum (Grinder, Cooper, & Britt 1999) or how to highlight certain concepts like social investing (Clinebell, 2013). Finally, some studies focus on student outcomes, such as marketability and overall knowledge (Macy, 2010).

Our research differs from prior studies in two key ways. First, we link our unique and innovative fund structure to successfully achieving the AASCB's call for business schools to focus on engagement, innovation, and impact. Next, we provide support for our assertion through feedback from a survey of SIF alumni. We believe that alumni responses are critical as the purpose of the Eberhardt SIF is to provide students an experiential learning environment that mimics the real business world. Work experience after graduation can help alumni better assess the extent of their learning, which provides us more accurate first-hand information regarding the impact student investment funds have in developing both technical and soft skills.

LEARNING THEORIES AND AACSB

The Association to Advance Collegiate Schools of Business (AACSB) requires accredited business schools to foster engagement, innovation, and impact. We utilize two sources to clarify our understanding of these concepts. First, Holmes, Wilkins, and Zhang (2017) define engagement as the "…existence and productive intersection of academic and professional engagement (p. 22)". Next, Robinson (2015) defines engagement as providing relevant education so that students have the skill and capabilities required by businesses. As for innovation, Holmes, et al. (2017) note that, "…innovation is tied to the pursuit of continuous improvement in business education via strategic experimentation and entrepreneurial pursuits (p. 22)". Robinson (2015) points out that innovation occurs as business schools generate and disseminate knowledge and promote an organization that continuously changes and grows. Additionally, it allows schools to take advantage of the changing business landscape. Finally, Holmes, et al. (2017) define impact as "…the various outcomes typically associated with high-quality business education and research, as well as addressing the extent to which business schools 'make a difference' in business, society, and the global community of business schools and educators (p. 22)" Robinson (2015) believes that by combining innovation and engagement, business schools can ensure that they will and continue to have impact on all their stakeholders and the business world at large.

To justify the claim that Pacific's SIF experience helps achieve the mission of the AACSB -- of fostering engagement, being innovative, and amplifying impact -- we look to various approaches to learning. To begin, we briefly define various learning theories and in subsequent sections, we link these theories to the structure and approach of the SIF course.

Social learning theory provides insights into the processes by which the students learn. It emphasizes the role of indirect or vicarious learning and social context. That is, individuals need not have direct experiences to learn but through vicarious reinforcement they can observe how key role models (e.g., their class peers) are rewarded or punished for their behavior. In particular, social learning theory proposes that the individuals learn from each other through three distinct methods – observation, imitation and modeling. Action, Bandura argues, is guided by individuals having observed certain behaviors and this observation then serves as a guide for their choices. As a result, there is continual feedback between observation, action and behavior. For modeling to be effective, certain conditions must be met – attention, retention, reproduction and motivation (Bandura, 1977; 2001).

In addition to social learning, experiential learning plays an important role in fostering AACSB's principles of merging academia and practice and connecting with other disciplines. Experiential learning encompasses the direct experience and the sense of involvement within the specific context (Keeton & Tate, 1978; Klimoski & Amos, 2012). Although the benefits of experiential learning are well established (Reising & Dale, 2017; Dees & Hall 2012; Templeton, Updyke & Bennett, 2012), business schools have been castigated for a lack of strong, experiential opportunities throughout the curriculum for students, especially as these types of activities have been shown to be crucial in long-term success (Armstrong & Mahmud, 2008).

As research has demonstrated, learning of all types can be hampered because of biases (Kolb, 2014). As a result, the effectiveness of the experience can be diminished, and individuals might not apply what they learned. As defined by March (2010), experiential knowledge is, "lessons extracted from the ordinary course of life and work (p. 9)". Academic knowledge, on the other hand, is, "generated by systematic observation and analysis by experts and transmitted by authorities" (p. 9).

One issue that is closely related to the use of experiential learning is critical thinking. This is particularly important when dealing with biases. For example, "critical thinking involves questioning assumptions, evaluating evidence, and testing the logic of ideas, proposals and course of actions" (Rousseau, 2012 p.13). When students utilize these skills, they may counteract their biases. Moreover, academic work on critical thinking emphasizes the link between these ideas and Bloom's taxonomy (Shaw & Holmes, 2014). They argue that the higher levels in the taxonomy (analysis, synthesis and evaluation) require the application of critical thinking skills. In the following section, we discuss how the student experience in ESB's SMIF conforms to these elements of learning theory.

THE EBERHARDT STUDENT INVESTMENT FUND

The Student Investment Fund (SIF) in the Eberhardt School of Business at University of the Pacific began in 2007 with a $1 million donation by an alumnus. After this initial gift, the Board of Regents of the university contributed an additional $1 million to the fund. The gift agreement stipulates that the fund would be managed by a selection of students. The fund's wholly student operated structure fits well with the AACSB mission to be engaged and innovative in higher education. Not only are the students expected to be as reflective as possible of the decisions that an investment manager would make, they also take responsibility for running the organization. A full-time, tenure track faculty member from the Eberhardt School of Business serves as the formal faculty advisor for the SIF. While the faculty advisor actively oversees the students and provides suggestions when appropriate, all of the decisions regarding investing and fund structure are made solely by the students.

Operation and Management

The Student Investment Fund is listed as a 4-unit class housed in the Eberhardt School of Business. The course is open to all students (Junior level and above) who have successfully completed a required 4-unit Financial Management undergraduate course. Interested students are encouraged to apply for admission to the course with a target class size of approximately 12-18 students.

Students are expected to not only have both breadth of knowledge (within finance and other business functions) and depth of knowledge (through assignment to a particular sector, e.g., consumer staples, energy, utilities, etc.) but also to gain managerial experience by serving in particular roles we call service positions (e.g., Chief Executive Officer, Chief Investment Officer, Accountant, Economist, etc.).

The service positions that students take are divided into three main areas: operations, investment management and marketing. The executive team consists of a Chief Executive Officer (CEO) who oversees the running of the class, a Chief Operations Officer (COO), a Chief Investment Officer (CIO), and a Chief Marketing Officer (CMO). The COO is responsible for ensuring reports get distributed and archived, trades get submitted correctly and in a timely fashion, and tracking decisions made by the fund. The CIO maintains the investment policy statement (IPS) and ensures that the fund is in compliance with the previously determined directives. The CMO is responsible for outreach both internally and externally by overseeing student recruitment efforts and ensuring that an annual newsletter is sent to interested stakeholders. Other service rolls include Portfolio Manager, Economists, and Social Media Coordinator.

Each of the defined roles allow students to engage in behaviors that they will be expected to perform once they enter the work world. Additionally, to complete the necessary roles for the class, students must work across disciplines and functional areas. Requiring the students to perform these roles ensures that the class differs markedly from most business school courses. This type of course structure helps amplify the links to AACSB's engagement, innovation, and impact.

Member recruiting is an essential component of a student-run fund that helps the members in the fund identify motivated students to apply for admission into the course. Each semester the current SIF students actively recruit their colleagues for the following semester. Interested students complete an application which includes an analysis of the economy and upcoming economic trends over the next twelve to sixteen months. These applications are then reviewed by the faculty advisor and the student executive team of the fund. Two to three current SIF students then interview the applicants using questions provided by the fund advisor and the fund's CEO. At the conclusion of all student interviews, the SIF students gather and evaluate the qualifications of each of the candidates. In order for a new student to be invited into the fund, the candidate must receive a positive vote from at least 75% of the current students (including the vote from the faculty advisor). If a student fails to meet this threshold, s/he is denied admittance to the fund but allowed to submit an appeal directly to the faculty advisor and allowed another intensive interview upon the approval of the faculty advisor. This opportunity for observation and imitation is clear. The recruitment and interview process enable the recruits to observe behavior and once they are selected, model that behavior.

SIF is organized to ensure a structured executive succession. Once the students in the incoming class have been identified, the outgoing executive team and the faculty advisor interview candidates interested in becoming members of the executive team. A unanimous vote by the current executive team and the faculty advisor is necessary. The

faculty advisor and the incoming CEO of the fund then decide other roles within the fund and the sector analysis assignments for the following semester, and students are made aware of these assignments on the first day of class. Therefore, the CEO begins by managing her resources and making decisions about how to best allocate human capital. Student skills are utilized to maximum advantage or they are allowed to expand their abilities. Moreover, because of the needs required in running the fund, students are required to use all the functional business areas for it to work effectively. Typically, the number of students within the fund varies between 10-16 students. The size of the class has been kept small to ensure that the students fully immerse themselves in the management of the portfolio. The composition of the students in the fund, graduate and undergraduate, has varied over time with the early years tilting more towards graduate students and a current composition of primarily undergraduates. Students, therefore, have the opportunity to work with individuals of varying backgrounds, abilities, and knowledge in any given semester. Some students may already have participated in the fund while others are in their first semester. Students' diverse background allows them to learn from each other and pass along both technical skills and the SIF culture. An unbiased assessment of students' performance is critical to ensure that experiential learning is employed and applied. On the one hand, the faculty advisor in SIF takes the role of evaluating students' academic performance. This makes SIF different from a student investment club where students' activities would not affect their academic performance. On the other hand, the faculty's assessment is not the only feedback that students receive. For example, the fund's performance is compared to a major market index, which ensures the assessment is tied less to an individual's subjective judgment and thus potentially less biased. After each presentation, the students also receive a brief peer evaluation from every member of the class. Students rate the presenters on their presentation style and effectiveness, analysis and content of the presentation, and ability to respond to questions asked during the presentation. While there is always informal mentoring by the students who are returning for their second semester in the fund, this formal peer review process helps to provide one more source of feedback to encourage continuous improvement.

Investment Decision Making Process

In addition to their service roles, students are assigned as an analyst for one of the sectors of the S&P 500. The fund covers 10 sectors every semester based on the GICS classification (e.g. financials, consumer staples, consumer discretionary, healthcare, etc.). Students are expected to have a broad and deep knowledge of the sector that they have been assigned. They are responsible for overseeing the fund's investments in that sector and providing reports and suggestions to the fund. Students are required to conduct four analysis reports for their assigned sector, including an outlook report, a holdings report, a stock recommendation report, and a semester wrap-up report. The order of the reports is intentional as the early reports will inform future reports and allow students to become comfortable with using the Bloomberg terminals to obtain the appropriate information. The sector outlook report focuses primarily on macro and industry trends within the sector. One of the primary goals is that students will use the information from the reports to identify industries within their sector that they believe are positioned to do well in the upcoming 12 months. These attractive industries serve as a starting point for the students when they are asked to identify a specific stock to recommend. The sector holdings report gives the students an opportunity to analyze individual equities and receive feedback from the faculty advisor and their peers before they are tasked with preparing their stock recommendation report. The semester wrap-up report is used by the future students to become familiar with their assigned sector and receive an overview of what occurred within the sector over the past semester.

After the first two weeks, students begin researching and preparing their sector outlook reports which are distributed and presented to the fund. Once all the outlook reports are presented, the students will debate and vote on the new target allocations for each sector within the portfolio. This structure allows for maximum experiential learning – the students observe their classmates' presentations, and then imitate. Reports from previous years are available for the students to utilize and model for their own research. However, class time is spent on the students' analytical presentations and their efforts to influence their peers' decisions. As a result, many are learning and developing a series of skills beyond finance. They are also exposed to knowledge and skills from different fields as the class is comprised of both finance and non-finance students. This connecting across disciplines is an important aspect to success in the program and helps achieve one of the AACSB's three critical factors, specifically connecting with other disciplines. They are also directly engaged with relevant business practice.

The following weeks are spent researching the current stock holdings within each sector and recommending whether the fund should continue to hold or sell the stock. After each sector has reviewed its holdings and provided hold/sell recommendations, the fund votes on the recommendations with a 75% threshold required to either buy or sell a stock. The analysts then research individual securities and recommend a new security within their sector for the fund to purchase. Near the conclusion of the semester, the wrap-up reports provide a summary of what occurred within the sector over the semester and are used as a tool for familiarizing the incoming analysts with the sector. While the advisor uses some class time for lecturing on the tools necessary for the upcoming reports, the majority of class time is reserved for student presentations and discussion.

Modeling, which represents an important aspect of experiential learning, is incorporated throughout the class. All three aspects – attention, retention and reproduction occur in different areas throughout the semester. For example, a template is provided to the students to help them focus their research and know what the most essential information is. Retention involves the students maintaining the issues that were emphasized. This happens through the class process, where students are continually presented with their colleagues' work product. Students receive both the written reports and witness student presentations throughout the semester. Reproduction occurs in multiple ways. One is through the presentation process. By seeing strong students achieve positive outcomes, such as a unanimous vote to buy or sell a position, students will attempt to imitate those aspects (style and or content) in their own work. Students will also share templates to obtain financial ratios. Finally, students are motivated through their peers' activities. This is facilitated by the information gathering requirement for the reports. The students need to use Bloomberg terminals that are located in the trading room within the business school. As a result, the students spend a significant amount of time together and see the effort that is required to produce a quality report. Students thus learn via their own individual work as well as through observing others (Kolb, 2014). This collaborative approach to learning has a great impact on the students and helps them to elevate their work and grow beyond what can be achieved from a typical lecture course.

Because student discussion and involvement are essential to making informed investment decisions, all the reports are distributed to the class 24 hours before the presentations to provide the whole class enough time for review. During the presentations, there is typically considerable discussion regarding the information provided as students finalize their opinions prior to the vote. If a vote to purchase or sell fails to reach the 75% threshold but receives more than 60%, a second discussion and vote occurs.

Outside Classroom Activities

Bloomberg terminals are the primary tools used by the students for research and for tracking their portfolios. Within the first two weeks of each semester, the students attend a training session at the Bloomberg office in San Francisco, CA. As our campus is relatively close to San Francisco, this trip is usually a one-day event. They are also required to complete the official Bloomberg Market Concepts training, within the first two weeks of the semester. In addition to actively managing the portfolio, the students are provided with guest speakers and firm visits each semester. Typically, two to three guest speakers come to the class to speak with the students and provide investment and career advice. While the faculty advisor is responsible for identifying potential speakers, the CEO of the fund is responsible for reaching out and finalizing all scheduling of visits and speakers. One of the more notable trips is to the Quinnipiac G.A.M.E. (Global Asset Management Education) Forum held annually in New York City. Students travel to New York for almost the entire week to attend the three-day conference and visit firms and alumni in New York. The conference involves two days of discussion regarding investing and the economic outlook with the final day being reserved for career advice.

The Bloomberg training, along with the guest speakers and the conference, provide a strong bridge for the students between academia and practice. They have the opportunity to meet with and learn from people who are actively utilizing the skills that they have been acquiring. Furthermore, each semester the students present their analysis to financial advisors who specialize in high wealth management clients. The fund is treated as if it was being vetted as a possible investment option for their clients and as such, the students are expected to explain their positions and investment philosophy. Each of these experiences underscore the innovative aspect of the class and the linkage between classroom and the business world.

Another unique aspect of the fund is the requirement of annual disbursements to the university, the business school, and specific university programs. Since its founding, the fund has distributed over $900,000. This ceremony occurs every spring, where the students present novelty checks to the recipients. In this way, the SIF students experience the appreciation of the recipients and are able to see the impact that their investments have in the community. The students also witness firsthand how a one-time donation to the community can have a lasting impact. Participating in the philanthropic aspect of SIF reinforces the importance of being a positive influence in the community as they pursue their careers. Additionally, the students are required to report to the Board of Regents about the performance of the fund and the future economic outlook. By doing so, they engage with the university community, and learn how a fund manager interacts with large institutional investors. Each year students comment about how this responsibility adds extra meaning to their investing decisions and helps them realize the positive impact one individual can have on a community.

ALUMNI FEEDBACK

In order to learn more about the impact the SIF course has had on our alumni, a SIF alumni survey was conducted. The survey was created through a process involving multiple steps. First, our study received approval by our Human Subjects Institutional Review Board. Given our interest in the effects of SIF on students' long-term success, we created a survey that focused on two main areas. The general information section focused on demographic information and outcomes since graduation (e.g. any additional degree programs or certifications). The second part of the survey focused on their experience in SIF and the role the course played in developing and improving a variety of different skills. During the revision process, additional questions regarding the interdisciplinary nature of the SIF experience were included.

Once the initial draft was completed, the survey was pilot tested with a group of SIF alumni (undergraduate and graduate) who were also asked to provide feedback. The survey was then revised based on their comments including rephrasing questions for clarity, adding questions regarding the students' service roles within the fund, and reformatting the self-assessment section. The revised survey was then posted online and all the students who have taken SIF were contacted via email and asked to participate. Given the small sample size, we include surveys that are mostly complete, as some respondents chose not to answer certain questions.

SURVEY RESULTS AND DISCUSSION

We received 38 survey responses from the 112 alumni for a response rate of 34%. All the respondents participated in SIF as undergraduates and four of them also participated in SIF during their graduate work. 16% of the respondents are female and 84% male. All 38 students completed their degree(s) at University of the Pacific. The majority of respondents (28) received a Bachelor of Science degree in Business Administration. ESB has concentrations, not majors and, not surprisingly, the majority concentrated in finance (26) with the others in accounting (2), international business (2), management and information system (1) and general business (1). Two students graduated with a Bachelor of Science in Accounting. The remaining undergraduates graduated with degrees outside the business school, in economics (4), international affairs (1) and engineering (1). All SIF graduate students were MBA students.

Overall, the alumni survey results indicate that students' positive feedback of SIF amplified their overall learning experience in the business school and the university. When asked about the role of other ESB courses in developing their skills used in SIF, 80% of students assess ESB at least good at developing their skills, especially in "making decisions on your own". All (100%) of the respondents believe their experience in SIF has had a positive impact on their University of the Pacific experience, and 72% of the alumni believe that SIF contributes more than 50% of University of the Pacific experience. Based on these responses, it is apparent that the structure of the course and the responsibility of managing the SIF portfolio create opportunities for student growth that have a meaningful impact on their time at the university. The SIF experience also encouraged post-graduate pursuit of professional credentials, such as CFA (5 students), CPA (one), and Broker series (one).

In addition, the positive relationship between academia and practice can be seen through SIF students' job placements. 95% of alumni are currently employed with 74% employed in their degree field. Moreover, 71% of respondents report that their position is either appropriate or advanced for their level (24). Overall, 77% of SIF alumni are satisfied with their job (26).

Additional evidence of the positive relationship between academia and practice can also be seen through the extent to which the alumni agree that the knowledge and skills they learned in SIF are used in their work on a daily basis. For example, one respondent stated: "I didn't realize how applicable the class was to the world of finance until I began working full-time. The skills that I developed from this course has (sic.) allowed me to excel in a professional environment." Another respondent stated: "Seriously the best course ESB offers. In terms of real-world scenarios, it has prepared me for the job I am in currently. Communicating your decisions and analysis with conviction is the single thing needed in my business. People pay for advice. They want you to take the ambiguous and make it black and white. To do this successfully conviction is needed. SIF developed these skills and it helps to this day". 44% of students often use the skills they learned in SIF in their current positions.

As stated earlier, the AACSB urges schools to promote interaction between academia and practice, connect with other disciplines and be innovators in higher education. The survey results dealing with scholarly areas demonstrate that SIF promotes enhanced learning outcomes, allows for interaction and peer-learning among individuals from diverse academic backgrounds, amplifies the university learning experience, and bridges academic training with future career development.

CONCLUSION

Overall, given the popularity and rapidly growing number of student investment funds in universities, it is crucial to have an updated assessment about students' learning experiences in this type of experiential learning course. Clearly, such a class supports the goals of effective learning by providing opportunities for observation, imitation and modeling. Our study, using the first-hand data from SIF graduated alumni, provides a unique contribution to SIF literature in that our post-learning assessment may more objectively reflect students' learning outcome. Our survey results confirm that SIF alumni, both undergraduate and graduate, consider SIF a unique and valuable learning experience that benefits their future career development. These findings are particularly notable as the former students are reflecting on the impact that this course has had, a course that they may have taken 10 years prior. This long-term perspective can only be obtained through alumni feedback. The unique structure of SIF at University of the Pacific helps achieve the key tenets of what the AACSB would like to see business schools accomplish– engagement, accelerate innovation and amplify impact all occur in SIF.

Figure 1: Link with AACSB

	Engagement	Innovation	Impact
University of the Pacific's SIF course	Encourages students from all business and non-business concentrations to apply to enroll in the course. Students serve in leadership roles (e.g., service positions) during their SIF experience	Includes cutting-edge Bloomberg terminal training in San Francisco, trip to Wall Street each spring, long-short trading, etc.	Alumni report SIF skill development impacted their careers and long-term development.

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Measuring Student Ethical Behavior at the Micro Level Revisited

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ABSTRACT

In an earlier paper, the authors described how ethical behavior of students was measured using vignettes containing ethical dilemmas. A second three-year follow-up study was conducted that analyzed the responses of 1,060 junior-level pre-accountancy majors, and was expanded to measure student ethical behavior using gender, age, hours worked, and the number of ethics classes taken. This study resulted in the following findings. (1) Female students appear to be more ethical than male students except when an ethical dilemma represents a potential threat or confrontation. (2) Students become more ethical as they get older. (3) Gender and age are not independent of student ethical behavior and are statistically significant. (4) The number of hours worked and ethics classes taken are independent of student ethical behavior and not statistically significant. (5) A longitudinal analysis shows little change between the two studies other than the addition of the demographics.

Keywords: ethics, ethical behavior, demographics, age, gender, hours worked, instruction in ethics, ethical dilemma, vignettes, students, moral compass, universal ethics standard

INTRODUCTION

This article describes the results of the second of two three-year studies that measures the ethical behavior of students. Unlike the first study (Weiss, Stone, and Lazarony, 2013), demographics are used in this study to measure the impact on ethical behavior.

LITERATURE REVIEW

Vignettes were again used in this study. Sadler and Barac (2005) identified a substantial number of studies supporting the use of vignettes as an effective research technique. Alexander and Becker (1978) long ago found support that vignettes are a means for producing a more valid and reliable measure of opinions than simple abstract opinion surveys.

Our review of the literature focuses on how demographics impact ethical behavior and attitudes.

Gender
A study by Franke, Crown, and Spake (1997) of more than 20,000 respondents in 66 samples found that females are more likely to perceive business practices as unethical. Loo (2003) described how results that differed regarding gender might be due to the statistical methodology used. Though vignettes were used in his three studies, he described the limitation that vignettes are simplified snapshots of complex dilemmas in the real world. The results found by Glover, Bumpus, Sharp, and Munchus (2002) added a different perspective to the issue of gender. Males were found to be more ethical than females when confronted with an extremely intense moral dilemma (the situation is clearly and obviously unethical), but less ethical when the issue is in a gray area and not as obvious. Smith and Rogers (2000) used accounting vignettes to survey both students and accountants working in public accounting. The results revealed that there are no ethical differences by gender when a rule is violated. But for gray areas of ethics, females are more ethical than males. Another result is that the behavior is more acceptable if the actor engaging in the behavior is female. Hoffman (1998) used ethical vignettes for 164 of three levels of managers at a large stock exchange located in a fourteen-state region. The purpose of this study was not to assess whether there were gender differences, but whether the dynamics of situations and ethical dilemmas caused differences. Doty, Tomkiewicz, and Bass (2005) found that females are less likely to engage in unethical behavior than males. They suggested that one conclusion could be that the male drive to succeed could lead to unethical actions and decisions. In a study of 175

business students, Tsaliki and Ortiz-Buounafina (1990) found that the ethical beliefs of males and females are similar.

Instruction in Ethics

Hilteberitel and Jones (1992) reported that integrating a unit of business ethics into eleven accounting classes results in an effect on moral decisions. Jonson, McGuire, and Cooper (2016) looked at the responses of 142 students to four vignettes before and after taking a semester-long unit in business ethics. This study provided qualified support that business ethics education has an impact on students' ethical decision making. Klimek and Wenell (2011) compared the ethical reasoning abilities of accounting students who took an accounting ethics course to students who merely had ethics discussions integrated into their other accounting courses. The students who took the standalone ethics course appeared to have higher ethical reasoning abilities. Lau (2010) used a questionnaire and ten vignettes to sample 707 students in two undergraduate business courses to find that ethics education improves ethical awareness and moral reasoning (defined as "the ability to compare, weigh, and evaluate different ethical perspectives"). This study, however, did not examine whether ethical behavior increases with additional ethical education. Using a sample of 230 upper-division undergraduate students, Bloodgood, Turnley, and Mudrack (2010) found that taking a business ethics course does not have a significant effect on a student's views regarding cheating. Cameron and O'Leary (2015) reported the results of a study in which accounting students with prior ethical instruction evaluated six ethical vignettes, three involving only moral issues and three with a combination of both legal and moral issues. After receiving additional ethical instruction, the students evaluated the same vignettes. Ethical attitudes towards the moral-only issues did not improve, but the attitudes towards legal/moral issues did. The conclusion was that additional ethics education results in students recognizing legal issues but does not improve moral attitudes.

Studies Involving More Than One Demographic

Ruegger and King (1992) concluded that gender is a significant factor, with females being more ethical than males in their perception of ethical situations. They also found that students are ethical in descending order of age with the oldest students being the most ethical. Holmes, Marriott, and Randal (2012) compared intended ethical behavior with actual behavior using 630 undergraduate accounting students and hypothetical tax evasion examples. Females gave more ethical responses than males. Older students and students at the university the longest were the most tax compliant. However, in a subsequent study by Marriott, Randal, and Holmes (2013) of 2,600 individuals from the general population, there were significant behavioral differences between females and males. But the age variable did not have an effect. In a survey of 2,196 students in business courses, Gupta, Cunningham, and Arya (2009) found that female students are more likely than males to engage in ethical behavior, but that age, GPA, major, and level of education have no influence. Joseph, Berry, and Deshpande (2010) examined the ethical behavior of 182 college students. The results were that female students are more ethical than males, and that grade point average impacts ethical behavior. Cohen, Pant, and Sharp (1998) used eight general business ethics vignettes at four universities to examine the effect of gender and academic discipline (accounting versus non-accounting) on ethical behavior. The results indicated that females view questionable actions as less ethical than males, and that accounting majors also view questionable actions as being less ethical than majors in other disciplines, especially in the liberal arts. A review by Borkowski and Ugras (1998) of studies conducted over a ten-year period concluded that females are more ethical than males (to fictional dilemmas), and that ethical attitudes and behavior increase with age. In a study of undergraduate and graduate students, Borkowski and Ugras (1992) found that ethical behavior changes with age, but employment or coursework in ethics do not significantly affect ethical attitudes. Wang and Calvano (2015) concluded that females act somewhat more ethically than males unless they have had instruction in ethics. Nguyen, Mujaba and Cavico (2015) found that age, gender and government work experience make a significant difference in the ethical development of Vietnamese people.

REVIEW OF THE FIRST STUDY

The results of our first three-year study measured student ethical behavior by using fifteen brief and simple ethical dilemmas that were described as vignettes.

In that study, two initial hurdles were identified that needed to be addressed in order to measure how students would react when faced with an ethical dilemma. These hurdles were equally relevant to the second study. The first hurdle was to minimize any defense mechanisms that students might have in response to the wording contained in questions that they perceived as judgmental or threatening. The focus was directed toward their behavior, and

avoided using trigger words that might raise barriers. The second hurdle was to ensure that students would respond to how they would actually behave when confronted with an ethical dilemma, and not select the answer that described what they perceived to be the most socially desirable response. We described the primary means of overcoming these hurdles as follows:

> . . . we disguised the questions as vignettes containing simple ethical dilemmas as the measurement tool. These vignettes described common situations that people encounter every day and which don't require a lot of time to think about. We made these ethical dilemmas somewhat fun, humorous, and non-threatening. The vignettes were presented in class to the students by use of PowerPoint slides, projecting each question one at a time in order to obtain spontaneous responses – often times evoking laughter, which lightened the mood. The students were given Scantron Form 20-S survey forms to anonymously record their responses.

The conclusion from the results of that study, in part, was that the students as a whole appeared to be honest individuals, but the majority of them were unwilling to accept responsibility for their conduct, and that the use of rationalizations by many of them negatively impacted their ethical behavior. An additional conclusion was that sharing these results with the students helped some of them recalibrate their moral compass.

THE SECOND STUDY

In our first paper, we described our plan to complete a second study that would be expanded to measure ethical behavior using gender, age, grade point average (GPA), and the number of ethics courses taken as independent variables. It was later decided to substitute hours worked for GPA because students have more than one GPA (overall and work completed at the University), and not all students would accurately remember their GPAs when completing the survey form.

The sample size increased from 798 students in the first study to 1,060 students in the second study. The students were again junior-level pre-accountancy majors who were enrolled in their first intermediate accounting class. The student profile for this study consisted of 49% female, 51% male, 23% Hispanic, 23% Asian/Pacific Islander/Filipino, 2% African American, 44% White, and 8% other or preferred not to indicate. In addition, there were an above average number of ESL (English as a Second Language) and international students.

The same fifteen vignettes from the first study were used. As stated above, this study differed from the first in that we used gender, age, hours worked, and the number of ethics courses previously taken to measure ethical behavior. To graduate with a degree in accounting, students are required to complete the following two courses in ethics: an upper-division course offered by the Religious Studies Department titled Contemporary Ethical Issues, and the choice of an upper-division course offered by the Philosophy Department titled Business Ethics or an upper-division course offered by the Business Law Department titled Law, Business, & Ethics. Many students complete all three.

We chose to report the results of eleven of the fifteen vignettes due to constraints in the length of this paper. However, all results are available for all the vignettes.

As was true with the first study, students were given immediate feedback about the results of their responses to the vignettes, which segued into a lecture on ethical behavior.

METHODOLOGY

As described earlier, 1,060 students were surveyed over a 3-year period. To test if the differences found within each demographic are statistically significant, we used a chi-square test of independence with a 5% level. In addition to the use of a chi-square test, further analysis was performed using a paired t-test for three sets of two related vignettes to determine if the difference between the means is statistically significant.

The following null hypotheses were set for each demographic:

Null Hypothesis 1: There are no differences in the target population based on gender.

Null Hypothesis 2: There are no differences in the target population based on age.

Null Hypothesis 3: There are no differences in the target population based on hours worked.

Null Hypothesis 4: There are no differences in the target population based on the number of ethics classes taken.

After each table reporting the results, we conclude whether or not the null hypotheses should be rejected and if the results are statistically significant.

THE "IT DEPENDS" RATIONALIZATION

In our first paper, we explained that the words "it depends" are often used to qualify a response to an ethical dilemma. Behavior in such cases is "dependent upon how much, who benefits, who is harmed, the magnitude, justification . . ." The following six vignettes examine this rationalization.

How Much

Materiality appears to influence the ethical behavior of some students. Table 1.1 reports the responses to receiving $10 too much change when purchasing groceries versus receiving only 50 cents reported in Table 1.2. The results show that more students would return the $10 (58%) than the 50 cents (43%). But are these differences between $10 and 50 cents statistically significant? Using a paired t-test, we conclude that they are at a 1% level, supporting the idea that the amount of money at stake influences how people respond. For the $10 vignette, an additional 14% of the students would rationalize their decision as a friendly discount if the prices of the groceries are too high.

For both vignettes, where one receives $10 too much and 50 cents too much, the chi-square test shows that there is no reason to believe a difference exists in the responses by gender. Nor are the number of hours employed and ethics classes taken statistically significant. Of the students who would return the change, the highest percentage for both amounts of any of the demographics are the oldest students. The chi-square test shows a statistically significant difference response by age for both vignettes. In particular, those students over 30 are much more likely to return the money, regardless of whether it is $10 or 50 cents. For the $10 vignette, 77% of students over 30 would return the money versus 55-58% for the other age ranges. And for the 50 cents vignette, 63% of students over 30 would return the money versus 31-44% for the younger age ranges. Thirty-one percent of the students who are less than 20 years old responded that the 50 cents isn't worth mentioning unless overcharged, while only 14-22% of the other age ranges chose this answer.

Tables 1.1 and 1.2: Receiving Too Much Change

		Gender		Age					Employment				Ethics Classes				
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
When purchasing groceries, you notice that the cashier has given you $10 too much change. What would you do?																	
• Keep it.	%	24	28	28	30	27	30	11	27	23	24	35	29	29	23	24	26
• Return it.	%	60	56	58	55	55	56	77	59	58	61	53	56	58	60	57	58
• I would consider it a friendly discount if the store's prices are too high.	%	14	14	14	14	15	14	10	12	17	13	11	14	11	15	16	14
• Something else.	%	2	2	0	1	3	0	2	2	2	2	1	1	2	2	3	2
When purchasing groceries, you notice that the cashier has given you 50 cents too much change. What would you do?																	
• Keep it.	%	33	31	24	35	32	39	18	34	32	31	30	35	32	32	31	32
• Return it.	%	40	45	31	37	44	41	63	42	38	49	45	40	46	42	43	43
• It's not worth mentioning unless I'm overcharged.	%	21	19	31	22	20	14	14	19	24	15	18	21	17	21	17	19
• Something else.	%	6	5	14	6	4	6	5	5	6	5	7	4	5	5	9	6

Chi-Square Statistical Analysis – Table 1.1 "$10 too much change"
Gender: χ^2 (3, N = 1060) = 2.25, p =.522; do not reject null hypothesis 1; results are not statistically significant.
Age: χ^2 (12, N = 1060) = 37.9, p = 0.0002; reject null hypothesis 2; results are statistically significant.
Employment: χ^2 (9, N = 1060) = 11.9, p =.219; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (9, N = 1060) = 8.55, p =.479; do not reject null hypothesis 4; results are not statistically significant.

Chi-Square Statistical Analysis – Table 1.2 "50 cents too much change"
Gender: χ^2 (3, N = 1060) = 2.95, p =.399; do not reject null hypothesis 1; results are not statistically significant.
Age: χ^2 (12, N = 1060) = 46.4, p < .001; reject null hypothesis 2; results are statistically significant.
Employment: χ^2 (9, N = 1060) = 12.1, p =.208; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (9, N = 1060) = 8.93, p =.444; do not reject null hypothesis 4; results are not statistically significant.

Taking office supplies home from an employer has been a long-standing ethical dilemma that often depends on how much is taken. Table 2 describes the responses to this vignette. Though 52% of the students responded that it isn't right, 40% would consider how much is taken before making a decision.

The oldest students are most likely to believe that taking supplies home is not right. The chi-square test results find a difference in responses by age to be significant at a 1% level, with 70% of those students over 30 compared to 42-59% in the younger age categories. Students 22 years old or younger are more likely to respond that knowing "how much" is needed to make a decision (47-48%), rather than responding that it isn't right (9-10%). Only 25-35% of students 23 years or older chose "it depends on how much." Fifty-six percent of female students responded it isn't right, as opposed to 49 percent for males, with the difference being statistically significant at a 5% level. Consistent with the results reported in Tables 1.1 and 1.2, the difference in responses for hours employed and number of ethics classes taken are not statistically significant. Even though not statistically significant, it's still worth noting the

apparent contradiction in ethical behavior in Table 1.1 and Table 2 – students employed full-time are less likely to return the $10 but more likely to believe taking office supplies home is wrong.

Table 2: Taking Office Supplies Home

		Gender		Age					Employment				Ethics Classes				
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
Is it right to take office supplies home from your employer for personal use?																	
• Yes	%	6	10	9	10	6	6	5	8	8	7	8	9	9	5	6	8
• No	%	56	49	44	42	59	59	70	53	47	54	59	57	52	52	50	52
• It depends on how much.	%	38	41	47	48	35	35	25	39	45	39	33	34	39	43	44	40

Chi-Square Statistical Analysis
Gender: χ^2 (2, N = 1060) = 8.71, p =.013; reject null hypothesis 1; results are statistically significant.
Age: χ^2 (8, N = 1060) = 49.9, p < 0.001; reject null hypothesis 2; results are statistically significant.
Employment: χ^2 (6, N = 1060) = 7.61, p =.268; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (6, N = 1060) = 8.77, p =.187; do not reject null hypothesis 4; results are not statistically significant.

Observing Who is Harmed
Tables 3.1 and 3.2 report what students would do if they found $900 on the sidewalk and either observed or didn't observe who lost it. Not observing who lost the money results in 69% of the students keeping the money (with 25% feeling guilty about it) when the alternatives are to turn the found money in to the police, donate to charity, or something else. However, when a little old lady is observed dropping the money, only 5% would keep it (with 2% feeling extremely guilty). Twenty-four percent of the students would accept a reward if offered. Only 11% would turn the money over to the police when the origin of the money is unknown, but 70% would return it to a little old lady who dropped it (and refuse a reward). Using a paired t-test, this difference is statistically significant at a 1% level. Comparing those who would turn in the money to a police station or donate it to charity (16% total) when the origin of the money is unknown with those who would return the money to a little old lady (94%, including those who would accept a reward and those who wouldn't) also results in a statistically significant difference at a 1% level.

For both vignettes, male students are more likely than females to keep the money, with the chi-square test finding a difference in responses by gender significant at a 5% level when the source of the money is unknown, and at a 1% when the source is known. Also, when the source of the money is unknown, female students are more likely to feel guilty about keeping the money. Looking at age, there is a statistically significant difference in responses for both vignettes. Older students are less likely to keep the money. When the source of the money is unknown, 69-73% of those students under 27 would keep it (with 21-26% feeling guilty). For those students 27 and older, 64-66% would keep the money, with 19-24% feeling guilty about it. When the source of the money is known, both the oldest students and the youngest students are the most likely to return the money to the little old lady, but least likely to accept a reward if offered. Of those students 27 and older, 81-83% would return the money as opposed to only 65-66% for those aged 20-26. When a little old lady drops the money, students under 20 (82%) are as likely to return the money as those over 26 (81-83%). And the 23-26 age range has the largest decrease in students keeping the money when the source is known (from 73% to 3%). The hours of employment and ethics classes taken do not result in statistically significant responses. However, in Table 3.1, a higher percentage of students who are employed full-time (78%) would keep the money if the source of the money is unknown.

These results strongly support the theory that people will behave more ethically when a potential victim is identifiable and generates sympathetic feelings. One option that wasn't included in these vignettes, but might have revealed a different result, is if the little old lady who dropped the money had just exited from a Rolls Royce driven by a chauffeur. Would the perception of the wealth of the individual and ability to absorb the loss have affected the ethical behavior?

Tables 3.1 and 3.2: Finding Money

		Gender		Age					Employment				Ethics Classes				Total
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
You find $900 on the sidewalk. What would you do?																	
• Keep it.	%	40	49	48	43	47	47	40	44	40	44	58	48	46	44	38	44
• Turn it in to the local police station.	%	12	10	17	12	10	9	10	12	12	12	7	11	11	10	13	11
• Keep it and feel guilty.	%	29	22	21	26	26	19	24	24	27	26	20	27	23	25	24	25
• Donate it to charity.	%	6	5	0	4	3	9	12	5	7	5	5	5	4	6	7	5
• Something else.	%	13	14	14	15	14	16	14	15	14	13	10	9	16	15	18	14
You saw a little old lady drop $900 on the sidewalk. What would you do?																	
• Pick it up and keep it.	%	1	5	0	5	1	3	0	2	3	4	2	4	3	2	3	3
• Pick it up and return it to her.	%	74	66	82	65	66	81	83	72	68	71	72	71	72	69	67	70
• Keep it and feel really, really, really guilty.	%	2	3	2	2	2	3	1	2	3	3	2	3	2	1	3	2
• Return it to her and accept a reward if offered.	%	22	25	16	27	31	13	16	24	26	22	24	21	22	27	26	24
• Something else	%	1	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1

Chi-Square Statistical Analysis – Table 3.1 "Finding $900"
Gender: χ^2 (4, N = 1060) = 11.6, p =.021; reject null hypothesis 1; results are statistically significant.
Age: χ^2 (16, N = 1060) = 26.6, p =.046; reject null hypothesis 2; results are statistically significant.
Employment: χ^2 (12, N = 1060) = 15.3, p =.223; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (12, N = 1060) = 12.1, p =.435; do not reject null hypothesis 4; results are not statistically significant.

Chi-Square Statistical Analysis – Table 3.2 "Little old lady drops $900"
Gender: χ^2 (4, N = 1060) = 18.8, p =.001; reject null hypothesis 1; results are statistically significant.
Age: χ^2 (16, N = 1060) = 51.9, p < .001; reject null hypothesis 2; results are statistically significant.
Employment: χ^2 (12, N = 1060) = 5.18, p =.952; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (12, N = 1060) = 8.78, p =.722; do not reject null hypothesis 4; results are not statistically significant.

Knowing Who Benefits
Tables 4.1 and 4.2 report the results of cheating on income tax returns. These vignettes could have been reported in the earlier section that examined materiality because of the option "It depends on how much." Another section these vignettes could have fit is "Observing Who is Harmed" because cheating the government might be viewed as an anonymous victim.

More students indicated that it is not right for corporations (93%) to cheat on income tax returns as compared to individuals (76%). Knowing the dollar amount individuals cheat is important to 19% of the students, but only 5% if a corporation is cheating. Using a paired t-test, both sets of percentages have statistically significant differences at a 1% level. This result might have been influenced by the perception that there are no small amounts for corporations. There is no evidence that these students were influenced by any biases against corporations. Quite the contrary. For them, corporations represent a source of future income – either as employers or clients in public accounting. It appears that the students are more forgiving to individuals who cheat on their taxes than corporations.

Female students are more likely than males to believe that it is not right to cheat on either an individual or corporation tax return. Using the chi-square test, the difference in responses between males and females is significant at a 1% level for both vignettes. Students employed full-time are the least likely to believe that it isn't right to cheat on either tax return, although there is no statistically significant difference in responses for the employment category. Age and the number of ethics classes taken also showed no statistically significant difference in responses.

Tables 4.1 and 4.2: Cheating on an Income Tax Return

		Gender		Age					Employment				Ethics Classes				
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
Is it right for individuals to cheat on their income tax return?																	
• Yes	%	2	7	6	5	3	5	5	3	5	5	8	4	7	5	3	5
• No	%	80	74	75	75	77	75	81	80	76	76	70	79	76	76	75	76
• It depends on how much.	%	18	19	19	20	20	20	14	17	19	19	22	17	17	19	22	19
Is it right for a corporation to cheat on its income tax return?																	
• Yes	%	2	3	7	3	1	3	1	1	3	2	4	1	2	3	2	2
• No	%	95	90	93	91	95	93	94	94	93	94	89	92	95	92	91	93
• It depends on how much.	%	3	7	0	6	4	4	5	5	4	4	7	7	3	5	7	5

Chi-Square Statistical Analysis – Table 4.1 "Is it right for individuals to cheat?"
Gender: χ^2 (2, N = 1060) = 15.6, p = .0004; reject null hypothesis 1; results are statistically significant.
Age: χ^2 (8, N = 1060) = 4.84, p =.775; do not reject null hypothesis 2; results are not statistically significant.
Employment: χ^2 (6, N = 1060) = 8.74, p =.189; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (6, N = 1060) = 6.85, p =.335; do not reject null hypothesis 4; results are not statistically significant.

Chi-Square Statistical Analysis – Table 4.2 "Is it right for corporations to cheat?"
Gender: χ^2 (2, N = 1060) = 10.4, p =.006; reject null hypothesis 1; results are statistically significant.
Age: χ^2 (8, N = 1060) = 10.2, p =.254; do not reject null hypothesis 2; results are not statistically significant.
Employment: χ^2 (6, N = 1060) = 7.13, p =.309; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (6, N = 1060) = 8.46, p =.207; do not reject null hypothesis 4; results are not statistically significant.

TAKING RESPONSIBILITY

Table 5 reports what students would do if they drop their roommate's toothbrush on the floor. Less than one-third of the students would be willing to tell their roommates what had happened. It appears that these students either adhere to the 5-second rule (no germs attach within that period of time) or their unethical behavior consists of failure to accept responsibility.

Students over 30 years old are more likely to tell their roommates (43%) compared to 26-32% for the other age ranges. The difference in responses is statistically significant at a 5% level. This result might be explained by older students having roommates that are a spouse, partner, or family member and, therefore, more concerned for their health than students are for a dormitory-type roommate. Unlike the results of the other vignettes, the number of ethics classes taken results in statistically significant different responses at a 5% level. Students with one ethics class are more likely to tell their roommate than any other number of classes taken. This calls into question the impact of taking more than one ethics class. Another pattern observed is that the more hours a student works, the less likely the student would be willing to tell the roommate. But the difference is not large enough to generate a statistically significant result in the chi-square test. Gender does not appear to have any impact.

Table 5: Dropping a Toothbrush on the Floor

		Gender		Age					Employment				Ethics Classes				
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
You drop your roommate's toothbrush on the floor. What would you do?																	
• Pick it up and put it back.	%	21	22	31	21	25	18	15	18	23	22	20	22	24	18	19	21
• Wash it carefully and put it back.	%	36	34	35	35	37	34	33	36	33	34	40	37	31	36	37	35
• Leave it on the floor (Gremlins did it).	%	1	3	3	3	2	1	1	1	2	2	3	3	2	2	1	2
• Wash it and tell your roommate.	%	32	32	31	32	26	32	43	35	34	29	28	32	36	29	34	32
• Something else.	%	10	9	0	9	10	15	8	10	8	13	9	6	7	15	9	10

Chi-Square Statistical Analysis

Gender: χ^2 (4, N = 1060) = 6.13, p =.189; do not reject null hypothesis 1; results are not statistically significant.

Age: χ^2 (16, N = 1060) = 27.6, p =.036; reject null hypothesis 2; results are statistically significant.

Employment: χ^2 (12, N = 1060) = 12.9, p =.371; do not reject null hypothesis 3; results are not statistically significant.

Ethics Classes: χ^2 (12, N = 1060) = 23.9, p =.021; reject null hypothesis 4; results are statistically significant.

Table 6 describes what students would do if they accidentally cause "more" than a ding to another car when opening their own car door. Only 25% would leave a note, while 47% would move their car and 17% would ignore it. Male students would be more likely than females to leave a note. The p-value for the chi-square test for gender is 0.127. Therefore, the difference in responses are not statistically significant at a 10% level, but close enough to warrant mentioning. For the different age ranges, the responses are statistically significantly different at a 1% level. The youngest students are the most likely to move their car (arguably the least ethical choice), and the least likely to leave a note. This might partially be explained by the youngest students worrying about their auto insurance premiums increasing if the other car needs to be repaired. The oldest students are much less likely than the other age ranges to move their car, making them the most likely age range to either ignore it or leave a note. With regard to the number of ethics classes taken, students with no ethics classes are the least likely to leave a note. But the difference in responses is not statistically significant.

The response of female students would appear to be somewhat inconsistent with the results of their more ethical behavior contained in other vignettes. The female students are more likely than the male students to ignore it or move their car, and less likely to leave a note. These results might be less about ethical behavior and more about safety. It's possible that more females than males would feel uncomfortable about leaving a note with their name and phone number on the car of a stranger. And moving the car might be motivated by avoidance of a potential confrontation or retaliation. One question to ponder is whether the female student responses would be different if they see a little old lady get out of the car before dinging it. This might have eliminated the safety issue, and the person harmed would not have been anonymous.

Table 6: Damaging Someone's Car

		Gender		Age					Employment				Ethics Classes				
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
While opening your car door, you accidentally cause more than a ding to the car next to you. What would you do?																	
• Ignore it.	%	19	16	14	14	18	19	24	15	19	17	21	22	17	17	13	17
• Move your car to another parking space.	%	48	46	55	52	45	50	32	48	42	48	52	46	47	47	48	47
• Leave a note on the windshield.	%	21	27	14	25	24	21	29	26	25	26	17	19	25	26	26	25
• Something else.	%	12	11	17	9	13	10	15	11	14	9	10	13	11	10	13	11

Chi-Square Statistical Analysis
Gender: χ^2 (3, N = 1060) = 5.70, p =.127; do not reject null hypothesis 1; results are not statistically significant.
Age: χ^2 (12, N = 1060) = 28.4, p =.005; reject null hypothesis 2; results are statistically significant.
Employment: χ^2 (9, N = 1060) = 12.8, p =.171; do not reject null hypothesis 3; results are not statistically significant.
Ethics Classes: χ^2 (9, N = 1060) = 8.52, p =.483; do not reject null hypothesis 4; results are not statistically significant.

UNIVERSAL STANDARD

The same adapted NAS/Zogby (2002) question concerning a universal standard on ethics used in our first study was posed to students in the Table 7 vignette. The results are almost identical. It appears that students don't subscribe to one absolute universal ethical standard. Instead, there is a combination of two standards, most likely depending on the ethical dilemma. In some situations, there are clear and uniform standards of right and wrong. And in other situations, right and wrong depends on differences in individual values and cultural diversity.

The following excerpt from Stout and Weiss (2003) still appears to be applicable:

> One could certainly argue that, over time, the moral compass changes within the same society. One also could argue that in different societies at the same point in time, the moral compass varies due to cultural differences. But within the same society at the same point in time, the moral compass that guides the ethics practiced in that society should be calibrated so as to apply clear and uniform standards of right and wrong, not differences in individual values and cultures.

When choosing between "individual values/cultural diversity" and "clear and uniform standards," female students are more likely to favor "individual values and cultural diversity," whereas male students tend to pick "clear and

uniform standards." The differences in responses males and females gave to the choices in Table 7 are statistically significant at a 5% level. Differences in responses by age are also statistically significant at a 5% level. Looking at the different age ranges, 22-24% of those under 27 believe right and wrong depends on individual values and cultural diversity, compared to 34-36% of those students 27 and older. Responses by hours employed and number of ethics classes taken do not differ at a 5% level, but the number of ethics classes taken is significant at 10% with a p-value of 0.089. Looking at Table 7, those students with more than two ethics classes are less likely to say right and wrong depends on "individual values and cultural diversity" than those with less ethics classes.

Table 7: Right and Wrong

		Gender		Age					Employment				Ethics Classes				
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
With which of the following statements do you most agree? • What is right and wrong depends on differences in individual values and cultural diversity.	%	29	22	24	23	22	36	34	26	25	25	30	26	24	30	21	26
• There are clear and uniform standards of right and wrong by which everyone should be judged.	%	15	19	14	16	19	17	18	20	15	17	17	19	19	16	17	17
• Something in between the first two statements.	%	49	50	62	53	50	41	41	47	53	50	47	45	49	50	54	49
• I don't agree with any of these statements.	%	7	9	0	8	9	6	7	7	7	8	6	10	8	4	8	8

Chi-Square Statistical Analysis

Gender: χ^2 (3, N = 1060) = 9.04, p =.029; reject null hypothesis 1; results are statistically significant.

Age: χ^2 (12, N = 1060) = 23, p =.028; reject null hypothesis 2; results are statistically significant.

Employment: χ^2 (9, N = 1060) = 5.44, p =.795; do not reject null hypothesis 3; results are not statistically significant.

Ethics Classes: χ^2 (9, N = 1060) = 15.1, p =.089; do not reject null hypothesis 4; results are not statistically significant.

ETHICAL THEORIES

Table 8 measures the five ethical theories identified by Collins and O'Rourke (1994) – egoism, social group relativism, cultural relativism, utilitarianism, and deontology. Most students (72%) agree with "If what I do treats others the way I would want to be treated (truthfulness, respect, and integrity), then it is right." Students identified this statement as the proverbial Golden Rule.

Responses by gender and age result in statistically significant differences at a 5% level. Female students are more likely than males to agree with the Golden Rule. Males are more likely to agree that what benefits the most people is right. The oldest students are the most likely to agree with the Golden Rule and the youngest students the least likely. The oldest students are the least likely to select what benefits the most people, with the youngest students the most likely. The p-value for testing differences in responses by employment level is 0.139, which is not statistically significant even at a 10% level. Looking at Table 8, those employed 40 hours or more are less likely to choose "if what I do is acceptable using the standards of my country and its laws, then it is right" compared to the other employment categories. The difference in responses based on the number of ethics classes taken is not statistically significant.

Table 8: Ethical Theories

		Gender		Age					Employment				Ethics Classes				Total
		Female	Male	Less than 20 years old	20-22 years old	23-26 years old	27-30 years old	Over 30 years old	None	20 hours or less	21 to 39 hours	40 hours or more	None	One	Two	More than two	Total
	n	523	537	29	467	286	117	161	317	318	276	149	176	380	336	168	1,060
With which of the following statements do you most agree?																	
• If what I do is beneficial only to my best interests, then it is right.	%	1	4	5	3	2	1	1	1	2	2	4	2	2	2	2	2
• If what I do is acceptable using the standards of my family and friends, then it is right.	%	5	5	13	7	5	1	1	5	7	3	6	7	5	5	4	5
• If what I do is acceptable using the standards of my country and its laws, then it is right.	%	8	9	0	8	10	9	7	11	9	8	4	11	8	7	9	9
• If what I do is beneficial to the greatest number of people affected by it, then it is right.	%	11	13	20	13	13	12	9	12	12	14	11	13	13	14	9	12
• If what I do treats others the way I would want to be treated (truthfulness, respect, and integrity), then it is right.	%	75	69	62	69	70	77	82	71	70	73	75	67	72	72	76	72

Chi-Square Statistical Analysis

Gender: χ^2 (4, N = 1060) = 12.7, p =.013; reject null hypothesis 1; results are statistically significant.

Age: χ^2 (16, N = 1060) = 31.5, p =.012; reject null hypothesis 2; results are statistically significant.

Employment: χ^2 (12, N = 1060) = 17.3, p =.139; do not reject null hypothesis 3; results are not statistically significant.

Ethics Classes: χ^2 (12, N = 1060) = 6.9, p =.867; do not reject null hypothesis 4; results are not statistically significant.

LONGITUDINAL VIEW

Another question we looked at is whether the responses to any of the vignettes in the second study changed from the responses in the first study. Except for the vignettes identified below, all responses in both studies are consistently within four percentage points or less.

Table 1 – Receiving too much change: There is a decrease in the percentage of students who would return the excess change of 50 cents (52% versus 43%).

Table 3.1 – Finding money: There is an increase in the percentage of students who would keep the money if the person losing it is anonymous (64% versus 69%).

Table 4.1 – Cheating on an individual income tax return: There is an increase in the percentage of students who do not think it is right to cheat on individual tax returns (66% versus 76%). Also in regard to individual tax returns, there is a decrease in the percentage of students who believe it depends on how much (25% versus 17%).

Table 6 – Damaging someone's car: There is a decrease in the percentage of students who would ignore it (22% versus 17%).

QUICK VIEW AT THE MACRO LEVEL

This study focuses on ethical behavior at the micro level. However, we would be remiss if we didn't at least attempt to examine these results at the macro level.

At the micro level, we used individual vignettes to measure and evaluate the ethical behavior of students if confronted with a specific ethical dilemma. But what would the results show if all of the vignettes are combined into one outcome?

To answer this question, we calculated an overall measure of ethical behavior for each demographic. Except for the results from the last two vignettes reported in Tables 7 and 8 (universal standard and levels of moral development), we identified the following responses: (1) the *most ethical* response in each vignette even if there is another response that is also ethical, and (2) the *most unethical* response in each vignette even if there is another response that is also unethical. To adjust for differences in the sample sizes within each demographic, percentages were used instead of the absolute number of students.

The Most Ethical Response
The average percentage for all students selecting the most ethical response is 51.2%. Each demographic contains the following percentages:

Gender. Even with including the car ding vignette, female students selected 52.2% of the most ethical responses compared to 49.9% for the male students.

Age. The oldest students selected 61.1% of the most ethical responses compared to students less than 20 years old who are the lowest at 48.2%.

Employment. Students who are not employed had the highest percentage of ethical responses at 52.6%. Students who are employed 40 hours or more have the lowest at 48.9%.

Ethics Classes. Students with one class in ethics have the highest percentage of ethical responses at 52.3%. The other categories are closely bunched together with the lowest being 50.7% for students with two or more ethics classes.

The Most Unethical Response
The average percentage for all students selecting the most unethical response is 20.9%. Each demographic contains the following percentages:

Gender. Male students selected 22.3% of the most unethical responses compared to 19.7% for the female students.

Age. The oldest students selected 14.1% of the most unethical responses compared to students less than 20 years old who are the highest at 23.1%.

Employment. Students who are employed 40 hours or more have the highest percentage of the most unethical responses at 24.1%. The other three categories are closely bunched together with students employed 20 hour or less being the lowest at 19.9%.

Ethics Classes. Students with one class in ethics selected the highest percentage of the most unethical responses at 22.1%, with the lowest being 19.3% for students with two or more ethics classes.

This macro view reveals some interesting results. Students with one ethics class have the highest percentage of both the most ethical *and* the most unethical responses. And students with two or more ethics classes have the lowest percentage of both the most ethical *and* the most unethical responses. Female students and students over 30 years old each have both the highest percentage of the most ethical responses and the lowest percentage of the most unethical responses. Students employed 40 hours or more have the highest percentage of the most unethical responses and the lowest percentage of the most ethical responses.

CONCLUSION

Overall and based on individual vignettes, what can we conclude from this study about the ethical behavior of students? First, female students appear to be more ethical than male students except when an ethical dilemma represents a potential threat or confrontation. Second, students become more ethical as they get older. Third, the number of hours employed has no impact on the ethical behavior of students. None of the results from the vignettes regarding hours employed are statistically significant at a 5% level. Fourth, the same conclusion can be made about the number of ethics classes taken. It does not appear that taking classes in ethics changes ethical behavior. Most of these results concerning the number of ethics classes are not statistically significant (except for one vignette being significant at 5% and another at 10%). As a result, for most of the vignettes, we can reject the null hypotheses for gender and age, and can conclude that they have a relationship with student ethical behavior. Likewise, for all but one or two of the vignettes, we cannot reject the null hypotheses for hours employed and ethics classes taken and, therefore, cannot show they are correlated with student ethical behavior.

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Analysis of the Changes in Undergraduate Business Student Perceptions of Online Courses

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ABSTRACT

The purpose of this paper is to determine what has changed, and what has not changed, regarding student perceptions of online undergraduate business courses over the last six years. A pair of comparative surveys was administered in both 2012 and 2018, separating those students with online experience from those with only face-to-face instructional experience. Given the growing prevalence of online business courses, the analysis provides evidence of how students' perceptions and experiences have evolved over time. Furthermore, measures of tuition pricing sensitivities for online college courses relative to face-to-face instruction provide significant evidence of the importance to the online course pricing decision.

Keywords: online instruction, student perceptions, online tuition pricing, tuition affordability

INTRODUCTION

Online classes are becoming increasingly prevalent in higher education. The 2018 Babson Survey Research Group Report showed the number of students enrolled in at least one online course had increased by 5.6% between fall 2015 and fall 2016. This increase was at a faster rate than ever experienced in a one year period before. The Babson Report expects the increase to continue through 2018 which would mark the fifteenth consecutive year online has experienced enrollment growth. They also reported that the number of students taking only the traditional face-to-face courses continued to drop. Students today are combining face-to-face with online courses in their programs of study.

Likewise, the Education Department's Integrated Postsecondary Education Data System showed the number of college students enrolled in at least one online course and the proportion of students studying online has continued to increase at most levels and types of schools (Lederman 2018). The reality is that online courses are now a staple of most higher education course offerings. They appear to have increased in response to student demand for more flexibility.

Although there have been numerous studies regarding the difference in learning outcomes between online versus face-to-face classroom delivery, the findings are mixed. On one hand, several studies (Benoit 2006; Bernard 2004; Jahn 2007; Sitzmann, 2006) suggest that the online course experience is sufficiently equivalent or achieves higher learning outcomes than the teaching and learning in traditional face-to-face courses (Gratton-Lavoie 2009; Harmon 2014; Means 2010). On the other hand, there are studies which suggest learning outcomes are worse in courses using online delivery (Dynarski 2018; Hattie 2008; Flanagan 2014; Mahmood 2012). Numerous studies have also reported no statistically significant differences between the two learning formats (Cavanaugh 2015; Stack 2015). Overall, the literature suggests that learning outcomes between online and face-to-face classroom delivery are at this time inconclusive.

Besides the differences in learning outcomes, another important variable to address when comparing the two modes of learning is the 'perceived' view students have of online versus face-to-face instruction. A study of student perceptions is important for three major reasons. First, there is a significant connection between the students' perceptions of their learning environment and their academic outcomes (Kilgo 2013; Lizzio 2002; Sherblom 2010). Second, understanding perceptions assists administrators and educators to make more informed decisions on course offerings and design (Goralski 2017; Bramorski 2016). And, finally, student perceptions are important as an indicator of future enrollment possibilities.

After analyzing seven years of student evaluations, Lowenthal (2015) found that students rate online courses lower. Platt (2014) suggested that previous exposure to online classes affected their perceptions of online learning. This

was also Burn's (2013) finding when studying graduate student perceptions of online courses in an adolescence education program. Furthermore, Burn's study revealed substantial differences based on the students' previous online experience.

The purpose of this paper is to determine what has changed, and what has not changed, regarding student perceptions of online courses over the six year period from 2012 to 2018. A pair of comparative surveys was administered in 2012 to both students who have taken an online course versus students who have not taken an online course. The identical pair of surveys was again administered six years later in 2018. The empirical section of this paper presents the statistically significant findings of how today's business students view online learning.

THE SAMPLE GROUPS AND SURVEY INSTRUMENT DESIGN

Two similar survey instruments were administered to upper level business undergraduate students in spring 2012 at a smaller Midwestern AACSB accredited public university. The students were asked whether or not they had taken an online course prior to filling out the survey anonymously. Those students who responded that they had taken an online course (denoted as "HAVEs") were asked to fill out the survey designed for experienced online students. The students who had not taken an online course (denoted as "NOTs") were requested to complete out a somewhat different, but parallel survey. The 2012 study was designed to identify how the perceptions of students who have not taken an online course compared to the actual experience of online students (Holmberg-Wright & Wright 2012a). The original 2012 survey also included a section of Likert scale questions concerning student pricing sensitivities for online courses (Holmberg-Wright & Wright 2012b).

In May 2018, the identical two survey instruments were administered to junior and senior business undergraduates at the same university. By using identical surveys with students at the same institution, but separated by six years, allowed an analysis of whether student preferences and experiences with online courses had in anyway changed over the six year period. Furthermore, very little research is available that specifically measures student tuition pricing sensitivities for online college courses. Given the dramatic changes in consumer behavior in the retail sector, this study provides evidence of whether students have changed from six years ago to how sensitive they are to online course tuition pricing differentials.

Four Sample Groups

As a result, the four mutually exclusive sample groups and their sample size examined in this study are the following:

- 2012 students who "HAVE" taken an online course (n=125).
- 2012 students who have "NOT" taken an online course (n=234).
- 2018 students who "HAVE" taken an online course (n=95): (Identical to the 2012 "HAVE" survey).
- 2018 students who have "NOT" taken an online course (n=50): (Identical to the 2012 "NOT" survey).

The growing prevalence of online business courses at the university in 2018 where the surveys were administered in 2012 is signified by the relative percentage of students who responded that they had taken an online course. Those students in the HAVEs sample made up only 35 percent of those students in 2012, while in 2018 the percent of HAVEs grew to 66 percent of the respondents. It is noteworthy that where the survey was administered, as with many smaller universities, significantly more business courses are only available through online delivery as college administrators shift limited resources away from the classroom to online delivery.

The Research Surveys
The research survey contains two major parts. First there is a section of 12 "Online Perception Questions" and the second part of the survey consists of "Online Price Elasticity Questions". In addition, for those students who have taken an online course, their survey also added a follow-up question asking the reasons why they chose an online course.

Except for the first question(s), Questions 2 through 12 on both surveys covered the same issues, except the questions for those students who have not taken an online course were worded based upon their perceptions, rather than their actual experiences. The 12 "Online Perception Questions" relied on a variety of Likert seven point scale

questions. (Note that the original full survey is available from the authors upon request.) For those students who have taken an online course, four questions (Questions 1a through 1d) were asked that measure their level of satisfaction based on their online class experiences. The students without online course experience were asked a question regarding their interest in enrolling in an online course. For brevity, the 12 "Online Perception Questions" are summarized below.

Question 1 was administered ONLY for those who have never taken an online course:
1. How seriously have you considered taking an online course?
1: Not Considered…7: Seriously Considered

Questions 1-a through 1.d were administered ONLY for those who HAVE taken an online course:
1-a. Overall satisfaction level with your online course experiences?

1: Very Unsatisfied…7: Very Satisfied

1-b. How strongly do you prefer taking courses online?

1: Strongly Prefer Face-to-Face…7: Strongly Prefer Online

1-c. Would you recommend online courses to other students?

1: Strongly Discourage Online…7: Strongly Recommend Online

1-d. How seriously have you considered taking another online course?

1: Do Not Want to Take Another Online Course…7: Strongly Considering Taking Another Online

Questions 2 through 12 were administered to all the students. However, the questions for those students who have not taken an online course were worded based upon their expectations rather than their actual experiences:

2. Preference for traditional face-to-face classroom interaction with the class instructor?

1: Strongly Prefer Online Instructor Interaction…7: Face-to-Face Much Better Instructor Interaction

3. Preference for traditional face-to-face classroom interaction with fellow students?

1: Strongly Prefer Online Student Interaction…7: Face-to-Face Much Better Fellow Student Interaction

4. Rate the difficulty of the online course(s) compared to your traditional face-to-face courses?

1: Online Courses are Significantly Easier…7: Online Courses are Significantly More Difficult

5. How concerned that students are more able to cheat on tests and assignments on online courses?

1: Not Concerned with Online Cheating…7: Very Concerned with Online Cheating

6. How concerned are you that you would not like the online experience BEFORE taking the course?

1: Not Concerned with a Bad Online Experience…7: Very Concerned Would Not Like Online

7. Concerned that online courses are more impersonal?

1: Not Concerned Online is Impersonal…7: Very Concerned Online is Very Impersonal

8. Compared to face-to-face classroom, rate the difficulty of exams in your online course.

1: Significantly Less Difficult Online exams…7: Significantly More Difficult Online Exams

9. Rate your overall course satisfaction level with your traditional face-to-face classroom experiences.

1: Very Unsatisfied with Face-to-Face Instruction…7: Very Satisfied with face-to-Face Instruction

10. Rate your satisfaction level with the student-to-teacher interaction in your face-to-face classroom.

1: Not Satisfied with Student-to-Teacher Interaction…7: Very Satisfied Student-to-Teacher Interaction

11. Rate your satisfaction level with the student-to-student interaction in face-to-face classroom.

1: Not Satisfied with Student-to-Student Interaction…7: Very Satisfied Student-to-Student Interaction

12. What is your personal level of computing competence?

1: Not Very Good…7: Excellent

The second part of the survey consisted of "Online Price Elasticity Questions". All four groups of students were asked Likert seven point scale questions to measure their price sensitivity with respect to alternative online pricing levels. They all received the same survey question that was the following:

Price Elasticity of Demand for Online Courses: Alternative Tuition & Fee Pricing
Choosing to take online courses may cost you <u>more in tuition and fees</u>. Sometimes they may be <u>cheaper in tuition and fees</u>. The following set of questions is designed to determine your price elasticity to either additional tuition & fees or reduced tuition & fees associated with taking an on-line course. **In other words, these questions are an attempt to measure your level of interest in taking online courses in response to different tuition and fees per course (either higher or lower tuition and fees per course).**

KEY ➔ *<u>Assume</u>* **you had a <u>choice</u> of taking a course in the** *<u>traditional face-to-face classroom setting</u>* *<u>versus</u>* **the** *<u>SAME COURSE</u>* **that would provide you the <u>SAME CREDIT</u> at your university, but it is an** *<u>online course</u>***.**

Use the following **<u>7-point scale to determine your level of interest</u>** in **<u>choosing between</u>** taking the **online course** *versus* a **traditional face-to-face classroom course** given the *alternative course* **differences in total** *course cost* (not per credit cost) tuition & fees (ranging in $100 increments from *+$500 more to -$500 less*).

<u>Circle a single number 1 through 7 that best reflects your decision preference, given the online course cost differential. For each price point differential, choosing "1" implies an extremely strong preference for the traditional face-to-face course. In contrast, choosing "7" implies an extremely strong preference for the online course.</u>

Assume the ***Online course costs +$500 More*** in tuition and fees than the same traditional face-to-face classroom course.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**STRONGLY PREFER
THE TRADITIONAL
FACE-TO-FACE COURSE**

**STRONGLY PREFER
THE ONLINE
COURSE**

Assume the ***Online course costs +$400 More*** in tuition and fees than the same traditional face-to-face classroom course.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**STRONGLY PREFER
THE TRADITIONAL
FACE-TO-FACE COURSE**

**STRONGLY PREFER
THE ONLINE
COURSE**

The Likert seven point scale questions continued in the same pattern, with only the dollar amount changed. The dollar amounts ranged from +$500 to -$500 in increments of $100, including a question with a "$0 NO Cost Difference". As a result, students were asked to respond to eleven different Likert seven point scale questions, which were identical in all respects except for the online class price differentials. Given each of the price differentials, the students then indicated on the Likert scale their preferences for enrolling in an online course versus a traditional face-to-face classroom course.

RESEARCH STUDY RESULTS

Student Perceptions of Online Learning

Exhibits 1 & 2 both summarize the responses of all four sample groups to the first part of the survey consisting of 12 "Online Perception Questions". Exhibit 1 provides the means of the Likert seven point scale responses for each question. The first two columns show the average value along the Likert seven point scale for the 2018 NOTs and HAVEs sample groups. Columns three and four of Exhibit 1 similarly display the means from the NOTs and HAVEs samples from 2012 using the identical survey. A value of 4 represents the midpoint of the scale indicating there is neither a preference in one direction nor the other. Hence, the tests of significance in Exhibit 1 determine whether the value is significantly different from the midpoint of 4 at both the 5 percent and 1 percent levels of significance. Exhibit 2 presents the difference in a pair of mean values of two different sample groups for each of the survey questions. For example, one might ask whether there is any difference between the 2018 HAVEs and NOTs for a question, and whether that difference is statistically different. The test of significance in Exhibit 2 determines whether the differential mean value is significantly different than zero. The following section describes a statistical analysis of the Likert survey question response means, differences in means, and the significance tests. The findings in Exhibits 1 and 2 not only allow comprehensive insights into the perceptions of students with versus without online course experience, but also provides evidence into whether student opinions have changed over time.

Mean Levels of the Likert Scale Seven Point Scale Responses to Questions for the Four Sample Groups:
(1) 2018 Students Who Have NOT Taken Online; (2) 2018 Students Who HAVE Taken Online Courses;
(3) 2012 Students Who Have NOT Taken Online; (4) 2012 Students Who HAVE Taken Online Courses

Survey Questions	2018 Have NOT Online	2018 Have YES Online	2012 Have NOT Online	2012 Have YES Online
Question 1: Students Who Have NOT Taken Online:				
1. Considered taking online courses?	4.70*		4.03	
Questions 1a to 1d: Students Who HAVE Taken Online:				
1-a. Overall satisfaction with online?		4.52**		4.69**
1-b. Preference for online?		3.52**		3.85
1-c. Recommend online to others?		4.47**		4.79**
1-d. Want another online course?		5.27**		5.18**
Questions 2 to 12: ALL Students:				
2. Prefer for classroom interaction with instructor?	5.76**	4.58**	5.64**	4.34*
3. Prefer classroom interaction with fellow students?	5.06**	4.31	4.85**	3.89
4. Difficulty of online course(s)?	5.12**	3.97	4.39**	3.88
5. Concerned about online cheating?	4.02	3.56*	3.92	3.06**
6. Concerned about the online experience?	4.70**	4.41*	4.70**	3.61*
7. Concerned that online is more impersonal?	4.58*	3.87	4.62**	3.34**
8. Difficulty of online exams.	4.34	3.95	4.68**	3.93
9. Satisfaction level with face-to-face classroom.	5.60**	5.32**	5.45**	5.12**
10. Satisfaction level with the student-to-teacher interaction in your face-to-face classroom.	5.34**	5.43**	5.41**	5.06**
11. Satisfaction level with the student-to-student interaction in face-to-face classroom.	4.92**	5.12**	4.85**	4.66**
12. What is your level of computing competence?	5.32**	5.43**	5.47**	5.82**

*Significantly different from 4.00 at the 5% level. **Significantly different from the 4.00 level at the 1% level.

Students who have never taken an online course were asked "how seriously have you considered taking an online course?" The results for Question 1 indicate that they are somewhat more open to taking an online course in 2018 than they were in 2012. That result and the fact that the percentage of NOTs dropped from 65 percent to only 34 percent indicates either a greater willingness to take online courses or that in some cases, the course is only available online.

Survey Questions	Mean Differences 2018 = Have NOT Online - Have YES	Mean Differences 2012 = Have NOT Online - Have YES	Mean Differences = 2018 - 2012 = Have YES 2018 Online - Have YES 2012	Mean Differences = 2018 - 2012 = Have NOT 2018 Online - Have NOT 2012
Question 1: Students Who Have NOT Taken Online:				
1. Considered taking online courses?				0.67*
Questions 1a to 1d: Students Who HAVE Taken Online:				
1-a. Overall satisfaction with online?			-0.17	
1-b. Preference for online?			-0.33	
1-c. Recommend online to others?			-0.32	
1-d. Want another online course?			0.10	
Questions 2 to 12: ALL Students:				
2. Prefer for classroom interaction with instructor?	1.18**	1.30**	0.24	0.12**
3. Prefer classroom interaction with fellow students?	0.75*	0.96**	0.42	0.21
4. Difficulty of online course(s)?	1.15**	0.51**	0.09	0.73**
5. Concerned about online cheating?	0.46	0.87**	0.50	0.10
6. Concerned about the online experience?	0.29	1.09**	0.80**	0.00
7. Concerned that online is more impersonal?	0.71*	1.28**	0.53*	-0.04
8. Difficulty of online exams.	0.39	0.75**	0.02	-0.34
9. Satisfaction level with face-to-face classroom.	0.28	0.33*	0.20	0.15
10. Satisfaction level with the student-to-teacher interaction in your face-to-face classroom.	-0.09	0.35*	0.38	-0.07
11. Satisfaction level with the student-to-student interaction in face-to-face classroom.	-0.20	0.20	0.46*	0.07
12. What is your level of computing competence?	-0.11	-0.35**	-0.38*	-0.15

*Significantly different from 4.00 at the 5% level. **Significantly different from the 4.00 level at the 1% level.

Questions 9, 10, and 11 of the survey ask students whether they are satisfied with their face-to-face classroom education and were worded the same for both the HAVEs and NOTs version of the survey. The Likert scale averages for all three questions and every sample group were all above 5 and statistically significant at the 1 percent level. Students are very satisfied with their traditional face-to-face classroom experiences (question 9). Results for questions 10 & 11 indicate that while students value classroom interaction with their fellow students, they place relatively more importance on instructor interaction in the classroom.

The survey for students who have taken an online course contained questions 1-a, 1-b, 1-c, and 1-d. The four questions ask students to evaluate their attitudes toward online learning. Question 1-a in Exhibit 1 asks the HAVE students to rate their overall satisfaction level with their online course experiences. The Likert scale mean values of question 1-a for both 2012 and 2018 were 4.52 and 4.69 respectively, indicating online students were somewhat satisfied with their online course experience. However, when asked their preference relative to a traditional classroom, they significantly prefer the face-to-face classroom experience over the online class. The results of question 1-b at first appear to contradict the 1-a findings.

Question 1-b in Exhibit 1 asks students how strongly they prefer taking courses online versus a traditional face-to-face classroom experience. In other words, given a choice, would students strongly prefer a traditional face-to-face course (1) or strongly prefer an online course (7). The average 2018 sample response to question 1-b was 3.52 and was significantly below the midpoint of 4.0, thus the 2018 online experienced students significantly leaned toward preferring a traditional classroom. Even though HAVE students prefer the traditional classroom, the answers to questions 1-c and 1-d suggest they are more likely to recommend an online course to other students and would also

consider taking another online course. Insights to the apparent contradicting response to questions 1-b which indicated a student preference for the traditional classroom versus the responses to questions 1-a, 1-c, and 1-d may be found by asking the online students why they decided to take an online course.

In the survey given to the students with online experience was a question that asked them to respond to a set of reasons why they took a course online. Exhibit 3 displays the results of that question for both the 2012 and 2018 HAVE students. The responses were chosen based upon the literature and an earlier preliminary survey. Students were asked to check all responses that apply to them. Interestingly, the biggest reason by a large margin for enrolling in online courses expressed by both the 2012 and 2018 samples was the flexibility of hours. However, the second most important reason for choosing an online course has changed between 2012 and 2018. In 2012, the majority (54%) of students liked the fact that no commute was necessary. In contrast, only 35 percent of the 2018 students expressed that no commute was a reason for taking an online course. Instead, the 2018 students needed to take an online course because the "course was not offered in the face-to-face format", making that as the second biggest reason for taking a course online. Although students like the flexibility that online courses provide, they may not have a choice as some university administrators are reducing and replacing traditional face-to-face offerings of courses at the same time that they are adding online classes.

Exhibit 3 - Percent Responses of Experienced Online Students to the Question: "Why did you take the online course(s)? (check all that apply)" -- 2018 Responses Versus 2012 Responses

	Course not offered in face-to-face classroom format	Flexibility of hours	No commute necessary / less transportation costs	To graduate faster by taking more courses
■ 2018	53%	74%	35%	27%
□ 2012	38%	79%	54%	42%

Alternative Multiple Responses of Students Who Have Taken an Online Course

Another key student perception question addressed by the survey is why some students choose only traditional face-to-face classes and have never tried even one online class. These students who have avoided online classes have dwindled in 2018 to less than one-third of the sample from two-thirds in the 2012 sample. Notably, the key distinguishing factors differentiating the NOTs from HAVEs students may be gleaned by examining the results from the survey questions 2, 3, and 7. Those three questions produced the largest, most significant statistical mean Likert scale differences between the HAVEs and NOTs among the survey's 12 perception questions. The divergence between students with online experience versus students without online experience (cited in the empirical results for questions 2, 3, and 7) has grown even wider between in 2018 from 2012.

The biggest perception differences for the NOTs may be found with survey question 2 which asks students their "preference for traditional face-to-face classroom interaction with the class instructor?" In other words, given a choice, would students strongly prefer online instructor interaction (1) or choose face-to-face instructor interaction (7). Exhibit 1's question 2 responses show that all four sample groups answered these questions by significantly preferring face-to-face interaction with the instructor. Notably, the key separating factor for the NOTs is that they place a significantly higher value on their ability to have face-to-face instructor interaction than online students. The statistical evidence that supports how important face-to-face instruction is to the NOTs may be found in the first two columns of Exhibit 2 for question 2. The question 2 differentials for the NOTs were not only significant at the one percent level, but were also the largest mean differences found in Exhibit 2.

More evidence supporting the perception differences for the NOTs may also be found with survey questions 3 and 9. Results from both the 2012 and 2018 samples confirm that the NOTs show a more significant preference for

traditional face-to-face classroom interaction with fellow students. On top of that, the NOTs are concerned that online learning is very impersonal.

The student survey moreover addresses student perceptions of online course difficulty. Again we find differences between the NOTs and the HAVEs. The NOTs consistently express higher concerns that, if they were to take an online course, it would be significantly more difficult (question 4) and the online exams would be more demanding (question 8). Ironically, students with online experience do not see any difference in online class difficulty, either harder or easier, compared to their face-to-face classroom courses.

Students who took online classes do have concerns that there is more cheating in online courses versus the traditional classroom (question 5). This result may possibly be attributed to the fact the students took the online classes from a university that has not yet adopted the new technology that proctors the students taking online exams. In contrast, students who have no online experience do not anticipate cheating as a potential problem if they were to take an online course.

A final issue addressed by the survey is question 12 that asked students to rate their level of computer competence. All sample groups rated themselves high on this dimension, but in the 2018 sample, students with online experience rate themselves with significantly higher computer competence than the NOTs students. This is consistent with other studies that suggest once students take an online course, their concerns about distance learning are reduced.

Price Sensitivity of Online Pricing: Online Versus Traditional Classes
The second major part of the survey consisted of "Online Price Elasticity Questions". One of the key purposes of this study was to measure student tuition pricing sensitivities for online college courses. How should those services be priced?

Using a Likert seven point scale, all four groups of students were asked to indicate their price sensitivity with respect to eleven alternative online pricing levels. All four sample groups received the same survey with only the dollar amount changed. The dollar amounts ranged from +$500 to -$500 in increments of $100, including a question with a "$0 NO Cost Difference". In other words, students were asked to respond to eleven different Likert seven point scale questions, which were identical in all respects except for the online class price differentials. Given the price differential, they would provide their preference for enrolling in an online course versus a traditional face-to-face classroom course. This methodology provides the points necessary to plot the students' preferences that are displayed in Exhibits 4, 5, and 6. The exhibits only differ by the pairs of sample groups being compared.

Exhibit 4 - Price Sensitivity of Online Course Tuition Pricing Relative to Traditional Face-to-Face Courses: 2018-Yes Versus 2012-Yes
(1=Strongly Prefer the Traditional Face-to-Face Course; 7=Strongly Prefer the Online Course)
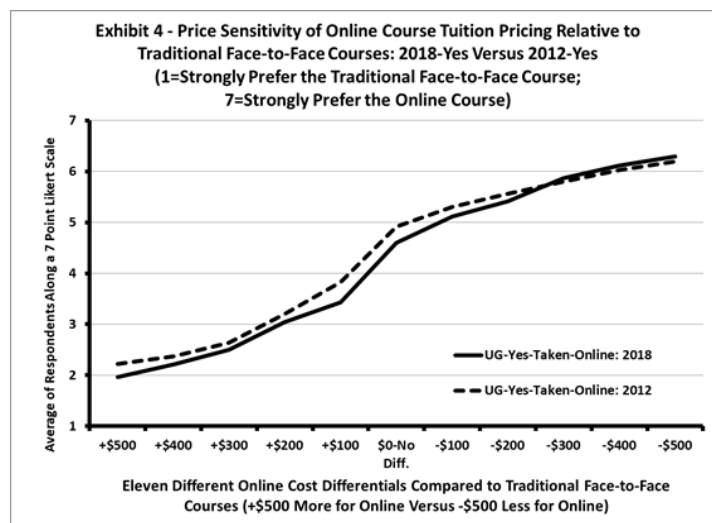
Exhibit 4 compares undergraduate business students in 2018 that have online course experience to the 2012 sample that also had taken online courses. The curves are remarkably similar. Although the slope of the curves is expectedly positive, the steepness of the slope demonstrates a high level of importance to the online course pricing decision by university administrators. Students in 2018 remain as highly sensitive to the cost of their education as the students

did in 2012. When online courses are more expensive, Exhibit 4 shows a strong preference for traditional face-to-face classes when online courses are $500 more expensive. Moving from left to right along the curve, online courses are increasingly preferred as they get cheaper than their campus classroom counterparts.

Exhibit 5 plots the curves of the NOTs in 2018 to the NOTs in 2012. Again, students remain very sensitive to online pricing differences, except the 2018 NOTs are apparently slightly more open to taking an online course only if priced cheaper than face-to-face courses. Otherwise, the two samples are equally opposed to more expensive online course pricing. Finally, Exhibit 6 plots the curves of the NOTs in 2018 to the HAVEs in 2018. As expected, there is a slight upward curve shift for HAVEs students compared to the NOTs, reflecting a more favorable preference for online courses at all price levels. The curves of Exhibits 4, 5, and 6 are very steep, demonstrating that all student groups are highly sensitive to the pricing of online college courses. The exhibits show that students have relatively the same basic sensitivity to prices in 2018 compared to 2012.

Exhibit 5 - Price Sensitivity of Online Course Tuition Pricing Relative to Traditional Face-to-Face Courses: 2018-No Versus 2012-No (1=Strongly Prefer the Traditional Face-to-Face Course; 7=Strongly Prefer the Online Course)

Exhibit 6 - Price Sensitivity of Online Course Tuition Pricing Relative to Traditional Face-to-Face Courses: 2018-Yes Versus 2018-No (1=Strongly Prefer the Traditional Face-to-Face Course; 7=Strongly Prefer the Online Course)

SUMMARY AND IMPLICATIONS

- Although more students are taking online courses, they nevertheless prefer traditional face-to-face instruction. The number one reason cited for taking online course is the flexibility they provide. However, in contrast to 2012, the majority of students that take online courses in 2018 cited that they had to take an online course, because it was not offered in the face-to-face classroom format.

- The key factor separating students who have never taken an online course versus those students with online experience is that students who have avoided online instruction place a significantly higher value on their ability to have face-to-face instructor interaction.
- The price sensitivity curves were remarkable steep in both 2018 and in 2012, demonstrating that all student groups are highly sensitive to the pricing of online college courses. However, it has been well documented that the nature of consumer decision making and the competitiveness of product and service pricing in 2018 is dramatically different since 2012. For example, more students now use internet sites to price shop their textbooks rather going through their university campus bookstore. In addition, there are multiple websites that rank the affordability of the growing number of online programs that by their very nature are borderless and results in significant price competition.

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Designing and Implementing a Strengths-Based Approach to Student Development

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ABSTRACT

Research has shown that there is a significant and positive relationship between strengths-based employee development and performance. At colleges, a strength-based approach to development can help students to improve self-awareness, foster development, and find direction. This paper provides a detailed look at one school's approach to designing and implementing a strengths-based approach to student development using the CliftonStrengths assessment tool. Details on the program are provided to assist other schools with implementing such a program.

Keywords: CliftonStrengths, student development, program design, professional development, skills development

INTRODUCTION

A meta-analysis conducted by researchers at Gallup (Asplund 2016) looked at the impact of using strengths-based employee development on crucial business outcomes. Gallup accumulated 43 research studies across 22 organizations in seven industries and 45 countries. Within each study, Gallup statistically calculated the business/work unit level relationship between strengths-based interventions and performance outcomes that the organizations supplied. In total, Gallup studied 1.2 million individuals and 49,495 business/work units and focused on six outcomes: sales, profit, customer engagement, turnover, employee engagement, and safety.

Comparing organizations that utilized strengths-based employee development to those that did not, the researchers found the following range of estimated practical effects:

• Customer Engagement: 3.4–6.9% increase
• Employee Engagement: 9.0–15.0% increase
• Profit:14.4–29.4% increase
• Safety Incidents: 22.0–59.0% decrease
• Sales: 10.3–19.3% increase
• Low Turnover Organizations: 5.8–16.1 points decrease in turnover
• High Turnover Organizations: 26.0–71.8 points decrease in turnover

Gallup concluded that the relationship between strengths-based employee development and performance at the business/work unit level is substantial and generalizable across organizations. Strengths- based development is related to each of six different performance outcomes. This means that practitioners can apply strengths-based employee development in a variety of situations with confidence that strengths-interventions capture important performance-related information.

Given such strong positive results, it seems as if there is value in exposing college students to a strengths-based approach to career and personal development. Academics and executives have recognized that just teaching students technical skills such as finance, accounting, or marketing no longer guarantees that the student will be successful in finding the right job or in their performance on the job. While much has been written over the past decade about the importance of "soft" skills, such as oral communication and teamwork, as well as the variety of responses to such a skills gap (Majeske 2009), (Jamison 2010), (Murray 2014), (Hardy 2014), (Borden 2015), there is little written on a strengths-based approach to development.

Over the past several years, there has been several standalone uses of the CliftonStrengths assessment tool throughout Villanova University. The tool had been used successfully in the Summer Business Institute, the Executive MBA program, Athletics, and Student Life. Based on these successful uses, as well as evidence of its success at many other schools (Matson, 2018), (Soria 2015), Villanova entered into a partnership with Gallup Inc. to offer the CliftonStrengths assessment across the university. This initiative is a collaborative effort of Villanova's

academic enterprise, Student Life, and career and professional development units. The University views CliftonStrengths as a "tool for self-discovery" and will provide opportunities for the university community to engage in activities and reflection about ways to acknowledge and build upon their strengths.

This paper will provide background information on the CliftonStrengths assessment and offer details on how Villanova designed and implemented a strengths-based approach to student development.

THE CLIFTONSTRENGTHS ASSESSMENT TOOL

The CliftonStrengths assessment, which is now part of Gallup, is rooted in psychological theory, literature, and research and identifies an individuals' top five Signature Themes from Gallup's developed list of 34 most common talents. Individuals who complete the assessment will be able to identify their talents, develop those talents into strengths, and apply those strengths in the classroom, in leadership opportunities, in their relationships, and in their careers. CliftonStrengths has been used and studied across the world in a wide-range of organizations and with people from a variety of backgrounds.

Gallup defines a strength as the ability to consistently provide near-perfect performance in a specific activity. Talents are naturally recurring patterns of thought, feeling, or behavior that can be productively applied. Talents, knowledge, and skills - along with the time spent (i.e., investment) practicing, developing your skills, and building your knowledge base - combine to create your strengths.

Each of the 34 CliftonStrengths themes are sorted into one of four domains: Executing, Strategic Thinking, Influencing, and Relationship Building. These domains describe how people and teams use their talents to make things happen, work with information, influence others, and build relationships. Table 1 shows the mapping of the 34 themes into the four domains.

Table 1: Mapping the 34 Themes into Four Domains

Executing	Influencing	Relationship Building	Strategic Thinking
People with dominant Executing themes know how to make things happen.	People with dominant Influencing themes know how to take charge, speak up, and make sure the team is heard.	People with dominant Relationship Building themes have the ability to build strong relationships that can hold a team together and make the team greater than the sum of its parts.	People with dominant Strategic Thinking themes help teams consider what could be. They absorb and analyze information that can inform better decisions.
Achiever Arranger Belief Consistency Deliberative Discipline Focus Responsibility Restorative	Activator Command Communication Competition Maximizer Self-Assurance Significance Woo	Adaptability Connectedness Developer Empathy Harmony Includer Individualization Positivity Relator	Analytical Context Futuristic Ideation Input Intellection Learner Strategic

According to Gallup, people who know and use their CliftonStrengths are:

- Six times as likely to be engaged at work
- 7.8% more productive in their role
- Three times as likely to have an excellent quality of life
- Six times as likely to do what they do best every day (GallupStrengthsCenter 2018)

Over 19 million people have taken the assessment, which includes more than 90% of the Fortune 500 companies and over 600 universities.

At colleges, a strength-based approach to development can:
- Improve self-awareness - Students take the CliftonStrengths online assessment to uncover their natural talents. They use their personalized results to understand why they do what they do and how to do more of what they do best.
- Foster development - Schools create curriculum and offer resources to help students succeed using their strengths. Campuses promote a culture that prioritizes strengths over weaknesses and builds teamwork through a focus on talents.
- Find direction - Students learn to consider their strengths as they strive for great jobs and great lives. Schools offer students touch points throughout their time on campus to help them succeed before and after graduation.

DESIGNING AND IMPLEMENTING CLIFTONSTRENGTHS AT VILLANOVA UNIVERSITY

The formal program launched in the Summer of 2018 with Gallup's "Successful Strengths Coaching", a two-day training session held on campus for key members of the steering committee. This was followed by two-hour training sessions for additional faculty and staff. By the end of the summer 200 members of the University had attended 15 training sessions.

One of the key outputs of the planning process was the creation of Villanova's CliftonStrengths Tenets (Villanova University 2018):

1. I use my CliftonStrengths results to help me understand myself. My signature themes do not define me or limit me.
2. All of the strengths, or themes, have value; no one strength is better than another.
3. I possess all 34 of the CliftonStrengths to varying degrees and my Top 5 strengths, or signature themes, provide some language for talents that may come more naturally to me and that I may seek to cultivate and nurture.
4. My strengths are a platform from which I may engage in self-reflection and discovery.
5. I choose to develop my strengths and to use them to help me both thrive and overcome challenges. I choose a growth mindset where I seek to grow and develop during this journey that is life.
6. I am mindful that strengths can also present challenges or become obstacles, depending on context and circumstance.
7. My insights into strengths can help me recognize how I might best manage a variety of interests and circumstances.
8. I affirm the strengths of others and value the strengths each of us brings to the Villanova community.
9. I appreciate that an effective team may be at its best when a variety of strengths and domains are represented in that team.
10. I seek to become the best version of myself, to become who I am not yet. I am dynamic, changing and capable.

Another part of the planning process was the development of the following objectives:

- Engage students in the process of self-discovery and create a stronger sense of appreciation for others.
- Enable conversations to improve individual well-being, helping to develop students to their full potential.
- Provide units across campus with a common language of strengths to build a sense of community.
- Promote appreciation & understanding of diversity from the lens of unique talents – all are different, equal, and have value
- Positively engage all students across a variety of touchpoints, furthering investment in student identity and success for all

Once the objectives were set, the plan was to start the program with freshmen, with the goal of achieving six CliftonStrengths touchpoints with each freshman. Freshmen were sent information about CliftonStrengths before

they arrived on campus and were encouraged to take the assessment before they came for orientation, a three-day event held right before the start of the semester.

The first three touchpoints were as follows:

- A 40-minute introduction to the CliftonStrengths program during New Student Orientation
- Discussions facilitated by Residence Life
- Integration into the Learning Communities curriculum

The discussions were held in pairs/small groups, and used a Name It, Claim It, Aim It approach to talk about their CliftonStrengths Top 5 Talents:

- Name It – discuss one of the themes that resonated most & why
- Claim It – share an experience where top theme(s) resulted in a positive experience
- Aim It – consider future opportunities to "lean in" to one or more top talents to achieve success

The above approach is similar to a framework based on the principles of strengths-based education which broadly include: measuring students' strengths; providing individualized educational experiences for students based on their personal strengths; developing networking opportunities for students to share, explore, and develop their strengths with others; drawing out students' strengths through deliberate application of strengths inside and outside of classrooms; and encouraging students to undertake their own intentional development of strengths by actively seeking out novel experiences and previously unexplored venues for focused strengths development and application (Lopez 2009).

INTEGRATING CLIFTONSTRENGTHS INTO THE VILLANOVA SCHOOL OF BUSINESS (VSB)

The CliftonStrengths program is administered by the College's O'Donnell Center for Professional Development. In addition to the broad goals and objectives set at the University level for the program, VSB developed its own set of objectives:

- Demonstrate VSB endorsement of the CliftonStrengths (CS) initiative.
- Further educate students about CS and enhance the understanding of their talents.
- Provide students with opportunities to apply the CS concepts and knowledge of their Top 5 Themes to their personal/academic/professional lives

In order to achieve these objectives, the O'Donnell Center mapped out a series of tasks and events that are to take place during the academic year. Here is the breakdown:

Fall semester
- VSB Peer Advisors (VSB upperclassmen) will attend CliftonStrengths training; there will also be a CS feature in the monthly Peer Advisor newsletter.
- VSB Orientation activities – students will write their top strength on the Chalkboard Wall and participate in a Peer Advisor-led CliftonStrengths Bingo.
- CliftonStrengths overview for Business Dynamics (BD) Faculty – BD is an introduction to business course taken by all VSB freshmen. In keeping with Gallup's Best Practices for Managers (Rigoni 2016) which suggests that to best develop workers' strengths, managers first need to understand their own strengths, the BD faculty went through a two-hour training program related to CS.
- CS Reflection Paper – all freshmen in the BD course will write a reflection paper on CS. The paper will address the following questions:
    - What are your "Signature Themes"? (i.e., Top 5 strengths)
    - Which of your signature theme(s) describes you best and why? Provide a specific example of when this talent(s) led to a positive outcome.
    - What talents do you believe will serve you well as a student during your time at Villanova and why?
    - What information in the Guide surprised you most and why?

- Wellness Workshops – in collaboration with the Office of Health Promotion, students will learn how to use their strengths to make healthy lifestyle choices and to instill a sense of personal responsibility for individual health.
- O'Donnell Center staff will create door signs and an e-mail signature which include their Top 5 strengths as a way to raise overall awareness of the program.

Spring semester
- VSB 0099 – As part of this required, zero-credit course, there will be an activity that is designed to increase the students' understanding and appreciation of other students' talents. In addition, during the Networking Etiquette Workshop that is part of this course, there will be a CS-related activity and a reflection paper.
- Wellness Workshops – a continuation of the workshops held in the Fall semester.

CONCLUSION

Research shows that workers, and students, are more productive, and happier, when they are given the opportunity to focus on their strengths as opposed to their weaknesses. Gallup has developed an assessment tool, CliftonStrengths, that enables individuals to discover their top strengths, as well as resources to help guide those individuals in how best to take full advantage of their strengths and others. This paper has provided a comprehensive outline of how one University, and its Business College, have implemented CliftonStrengths into its curriculum and student life programs. The goal is to provide evidence and support for why other schools should consider adopting CliftonStrengths and enough guidance on how to do so.

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Integrating Data Analytics into the Undergraduate Accounting Curriculum

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ABSTRACT

The advent of Big Data and related applications and technologies have largely changed the process and practice of the accounting, and led to essential changes in the construction and teaching contents and practice of the undergraduate accounting curriculums. In response to the changes and practical needs in accounting education, in this paper we propose the rationale and procedures of integrating data analytics into the undergraduate accounting curriculum. Based on the extensive literature review of Big Data and data analytics processes, techniques, and technologies, we discuss key strategies, procedures, contents, and specific pedagogies for the integration of data analytics into the undergraduate accounting classroom. Following the data analytic implementation framework of Dzuranin et al. (2018), we introduce our teaching practice in a large public university in the U.S.A. and exemplify the integrative process and activities of incorporating data analytics topics into the existing accounting curriculums in a large public university in the U.S.A. This paper shall contribute to the teaching practice and pedagogies in integrating data analytics into the undergraduate accounting curriculum.

Keywords: Big Data, Data Analytics, Undergraduate, Accounting Curriculum, Course Development.

INTRODUCTON: DATA ANALYTICS IN ACCOUNTING CURRICULUMS

The advent of Big Data, and related applications and technologies have largely changed the process and practice of the accounting, and led to essential changes in the construction and teaching contents of the undergraduate accounting curriculums (Dzuranina et al., 2018). In response to the Big Data environment, businesses are just starting to embrace data analytics applications and technologies to re-engineer strategies and business models. Among them, accountants are expected and committed to utilize the related skillsets and critical thinking to help businesses capture valuable data-driven insights, identify data oriented strategies to improve organizational efficiency in the long run, and gain higher profit margins and competitive advantage (Dzuranina et al., 2018). For example, with the advances of Big Data, as full sets of data are available, auditors, both internal and external, are urged to switch from the simple sample-based model to the more accurate predictive models to facilitate the practice of continuous business monitoring. The accounting shift of this kind has successfully shown that the margin of errors decrease, more accurate recommendations are generated, and the overall audit quality is improved largely (Ovaska-Few, 2017). Accordingly, even more and more financial planners and advisors are relying on data analytics to predict market trends and consumer behavior patterns (Sledgianowski et al., 2017).

Along with the rise of Big Data, the above accounting practice showcases the huge growing demand and market of accountants with the mastery of data analytics related skillset and critical thinking. This suggests the exceptional career opportunities for the forthcoming accounting graduates. In this regard, boasting a base salary of $110,000 and a job-satisfaction score of 4.4 out of 5, data analytics has been ranked No. 1 on the "Best Jobs in America" in 2016 and 2017 (The Market Watch Reports, 2018). A 2016 McKinsey study shows that there is a 12% annual growth in demand for data analytics related accounting graduates, resulting in the shortage of about 250,000 related jobs. According to the 2017 survey by Forbes Insight and KPMG, 53% of financial executives believe that the accounting coupled with the advanced data analytics skillsets will become a "must have" in financial reporting and auditing in next five years. Future accountants are expected to possess the skills to extract value from large datasets through advanced analysis and become a forward thinking strategic partner in an organization. This represents big challenges to accounting students and working professionals who must be systematically trained and educated with the analytics skills and knowledge through the integrated accounting curriculums (Ovaska-Few, 2017).

Accordingly, in the higher education administration, back in 2013, the AACSB placed the higher priority of integrating data analytics contents into the accounting curriculum. For this end, the AACSB has expanded the Business Standard 9 (Curriculum Content) and Accounting Standard A7 (Information Technology Skills and Knowledge for Accounting Graduates) and integrated key data analytics contents. For double accredited schools (both business school and accounting program), the A7 explicitly requires accounting programs include such learning objectives as acquiring skills and knowledge of data creation, data sharing, data analytics, data mining, and data reporting and storage within and across organizations.

In response to the rise of Big Data and associated practical needs in accounting education, in this paper we propose the rationale and procedures of integrating data analytics into the undergraduate curriculums.. We start with an extensive literature review of Big Data and data analytics processes, techniques, and technologies, based on which we propose and discuss key strategies, procedures, contents, and specific pedagogies for the integration of data analytics into the undergraduate accounting classroom. Then, following the data analytic implementation framework of Dzuranin et al. (2018), we introduce our teaching practice in a large public university in the U.S.A. and exemplify the integrative process and activities of incorporating data analytics topics into the existing accounting curriculums in a large public university in the U.S.A. This paper shall contribute to the teaching practice and pedagogies in integrating data analytics into the undergraduate accounting curriculum.

1. BIG DATA, DATA ANALYTICS AND UNDERGRADUATE ACCOUNTING STUDENTS

Big data can be characterized with the following dimensions (De Mauro et al, 2016; McAfee et al, 2012; Suthaharan, 2014). (1) Variety. The scope, types and formats of big data extend from traditional structured to semi-structured and unstructured data of all varieties. (2) Volume. The word, big, describes the vast quantity of the data explosion. (3) Velocity concerns both frequency and speed of big data explosion. And, (4) variability refers to the wide inconsistencies of big data. The essential of big data is to collect, analyze, and present the user-generated contents and data to gain meaningful insights into businesses practice, processes and trends. This process has been referred to as data analytics in which the dataset can be so large, various, complex, and ever changing that unique advanced computing technologies and techniques of data management, analysis, and visualization have to be deployed to address the significant impacts (Fan & Gorden, 2014).

To facilitate big data analysis, Gartner (2016) recommended to divide data analytics into four key types: (1) Descriptive analytics. This refers to the retrospective analysis of data to insights of past information to understand the phenomena of "what happened?" (2) Diagnostic analytics, referring to the retrospective inspection of data to examine the causes of past results and explain "why did it happen in this way?" (3) Predictive analytics refers to the prospective analysis of data to help understand the future and provide projections explaining "what will happen?" And, (4) prescriptive analytics, referring to the prospective analysis of data for recommending the best option to achieve expected outcomes and explain "what should be done?"

In line with the nature of Big Data and the various types of data analytics, the academic background and training of undergraduate accounting students fit well in for the prerequisite requirements of data analytics. Accounting students have been commonly considered to be well prepared at analytical thinking and practice. The group of students possesses well trained quantitative analysis techniques and skills. They have been widely educated for analyzing and summarizing transactional data, and aggregating detailed data to develop financial reports in various organizational settings. Many of them have gained rich experience in utilizing descriptive analytics for in regular business tasks. In the process, they have acquired analysis capabilities of compiling data and performing basic data computing. The group of students have also learned to use techniques and methods of diagnostic analytics, performing variance and ratio analysis to explain historical data and results.

More importantly, the academic background and training and associated business practice of undergraduate accounting students have built them solid understanding of business implications of various contexts. It is widely believed that the significance and key points of data analytics are derived from the decisions making using data analysis techniques and technologies in various organizational contexts. Predictive and prescriptive analytics shall make great sense especially when they provide insights for businesses decision making and add value to the organizational operations. Therefore, the rich and deep understanding of organizational characteristics and larger business contexts is the key starting point for business stakeholders to understand, acquire, and apply skills and

mindsets of data analytics. In all these aspects, undergraduate accounting students are not only academically ready, they are also fully open to the integrated curriculum of data analytics (Ovaska-Few, 2017).

2. STRATEGY AND BEST PRACTICE OF INCORPORATING DATA ANALYTICS INTO UNDERGRADUATE ACCOUNTING CURRICULUMS

Even recognizing the fast growing market demand, career opportunities, and AACSB requirements, the higher education institutions are facing a series of challenges towards incorporating data analytics content into the existing undergraduate accounting curriculum. Firstly, with constrained resources in the higher education institutions, many business schools and accounting departments cannot afford to hire new faculty members and offer additional degree or certificate programs. Secondly, while most existing accounting courses are already content intensive, and may not have much room to accommodate additional topics of data analytics, the accounting departments need to determine what data analytic skills and tools are relevant to accounting field and how to implement these topics into already packed accounting curriculum (Dzuranin et al. (2018). Thirdly, teaching the revised curriculums is a challenge for faculty, and so is for student learners. Due to the disciplinary nature of data analytics, which naturally integrates subject matters and contents of a variety of disciplines such as statistics, mathematics, business, economics, IS, programming, computer engineering, social psychology, organizational behaviors, etc. It is particularly challenging for the existing body of faculty members – most of them are business majors – to develop the prerequisite knowledge base and academic background in the various disciplines. Such challenge equally applies to the undergraduate accounting student learners. The lessons and experience from our own teaching show that, students have been largely challenged, frustrated, and overwhelmed over the course assignments and materials of data analytics.

Our review of current several schools and departments that have developed the one-year analytic master degree program or certificate courses indicates that, to overcome the "human element" and the financial hurdle, the strategy and best practice include, 1) developing a data analytics course and add it to the existing accounting program; and/or 2) integrating data analytics courses across the existing core accounting curriculums. The strategy and best practice are consistent with and gain the empirical support from the survey of Dzuranin et al. (2018) regarding what, how, where and when data analytics topics should be taught in the accounting program. Taking those challenges and best practices into account, we propose the following strategies for faculty to consider when teaching accounting courses with integrated analytical competence:

- Listen to practitioners: Reach out to accounting firms or working practitioners, and listen to their concerns, needs, comments and feedback on what techniques, technologies, and methods of data analytics they use, and what skillsets and knowledge they expect for the forthcoming graduates to master.
- Analytics go beyond Excel: Teach and train student learners to understand and gain hand-on-practice on how to obtain and clean data, understand data using a greater variety of analytical tools, technologies, and techniques beyond the Excel. While the Excel is still a powerful analytical tool, our accounting student learners need the exposure to more advanced applications and programs, and should master more than that to meet the accounting business needs.
- Train students to be data analysts: We should not aim to transform accounting students into computer programmers or database experts. Knowing how to utilize the analytical technology of interest is critical. And, even more critical is to cultivate student learners' analytical mindset and train them to be able to effectively apply and communicate the analytical results in various business contexts, practice, and processes.

As to the data analytics topics that should be taught and learning objectives that should be achieved, currently, there is no authoritative guidance clarifying necessary data analytic skills and tools that accounting professionals should develop. The profession accounting literature has suggested many data analytics skills and tools for accountants in various function areas, among which three common types of skillsets are expected: ask data-driven questions (critical thinking skills); understand data and perform appropriate analyses; communicate analysis outcomes effectively. This is highly consistent to the strategies we have proposed above, and should lay the solid foundation for incorporating data analytics into undergraduate accounting curriculums.

3. INTEGRATING DATA ANALYTICS CURRICULUM TO BUILD EXPERIENTIAL LEARNING

Regarding what, how, where and when data analytics topics should be taught in the accounting program, Dzuranin et al. (2018) proposed a three-implementation-method framework in effort to integrate data analytic curriculum to build accounting student experiential learning: the focused approach, the integrated approach and the hybrid approach. According to Dzuranin et al. (2018), the focused approach can be used to develop one stand-alone course with learning objectives exclusively focusing on data analytic competencies, such as data creation, data storage, data mining, and data security. The integrated approach embeds specific data analytic topics into existing accounting courses. And, the hybrid approach involves both a stand-alone data course and existing accounting courses in a systematic integrative way that data analytic content is delivered to build accounting student experiential learning.

It is worth to note that, depending on student demographics, and teaching content and pedagogies, each method has pros and cons, and there is no "one size fits all" solution (Dzuranin et al. (2018). For example, with the focused approach, the accounting students can fully develop data analytics competency without sacrificing class time in acquiring fundamental accounting skills. Furthermore, with this approach, the accounting department can identify faculty resources with sufficient knowledge to teach this course. One obvious limitation with this approach is that, most of the accounting programs may be already full with course requirements – a situation that leaves limited room for students to take additional courses. For the integrated approach in which data analytics content is integrated in the existing accounting course, students are able to build better understanding of the importance of data analytics in specific accounting contexts; there would be no need to add an additional course to the packed accounting curriculum.

In the line with the aforementioned strategies and best practices, and based on the Dzuranin et al. (2018)'s three-implementation-method framework, we next share our step-by-step teaching experience in a large public university in the U.S.A. of incorporating data analytics contents into accounting curriculum. We first demonstrate "the focused approach" in which a stand-alone data analytics course was developed. Following is the application of "the integrated approach" that infuses data analytics topics into the existing accounting courses. Thus far, we have not got the chance to apply the hybrid approach in our teaching practice. We urge colleagues to embark on the adventure in the very near future and share insights, experience, and lessons in the avenue of integrating data analytics into the accounting curriculum.

3.1 Developing Data Analytics Course: A Focused Approach

Course Description & Learning Objectives

Big data analytics focus on understanding, interpretation, strategizing, and taking action to further business interests. To reflect the characteristics of big data, and map major techniques and technologies of data analytics to the organizational needs for skilled undergraduate learners, we propose the course description as,

- In this course, students will learn to identify, evaluate, and capture data analytic opportunities that create business value. Toward this end, students will learn basic data analytics principles and methods and analyze case studies on organizations that successfully deployed these techniques.
- Specifically, the course provides an overview of data analytics concepts, principles, procedures, techniques, technologies and applications for business data gathering, storing, processing, manipulating, and interpreting. The course discusses and demonstrates the associated statistical approaches and data mining techniques that arise in the area.
- Throughout the course, we will emphasize the entire data analytics cycle, which includes the following stages: (1) understanding of business and its opportunities, challenges, and problems; (2) data understanding and preparation; (3) modelling: construct a model to address business interests; (4) evaluating: evaluate possible models and solutions; and (5) deployment and recommendations of data analytics modeling.
- Accordingly, we have three goals in this course. The first is to help students develop mindset of analytics and think critically about business and data. The second is to enable students to identify opportunities for creating value using data analytics. The third is to help students analyze and estimate the value created using data analytics to address an opportunity.

In the line with the course description, the prerequisites for the course are required regarding the general understanding of database, information systems (IS) analysis and design, network and data communication (Chen et al, 2012; Fan & Gorden, 2014; Raghupathi & Raghupathi, 2014; Stigelitz & Xuan, 2014; Zeng et al, 2010). Upon the successful completion of the course, undergraduate students should be able to:

- Explain the ideas of data analytics to support business operations and decision making.
- Understand how to determine the appropriate data analytics tools, technologies, techniques for intended business analysis in the form of teamwork.
- Understand how to extract, transform, load and analyze business dataset upon defining business objectives.
- Design and implement data analytics solutions to address business interests, problems and opportunities.
- Report and illustrate to business stakeholders the procedures, interpretations, and deployment and recommendations of data analytics.

Data Analytics Architecture

We propose a data analytics architecture to facilitate the course teaching. As illustrated in Figure 1, the architecture integrates Hadoop/MapReduce, cloud computing, R, SQL, SEM, and other associated technologies and applications of data analytics into the organizational decision making setting. The content coverage systematically trains students with data analytics skillset and mindset.

Figure 1: An Architectural Framework of Business Data Analytics
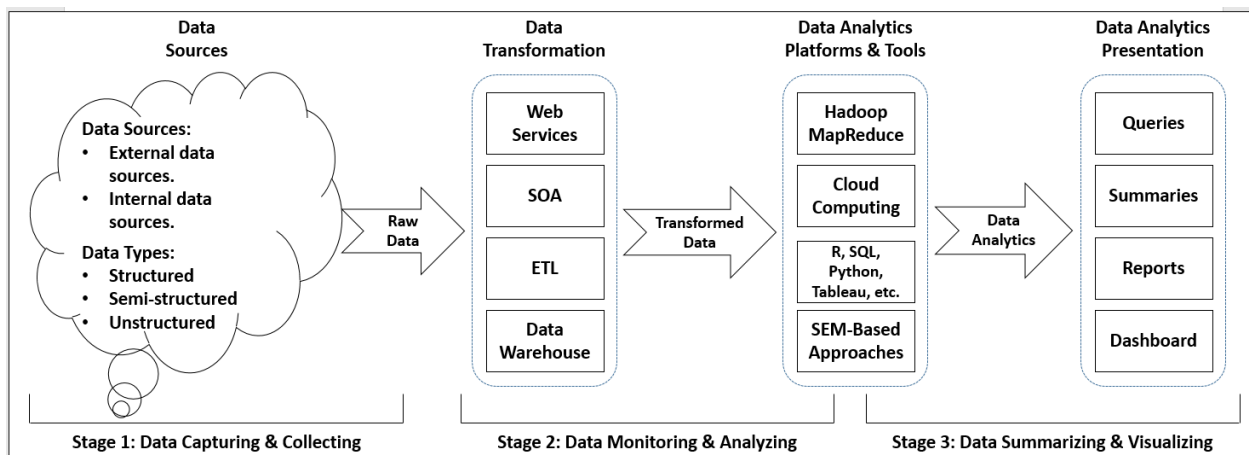
- Hadoop/MapReduce – an open source software framework providing computational capabilities for distributed storage and processing of large, various and complex datasets.
- Python – Python has a powerful data analysis library that provides powerful analytics tools suited to handle big datasets.
- Cloud Computing. Due to the flexibility and effectiveness of cloud computing, many data analytics technologies can be deployed without specific setup expertise.
- R & Tableau. R is an integrated suite of database environment for predictive analytics, data mining and data visualization. Tableau is an interactive data visualization tool. R and Tableau are bundled with an integrated collection of intermediate tools for data analytics.
- SEM-Based Approaches – A diverse set of computing algorithms and statistical methods for factor analysis, path analysis, and latent growth modeling.
- SQL & NoSQL. The SOL is still used heavily as a primary approach to querying big data. Meanwhile, applications of NoSQL and Interactive SQL can be embraced to examine semi-structured and unstructured data.
- Others: For data analytics methods (e.g., content analysis, text mining, opinion/sentiment analysis, social network analysis etc.), many tools provide programing interfaces for business use.

Pedagogical Approaches

While we realize that teamwork may be challenging for class management and teaching effectiveness, with the tremendous significance and higher priority of teamwork communications and interpersonal skills in data science and the IS-related data analytics process (Chen et al., 2012; Provost and Fawcett, 2013), we recommend the course be taught in the form of student teamwork modules covering interrelated topics of data analytics technologies, procedures, and techniques. Teaching activities consist of instruction lectures, demos of analytics techniques and technologies, hand-on-exercises, teamwork projects, team presentations and discussions, and invited talks of researchers and business practitioners. The textbooks and materials will be reviewed; requests for review copies will be made to determine the required and complementary readings for the course.

Modular teamwork projects should be assigned and used to evaluate student performance in the course. The purpose of the teamwork projects is to allow students to apply many of data analytics concepts, techniques and technologies to a specific business context. The projects will provide students with significant experiential leaning on which they can develop relationships and enhance technology entrepreneurship with companies. Many skills in data analytics will be learned and reinforced in depth as the student teams work on the projects.

For the projects, student teams will either be provided the open source datasets, or will identify by themselves a company that has a significant business problem or opportunity that can be addressed through the collection and analytics of corporate data resources. The teamwork projects will be conducted based on business procedures, thus it is important that teams are able to define the business characteristics and processes to complete the various requirements of data collection and analytics. Essentially students will follow the stages of big data gathering, storing, manipulating, interpreting, and visualizing to address particular needs of the business. To effectively assessment teamwork and student learners' work on the project, we have designed detailed project guidelines for student teams to refer to and report to the instructor periodically. In addition, grading rubrics have been developed to evaluate teamwork performance. Given the length constraint of the paper, this paper does not include the associated documents which are ready to distribute upon request.

3.2 Curriculum Integration Cases: An Integrated Approach

With the integrated approach, Dzuranin et al (2018) show that the hands-on project and case studies are the most appropriate method for delivering data analytics topics to undergraduate student learners. Our teaching practice in the large public university has introduced this method to deliver the data analytics topics. Furthermore, Sledgianowski et al. (2017) argued that integrating data analytics within a course context allows faculty to identify applications of the competency where accounting students in a program are exposed to the same learning opportunities. They further provided examples for integrating data analytics competencies into the discipline-based core accounting course subjects such as financial accounting, managerial accounting, auditing, and taxation. In this process, Sledgianowski et al. (2017) suggest that faculty who teach the courses be the ones to identify the desired level of integration.

Following Sledgianowski et al's approach (2017), we next turn to our teaching practice as case studies to exemplify the Dzuranin et al's integrated approach of how data analytics can be incorporated into the course context at both introductory and intermediate levels. To start, we suggest educators to consider following learning objectives in developing data integrated courses: Upon the completion of the course, the undergraduate student learners should be able to:

1) Develop data driven critical thinking skills such as asking data-driven questions, and identifying issues and datasets to address the questions.
2) Understand data including data clssfication, data retrieval, and data transformation and storage.
3) Provide descriptive statistics, predictive statistics, and prescriptive statistics to analyze data
4) Communicate data analytics results using both oral presentation and written communication.

3.2.1 Principles of Accounting I: Financial Statement Analysis Project

In the university, the course, Principles of Accounting I - Introductory Financial Accounting, covers the primary accounting concepts and procedures through the analysis, classification, recording, and summarizing of business transactions. Financial statements are introduced and shown to be a source of essential information for management. In the line with the integrated approach of Dzuranin *et al.* (2018), we developed the consistent course learning objectives for undergraduate accounting students including the development of the critical thinking skills, data analysis skills such as financial statement analyses, and communication skills including written and oral communications.

And, prior studies on the manner of incorporating data analytics in financial accounting have highlighted the significance of eXtensible Business Reporting Language (XBRL) and searching financial data and company filings on Electronic Data Gathering, Analysis, and Retrieval system (EDGAR) and analyze ratios with spreadsheet software (e.g., Debreceny and Farewell, 2010; Dilla *et al.*, 2010; Taylor and Dzuranin, 2010; Dzuranin *et al.*, 2018). Sledgianowski et al (2017) comment that "XBRL makes possible the integration of Big Data analytics and technology into an introductory accounting class" (p. 83). Furthermore, Debreceny and Farewell (2010) argued that principles of accounting is an appropriate course to introduce XBRL, and student should receive an end-user perspective on XBRL and only on a relatively surface level.

Following the above suggestions, we have incorporated aforementioned data analytics applications in this course with a financial statement analysis project, which was expected to teach and enhance students' skills in data collection, extraction, transforming, and descriptive analysis. The project was counted as 8-10% of total course grade, and required students to recognize the information conveyed in each of the four basic financial statements, identify the role of GAAP in determining financial statement content, and compute and interpret selected financial ratios. More specifically, the learning objectives include:

1) Retrieve company's annual report (10-K) from the Securities & Exchange Commission (SEC)'s EDGAR website, http://www.sec.gov/edgar/searchedgar/companysearch.html
2) Navigate, search, and review the company's annual report using EDGAR Renderer/Previewer (Inline XBRL Viewer) software Arella, downloaded from http://arelle.org/documentation/edgar-renderer-installation/.
3) Analyze and evaluate financial ratios using Excel spreadsheet.
4) Produce an oral presentation and a written report to effectively communicate findings.

At the beginning of the semester, each student was required to select one NASDAQ or NYSE public company that has readily available financial statements. Selected companies are restricted to unregulated U.S. companies (excluding financial and utility companies). Students then performed the following steps to access Arella XBRL document:

Step 1. Go to http://arelle.org/documentation/edgar-renderer-installation/ and install the pre-built application for Windows or Mac OS. Open Arella. Follow the instructions on the same link http://arelle.org/documentation/edgar-renderer-installation/ to install EDGAR Renderer and the internet proxy plugin for NTLM under "Manage Plug-ins".
Step 2. Go to https://www.sec.gov/edgar/searchedgar/companysearch.html. Type company's name under "Company Name", or type in ticker symbol under "Fast Search". In the example, we use Coca Cola Co.
Step 3. Under EDGAR company search results for Coca Cola Co, type in 10-K under "Filing Type" and click Enter. A window of annual reports (10-K) for available years shows up.
Step 4. Click on "Documents" under Format for 10-K Filings. A "Filing Detail" window will open. Find "XBRL Instance Document" row, "Document" column, Right click the document file name, and select "Copy link address".
Step 5. Go back to Arelle software, and paste (Ctrl-v) the address to the URL box. Click on "OK". The XBRL instant document will be loaded on Arelle and a web browser.
Step 6. Export the company's Income Statement and Balance Sheet to Excel file.

By examining the Arelle XBRL document, students were able to find the answers to the required questions. For example, by moving the mouse cursor, a box will pop up for each account, presenting the "Definition",

"References", and "Details". This is of particular interest to introductory accounting students. The required report includes responses to the following sample questions,

1) What is the exact name of your company? What is the ticker symbol for your company, on what stock exchange(s) does it trade, and when is the company's fiscal year end?
2) Income Statement: a) what is your company's revenue recognition policy? b) What is the amount of the largest expense on the income statement for the most recent year? Please briefly describe the transaction represented by the expense.
3) Balance Sheet: a) Using the 10-K, show that the fundamental accounting equation, is true for your company at the end of the most recent year-end. b) What was your company's largest asset (net) at the end of the most recent year?
4) Ratio analysis: Calculate your company's most recent two-year return on assets (ROA), net profit margin for ROA, and total asset turnover. Explain the company's ROA changes using the ROA profit driver analysis. Please extract the data to Excel Spreadsheet and calculate the financial ratios.

3.2.2 Intermediate Accounting: Earnings Management Module

In most schools, intermediate accounting is divided into two courses, specifically Intermediate Accounting I and Intermediate Accounting II. Both focus on conceptual, procedural and regulatory issues at different levels involved in preparing and understanding corporate financial statements. The issues include classification and presentation requirements for the income statement and balance sheet and a detailed examination of rules and principles pertaining to current assets, fixed assets, liabilities, and stockholders' equity. As discussed in Sledgianowski et al. (2017), big data can play a central role in relating real-world examples to undergraduate accounting students at the intermediate level. In addition, Dzuranin *et al.* (2018) show that accounting educators are in favor of introducing data analytics in the upper-level courses. Prior studies (e,g., Debreceny and Farewell, 2010) suggest that XBRL cases and papers be introduced to the intermediate accounting courses, as well as the concept of automated disclosure, metadata, taxonomies and alignment of reporting choices with standard taxonomies and consumption of reports. Warren *et al.* (2015) suggest that big data in the forms of video, images, audio, and text complement traditional data, and can be analyzed to improve the quality and relevance of accounting information.

In our teaching, we proposed to include a 4-class module to teach data analytics contents and apply analytical skills into advanced accounting topics and complex business contexts. Considering the limited room to make space for additional topics in intermediate accounting classes, we suggest to teach half of the modules in Intermediate Accounting I and the other half in Intermediate Accounting II. In other words, the instructor could teach two classes with data analytics contents (half of the modules for each) each semester, 1 hour and 15 minutes per class.

The intermediate accounting students are expected to develop understanding in applications of financial reporting standards with advanced topics and complex business context. For instance, when covering earnings management, after discussing managers' motivations and multiple ways to manage earnings, instructors could use this topic to teach to use data analytics approach (prediction models) to detect financial reporting that may have been manipulated by management.

The purpose of this 4-week module is to expose students to training and practice in line with the following learning objectives (compliance with recommended data analytics skills outlined by PwC (2015) report entitled "Data Driven—What Students Need to Succeed in a Rapidly Changing Business World"):

1) Apply legacy technologies (Microsoft Excel and SPSS)
2) Understand of structured and unstructured databases (EDGAR)
3) Retrieve and clean data
4) Apply multivariate regression and predictive tools
5) Research of accounting issues
6) Communication of accounting information in a professional manner (verbal/written)

We outline the teaching pedagogy as follows.

Class 1: Introduce concept of earnings management and discuss possible ways that managers employ to manipulate earnings. Manipulate earnings through aggressive revenue recognition practices is the most common way. Next, earnings could be manipulated through aggressive expense recognition practices. Managers could manipulate earnings through variance means, such as channel stuffing, estimation for bad debt expense and warranty expense, use LIFO liquidations, selection of depreciation methods, utilize percentage of completion method in long-term construction contract, and etc.

Class 2: Discuss Discretionary Accruals Models, such as Modified Jones Model (1991). The model is used to capture the non-cash portion of earnings or "accruals," where provide spaces for managers manipulate the estimation of revenues or expenses.

Class 3: Introduce basic statistics for model regressions. Regression models refer to how one sets of variables help explain the change in another variable. Explain how to use both time-series and cross-sectional regression models to make predictions. Teach students to use Excel or SPSS to run multivariate regressions step by step.

Class 4: Discretionary Accrual Model Case. Select one sample company and choose its peers from the same industry with identical first two SIC codes. Show students retrieve data from EDGAR website, transfer data into excel spreadsheet, and clean data into the format needed in the accrual model. Run regressions with time-series and cross-sectional datasets. The discretionary accrual estimated from the model can then be rank against discretionary accruals of the same firm in all prior years or compared to other firms' discretionary accruals from the same industry. This ranking is a comparative measure of the size of discretionary accrual, which is a common proxy for earnings quality. A high amount of discretionary accruals suggests lower level of earnings quality and indicates a red flag that management may use aggressive accounting to boost earnings.

In our teaching practice, students were required to submit a project report. Following are guidelines for the project:

- Student is expected to submit a project report and make an oral presentation in class.
- When selecting companies, make sure that you will be able to access the annual reports. Student is expected to notify the companies (one sample company and peer companies in the same industry) chosen for your term paper and presentation to the instructor by end of Class 2.
- Download annual reports from EDGAR website, https://www.sec.gov/edgar.shtml
- Create a spreadsheet with all accounting data needed in Discretionary Accrual Model.
- Project Report should discuss the selection procedure of companies and Discretionary Accrual Model used, report the datasets (in excel format) and regression results, and make predictive estimations and recommendations on sample company's financial reporting and earnings quality.

3.2.3 Managerial & Cost Accounting with the Integrated Approach

The Dzuranin et al's integrated approach can also be applicable in courses of managerial and cost accounting to incorporate Big Data and analytic contents in. In our teaching practice, cost classification, one of the basic level of analyses on raw business data is where data analytics and associated technologies can be integrated effectively to maximize undergraduate student engagement in experiential learning. .

As a related but more advanced topic, analysis of cost behavior and cost estimation provide another pedagogical opportunity for educators seeking to integrate data analytics and technological competency into classrooms through the Dzuranin et al's integrated approach. In this regard, our teaching practice includes developing an instructional module that demonstrates how to analyze cost behavior in relation to various types of activity measures using a hypothetical dataset and appropriate software, such as SAS, SPSS, Tableau or EXCEL spreadsheet capable of statistical analysis and visualization. In those practices, the data analytics architecture proposed in this paper appears to have a particularly good fit for the topic of activity-based coting (ABC) which is often introduced as a superior alternative to conventional methods of product costing, and there are various established learning rubrics ready to use.

Lastly but not least, a balanced scorecard (BSC) may be another area of interest that can introduce the Dzuranin et al's integrated approach to develop learning objectives in understanding the impact of an integrative data-analytic approach on the measurement and evaluations of various managerial performance. Accordingly in our teaching practice, we developed case studies and instructional tutorials. We found this data-driven approach help undergraduate students better understand how an organization may leverage volumes of differently structured data coming from internal and external sources to identify key performance indicators.

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Book Review: *How Did I Not See This Coming?*

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ABSTRACT

In the book *How Did I Not See This Coming*, Katy Tynan noted that the practice of poor management is widespread in the workplace. In an innovative approach in assisting new managers on ways to improve their skills in the workplace, the author used a literary novel format to lead the reader to vicariously experience challenges and frustrations in the workplace through the actions of a protagonist, Julie Long. Through unique conversations with several experienced managers in diverse discipline, Julie came to understand some important truths about good management and how to apply them in a workplace setting. The book can serve as an excellent supplement for college business students, allowing them to enrich their understanding of applied management skills.

Keywords: management, team members, truth about management, goals, motivation, trust

In the book *How Did I Not See This Coming*, Katy Tynan noted that the practice of poor management is widespread in the workplace. Based on data from Monster.com, she cited (1) 38 percent of employees perceived their bosses to be "horrible," and (2) 50 percent rated their superior as a "1" or "2" on a scale with a "5" being equivalent to "Outstanding/Best."

Although more than $15 billion is spent annually on a variety of management training methods, including books, videos, blogs, and workshops--all aimed to help new managers improve their skills, Tynan affirmed there remains a need for a more effective approach to instruct and guide new managers.

The author's purpose was to take an innovative approach in which she used a literary novel format to lead the reader to vicariously experience challenges and frustrations in the workplace through the actions of a protagonist, Julie Long. Julie was characterized as a new manager supervising three team members in a modern workplace setting Through her unrelenting effort to improve her skill as manager, Julie came to understand some important truths about good management practices and how to apply them in a workplace setting.

The narrative began with Julie feeling confident about fulfilling her management responsibilities. She perceived her roles to include delegating, monitoring, and seeing completion of tasks. However, when Julie heard that one of her most highly skilled team members was resigning due to Julie's lack of management competence, she accepted this event as a challenge to improve her management skills. Julie began a journey of learning from a host of experienced managers in diverse workplace environments.

The first individual Julie encountered in her quest to improve her management skills was former boss Sarah. This seasoned manager emphasized to Julie two management practices: (1) identifying goals for the team and specific goals for each team member; and (2) aligning those goals with the goals of the organization. Sarah assured her that when a team works together to accomplish goals, it becomes a more productive team.

After her meeting, Julie created a journal tilted *The Truth About Management* and posted in it what she had learned about good management from Sarah. Julie wrote, Truth 1. "Vision: Define the value your team shares and measure everything you do against those values" (p. 13).

The next day, she applied Truth 1 by involving her team to decide upon specific goals that were aligned with the goals of the organization. Following this team engagement, she directed her team to prioritize tasks most necessary to achieve the goals.

Upon the recommendation of Sarah, Julie next met with Mike Rogers, an experienced construction manager. From Mike, she acquired the perspective that each employee can be a specialist. He specified that in order for specialists to work as productively as possible, it is most important that a manager make resources available to them according to their needs and to remove obstacles in their way.

Mike also addressed problem solving and explained that the primary key to its effectiveness lay in a manager's role of maintaining open communication channels among all employees. He said that when an employee came to him with problem, he never hesitated to ask that person what he or she thought would be the best solution. Mike noted that when it was necessary that he never hesitated to seek advice from other employees who were more likely have knowledge of an effective way in which a problem might be resolved. When Julie commented that she hesitated to ask her team members for a solution, thinking that as a manager she should know all the answers, Mike reminded her of a quote by Steve Jobs: "It doesn't make sense to hire smart people and then tell them what to do. We hire smart people so they can tell us what to do" (p. 27).

That evening Julie added to her journal: Truth 2. "Team: Know your team members' strength and focus on clearing the obstacles to their success" (p. 29).

The following day, Julie faced a problem in which her team and her two co-teams were frustrated in their attempts to correct a problem regarding a client. As she recalled her visit with Mike and the discussion on open communication, she realized she had failed to set up proper lines of communication between her team members and her co-teams in order for necessary data to be shared among all members for problem solving purposes. As employees were eventually able to correct the problem, Julie acknowledged her mistake to her boss and vowed that she would improve her communication practices.

Next, Julie followed up with Mike Roger's suggestion that for her to continue to gain further perspectives of good management practices that she shares a conference call with his sister-in-law Caroline, an experienced manager working in an online environment with team members located in various geographical locations.

Julie learned from Caroline the importance of keeping a focus on the results of team projects. A technique recommended by Caroline was the use of the Eisenhower Grid. By categorizing tasks in a specific quadrant of a grid, a manager could easily determine the nature of the task, the approximate amount of time to dedicate to a task, and the priority to assign to a task. For example, in Quadrant 1, a manager was able to specify Tasks that are Highly Urgent/Highly Important; in Quadrant 2, Tasks that are Highly Urgent/Less Important; in Quadrant 3, Tasks that are Less Urgent/Highly Important; and in Quadrant 4, Tasks that are Less Urgent/Less Important.

Carolina also explained the use of a tool that was beneficial for keeping track of projects. It was titled the SMART procedure, an acronym with each initial letter representing managerial directions as follows: S=Specific meaning "Specify details for each goal;" M=Measurable meaning "Have a way to determine when a goal is successfully done;" A= Achievable meaning "Have a way for team members to know that they can achieve a goal with the correct amount of time and proper tools;" R=Relevant meaning "Be sure all members' goals are relevant to the org goals and objectives;" and T= Time bound meaning "Set a deadline for each goal."

After the conference call as she contemplated the new advice, Julie understood how she could incorporate these techniques into her own management style.

Julie posted to her journal: Truth 3. "Goals. Focus on the outputs and recognize each successful achievement" (p. 45).

The next day a friend sent Julie an Internet article on the topic of employee motivation. The article encouraged managers to use a tool including four quadrants to observe one's employees in terms of their levels of willingness to perform tasks and their levels of skill on how to perform the tasks. Identifiers in each of the four quadrants included: Quadrant 1: "I can, and I will," meaning an employee is self-motivated and highly skilled; Quadrant 2: "I can, but I won't," meaning an employee has the skill but is not satisfied with the outcome of work due to management's incompetence; Quadrant 3: "I can't, but I will," meaning an employee is not very skilled but is willing to learn; and Quadrant 4: "I can't and, I won't," meaning an employee is lacking the necessary skills and is not willing to learn the skills.

After studying the information in the article, Julie decided to ask team members what specifically in the workplace motivated and frustrated them. The following were the questions she asked:

**"What makes you excited to come to work?"

**"What motivates you about your job?"

**"What frustrates you about your job?"

**"If you could change one thing about your job, what would it be?"

Julie put the ideas from the article into practice. Together with the use of the grid of four quadrants and questions, she was able to gather important information about her team members' motivation and skill levels. With the information Julie assigned each member tasks that would strengthen their team role positions, as well as their levels of confidence.

Based on a recommendation by her father, the next person Julie met for advice was Coach Marcus, a football youth coach and a partner of her father's law firm. In his discussion with Julie, he emphasized the importance of knowing the strengths of one's team and reinforcing those strengths in order that the team could progressively reach their goals. The coach also stressed the importance of maintaining an ongoing evaluation of team members as they performed and completed tasks. He assured Julie that through proper evaluations procedures, a team could continue to grow together and improve in its results. Julie was impressed by the advice from the Coach and thought through ways to implement the Coach's recommendations into her management routine.

During evening hours, Julie added to her journal: Truth 4. "Learn and Adapt: Develop the habit of learning from each day's work and focus on growth, not perfection" (p 66).

Julie's next learning experience took place at a rock-climbing gym where she and her supervisor engaged in the adventure of climbing to the top of a rock wall. He explained that as a rock climber ascends a wall, he will make some mistakes in positioning his hands and feet into wall pockets. If the climber and his partner have mutual trust, he can remain confident that his partner will not let him fall. Julie's boss continued to describe how trust in a partner's support in rock-climbing parallels with the mutual trust between a manager and one's team members in the workplace. In summary, her supervisor said, "You can't take risks if you don't trust your team, and if you don't take those risks, you can't learn from them. Not everything you try is going to be successful, but you've got to have trust to try anything at all" (p. 83).

Julie noted to herself that establishing team trust would be one of her primary upcoming goals.

That evening Julie wrote in her journal: Truth 5. "Trust: Without trust, there is no team" (p .83)

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In the book's epilogue, the reader learned that Julie had acquired middle-management approval of becoming a competent manager in leading and collaborating with her team and co-teams.

The primary strength of this book is that a reader learns some essential truths of management practices in real-to-life work settings. The book is considered a well-grounded reading supplement for college business students, as well as for new team managers aspiring to improve their supervisory skills in a workplace environment. Regardless of the audience, the book enriches one's awareness of the importance of team vision, strengths of team members, and the overall achievements resulting from team goals and trust.

Sheets, B. H. (2018). Book Review: *How did I Not See This Coming*. [Author: Katy Tynan].
  Title: *How Did I Not See This Coming?: A Manager's Guide to Avoiding Total Disaster*
  Copyright: 2018 by Association for Talent Development
  Author: Katy Tynan
  Publisher: Association for Talent Development
  Paperback: 104 pages
  ISBN: 9781562867867

Brenda Hayden Sheets is an Associate Professor in the Department of Management and Marketing at Murray State University. Her range of interests include research in the business of the golf industry, plagiarism, and action learning.

Manuscript Guidelines, Submission and Review Process

TOPIC AREAS (BUT NOT LIMITED TO THESE):
- Course design – current courses, new courses, new trends in course topics
- Course management – successful policies for attendance, homework, academic honesty …
- Class material
  - Description and use of new cases or material
  - Lecture notes, particularly new and emerging topics not covered effectively in textbooks
  - Innovative class activities and action-learning – games, active learning, problem based
- Major or emphasis area program design that is new or innovative.
- Assessment – all aspects including AACSB and university level assessment strategies and programs
- Integration of programs or courses with other academic disciplines
- Internship programs
- Business partnerships
- Successful student job placement strategies
- Any topic that relates to higher education business education.

SUBMISSION AND REVIEW PROCESS:

Copyright

- Manuscripts submitted for publication should be original contributions and should not be under consideration with another journal.
- Authors submitting a manuscript for publication warrant that the work is not an infringement of any existing copyright, infringement of proprietary right, invasion of privacy, or libel and will indemnify, defend, and hold Elm Street Press harmless from any damages, expenses, and costs against any breach of such warranty.

Prepare your manuscript

- See the Style Guideline page for specific instructions.
- Articles must make a contribution to business education innovation.
- Manuscripts should be limited to 8 to 10 pages or less, although longer will be accepted if warranted.
- Articles can be either regular research papers, or shorter notes that succinctly describe innovative classroom teaching methods or activities.
- Manuscripts should be completely finished documents ready for publication if accepted.
- Manuscripts must be in standard acceptable English grammatical construction.
- Manuscripts should be in MS Office Word format. Word 2007 files are acceptable, as are earlier versions of Word. If you are using a new version of Word after Word 2007, save in Word 2007 format.

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- Manuscripts may not have been published previously or be under review with another journal.
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- Article submissions can be made at any time.
- Submission deadlines: September 15 for December issue, March 15 for June issue.

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- The editor and reviewers will review your submission to determine if 1) the content makes a contribution to innovative business education, 2) is of the proper page length, 3) is written in proper grammatical English, and 4) is formatted ready for publication.
- Submissions not meeting any of these standards will be returned. You are invited to make revisions and resubmit.
- If the submission meets the standards, the manuscript will be sent to two reviewers who will read, evaluate and comment on your submission.
- The editor will evaluate the reviews and make the final decision. There are 3 possible outcomes:
    - Accept as is.
    - Accept with minor revisions.
    - Not accepted.
- Reviews will be returned promptly. Our commitment is to have a decision to you in less than two months.
- If your paper is not accepted, the evaluation may contain comments from reviewers. You are invited to rewrite and submit again.

If your paper is accepted

- Minor revision suggestions will be transmitted back to you.
- Revise and send back as quickly as possible to meet printer deadlines.
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- Faster delivery methods are available for US and international delivery. Contact the editor for a specific pricing.
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- If you decide not to publish your paper with BEI Journal after submitting payment, we will refund publication fees less $200 to cover costs of review and processing.
- Cancellation cannot occur after the paper has been formatted into the final printer's file.

Manuscript Style Guide and Example

An example is provided following these instructions.
This style guide represents style guidelines in effect for future issues, but always check for updates online.
Authors are responsible for checking for correct grammar, construction and spelling. Authors are also responsible for formatting pictures, tables, and figures such that a pdf black and white file sent to the publisher will reproduce in a readable manner.

General Setup:
- All fonts other than exceptions noted below: Times New Roman. 10 point for text. Other sizes as noted below
- Margins: 1 inch on all sides of 8½x11 inch paper size.
- No headers or footers.
- Absolutely no footnotes or endnotes via footnote or endnote formatting. For footnotes or endnotes, place a number of the footnote in the proper location as a superscript. Then at the end of the paper or bottom of the page, add the footnote as text with a superscript number to correspond to that footnote.
- Page numbering bottom centered.
- No section breaks in the paper.
- No color, including url's. Format to black. No color in tables or figures. Use shading if necessary.
- All pages must be portrait orientation. Tables and figures in landscape orientations should be reformatted into portrait orientation.
- All paragraphs should be justified left and right, single spaced, in 10 point Times font, no indent on first line, l line between each heading and paragraph.
- One line between each paragraph.

Titles, Authors, and Headings:
- ## Title centered 14 point bold. One line between title and author's name.
- ## Authors: centered, 12 point. Name, affiliation, state, country.
- One line space to **ABSTRACT** (title 10 point, bold, all capitalized, aligned left; text of abstract 10 point, no bold)
- After **ABSTRACT**, one line space, then **Keywords**. Followed by one line space to first major heading.
- **HEADINGS, MAJOR**, 10 point, bold, all capitalized, aligned left.
    The specific headlines will be based on the content of the paper, but major sections should at a minimum include an abstract, keywords, introduction, conclusion, and references.
- **Sub-headings**: 10 point, bold, first letter capitalized, no line to following paragraph. Align left.
- *Third level headings: Italic*, 10 point, first letter capitalized, no line to following paragraph. Align left.
- **Keywords:** heading: 10 point, bold, first letter capitalized, no line to following paragraph. Align left. Your list of keywords in 10 point, no bold.

Tables, Figures and Graphs:
- All fonts 10 point.
- Numbered consecutively within each category. Table 1, Figure 1 etc.
- Title: 10 point, bold, left justify title, one space, then the table, figure, etc.
- Example: **Table 1: Statistical Analysis**

References:
- APA format when citing in the text. For example (Smith, 2009).
- References section: 8 point font, first line left margin, continuation lines 0.25 inch indent. Justify left and right. No line spacing between references. List alphabetically by first author.
- Specific references: Last name, First initial, middle initial (and additional authors same style) (year of publication in parentheses). Title of article. *Journal or source in italics.* Volume and issue, page number range.
- Example: Clon, E. and Johanson, E. (2006). Sloppy Writing and Performance in Principles of Economics. *Educational Economics.* V. 14, No. 2, pp 211-233.
- For books: last name, first initial, middle initial (and additional authors same style) (year of publication in parentheses). *Title of book in italics.* Publisher information.
- Example: Houghton, P.M, and Houghton, T.J. (2009). *APA: The Easy Way!* Flint, MI: Baker College.

Example (note that this example represents a change from previous style guides)
Evidence to Support Sloppy Writing Leads to Sloppy Thinking

Peter J. Billington, Colorado State University - Pueblo, Colorado, USA (12 point)
Terri Dactil, High Plains University, Alberta, Canada

ABSTRACT (10 point, bold, all capitalized, left justified)

(text: 10 point Times font, no indent, justified, single space, 150 words maximum for the abstract)
The classic phrase "sloppy writing leads to sloppy thinking" has been used by many to make writers develop structured and clear writing. However, although many people do believe this phrase, no one has yet been able to prove that, in fact, sloppy writing leads to sloppy thinking. In this paper, we study the causal relationship between sloppy writing and sloppy thinking.

Keywords: sloppy writing**,** sloppy thinking (**10 point, bold title, first letter capitalized, left justified).**

INTRODUCTION (10 point, bold, all capitalized, left justified).

The classic phrase "sloppy writing leads to sloppy thinking" has been used by many to make writers develop structured and clear writing. However, since many people do believe this phrase, no one has yet been able to prove that in fact, sloppy writing leads to sloppy thinking. Is it possible that sloppy writing is done, even with good thinking. Or perhaps excellent writing is developed, even with sloppy thinking.

In this paper, we study the writing of 200 students that attempts to test the theory that sloppy writing leads to sloppy thinking.

PREVIOUS RESEARCH

The original phrase came into wide use around 2005 (Clon, 2006), who observed sloppy writing in economics classes. Sloppy writing was observed in other economics classes (Druden and Ellias, 2003).

RESEARCH DESIGN

Two hundred students in two business statistics sections during one semester were given assignments to write reports on statistical sampling results. The papers were graded on a "sloppiness" factor using…

Data Collection (Sub-heading, bold but not all caps, 10 point, aligned left, bold, no line after to paragraph)
The two hundred students were asked to write 2 short papers during the semester…

Data Analysis(Sub-heading, bold but not all caps, 10 point, aligned left, bold, no line after to paragraph)
The two hundred students were asked to write 2 short papers during the semester…

DISCUSSION

The resulting statistical analysis shows a significant correlation between sloppy writing and sloppy thinking. As noted below in Figure 1, the amount of sloppy writing increases over the course of the spring semester.

Figure 1: Sloppy Writing During the Semester

Count of Sloppy Writing
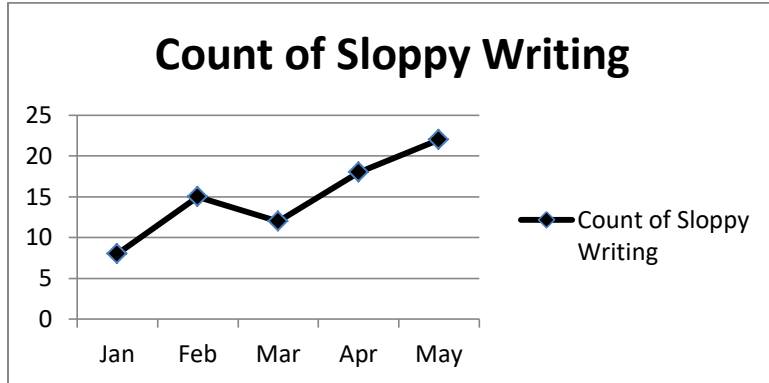
The count results were compiled and shown in Table 1 below.

Table 1: Counts of Good and Sloppy Writing and Thinking (bold, 1 line after to table, left justify)

	Good Thinking	Sloppy Thinking
Good Writing	5	22
Sloppy Writing	21	36

*-Indicates significance at the 5% level)

As Table 1 shows conclusively, there is not much good writing nor good thinking going on.

CONCLUSIONS

The statistical analysis shows that there is a strong relation between sloppy writing and sloppy thinking, however, it is not clear which causes the other…

Future research will try to determine causality.

REFERENCES (title10 point, all caps, bold, align left, one line to first reference)
        (1line spacing) (All references 8 point, indent second line 0.25 inch, justify left and right)

Clon, E. (2006). Sloppy Writing and Performance in Principles of Economics. *Educational Economics*. V. 14, No. 2, pp 211-233.

Devad, S. and Flotz, J. Evaluation of Factors Influencing Student Class Writing and Performance. *American Journal of Farming Economics*. V. 78, Issue 3, pp 499-502.

Druden, G. and Ellias, L. (1995). *Principles of Economics*. New York: Irwin.

        (short bio section optional, can run longer than these examples; removed before sent to reviewers)

Peter J. Billington, Ph.D., is a professor of operations management at Colorado State University – Pueblo. His research interests include lean six sigma and innovative education.

Terri Dactil, Ph.D., is a professor of business communication in the College of Business at High Plains University, Alberta, Canada. His research interests include instructional methods to improve student communication skills.

Endnote: (do not use word footnote or endnote formatting to accomplish this; see comments above)