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HISTORY AND PURPOSE OF NABET

The Northeastern Association of Business, Economics and Technology is in its thirty-fifth year of existence. It formerly was known as APUBEF (The Association of Pennsylvania University Business and Economics Faculty). It was founded by a group of economics and business professors from the fourteen state universities comprising the Pennsylvania System of Higher Education. Their goal was to provide a platform for sharing and exploring scholarly work among the business faculty of the fourteen state universities in Pennsylvania. As a result of their efforts, the organization has sponsored an academic conference each year for the past 35 years.

The fundamental goal of NABET/APUBEF has been to target the business faculty of the small business colleges in Pennsylvania, and surrounding states. The organization has been successful in achieving this goal for the past several years. Since 2006 NABET has been regional in scope. The October 2011 annual meeting presented 75 scholarly and pedagogical papers and workshops over two days. It featured authors from eight states and approximately 45 different colleges and universities. The organization continues to improve the annual Conference and embraces the business model of continuous improvement.

The original founders also established a referred journal, The Northeastern Journal of Business, Economics and Technology (formerly the Pennsylvania Journal of Business and Economics). The journal applies a double blind review process and is listed in Cabell’s Directory. It is published at least once each year, and has a devoted editorial staff supported by an excellent corps of reviewers.

TWITTER EFFECTIVENESS IN MOTIVATING BUSINESS STUDENTS

Melanie O. Anderson, Slippery Rock University of Pennsylvania

ABSTRACT

Universities have selected email as the preferred method to communicate with students, both in using student management systems and course management systems. There is a disconnect between student and university preferences and usage patterns, however, as students view email as outdated. They use social media tools to communicate. This study examines how the use of Twitter, a social media tool limited to 140 character messages, versus the use of email impacted student performance in a managerial accounting course. The instructor taught two different sections of managerial accounting and provided the same information outside of class to students in both courses. In one course, the information was provided via email, and in the second course it was provided via Twitter. Student feedback was sought regarding the use of Twitter and email. Students completed a pre and post quiz and a survey during the course of the term. The instructor compared the average homework scores, the average exam scores, attendance rates, and pre and post quiz results between the two courses to evaluate the use of Twitter versus email.

INTRODUCTION

Several professors at Harvard, Yale and Columbia have banned laptop use in the classroom (Newsweek, 2008). Other universities, such as UCLA, have installed "kill switches" so that Wi-Fi can be disabled to reconnect students to the classroom and the faculty member (Newsweek, 2008). However, Bill Daggett, CEO of the International Center for Leadership in Education, indicates that education is out-of-step with students (Daggett, 2010). Modern students are well connected with technology devices such as laptops, smart phones, iPods, and iPads, outside of school. When all of their connections must be shut down during school, schools appear to be museums to students, according to Daggett.

There are faculty who argue that education should embrace technology. Some argue that dedicated computer labs should be a thing of the past, and students should be encouraged to BYOD (Bring Your Own Device) (Baluja, 2011). In fact, "mobile learning devices" may be the new name for the previously banned cell phones in schools (Toppo, 2011). These devices that students have available may represent an opportunity for educators to utilize these tools both in and outside of the classroom.

The traditional method to communicate with college students regarding a course has been with course management systems such as Blackboard and Desire to Learn (D2L) and via campus supported email. However, college students view email as an "old person's medium" (Stebbins, 2007). Students rarely check their email unless their box is full, and then they often delete all emails without reading any of them.

This study analyzed an alternative way to use technology tools to achieve a better balance between traditional pedagogy, technology, and student abilities and interests. A relatively new micro blogging social media tool, Twitter, was used instead of email to connect with students outside of class time regarding the course.

BACKGROUND AND LITERATURE REVIEW

Social networking is an important part of college students' lives; 85% of students at a large research university had Facebook accounts (Mastrodicasa and Kepic, 2005). Twitter is a free social networking tool, and one of the best-known micro blogging services available. It was developed in 2007 to let users share their status. Micro blogging is defined as "a weblog that is restricted to 140 characters per post but is enhanced with social networking facilities" (McFedries, 2007). Educators may be more willing to integrate Twitter into the learning process, as a micro blogging platform that is conducive to sharing written information.

Micro blog platforms have become more powerful due to their mobility; they can be read from mobile phones using short message service or SMS. Twitter is the SMS of the Internet. Twitter users can send and read "tweets" of up to 140 characters. Twitter had 300 million users in 2011, 300 million tweets and 1.6 billion search queries handled per day (Twitter, 2011). A 2011 Pew Study found that 13 percent of online adults use Twitter, up from 8 percent in 2010 (Smith, 2011). Among 18 to 24 year olds, Twitter usage was 18 percent. The study also noted that 54 percent of these Twitter users access the service using their mobile phones.

A study in 2007 summarized the uses of micro blogging into three categories: information sharing, information seeking, and friendship-wide relationships (Java, Song, Finin, and Tseng, 2007). Using Twitter in educational settings would be a good fit for information sharing and seeking. Would students accept educators using Twitter, or are there boundaries? A 2009 report on Web 2.0 technologies summarized key findings; one of these was that there are boundaries in web space, personal space, group space, and publishing space. The report suggested that there is room in the so-called group space for teaching and learning (Hughes, 2009).

Other arguments against the use of Twitter are that it is only 140 characters, and it seems like it is a series of individual comments. However, Clive Thomspon notes that the Twitter effect is cumulative and lets the group using it know more about each other and become more cohesive and engaged (Thompson, 2007). Ebner et al., research indicated that the use of Twitter or a micro blogging tool can foster process-oriented learning in that it allows continuous and transparent communication between students and lecturers. The researchers further stated that because of the openness of the tool, internal communication would increase. The researchers were also interested in how the use of Twitter impacted informal learning, which can take place in formal learning environments. Informal learning is not directly impacted by the media used, but by the modality of the media. Students were encouraged to "just use the tool to document your learning activities and monitoring your personal learning process". Students created an average of 7.5 Tweets a day. The researchers concluded that the potential for micro blogging in expanding teaching and learning beyond the classroom is substantial (Ebner, et al, 2010).

As often happens with products, the products are used in ways the designers did not envision. Users use Twitter to post updates on what they are doing or thinking at the moment – similar to Facebook posts. Twitter can also be used to publish information or commentary on particular topics. One of the first uses of Twitter was to report live on sessions during a conference. Subsequent study of this conference use of Twitter was completed by Reinhardt, Ebner, Beham, and Chosta in 2009. Reporting by conference attendees concurrently while attending sessions and comments made before/after a conference have been labeled the "backchannel". Using Twitter outside of class can create a course "backchannel".

Dave Perry has many suggestions for using Twitter in education including creating class chatter outside of class; enhancing the classroom community; getting a sense of the world; tracking a word or idea; tracking a conference; getting instant feedback; following a professional or famous person; improving students' grammar; honing students' writing skills; maximizing the teachable moment; using it as a public note pad; and facilitating writing assignments (Perry, 2008).

Twitter can be used by instructors to remind students of homework with daily messages. Twitter can also be used to facilitate homework. At the University of Calgary, English professor Michael Ullyot had his students respond to their Shakespeare texts with tweets. Professor Ullyot watched his hash tag (#engl205) to monitor trending Twitter topics among his students (Baluja, 2011). Twitter can also be used to encourage students to interact with each other using hash tags. Hash tags are words marked with a # symbol that mark keywords or topics in Twitter; Twitter uses this as a way to categorize messages (Twitter, 2011).

The purpose of this study was to analyze the effectiveness and review the student feedback that resulted from the use of Twitter versus email in a managerial accounting course. The instructor taught two different sections of managerial accounting and provided the same information to students in both courses outside of class. In one course, the information was provided via e-mail, and in the second course was provided via Twitter. Students in the second course were asked to follow the faculty member's Twitter account. Student feedback was sought regarding the use of Twitter and email. Students completed a pre quiz, post quiz and a survey during the course of the term. The instructor compared the average homework scores, the average exam scores, attendance rates, and pre- and post-quiz results between the two courses. Student feedback was also reviewed and reported.

The following five research questions were addressed:

Research Question 1:

Is there a difference between the use of Twitter or email and student pre- and post-quiz test scores?

Research Question 2:

Is there a difference between the use of Twitter or email and students' class attendance?

Research Question 3:

Is there a difference between the use of Twitter or email and students' average homework scores?

Research Question 4:

Is there a difference between the use of Twitter or email and students' completion of homework?

Research Question 5:

Is there a difference between the use of Twitter or email and student exam scores?

METHOLOGY AND LEARNING OBJECTIVES

Students no longer use email on a regular basis. This study reviewed the use of Twitter as another avenue of communicating with students and determined the impact of the use of this tool on student performance. Students had the opportunity to learn using their own cutting-edge mobile devices with which they are enamored. Student smart phone usage is almost ubiquitous; a Pew study indicated that 83% of the U.S. population has a mobile phone and 35% of these phones are smart phones (Pew, 2011). Those students who did not have Wi-Fi access could use the proposed social media tool, Twitter, by traditional Internet connections.

This study enhanced student learning in the managerial accounting courses by using student owned Wi-Fi-enabled mobile or laptop devices to access a daily (Monday – Friday) Twitter feed for the course. The study compared how this interaction impacted student attendance, homework completion, exam scores, and pre-/post-test results.

The instructor set up a separate Twitter account to be used as a faculty member; tweets from the account related to coursework only. Tweets were sent Monday through Friday and reminded students of homework, reading and other assignments; directed students to related articles or websites to review for class; and asked students questions related to course material. Students were asked to complete an informed consent document prior to the research study. The two classes met back-to-back on a Monday-Wednesday-Friday afternoon schedule; the first section included out of class communications via Twitter and the second section included out-of-class communications using email. The instructor sent an average of two tweets a day for a 10-week period and an average of one email to every three tweets. (The first three weeks of class were not included in the study.) All of the tweets were copied to emails so that both sections received the same communications, although several tweets were combined in one email.

Students could set up a Twitter account for free if they did not have one, or they could follow the course without a Twitter account by using SMS and texting "follow @(instructor name)" to 40404. The instructor would then receive and approve a request for the student to follow the Twitter feed.

This study may benefit future instructors by examining the benefits of using Twitter to communicate with students outside of class.

RESULTS

The study population was students in two managerial accounting course sections at a state university with a total enrollment of 9,000 students. The two sections involved 71 students (36 in one section and 35 in another) in the spring 2012 term. Students were asked to complete the pre- and post-quiz at the beginning and end of the term, as well as the survey document at the end of the term. Descriptive statistical methods (mean, standard deviation, percentage, and frequency) were used to analyze the results of the data collected including attendance information, homework scores, exam scores, and survey data. After the term was complete, the instructor compared attendance, homework scores, and exam scores between the section where Twitter was used and the section where email was used.

Research Question 1:

Is there a difference between the use of Twitter or email and student pre and post quiz test scores?

Students had an average increase of two percent on Twitter related questions between pre- and post-test results.

Research Question 2:

Is there a difference between the use of Twitter or email and students' class attendance?

Students' attendance in the Twitter section was compared to students' attendance in the email section. Daily attendance totals were summarized; class averages were compared between the two sections. The Twitter section had a 13% greater daily attendance rate over the email section.

Research Question 3:

Is there a difference between the use of Twitter or email and students' average homework scores?

Students' homework scores in the Twitter section were compared to students' attendance in the email section. Ten homework scores were summarized; class averages were compared between the two sections. The Twitter section had a 1.58 point average higher score; this was a 15.8 percent higher score in student performance on homework in the Twitter section over the student homework scores in the email section.

Research Question 4:

Is there a difference between the use of Twitter or email and students' completion of homework?

Students were sent reminders regarding homework due dates via a tweet in the Twitter section and via email in the other section. In the Twitter section, the percentage of non-completion of the 10 homework assignments was 2.5 percent. In the email section, the percentage of non-completion of the 10 homework assignments was 16 percent, or 13.5 percent higher.

Research Question 5:

Is there a difference between the use of Twitter or email and student exam scores?

Students were sent reminders about exams, as well as exam tips, via Twitter or email. Each of the four exams was worth 100 points. Students in the section that used Twitter scored an average of 8.42 points higher on the exams, or 8.42%.

Students' comments were sought on the use of Twitter versus email for out of class communications. Three students in the Twitter section said it should not be used in the future, as it was not an appropriate use. The researcher believes that these students viewed using Twitter for educational use as an invasion into students' social media toolset. Five students in the Twitter section were neutral regarding the continued use of Twitter, and 27 students either recommended or strongly recommended that Twitter continue to be used.

DISCUSSION

The shorter message length and accessibility of Twitter tweets had a positive impact on student attendance, homework completion and scores, and exam scores. Student class attendance was improved by 13 percent in the section using Twitter. One possible explanation for this improved attendance is a type of Hawthorne effect first reported in business; students being studied and receiving the daily tweets felt special and were motivated by this attention. The students receiving the messages from email did not have the same reaction, as email is not as immediate and is a routine process that all students are used to and can effectively tune out.

The tweets sent to students regarding homework had a positive impact on their homework completion and their homework scores. Homework scores were 1.58 points or 15.8 percent higher in the section that received tweeted reminders regarding homework due dates. The tweets served as a tool to remind students to do homework, whereas the emails sent regarding this same subject to the other class section could be easily ignored as are most of the emails that students receive via institution-sponsored email systems.

Student performance on exams had a surprisingly large impact on their exam performance, increasing the exam scores. Students who received tweets reminding them of exam dates and sample questions scored an average of 8.42 percent higher than those students who received the information via email. Again, it appears that the Twitter's immediacy and the lack of barriers between tweets and the students positively impacted student performance. There could also be a cumulative impact for students in the Twitter section; their class attendance was better and their homework completion and homework scores were higher. The Twitter reminders about attendance and homework due dates were a contributing factor to the higher exam scores.

Limitations of this study include the possible impact of other factors on student performance that were not accounted for in the study.

CONCLUSIONS AND FUTURE DIRECTION

Overall, student performance increased substantially in the managerial accounting course that used Twitter for out-of-class communications as compared to the managerial accounting section that used email. The student performance reviewed included class attendance, homework completion, homework scores, and exam scores.

The researcher plans to continue to use Twitter in class and will extend the evaluation of the success of using this social media tool.

The ideas shared in this paper may help other educators in achieving their course objectives by using technology and mobile devices that students have available and are excited to use.

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HOSPITAL COSTS AND PROFITABILITY RELATED TO THE PPACA

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ABSTRACT

On March 23, 2010, President Barack Obama signed into law the Patient Protection and Affordable Care Act (PPACA). This law was one of the most controversial and transforming pieces of legislation impacting health care delivery in recent history. The legislation was created in response to rising health care costs and the belief that, in part, cost shifting of indigent uninsured care to paying patients would reduce the overall costs of health care. The recent Supreme Court decision upholding the individual mandate portion of the law is expected to significantly reduce the number of uninsured. This study will examine the expected impact of the PPACA on hospital costs and profitability using a sample of 442 hospital operations in California.

INTRODUCTION

The Patient Protection and Affordable Care Act (PPACA) attempts a substantial restructuring of the health care delivery system in the United States. The legislation was created, in part, in order to stem the growth of federal spending on Medicare and Medicaid. According to the federal government Centers for Medicare and Medicaid, save more than $575 billion over the next 10 years.[1]

> "Net Medicare savings are estimated to total $575 billion for fiscal years 2010-2019. Substantial savings are attributable to provisions that would, among other changes, reduce Part A and Part B payment levels and adjust future "market basket" payment updates for productivity improvements ($233 billion); eliminate the Medicare Improvement Fund ($27 billion); reduce disproportionate share hospital (DSH) payments ($50 billion); reduce Medicare Advantage payment benchmarks and permanently extend the authority to adjust for coding intensity ($145 billion); freeze the income thresholds for the Part B income-related premium for 9 years ($8 billion); implement an Independent Payment Advisory Board together with strict Medicare expenditure growth rate targets ($24 billion); and increase the HI payroll tax rate by 0.9 percentage point for individuals with incomes above $200,000 and families above $250,000 ($63 billion)."[2]

A long-standing problem with health care expense for hospital care is the expense of caring for the uninsured and under-insured. For decades these expenses have been born by those paying for hospital care through a process known as cost-shifting. Uninsured hospital patients are citizens who are unable to afford insurance, citizens who could afford insurance but choose to self-insure with inadequate asset reserves, or undocumented aliens lacking the assets to pay for their care. Under current law prior to full implementation of the PPACA, some cost-shifting is reduced by disproportionate share hospital (DHS) payments. Another goal of the PPACA is the reduction of health care costs through the reduction of cost-shifting. By reducing the numbers of uninsured citizens, it is hoped that the PPACA will reduced the level of cost-shifting resulting in lower hospital costs and consequently lower insurance premiums and reduced Medicare and Medicaid expenses.

Another focus of the PPACA is the emphasis on quality of care. The law has several quality care funding initiatives. Hospitals will be rewarded or penalized based on their patient outcomes for specific conditions such as Acute Myocardial Infarction, pneumonia, and heart failure.[3] In addition, the PPACA attempts to control hospital costs through encouraging better care from the initial visit to the

[1] CMS Office of the Actuary, "Affordable Care Act Update: Implementing Medicare Cost Savings," Centers for Medicare and Medicaid Services, 2010.

[2] Foster, Richard S., "Estimated Financial Effects of the "Patient Protection and Affordable Care Act," as Amended," Centers for Medicare and Medicaid Services, April 22, 2010, http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf

[3] Public Law 111–148, SEC. 3001. HOSPITAL VALUE-BASED PURCHASING PROGRAM

hospital by reducing the reimbursement rates for subsequent admissions for the same diagnosis.[4] However well intended, both of these programs can result in additional stress on a hospital's profitability.

DATA

The analysis employs financial, operating, and performance data from three data sets: the 2010 California Hospital Annual Financial Data (HAFD), Medicare Provider Analysis and Review (MPAR), and Hospital Compare. The HAFD files provide detailed financial and operating data at the hospital level of all licensed California hospitals and are accessible as public use data from the California Offices of Statewide Health Planning and Development (COSHPD). The MPAR and Hospital Compare data are provided by the Center for Medicare and Medicaid Services (CMS). From the MPAR data set we employ the Medicare case mix index as a traditional method of accounting for heterogeneity of inpatient care (Pratt, 2010). The Hospital Compare database supplies measures of hospital morbidity, readmission rates, and "Spending per hospital patient with Medicare." The latter measure indicates the proportional amount that Medicare spends treating patients in a specific hospital relative to other hospitals in the nation, such that a value larger than one denotes a greater expense in treating patients and *vice versa*. To pair the COSHPD data with the data CMS, we hand matched hospitals as the hospital facility identifiers are dissimilar and hospital names vary – for instance the CMS database employs the name of Silver Lake Medical Center, where as COSHPD lists City of Angels Medical Center.

To attain a comparable and consistent data set we removed all critical access, rural, long-term care, psychiatric, and child centered hospitals. We exclude critical access and rural hospitals as reimbursement methods and amounts differ from standard hospitals - typically rural/critical access facilities receive higher reimbursements. Long-term care hospitals which we define as hospital providing 60% or more of self reported long-term care were removed as these hospitals typically have the ability to control the patients they admit and therefore they have the ability to admit patients based on the patient's ability to pay and method of payment. Child centered hospitals, also known as "Children's hospitals", were removed as these hospitals typically provide a much lower quantity of services for those with Medicare beyond the emergency setting, hence the services and reimbursement source are not consistent with our sample data. The end data set employed in this analysis is comprised of 212 California hospitals.

The summary statistics for our sample is presented in **Table 1**. The descriptives indicate a diverse set of payment mixes over the sample where payor types (Medicare, Medicaid (Medical), and Third Party) are not accepted or one payment type constitutes two-thirds of a hospital revenues. Within the sample 10 percent of the hospitals are teaching facilities and 37 percent receive some amount of disproportionate share hospital (DSH) funding. Hospital size varies greatly from 16 to 992 licensed beds. Patient days per hospital bed provides an indication of utilization as well as remaining capacity. The values are rather alarming, such that at the 75th percentile, or *ipso facto*, 25 percent of hospitals are at virtually at zero remaining capacity. This is inferred by observing at the 75th percentile utilization is at 356 patient days per bed, i.e. the bed is rarely unoccupied.

STATISTICAL ANALYSIS

The PPACA calls for a large reduction in Medicare and Disproportionate Share Hospital (DSH) funding and an increase in Medicaid funding. To assess the impact of a decrease Medicare funding and an increase in Medicaid funding we form quintiles based on each hospitals: proportion of Medicare patient days relative to total adjusted patient days, proportion of Medicaid patient days relative to total adjusted patient days, and the operating cash flow per licensed bed. Within the analysis we normalize our data by the number of licensed hospital beds to draw comparable values. The analysis is approaches our research question(s) via a comparative means analysis between the quintile groups and payor type and sensitivity analysis. With respect to the comparative means analysis, T-tests are used to denote if the differences are statistically significant or not. The sensitivity analysis focuses on reductions in Medicare reimbursements and DSH funding.

RESULTS

As indicated in **Table 2**, operating cash flow (OCF) per bed generally increases with the proportion of Medicare revenues, such that when the proportion of Medicare revenues falls, OCF per bed falls. Death rates for heart attach, heart failure, and pneumonia patients decreases with increases in the proportion of Medicare revenues. We also observe an increase in the complexity of patients treated in hospitals that provide a greater proportion of services to Medicare patients as measure via the Medicare Case Mix

[4] Public Law 111–148, SEC. 3025. HOSPITAL READMISSIONS REDUCTION PROGRAM.

Index, possibly indicating an increase in skill/ability in treating patients that carryover in managing treatment cost. With respect to readmission rates a statistical difference is not observed.

Table 3 reveals that the proportion of Medicaid (Medical) is inversely related to proportion of Medicare, as observed in **table 2**. Specifically, as the proportion of Medicaid patients increase the OCF per bed falls and death rates increase, as well there is a small but insignificant uptick in readmissions. This observation would suggest a reduction in the effectiveness of health services when the proportion of Medicaid increases.

Table 4 presents health outcomes observed in hospitals receiving DSH funding in relation to hospitals that do not receive DSH funding. The results show that at the lowest OCF per bed quintile, there is a notable increase in the death rates across all three categories. However, when OCF increases, institutions receiving DSH funds have improved health outcomes relative to non-DSH receiving hospitals. This implies that if DSH and other sources of funding are greatly decrease, we should expect health outcomes to move towards the lowest OCF per bed quintile. We also consider the impact of reduced Medicare reimbursements as outlined in the PPACA – calling for a 10 percent reduction in reimbursements. **Figure 1** charts OCF per bed with reductions in Medicare beginning with a 2.5 percent reduction up to a 20 percent reduction. **Figure 2** aids **Figure 1** by presenting the proportion of hospitals incurring negative OCF with reductions in Medicare. At the reduction level called for by the PPACA (10%), 89.2 percent of the hospitals within the sample will experience negative OCF – without consideration of other planned reductions in reimbursements.

IMPLICATIONS FOR THE FUTURE AND UNINTENDED CONSEQUENCES

One very significant response for a hospital to maintain profitability under the reduced reimbursement for Medicare, Medicaid, and the public insurance exchange is for the hospitals to elect to eliminate emergency care. Emergency care is often a "loss-leader" for hospitals under current reimbursement programs. Under the PPACA, however, admissions for those under Medicare, Medicaid, and the public insurance exchange are likely to see a reduction in revenue from the government. By eliminating emergency care, there will be less admission of indigent care and government controlled reimbursements. To the extent that private insurance companies do not follow the public insurance exchange reimbursement rates, hospitals can be less concerned with the rates charged to paying patients and readmissions.

Even prior to the PPACA, there has been a trend for hospitals to eliminate emergency care to avoid indigent care and lower Medicare and Medicaid reimbursements. This trend is only likely to increase. This poses serious questions about access to emergency care, especially if the rural hospitals follow the trend of elimination of emergency care.

Another interesting possibility might be for the non-emergency care hospital to pay for selected transfers for patients needing acute care that have private insurance or the ability to pay for care. While on the surface, it could be argued that hospitals would not have a financial incentive to recommend that patients transfer, they may have little choice because of capacity issues and the need to accommodate additional patients who are admitted through the emergency room.

Businesses will have an even greater economic incentive to move employees from full-time to part-time in order to save on health care expenses. It appears that the Darden Group has preemptively anticipated the impact of the PPACA in that it recently announced moving a significant amount of their employees from full-time to part-time.

> "The loophole Darden Restaurants is trying to slip through is one that will experiment in the corporation's shifting of more workers to part-time status from full-time, a move that will cut benefits for hundreds of its employees. With this move, Darden will require employees to foot the bill for Obamacare-promised benefits geared toward health care. Darden's move will also require an increase in worker contribution toward health plans."[5]

A significant concern over PPACA is the fear that there will actually be significantly less access to health care for those covered by Medicare, Medicaid, and the government insurance exchange. This lack of access is expected to result from fewer hospitals that will accept Medicare, Medicaid, and government insurance exchange patients since there will likely be

[5]Oliva, Jason, "Darden Restaurants skirt Obamacare," *College News*, October 15, 2012, http://www.collegenews.com/article/darden_restaurants_skirt_obamacare.

fewer emergency rooms. In addition, there will likely be fewer doctors. Various studies have suggested that many doctors would discontinue their practice of medicine under the PPACA. "Four of nine doctors, or 45%, said they "would consider leaving their practice or taking an early retirement" if Congress passes the plan the Democratic majority and White House have in mind."[6] A more recent study suggests a much higher percentage. "Eighty-three percent of American physicians have considered leaving their practices over President Barack Obama's health care reform law, according to a survey released by the Doctor Patient Medical Association."[7] Another survey shows similar results, "In the Physicians Foundation Survey of 13,000-plus physicians, more than half plan on cutting back on patients, switching to cash only or quitting over the next three years — thanks largely to the president's "reform." Indeed, 60 percent say they'll retire if they can."[8]

At the same time, nationwide there is expected to be a 44.5% drop in the number of uninsured and a 27.4% increase in Medicaid enrollment alone. [9] These numbers will likely result in a significant increase in the demand for medical services and will likely stress the capacity of the health care delivery system.

This combination of fewer hospitals and fewer doctors and increased demand for care will likely lead to significant health care shortages resulting in rationing of care. Even though the PPACA contains several provisions to improve the quality of patient care, the likely shortage of care relative to the demand for care may actually result in worse patient outcomes. Ironically, even though there were be millions more people covered by at least minimum insurance, there may actually be less care available than under the system that currently is in operation.

In an effort to reduce health care costs, companies will likely develop strategies that might include self-insurance of the more healthy employees and purchasing insurance through the exchange for the less healthy. In addition, employees will likely be rewarded for healthy living. Finally, companies may "outsource" more jobs to foreign or domestic companies to avoid payment of health care expenses. It is possible that the companies will even move some of their current employees to independent contractor status.

It is reasonable that under the PPACA, hospital will be under significant pressure to reduce costs. One of the more easy ways for a hospital to reduce costs is to reduce the number of patient days necessary for the patient to recover. The challenge for the hospitals is to reduce patient days without readmission. The PPACA penalizes hospitals if the patient is readmitted for the same illness within a short time after the patient was first released. The readmission penalty might tend to extend the number of patient days for the illness. Breakthroughs in technology over the past few years have made home monitoring of vitals a practical solution that may be more likely to be expanded.[10] The PPACA does encourage innovation in health care delivery. This kind of innovation could help significantly, especially if hospitals are stressed by overcrowding from the expected increase in utilization.

It is clear that the PPACA will have some far reaching impacts on health care delivery in the United States. Some of these impacts are unlikely to have the result intended by the legislation. These unintended consequences will need to be addressed.

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[7] Morgan, Rick, "Poll: 83% of doctors have considered quitting because of Obamacare," *American Thinker*, October 17, 2012, http://www.americanthinker.com/blog/2012/07/poll_83_of_doctors_have_considered_quitting_because_of_obamacare.html#ixzz29z4B2HAc

[8] Siegel, Marc, "Why doctors hate ObamaCare." *New York Post*, October 16, 2012.

[9] Holahan, John and Headen, Irene, "Medicare Coverage and Spending Reform: National and State-by-State Results for Adults at or Below 133% FPL," *Urban Institute*, May 2010.

[10] The State of Texas put a law into effect on 9/1/2011 that allows home monitoring of some Medicaid patients using telemedicine medical services. http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=82R&Bill=SB293

HAFD http://oshpd.ca.gov/HID/DataFlow/HospFinancial.html

HAFD documentation http://oshpd.ca.gov/HID/Products/Hospitals/AnnFinanData/HAFDDoc2004.pdf

Medicare spending http://www.hospitalcompare.hhs.gov/About/HOSInfo/Medicare-Payment.aspx

Hospital Compare Database https://explore.data.gov/Social-Insurance-and-Human-Services/Hospital-Compare/g4a8-s9zu

GO TO FOR DATA LABELS

http://www.oshpd.ca.gov/HID/Products/Hospitals/AnnFinanData/HAFDDoc2004.pdf

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Table 1. Descriptive statistics for California hospitals in the sample

	Mean	StDev	P25	Median	P75	Min	Max
Medicare Payments (%)	0.33	0.13	0.25	0.32	0.43	0.00	0.64
Medicaid Payments (%)	0.19	0.14	0.08	0.17	0.27	0.00	0.67
Third Party Payments (%)	0.05	0.08	0.01	0.03	0.05	0.00	0.68
Teaching Hospitals	0.10	0.31	--------	--------	--------	0.00	1.00
Disproportionate Share Hospital	0.37	0.48	--------	--------	--------	0.00	1.00
Licensed Beds	285.38	177.72	153.00	248.00	395.50	16.00	992.00
Patient Days (Adjusted)	87743.89	65416.08	41298.50	72568.00	116498.50	1299.00	397140.00
Patient Days / Bed	302.66	98.18	244.70	297.99	356.15	81.18	363.93
Operating Cash Flow / Bed	$27,336	$138,693	$(10,007)	$35,190	$80,322	$(693,315)	$521,236
Medicare Case Mix Index	1.23	0.27	1.06	1.21	1.34	0.68	3.08
Spending per Hospital Patient	1.03	0.11	0.97	1.01	1.07	0.76	1.49
Morbidity - Heart Attack (%)	15.13	1.47	14.10	15.10	16.00	10.50	18.80
Morbidity - Heart Failure (%)	10.98	1.69	9.85	10.95	11.80	7.10	15.90
Morbidity - Pnuemonia (%)	11.55	2.10	9.90	11.40	12.90	6.80	18.10
Readmission - Heart Attack (%)	19.48	1.46	18.50	19.50	20.30	15.40	23.80
Readmission - Heart Failure (%)	24.54	1.65	23.40	24.50	25.70	20.00	28.30
Readmission - Pnuemonia (%)	18.30	1.39	17.3	18.1	19.1	15.3	22
Bad Debt ($M)	$17.38	$18.22	$6.54	$12.71	$23.18	$-0-	$172.01

Table 2.
Quintiles of sample hospitals relative to the proportion of Medicare patients

		OCF per Bed	Case Mix Index	Spending Per Hospital Patient	Morbidity - Heart Attack	Morbidity - Heart Failure	Morbidity - Pnuemonia	Readmission - Heart Attack	Readmission - Heart Failure	Readmission - Pnuemonia
Highest proportion of Medicare patients	80-100%	35452.35	1.33	1.05	14.57%	10.73%	10.91%	19.44%	24.42%	18.03%
	60-80%	10129.82	1.30	1.02	15.30%	11.03%	11.33%	19.56%	24.32%	18.19%
	40-60%	88607.15	1.23	1.01	14.90%	10.97%	11.87%	19.31%	24.46%	18.46%
	20-40%	45957.78	1.21	1.03	15.50%	10.94%	11.54%	19.69%	24.89%	18.43%
Lowest proportion of Medicare patients	0-20%	-43245.06	1.12	1.02	15.52%	11.28%	12.19%	19.40%	24.60%	18.41%

Table 3.
Quintiles of sample hospitals relative to the proportion of Medicaid patients

		OCF per Bed	Case Mix Index	Spending Per Hospital Patient	Morbidity - Heart Attack	Morbidity - Heart Failure	Morbidity - Pnuemonia	Readmission - Heart Attack	Readmission - Heart Failure	Readmission - Pnuemonia
Highest proportion of Medicaid patients	80-100%	-71987.77	1.05	1.09	15.39%	10.64%	11.67%	19.39%	25.07%	18.52%
	60-80%	24474.19	1.19	1.03	15.01%	10.98%	11.69%	19.86%	24.97%	18.65%
	40-60%	52061.03	1.29	1.02	15.22%	11.10%	11.81%	19.40%	24.22%	18.23%
	20-40%	49748.03	1.29	0.99	14.95%	11.04%	11.52%	19.46%	24.36%	18.27%
Lowest proportion of Medicaid patients	0-20%	80529.68	1.35	1.01	15.16%	11.09%	11.08%	19.26%	24.09%	17.85%

Table 4.
Health outcomes by quintiles of OCF per bed comparing hospital receiving DSH relative to Non-DSH

		Morbidity - Heart Attack	Morbidity - Heart Failure	Morbidity - Pnuemonia	Readmission -Heart Attack	Readmission - Heart Failure	Readmission - Pnuemonia
Lowest OCF per bed	0-20%	5.40%	4.92%	7.98%	2.13%	5.17%	3.31%
	20-40%	1.03%	-3.80%	2.53%	-3.83%	-0.03%	-1.09%
	40-60%	2.46%	-5.42%	-3.48%	0.97%	-1.29%	4.58%
	60-80%	-2.55%	-5.12%	-5.55%	6.75%	5.46%	6.03%
Highest OCF per bed	80-100%	-0.38%	-10.45%	1.40%	5.11%	4.61%	3.95%

*DSH -Disproportionate Share Hospitals
**[DSH Value - Non-DSH Value] / Non - DSH Value

Higher Readmissions This should increase hospital costs.
As reimbursemtns fall lowering OCF per bed the costs of readmissions will fall since this cost will be curtailed by increased morbidity.

Disproportionate Share Hospital (DSH) adjustment payments provide additional help to those hospitals that serve a significantly disproportionate number of low-income patients; eligible hospitals are referred to as DSH hospitals. States receive an annual DSH allotment to cover the costs of DSH hospitals that provide care to low-income patients that are not paid by other payers, such as Medicare, Medicaid, the Children's Health Insurance Program (CHIP) or other health insurance. This annual allotment is calculated by law and includes requirements to ensure that the DSH payments to individual DSH hospitals are not higher than these actual uncompensated costs. (http://www.hhs.gov/recovery/cms/dsh.html)
Patient Protection Affordable Care Act of 2010 PPACA aims to reduce:
Funding for the Medicaid DSH program by $17.1 billion between 2014 and 2020;[3]
Aggregate Medicaid DSH allotments by $0.5 billion in 2014, $0.6 billion in 2015, $0.6 billion in 2016, $1.8 billion in 2017, $5 billion in 2018, $5.6 billion in 2019, and $4 billion in 2020; and Medicare DSH payments initially by 75 percent and subsequently increase payments based on the percent of the population uninsured and the amount of uncompensated care provided.[4] PPACA requires the Secretary to: Develop a methodology to distribute DSH reductions in a manner that (1) imposes the largest reduction in DSH allotments for states with the lowest percentage of uninsured or those that do not target DSH payments; (2) imposes smaller reductions for low-DSH states; and (3) accounts for DSH allotments used for 1115 waivers effective October 1, 2011;[5] and Determine the best way to implement the cuts in a way that will target states that direct the lowest percentage of DSH allotments to hospitals with high volumes of uninsured and Medicaid inpatients. The 16 states considered "low DSH states" will be reduced by 25%, and all other states will be reduced by 50%.

INTERPRETATION
The DSH system works as income increases the DSH is associated with improved performance, moving away from DSH to lower reimbursements should be expected to increase morbidity as OCF per bed falls. Since DSH hospitals will not necessarily receive equivalent funds health outcomes may be expected to fall.

Figure 1

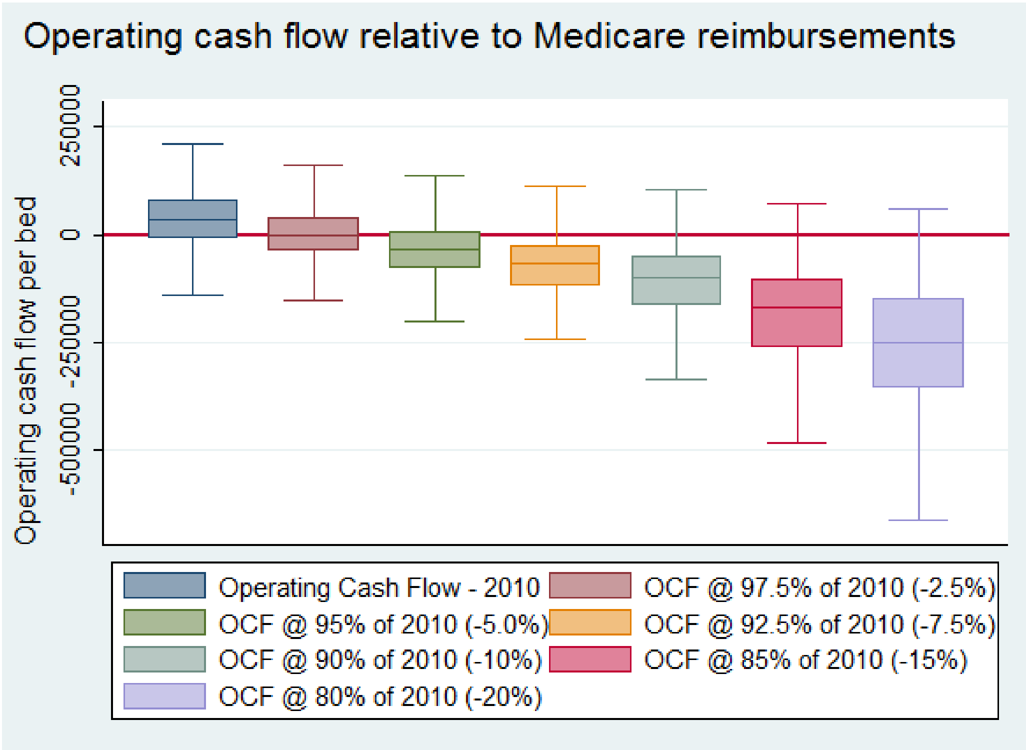


Figure 2

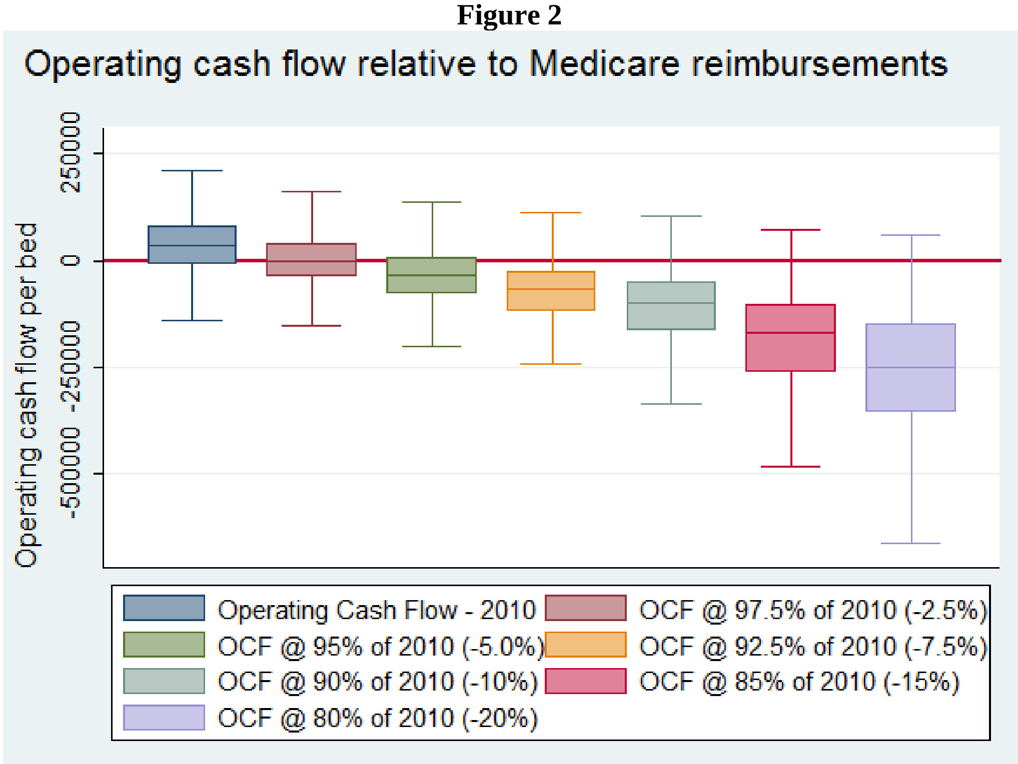


Figure 3

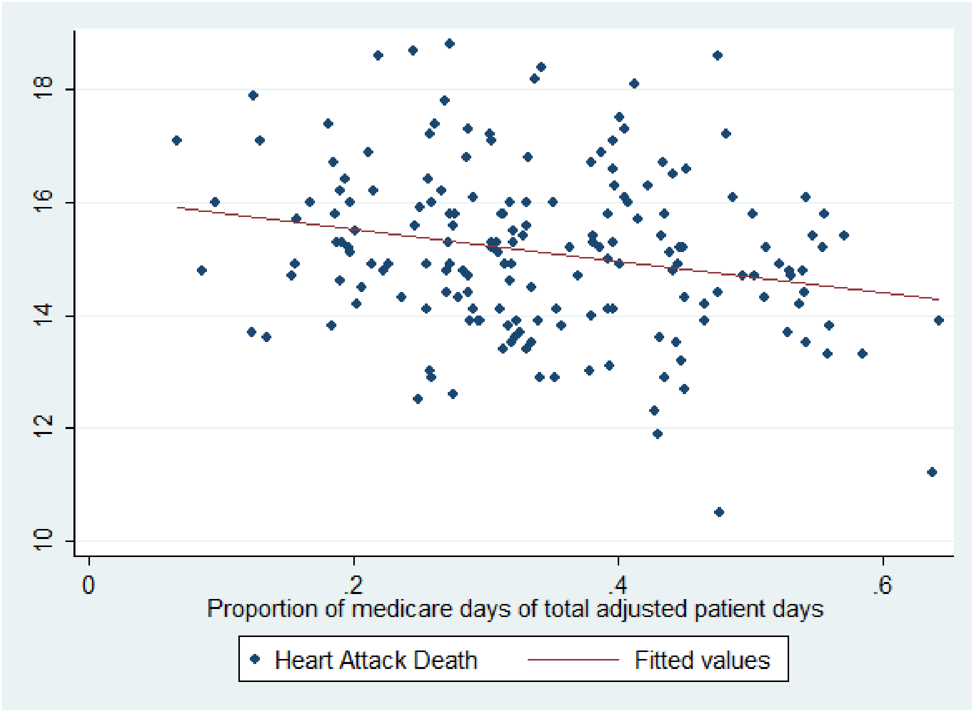


Figure 4

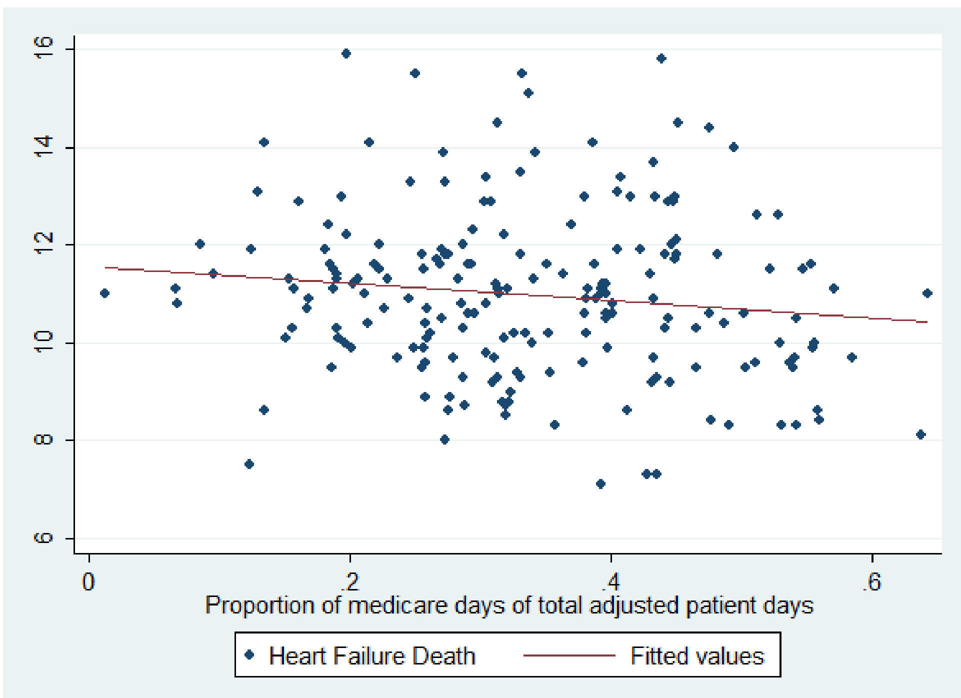
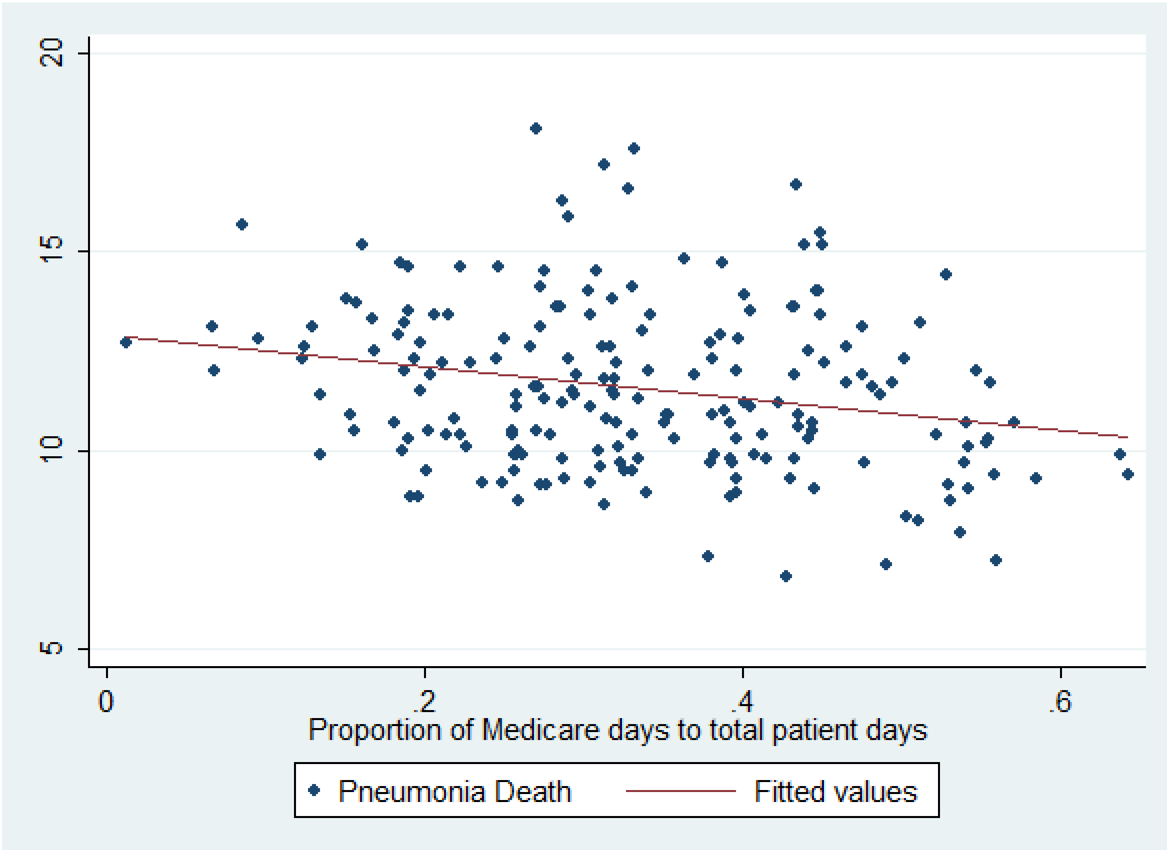


Figure 5


20
15
10
5
0
.2
.4
.6
Proportion of Medicare days to total patient days
Pneumonia Death
Fitted values

PUT A LITTLE JING IN THE CLASSROOM

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ABSTRACT

There is increasing interest in "flipping the classroom" or "reverse instruction", which uses Internet technology to leverage classroom learning and create bended learning environments. Jing, Snagit, and other video capture programs can be valuable tools for creating blended learning environments and building on-line courses. This paper covers the basics of selecting and using video capture programs. It provides guidance/illustrations/tips on effectively using video to prepare lectures, create guided homework examples, illustrate progressive Excel modeling skills, speed grading and provide customized feedback, and assist students with navigating course management systems. The examples provided in this paper focus on finance and accounting disciplines.

INTRODUCTION

There is growing debate among educators over the "flipped classroom". In its simplest form, a flipped classroom is one in which homework and traditional classroom activities are swapped, or "flipped". In flipped classroom teachers spend less class time lecturing, and devote more time to interacting with students, solving problems, and building on basic concepts. In a typical flipped classroom, students are expected to watch videos covering basic content for homework, which frees up class time for hands-on activities and application of knowledge. The goal is to move beyond the acquisition of basic knowledge, and to assist students in assimilating new information and ideas, for cognitive learning at the upper end of Bloom's Taxonomy.

The push for flipped classrooms stems partially from the success of the Kahn Academy, an on-line library of free video tutorials created by Salman Khan. The Kahn Academy has been funded by the Gates Foundation and heavily promoted by major media outlets, and the promise of on-line learning is stirring debate among educators, policy makers, investors and students themselves. In higher education, websites such as couresa.com and openculture.com offer free on-line courses from Stanford, Yale, MIT, Harvard, Berkeley, and other top universities. A big challenge for higher education is how to monetize on-line content without cannibalizing their existing product. In addition, despite a growing body of on-line content, many critics argue that in some respects the flipped classroom is a flawed pedagogy. Flipped classrooms and on-line courses are often no more than high-tech lectures, an antiquated instructional method (Ash 2011).

The role and effectiveness of on-line learning and flipped classrooms are likely to be the source of countless academic papers and dissertations. Yet regardless of the outcome of these discussions, video capture is a useful tool for developing on-line content, and improving student learning. This paper covers the basics of selecting and using video capture programs. It provides guidance/illustrations/tips on effectively using video to prepare lectures, create guided homework examples, illustrate progressive Excel modeling skills, speed grading and provide customized feedback, and assist students with navigating course management systems and website. The examples provided in this paper focus on finance and accounting disciplines.

WHAT IS VIDEO CAPTURE?

Video capture programs (or screen casting) allow users to create digital videos using a personal computer. Screen capture programs such as Jing or Snagit allow users to select and record/capture a portion of their computer desktop and accompany the recorded video with an audio track. The videos can be saved locally, or uploaded to the web through course management systems or commercial sites such as Youtube.com or Screencast.com. Students can pause, rewind, and view the content as often as necessary.

Video Capture Programs

There are a wide range of screen capture programs on the market, from a variety of providers.[1] This paper illustrates screen capture software from TechSmith (www. techsmith.com), which offers a free version called Jing, and more advanced products Snagit and Camtasia, which among other features, allows users to edit their recorded videos. All three programs provide the ability to capture still images or videos.

[1] There are a variety of other video capture software options including: Wirecast (Mac and PC) Screen Flow (Mac only) by www.telestream.net, HyperCam (PC only) by www.hyperionics.com/, Screencast-o-matic (PC and Mac) by www.screencast-o-matic.com, McGraw-Hill's Tegrity.

For image capture with Jing, you simply take your mouse, highlight the area of the screen you want to capture and click "Capture Image." You can then save the image, copy it to the clipboard, or upload it to a free 2 GB Screencast account (screencast.com). Jing also allows you to add text, arrows, boxes, or highlights to portions of the captured image.

The technique for capturing video with Jing is essentially the same. Again, with your mouse you highlight the portion of the screen you want to capture, but now select "Capture Video." The video can be recorded with or without narration. You can pause and resume your recording with the click of a mouse. Jing videos are limited to five minutes, and completed recordings can be uploaded directly to the web or saved locally as MP3 files. You can use Snagit or Camtasia to record videos longer than five minutes or to save files in alternative file formats (.AVI, .WMV, MP4...). From a best practices perspective, consider chunking lectures/videos into shorter 5-10 minute segments. In addition, longer videos (larger files) should be streamed from sites such as Screencast or YouTube. Course management systems that require students to download files often timeout before students can download an entire file.

WHY USE VIDEO CAPTURE?

The short answer is that video capture can place classroom material on the web. However, the reasons for placing video content on the web are varied. On-line content can be used to flip the classroom, to augment and support traditional teaching, or as necessary components in fully on-line or blended course. On-line lectures are also a helpful resource for students that have missed class. The sections that follow offer suggestions on creating and using video capture.

Recorded Lectures

Perhaps the most important don't of video capture is: "Don't record epic two-hour lectures". When recording lectures, think short, organized, and provide reflective activities. Students should understand why they are watching a video, and effective videos will encourage or require students to think about and use the content. Reflective activities may include working problems, answering questions, writing a reflective piece, or perhaps posting to a discussion board.

For my managerial accounting course, I use Excel workbooks to organize content and provide reflective activities. A separate Excel workbook is created for each chapter or content area. These follow the syllabus, table of contents from the textbook, or content in a course management system. In turn, each Excel workbook includes multiple worksheet tabs. There is a separate tab for each of the chapter's (or content area's) learning objectives. This framework allows students to easily navigate course content and forces the chunking of lectures into shorter 5 to 10 minute segments. On each worksheet tab, students find the stated learning objective, a YouTube video link, and a self-correcting activity.[2] The videos typically consist of a short PowerPoint presentation and a demonstration problem. The demonstration problem is typically a variation of the problem or question they are then asked work on the worksheet tab. The set-up is much like the typical concept check found in many textbooks. The worksheet tab also may include links to assigned homework on a textbook homework management system such as McGraw-Hill's Connect, or Prentice Hall's MyAccountingLab.

Excel Tutorials

Excel is an important tool in the fields of accounting and finance, but supplementing courses with Excel modeling assignments are logistical and pedagogical challenges. Because not all students have laptops, and the base skill levels vary widely among students, it is difficult to demonstrate modeling techniques in a traditional classroom setting. In addition, classroom instruction is often far removed from the time students actually sit down to build their models.

Video capture offers an effective solution. Students can download prebuilt worksheet shells that include Screencast or YouTube video links with instructions for completing a particular assignment. The form of the instruction can vary over the course of the semester with videos providing complete step-by-step for early assignments, and videos limited to relevant Excel functions and tools for latter assignments. Video capture allows the students to access instruction when and if they need it. They can pause and replay the videos until they have successfully completed the assignment.

[2] Blazer, Eric, Delivering Just-In-Time Learning With Self-Correcting Excel Worksheets**.** *Journal of Financial Modeling & Educational Technology.* Winter 2012. http://www.afmet-online.org/journal/abstract/delivering_just-in-time_learning_with_self-correcting_excel_worksheets/

Guided Examples

On-line homework management systems have significantly reduced the burdens associated with assigning and grading homework assignments. But real-time learning leads to real-time questions, and today's students often use screen capture software themselves to e-mail quick questions. Recorded guide examples are a great way to handle student questions in real-time. Guide examples are essentially answers to FAQs for your homework and assignments.

Accounting and finance disciplines readily lend themselves to building and recording professional quality guided examples using Excel. The starting point is to build an Excel worksheet that shows the steps required to solve the assigned problem. The worksheet should include color-coded input as well as output fields. You can use Jing to take a screen capture of the actual question from the e-book, or homework management system, and paste the image to the worksheet. To add clarity and a professional touch, I use Excel's data validation feature to add "Input messages" to most of the worksheet cells. The input message will state that the data was given, or show how a calculation was made. The final step (after saving the worksheet) before recording your video, is to work backwards from the final answer, through each step in solving the problem, to the given information, deleting each cell. That is correct - deleting each cell. Highlight your entire worksheet and begin your screen capture. Begin recording the video by reading through the question and the steps required to solve the problem. At each step, click on Excel's redo button, and the content of a cell along with your "Input message" reappears.[3]

Grading Assignments

Video capture can be used to speed grading and provide customized feedback on any assignment students have uploaded to the web. Rather than inking comments with a tablet PC or using other tools for annotating documents, you can use video capture to record comments. Simply use your mouse to highlight a section of a student's assignment and start recording a video. It is easy to pause the video to move to other sections of their document, or open an e-book or other source document and refer to content the student should consider. In grading Excel worksheets, video capture makes it easy to record step-by-step corrections, or point out errors by opening a solutions worksheet side-by-side. Recorded comments can be uploaded to course management systems or to a Screencast account.

Navigating Course Management Systems

Video capture is an excellent tool for assisting students with navigating course management systems and explaining how to register for on-line homework management systems. Rather than relying on canned tutorials, you can easily walk through and record the content areas that are relevant to your course.

Student Presentations

Video capture allows students to easily create and share presentations. Students may be required to rehearse, critique, and upload presentations before stepping in front of the classroom. Most students, and particularly in the case of group presentations, have the technological savvy to record and upload videos with ease.

SOME COMMON QUESTIONS

Do students use this as a resource?

Yes! Sort of, student usage varies by course. All of my on-line content is available to students whether they are enrolled in a traditional face-to-face class, a blended course, or a fully on-line class. As expected, usage is highest in on-line classes, and lowest in traditional face-to-face classes. Most course management systems track usage, and provide user statistics in aggregate and on an individual basis. Commercial websites such as YouTube or Screencast track aggregate usage.

Do students still come to class?

Yes, most students use the taped lectures merely as a refresher or to reinforce material. In general students that skip class also skip recorded lectures.

How much time does it take to develop content?

Developing content takes as much time or as little as you want. The starting point is to develop bits and pieces of content to supplement a face-to-face class. Overtime your library and confidence will grow, and be able to support blended or on-line courses.

Is there unlimited space and bandwidth?

Most of the free video capture programs have limited recording times and bandwidth. But remember, large files should be streamed rather than downloaded.

[3] For an example: http://youtu.be/QQvHewMQaOU

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SECURITIES ANALYSIS: DIVIDENDS, STOCK BUYBACKS, AND THE (K-G) PROBLEM

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Conway Lackman, Duquesne University
Howard Silverblatt, Standard & Poor's

ABSTRACT

The expanded one stage Gordon model of stock valuation is P = Eo(1+g)POR/(k-g) where P is the stock price, Eo earnings per share over the past year, g the growth rate, POR the payout ratio, and k the discount rate or required rate of return. As noted in the AIMR book (2002) "Gordon growth model values are very sensitive to the assumed growth rate and required rate of return". The expression (k-g) also appears in the last term of 2 and 3 stage dividend discount and free cash flow models and the last term accounts for 90+% of the total value of the AIMR examples below. Hence, (k-g) value assumptions are crucial to the valuation estimate. (k-g) and payout ratio behavior has been analyzed with S&P 500 data from 1926 through 2011. The 1926-1994 results were reasonably stable but there have been problems from 1995 on. Accounting shenanigans were so severe that S&P felt compelled to create its own "core earnings" measure in 2001. If earnings are distorted so are POR and P/E. A particular problem is adjusting for extraordinary items. Another was the "irrational exuberance" dot.com bubble of 1995-2002 which raised P/Es to levels far in excess of 1928-9. The real estate bubble and the financial crisis of 2008-9 have introduced another distortion, cash hoarding which may be depressing dividends. Since the early 1990s stock buybacks became such a major factor that Howard Silverblatt of S&P began gathering data for analysis. Are buybacks dividends in disguise or an effort to offset dilution from stock option grants, or both? Adjusting the payout ratio with the Silverblatt buyback data yields improved results.

INTRODUCTION

Brief Research Summary

Andersen and Jordan (1966) did a reduced form model of the economy with a single equation rather than using a multiple equation system. Analogously we are trying to estimate (k-g) as a single quantity rather than estimating k and g independently and then taking the difference. There have been many analyses of the equity risk premium (k minus the bond interest rate) which is not the same as (k-g) but close depending on which interest rate is used, long or short or corporate or Treasury. There is a 107 page review: "Equity Risk Premiums (ERP): Determinants, Estimation, and Implications" (Damodaran, 2012) which has ERP estimates for 1961-2011 as well as a review of the literature. Note the plural "Premiums" indicating that there are multiple methods of calculation and disagreements. There are four interesting observations from his paper. (1) Formulas break down if cash is hoarded , (2) stock buybacks became a significant factor in the early 1990s, (3) that the ERP changes not just day to day but minute to the minute" mainly due to movements in the stock index. This is a problem. Which minute (or day or month) should we pick? We want something stable out to infinity and (4) eight different ways to calculate the ERP (the average is 4.30% with a range of 3.07% to 6.15 %.(Damodaran, 2012, p.93)

In the August 2002 issue of Investment Advisor there is an interview with Roger Ibbotson, "What is the Real Equity Risk Premium?". His estimate was 7.9%. Fama and French had an estimate of 2.55%. Mentioned is the Arnott and Bernstein Financial Analysts Journal article (2002), "What Risk Premium is Normal?" They noticed that k was too low because of high P/Es due to the 1990`s bubble. We agree that the dot.com "Irrational Exuberance" bubble of 1996-2000 causes a low estimate of (k-g). A second interesting conclusion was that earnings and dividend growth are faster when payout ratios are high than when they are low due to retained earnings often chasing poor reinvestment opportunities, diminishing returns due to competition, and dilution. This is in agreement with Graham & Dodd (1962, p.518). Their formula involves the assumption that a dollar paid out in dividends has four times the weight in the valuation process as the same dollar retained in the business. Regarding accounting shenanigans, dividends can't be faked, earnings can. Retained earnings were not worth much to the shareholders of RIMM, Nokia, Motorola, Enron, etc. Arnott and Bernstein 2002 also argue that the long run terminal growth rate of dividends is 2% per year. To summarize, the measurement of the equity risk premium is still unsettled. Accounting issues, the dot.com bubble, stock buybacks, and cash hoarding are issues that should be analyzed as we try to find an estimate of (k-g) for security analysis purposes.

The Importance of (k-g) in DCF and FCF Formulas

In the Investment Analysis and Securities courses at Duquesne University we have been using a two stage discounted free cash flow model. We have noticed that usually 90% or so of total value came from the second stage. And since the expression (k-g) is in the denominator of the second stage term its value is very sensitive to the (k-g) assumption.

Here are four examples of the influence of (k-g) from AIMR (2002).

Table 1: Terminal Stage Weight

PVterminal/Total value	Fraction	k	g	(k-g)	AIMR Table
44.60/50.14	88.95%	.1070	.0800	.0270	2-07Gen Mills
79.27/82.40	96.20%	.1200	.1125	.0075	2-09 IBM
19.41/21.51	90.24%	.0872	.0570	.0302	2-10 Hormel
38.42/40.98	93.75%	.1240	.0600	.0640	3-10 Technoschaft

The k-g Gordon model was created for General Mills with the terminal stage represented by years 6 through infinity. IBM was a 3 stage model, Hormel, a H-model, and Technoschaft, a two stage free cash flow model. The terminal stages dominate in all three cases. What is interesting is the differing values for k, g and (k-g). They vary widely with ambiguous derivation. Here is an example of the importance of (k-g). Suppose a stock has 90% of value from the terminal stage and a fair value of $14.00 per share if (k-g) = .04. If (k-g) is .06 the value is $9.80, if .02 the value is $26.60. With these different assumptions one can make the stock a buy, hold, or sell. This is why we believe (k-g) is a crucial determinant of value. If you are going to use any of these types of models, you cannot not specify a value for (k-g) because if you do not specify a number you get no answer.

The Gordon One Stage Model and the Need for a Two Stage Model.

Let us analyze the average stock with the expanded Gordon model and statistics from Graham and Dodd (G&D). We assume a historical real (inflation adjusted) growth rate of 3%, and a payout ratio of .60. The discount rate (or required rate of return) is assumed to be the 3% real “risk free" rate on long term U.S. Treasuries plus a risk premium of 4.5%. The Gordon model in P/E format is P/Eo= POR (1+g)/ (k-g) = .60(1.03)/(.075-.03) = 13.73 which is close to the 13.60 historic average P/E found by G&D (1962, Table 37-1) over the 1873-1960 period. For the period 1926-1994, the actual S&P P/E was 13.86 and the Gordon formula calculates the S&P P/E to be 13.62 (see Table 2). It appears that the Gordon model can be used for analyzing the average stock or the market as a whole over the long run

A problem is posed by growth stocks. If we try to use the Gordon model to analyze Microsoft back in the 1990s when it was growing at a 20+% rate, the (k-g) term is negative giving an absurd answer. A two stage model solves this problem. In the growth stage one we assume a high growth rate g, of say 20%, a discount rate k of say 10% and a low (5%) or zero payout ratio POR. This period may be estimated to last 4 years as suggested by G & D (1962, p. 536). Then in Cinderella fashion the stock changes from a glamorous growth stock to a plain average stock with market growth gm (g is the symbol for the growth rate in stage one; gm is the symbol for the market, average, or terminal growth rate), market risk km, and the market payout ratio PORm.

The value of stage one uses an approximation from Modigliani and Miller (1961, footnote 15, p. 422): (1+g/1+k)T is approximately 1+T(k-g). This gives the value of the first term as POR(1+g)T. T is the duration of stage one, in this case T = 4 years. This term is almost always less than 10% of the total value and if the stage one dividend is zero, as it is for most growth stocks in their growth stage, then this term is zero.

The value of the second stage is PORm(1+gm/km-gm) $[1+g/1+k]^T$. The full formula is P/Eo = POR(1+g)T+ PORm (1+gm/km-gm) $[1+g/1+k]^T$. There are three points of interest regarding the stage two terms. PORm (1+gm)/(km-gm) is the Gordon model for the market or the average stock with market or average terminal values for PORm, km, and gm. The term is very dependent on the value of (km-gm) in the denominator. Also, the term is directly proportional to the value of PORm. As will be shown, stock buybacks have changed the nature of PORm which is why we make adjustments with the Silverblatt S&P buyback data.

A Note About Three (and more) Stage Models

Some people feel that the abrupt change from stage one to stage two is not realistic and prefer a three (or more) stage model. A common solution is the three stage ramp model. Example: Stage one growth is say 13% for years 1 through 3. Then growth ramps down, year 4 is 11%, year 5 is 9%, year 6 is 7%, year 7 is 5%.and year 8 starts the terminal stage growth of 3%. But essentially the same value can be found by assuming the 13% overshoots by two years (years 1 through 5) and then the terminal stage undershoots by starting the 3% growth in year. With a bit of tinkering because discount values change we can get the overshoot to exactly match and cancel the undershoot in which case the two stage model gets the same answer as the three stage model. This is a variant of the theorem of the mean.

A Limit on the Growth Rate in the Terminal Stage

There are no particular constraints on the values of k, g, and POR in the initial stage. But a key feature of the terminal stage is that regarding time. The terminal stage runs out to infinity. Growth to infinity has some limiting considerations. The long run real inflation adjusted growth rate of the economy has been estimated to be 3%/yr. What happens if a company grows at 10% real to infinity or 100 years? If the growth stock maintains its growth and starts out as 1/100th of the economy, in 100 years it will be 7.24 times as large as the rest of the economy. That is unlikely to happen. Sooner or later growth slowed for IBM, Standard Oil, Xerox, Microsoft, etc. and will for Google and Apple. Hence, the terminal growth rate should be equal to the long run growth rate of the economy which is about 3% adjusted for inflation which itself has averaged 3% over the very long run. Arnott and Bernstein (2002) estimate gm to be 2%, as do Bill Gross and Mohammed El-Arian of PIMCO.

INITIAL HISTORICAL ANALYSIS OF P/Eo = PORm (1+gm)/ (km-gm)).

The initial effort to find a value of (km-gm) using the Gordon model produced reasonably good results using data from 1926 (the start of the Ibbotson–Sinquefield studies (1988 through 1994). Table 2 summarizes the raw data. The average implied (k-g) for 1926-1994 is 4.57%, very close to the Graham and Dodd results. But the implied (k-g) values of 1.632% for 1995-2003 and 2.127% for 2004-2011 are the result of new and abnormal behavior. Data note: later we will adjust PORm for the influence of stock buybacks. Unfortunately, buyback information is missing for 1995-1998. Accordingly, when adjustments are made we will be looking at the1999-2003 and 2004-2011 periods rather than 1995-2003 and 2004-2011 below. Table 2 contains the 1999-2003 and 2004-2011 in two formats. The basic results and the first mini-set use S&P data in the conventional per share format such as dividends per share. The Silverblatt tables are done in dollar amounts and also uses operating earnings rather than “as reported" earnings. The bottom mini-set results use the latter format. The differences are slight. The (k-g) results are basically the same.

Table 2: One-Stage Model Results

Year	P/Eo	Div Yield	POR_M	$_{End}EPS$	g_M	$(k_M-g_{M})_e$
1925	-	-	-	1.22e	-	-
1926-29	14.855	4.228%	61.715%	1.61	7.180%	4.453%
1930-39	16.523	5.675	90.106	.90	-5.650	5.153
1940-49	10.933	5.719	59.366	2.32	9.932	5.969
1950-60	12.847	4.610	55.025	3.27	3.169	4.419
1961-72	17.847	3.121	55.337	6.42	5.783	3.280
1973-82	9.262	4.344	43.045	12.64	7.009	4.973
1983-94	15.243	3.529	52.371	31.75	7.177	3.682
1995-03	22.810	1.601	35.053	54.69	6.228	1.632
2004-11	16.043	2.009	31.768	97.05	7.433	2.127

S&P Per Share Based Data

Year	P/Eo	Div Yield	POR_M	$_{End}EPS$	g_M	$(k_M-g_{M})_e$
95-98	21.088	1.807%	36.508%	44.27	8.665%	1.881%
99-03	24.188	1.436	33.890	54.69	8.860	1.525
04-11	16.043	2.009	31.768	97.05	7.433	2.127

S&P Operating Earnings Table Data

Year	P/Eo	DivYield	POR_M	$_{End}EPS$	g_M	$k_M-g_{M)e}$
99-03	24.461	-	33.702%	-	8.860%	1.500%
04-11	16.727	-	33.815	-	7.079	2.165

S&P with Div+ 50% Buyback Adjustment

Year	P/Eo	Div Yield	POR_M	$_{End}EP$	g_M	$(k_M-g_{M})_e$
2004-2009	17.620	-	62.788 % adj	-	7.079%	3.816
2010-2011	14.050	-	48.865 % adj	-	7.079	3.724

If we solve the Gordon model for (k-g) we can see why the implied value dropped after 1994. The inverted formula is (k-g) = PORm (1+gm)/ (P/Eo). First, in the dot.com bubble the P/E of the market reached levels higher than in 1928-9, and being in the denominator high P/E levels lower the estimate of (k-g). The high P/E effect was reinforced by the suspected overstatement of earnings with gimmicks such as “big bath" accounting, abuse of the extraordinary item allowance, off balance sheet items (think Enron), massive write offs, etc. The accounting situation became so bad that in 2001 S&P decided to junk GAAP and “pro forma" accounting and created its own method of calculating “core earnings" (see Business Week, June/24/2002”2001 S&P Core Earnings”.)

The second reason for the (k-g) drop post 1994 is the decline in the payout ratio, PORm. This drop is almost certainly due to the increased level of stock buybacks since the early 1990s. Some buybacks are dividends in disguise. Other buybacks are done for other purposes, particularly to reduce dilution resulting from stock grants and option grants which really is a form of compensation expense. “Normalcy” seemed to appear in 2004 but then came the real estate bubble, the crash of 2008-9 and now huge hoards of cash being accumulated by business possibly lowering dividend payouts.

The 1995-98 Period.

The 1995-98 payout ratio is the lowest of all of the time period groups going back to 1926 up to that time (1973-82) also has a low PORm but it is offset by an abnormally low P/Eo) and is a major reason along with the high P/Es why the (km-gm) estimate is only .01881, far below the 1926-94 average. We had hoped to be able to use the Silverblatt stock buyback data to adjust PORm for these years but his data does not go back that far.

THE STOCK BUYBACK ADJUSTMENTS 1999-2011

Motives for Stock Buybacks

Note: as dividends are discussed we mean cash dividends (not stock dividends).There are several reasons why companies repurchase their stock. A dividend is a commitment. Once made shareholders expect it to continue and hopefully be increased in the future. Buying back stock is an alternate method of returning cash to shareholders in a more flexible manner. Stock buybacks do not necessarily promise a long term commitment and can be discontinued with no discernible penalty. An interesting case is that of Microsoft. For years it refused to pay a dividend because there is the strategy that if a company is a growth company it should reinvest instead of paying a dividend. The opinion was that if MSFT paid a dividend it would be admitting that it no longer was a growth company and the market would lower its stock price. Also, Steve Jobs would not let Apple pay a dividend. ”Growth" companies can pay dividends using the alternative method of stock buy-backs without the stigma of paying a regular dividend.

When capital gains tax rates are lower than the rate on dividends stock buybacks are a more efficient way to distribute funds back to shareholders (depending also on commissions and shareholder needs for cash). The April 2001 issue of CFO Magazine notes that When San Antonio based Ultramar Diamond Shamrock announced its dividend cut would fund a stock buyback, the share price went up 4%" (Nyberg, 2001).

A non-dividend motive for buybacks is that management may feel that the stock is undervalued. There can be two effects on the stock price. The buyback could push the stock price up as the market appreciates the view of management. On the other hand, investors might feel that the company has run out of investment opportunities and has nothing better to do with free cash flow. This would tend to reduce the stock price down. Recognizing that Jim Cramer of CNBC is a controversial figure, he mentions that stock buybacks are often made at inflated prices and are a waste. Google: Jim Cramer / Buybacks. There are numerous articles on the internet about this including the Jan. 23, 2006 Business Week article, “The Dirty Little Secret about Stock Buybacks".

Probably the major non dividend reason for stock buybacks since 1994 is to reduce dilution from the issue of stock grants and options. There have been a number of studies showing a strong relation of stock option grants to stock buybacks. Two working papers, Rogers (2006) and Liang and Sharpe (1999) give rough estimates that about 38% of stock repurchases are done to offset dilution due to stock option grants (this is a “guesstimate", there is no transparency regarding the motives for stock buybacks). Executive stock option grants became popular in the 1990s. As grants increased (the rate of increase slowed by 2006 due to bad publicity about CEO pay) many companies bought back stock to offset the dilution. Stock buy-backs for this purpose should not count as dividends since they really are payments for services in disguise.

What If We Count All Buybacks as Dividends?

Dividends 1999-2011 totaled $2.473 trillion for the S&P 500. Stock buybacks were $3.429 trillion. Stock buybacks have become the dominant form of returning cash to shareholders. A simple adjustment would be to count all buy backs as dividends. The problem is that the 1999-2011 combined dividend buyback payout ratio (PORdiv+bb) at 77.269% substantially exceeds the 1926-94 average of 59.610% (53.810% excluding the 1930s).See Table 3. An extreme observation is 2007 when dividends were $248.58 billion and buybacks $589.11 billion for a total of $835.69 billion per the Silverblatt Data. But operating earnings were only $731.38 billion giving a payout ratio of 114.26%. On a as reported" basis the ratio is $835.69/$587.24 = 142.35%. Data note: the following summary uses two different data sets; the conventional S&P results on a per share basis and the Silverblatt tables which reports dollar amounts and we use operating earnings rather than as reported".

Table 3: POR Adjusted for Buy Backs

Period	PORm.	POR (divs+bbacks)	POR (divs+.50bbacks)	(km-gm)
1926-1994	59.610%			
1999-2011	32.584%			
1999-2011	33.772%	77.269%.	55.525%	2.994% (x:dot.com)
1999-2003	33.702%.	65.266%	49.484%	2.149% (x:dot.com)
2004-2011	33.815%	84.772%	59.300%	3.796%
2004-2009	35.982%	89.557%	62.778%	3.815%
2010-2011	27.315%	70.415%	48.864%	3.724%
2010-2011			50.582%	3.855% (hoard adj)
2004-2011			59.729%	3.824% (hoard adj)

Counting Half of Buybacks as Dividends.

Counting all buybacks as dividends is overkill. Stock bought back to offset the dilution from stock option grants should not be counted as they are indirect payments to management for services. Silverblatt mentions that some shares are accumulated for mergers and acquisitions; these should not be counted as dividends either. Also, buybacks made because management believes the stock price is too low represents an investment decision, not a dividend decision.

It would be helpful to have the percentages of buybacks due to stock option activity, mergers, valuation decisions, and dividend substitutes but unfortunately such data is not available currently. There is some fragmentary evidence about buybacks to offset stock option dilution. The Liang and Sharpe (1999) and Rogers (2006) studies indicate that about 38% of buybacks are done to reduce dilution. And if we add another 12% for other non-dividend motives we guess that about half of stock buybacks count as dividends in disguise. If we count half of the buybacks as dividends in the Silverblatt data, we find that the adjusted payout ratio is 55.525%, quite close to the 53.810% for 1926-94 excluding the 1930s.The bottom section of the table above shows the payout ratios for 1999-2003 (the end of the dot.com bubble), and 2004-2009 the boom and bust of the real estate bubble. 2010 and 2011 are of particular interest because of the huge increase in the cash hoard of corporations which may have depressed dividends.

Recalculation of (km-gm) 1999-2011 with the Half Buyback Adjustment

The 1999-2011 adjusted POR value of .55525 is substituted into the equation (km-gm) = POR(1+gm)/(P/E) along with gm = .06224. Now there is a problem with the P/E ratio. It averaged 19.702 (biased upward by the end of the dot.com bubble - the P/E was still over 20 at the end of 2003 - one might remember that the S&P was up more than 20% per year for five straight years - and the NASDAQ had a much more spectacular rise and fall than the S&P). The result is a (km-gm) of .02994 or 3.00% rounded.

If we eliminate the 1995-2003 P/E bubble we have the following values for 2004-2011: adjusted POR = .59300, gm = .07079, and the average P/E was 16.727 (the P/Es of 2008 and 2009 rose to 18.051 and 19.825 as earnings fell more sharply in the 2008-09 crisis than stock prices). The implied (km-gm) is 3.796%, greater than the 3.280% of 1961-72 and the 3.682% of 1983-94. At this point we could say mission accomplished but we are curious about 2010-2011 and the corporate cash hoard.

The 2004-2009 and 2010-2011 Sub periods

Because the great recession of 2008-9 distorts gm, we use the 7.079% average for the whole period. For 2004-2009 the adjusted POR was 62.788% (as earnings fell faster than dividends in 2008-9) and the average P/E was 17.620. The implied (km-gm) is 3.815%. For 2010-2011 the adjusted POR was 48.865% and the P/E 14.050. The implied (km-gm) is 3.724%.

Due to the continuing financial crisis (we are at the zero bound interest rate as we were in the 1930s) here and in Euroland corporations have hoarded cash which otherwise might have been spent on plant, equipment, R&D, or more dividends and buybacks.

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Pending fourth quarter cash balance figures, the 2009-2011 cash balances for the first three quarters of the year averaged $1159, $1238, and $1416 billion respectively. The 2010 growth rate was 6.82% about in line with the growth of earnings so no adjustment is made. The 2011 growth rate of cash is 14.38% about twice the long run growth of earnings so half of the $178 billion or $89 billion could be considered as “excess" cash accumulation that could have been paid in 2011 as dividends or used to buyback stock.

Given the reluctance of firms like Apple, Microsoft, Google, Cisco, etc. to part with their cash hoards we are guessing that a third of the cash hoard increase or $30 billion should count as dividends (a thought analogous to the Graham & Dodd downgrade of retained earnings mentioned above). This additional adjustment raises POR for 2011 to 54.344% from 50.910% and the combined 2010-2011 POR to 50.582% from 48.865. The implied (km-gm) is 3.855% rather than 3.724%.

CONCLUSION

Using the Gordon model, the growth adjusted discount factor (km-gm) for the terminal term in dividend and free cash flow discount common stock valuation formulas averaged 4.57% (4.32% not including 1930-39) for the 69 year period 1926-1994. This factor was consistent with an average P/E of 13.859 for the S&P500.

Whether we should count the 1930s depends on whether we think we are smart enough to avoid another Great Depression. Our 2008-unresolved financial crisis and the Euroland mess cast some doubt. Splitting the difference between 4.57% and 4.32% gives an estimate of 4.44%.

1995 began the dot.com stock market bubble which featured S&P gains of 20+% for five consecutive years (and pushed the Nasdaq with Greenspan's “irrational exuberance" to 5048 on March 10 2000). P/Es remained over 20 through 2003. The implied (km-gm) factor for 1995-2003 is only 1.632%. If an average stock has a fair value P/E of say 15 using a (km-gm) value of 4.57%, replacing the 4.57% with 1.632% will give the average stock a fair value P/E of over 30 which is too extreme. Just as most economists leave out 1942-46 due to WWII effects in their analyses we leave out1995-2003 because the bubble radically distorts the results.

The 2004-2011 results are distorted also due to changes that started in the 1990s: a major increase in stock buybacks and an even larger increase in stock grants and options to management. Using buyback data from Silverblatt of S&P pay-out ratios were adjusted and the implied (km-gm) values for 2004-2011 are 3.824% including a minor adjustment for cash hoarding in 2010-2011.

Estimating (km-gm) for Actual Use

Because the adjustments are rough the 8 years at 3.824% are averaged in with the 69 base years adjusted to 4.44% giving a weighted average of 4.376%. But there is one more problem. Bill Gross and Mohammed El-Arian of PIMCO have suggested that there is a “new normal" real growth rate of about 2% annually, down from 3%, agreeing with Arnott and Bernstein (2002). Fully adjusting for their idea would raise (km-gm) to 5.376%. We think a small adjustment should be made, say .25% giving a temporary estimate of 4.626%.

Some suggested revisions. This paper was written with preliminary data. We should use the revised data forthcoming. Observation leads us to believe that dividend changes lag earnings changes meaning that our payout ratio calculation is not optimal. In turn this means the analysis should be done on a quarterly basis since the lag does not appear to be exactly one year. Also an inflation adjusted value for gm should be used. Complete data tables will be available so that we can avoid going to the Journal of Irreproducible Results.

Adjustments

The Apple versus Campbell Soup problem. The best guess for (km-gm) is.04626 or 4.626% pending revised data. Should we use 0.4626 for both companies? There has been much discussion on CNBC about the low P/E of Apple (AAPL) compared to its growth rate. One explanation is that AAPL faces ferocious competition and that survival is not certain. Nokia was dominant once and now it is nearly gone. RIMM with its Blackberry was on top but has suffered a horrible fall. Motorola and 3 Com failed. AAPL itself almost died in 1997. Sony had the walkman then Apple knocked it off with the iPod. Now Apple is a target. Google and Android phone manufacturers, Samsung with OLED Galaxies with 28 nanometers and now Microsoft is coming after the iPad with its new tablet called Surface. There is unrelenting pressure in the industry.

Compare this situation to that of Campbell Soup, H.J. Heinz and General Mills while there are technological changes they are less rapid and less potentially disruptive than those faced by Apple (and RIMM, Nokia etc.). So, the question is: if we use .04626 for Heinz should we use .04626 for Apple?

The .04626 estimate was found for the average stock (from the S&P 500 Index). We suggest that for a less risky stock such as Heinz a lower number could be used say .04. For Apple we could add a point to .05626. Pending more research on k as mentioned by Damodaran (2012), we may need to use judgment.

The .04626 estimate of (k-g) is for the average S&P stock. The question is how to adjust for stocks with above or below average risk. While not perfect Beta is a measure of risk that can be used with minimal effort. Simply multiple .04626 (or whatever other value the reader chooses) by Beta to get a risk adjusted value for (k-g). Unfortunately there is a problem. Different services give different betas. Here are some betas for HNZ and AAPL:

Table 4: Beta for HNZ and AAPL

AAP	HNZ	Source
0.86	0.34	Yahoo Finance
1.22	0.53	Google Finance
1.43	0.76	Macroaxis
1.21	0.52	Reuters
1.05	0.54	S&P – ABG Analytics

Again, a bit of judgment is needed (Google judgement or judgment – a spelling battle.) From a past study of beta and the 1987 stock market crash we found that the lowest beta in the S&P 500 index in the week before the crash was .60. We also found that high beta stocks, middle beta stocks, and low beta stocks were pounded about equally over Oct. 14-19 crash (except for the three gold stocks-Homestake, Echo Bay Mines, and American South African; also telephones and electric utilities were relatively unscathed). Accordingly we are reluctant to use any beta under .60 unless there is a powerful reason to use a lower value. For HNZ we prefer the Macroaxis estimate. For HNZ .76 X .04626 = .0352 for (k-g).

Regarding Apple recent events up to November 2012 including its drop from over 700 to under 600 indicate real competitive concerns. Again we favor the Macroaxis estimate. For AAPL 1.43 X .04626 = .0662 for (k-g). If analysis could be done with only mechanical formulas without judgment all of us could be rich. Or, as Jane Fonda said, "If it came in a bottle we all could look good."

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EXPLORING BEST PRACTICES IN *SECOND LIFE* VIRTUAL WORLD ADOPTION

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ABSTRACT

Second Life (*SL*) is one of many computer-based Internet-accessible multi-user 3-D virtual world environments. Launched in 2003, *SL*, once the largest virtual world environment with millions of registered users (or residents) with a thriving economy, is widely adopted and deployed in business and government settings and, increasingly, in educational institutions. Institutions of Higher Education (IHEs), in particular, are making greater investments in virtual world environments. This study, a research in progress, uses a grounded theory approach to identify emergent themes to better understand the selection and adoption of the *Second Life* virtual world environment in institutions of higher learning. Chief technology officers, instructional technologists, and faculty were interviewed. It utilizes *Atlas.ti*, a popular qualitative research data analysis software tool, to help identify emergent data keywords, categories, and themes for further analysis. In this paper we report the results of our first iteration of data analysis, developing an initial understanding of the richness of our study context.

INTRODUCTION

Second Life (*SL*) (http://secondlife.com/whatis) is one of many computer-based Internet-accessible multi-user 3-D virtual world environments. Launched in 2003, *SL*, once the largest virtual world environment with millions of registered users (or residents) with a thriving economy (Educause, 2008), is widely adopted and deployed in business and government settings and, increasingly, in educational institutions.

Using virtual world environments, artists have set up galleries, musicians have held concerts, authors have read their work, countless entrepreneurs have developed and transacted business, and governments of several real nations including Maldives, Sweden, and Estonia have set up virtual embassies where users can speak to representatives of nations or about visas and other requirements (Educause, 2008). Furthermore, while virtual world environments are great places to escape from reality even for a little while - create personas, wear outrageous clothes and meet and collaborate with strangers from around the world - virtual world environments are also great places to facilitate and engage in very real-world, business-oriented, highly innovative endeavors (Gandhi, 2010) and to meaningfully engage learning in ways that are difficult, if not impossible, outside the virtual world (Kelton, 2007). For example, IBM, using *SL* and its own Systems EduCenter Island, facilitated collaborative, open innovation conversations on Smarter Cities with topics that included public safety, transportation, education, social services, energy and utilities, and healthcare (Gandhi, 2010). While requiring a great deal of preparation, Shruti Gandhi (2010), a technology innovation manager at IBM, reported that the discussions yielded tremendous insights. In addition, with the ability to defy the laws of physics and other real-world realities and limitations in virtual world environments, along with the potential for immersive situated learning in individualized and collaborative settings, virtual world environments offer tremendous opportunities for highly innovative ways to enhance teaching and learning (Kelton, 2007). Moreover, virtual world environments offer opportunities for visualization, simulation, enhanced social networks, and shared learning experiences (Educause 2008).

This study, a research in progress, uses a grounded theory approach to identify emergent themes to better understand the selection and adoption of the *Second Life* virtual world environment in institutions of higher education. Chief technology officers, instructional technologists, and faculty were interviewed. It utilizes *Atlas.ti*, a popular qualitative research data analysis software tool, to help identify emergent data keywords, categories, and themes for further analysis. In this paper we report the results of our first iteration of data analysis, developing an initial understanding of the richness of our study context.

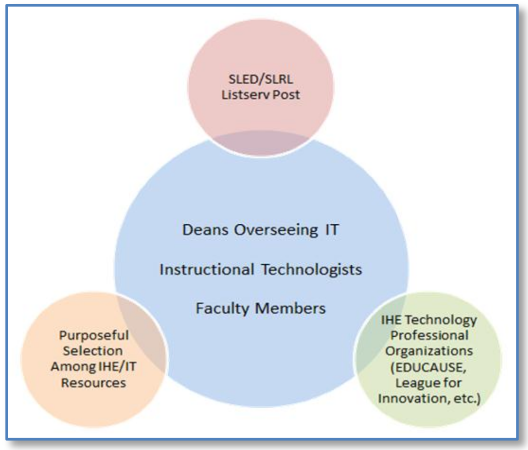
THE STUDY

21st century learners are progressively expecting and demanding a richer array of teaching and learning technologies. This study focuses on a specific technology that is increasingly adopted and deployed in institutions of higher education, the virtual world environment. Currently, there is a lack of extant research on this topic. Specifically, this study, using the *grounded theory approach*, sought to provide a thick description of and better understand the following:

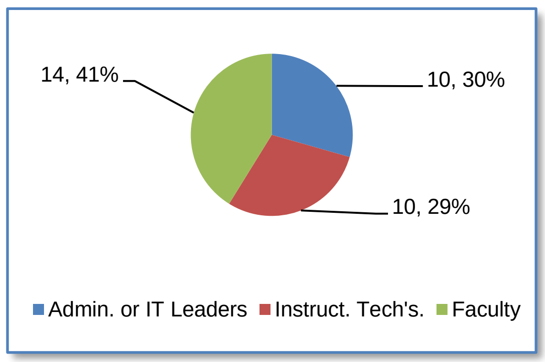
- How do institutions of higher education evaluate and adopt virtual world environments as a learning technology tool choice?
- Why would the *Second Life* virtual world environment be selected ahead of some other options?

Targeted participants were persons involved in the selection and/or adoption and use of virtual worlds at their institutions. These included Chief Technology Officers (CTO), Instructional Technologists (IT), and Faculty. While the specific titles of each person varied, in general, their roles were within the traditional functional areas of CTO, IT, and faculty. At least 30 participants falling within the three groups were sought. Each participant must have had a minimum of one year of regular *Second Life* activity while owning virtual land was not necessary. Participants were identified through the *SL* education-related listserv (*SL*ED), professional organizations that target IHE technology use (e.g., League for Innovation, EDUCAUSE), and purposeful selection (e.g. journals, podcasts, and in-world events).

A qualitative design was selected to collect and analyze the data. A special feature of data collection was the fact that semi-structured, open-ended interviews were conducted *in-world (within SL).* Telephone contact served as a backup in case of technical problems. TeleStream's ScreenFlow was used to capture each interview and a camcorder was used as a backup. Atlas.ti (http://www.atlasti.com), a popular qualitative research data analysis software tool well-suited to the grounded theory research design, was used to assist in the organization and analysis of interviews and to identify emergent data keywords, categories and themes.



Of the 75 potential participants identified, 34 agreed to be interviewed: 10 were administration or IT leaders; 10 were instructional technologists, and 14 were faculty. The interviews were analyzed using Altas.ti and the analysis yielded 17 emergent core categories based on 188 subcategories spread across 1,895 quotations.



Core Categories	Sum of Quotations
⊟Admin (ADMINISTRATION)	40
Admin_awareness of SL varies	2
Admin_support level mixed	9
Admin_support level strong	23
Admin_support level weak	6
⊞AdoptChal (ADOPTION CHALLENGES)	310
⊞AdoptStag (ADOPTION STAGES)	32
⊞AlignWithEdNeeds (ALIGNING WITH EDUCATIONAL NEEDS)	259
⊞BuildAndBuy (BUILDING AND BUYING OBJECTS)	69
⊞CourseMgtSys (COURSE MANAGMENT SYSTEM)	7
⊞CreatingSLBuy-in (CREATING SL BUY-IN)	213
⊞EarlySuc (EARLY SUCCESSES)	282
⊞FacTransition (FACULTY TRANSITION)	104
⊞InfluBy (INFLUENCED BY)	48
⊞JoinedSLDate (JOINED SL DATE)	27
⊞RelatedSWTools (RELATED SOFTWARE TOOLS)	15
⊞RelatedVWLocs (RELATED VW LOCATIONS)	111
⊞SLSkillsDevel (SL SKILLS DEVELOPMENT)	72
⊞SLUsageExamp (SL USAGE EXAMPLES)	52
⊞StuTransition (SUDENT TRANSITION)	102
⊞UnusedMisc (UNUSED MISCELLANEOUS)	12
⊞VirtWorldsFut (VIRTUAL WORLDS FUTURE)	140
Grand Total	1,895

DEVELOPING AN INITIAL UNDERSTRANDING

An effective strategy is, at first, literally to ignore the literature of theory and fact on the area under study, in order to assure that the emergence of categories will not be contaminated by concepts more suited to different areas. Glasser & Strauss, 1967

In this article, we report the results of our first iteration of data analysis. We intend to perform a couple more iterations of data analysis for another article in the near future. The goal of our first iteration of data analysis is to develop an *initial understanding* of the *richness* of our study context. Using *live* excerpts from the study setting, we have clustered some representative direct quotations from the *in world SL* interviews under various headings: Reactions, Learning and Support, *SL* to Enhance Learning, *SL* Commitment for the Long Term. We have placed some quotations under two headings when appropriate. To provide a true feel for the interview dialogue, actual quotes are used. Consequently, typos and grammatical errors have not been revised nor corrected.

Reactions

We found a diversity of reactions to *SL* from an array of stakeholders including faculty, administrative leaders, and students. In our analysis, we noticed the following: (a) Faculty, administrative leaders, and students are not to be treated as homogenous groups. Among faculty, interest and concerns (open & excited, support, fear, lack of time, confusion; impact on teaching style) were varied perhaps indicating there were different levels or categories of *openness* and *interest* and even *technical capability to effectively learn and deploy*. For example,

- P23: *"I have done some presentations on SL on my campus. People often nod, smile, say wow that's cool, but it ends there."*
- P21: *"We have a lot of 'old style' instructors. From day one, it was wall after wall. (It) was only after they heard Harvard used SL in courses."*
- P27: *"...we're finally beginning to see the true power of the environment is being able to leverage the environment to do the actual application of learning. We've gotten over the hype of it. We've gotten over the glam of it."*
- P18: *"I have never had a boring moment in Sl. I find people here who people learn, explore, work, shop and play. Those who find little to do or few people to meet have not learned how to adapt to life in the virtual world. There are more than 20 million residents. At any one time there are tens of thousands of people logged on. These are people from all over the real world. You know, SL's population is about 40% from the U.S. and 60% from other nations. This makes for a dynamic, lively mix."*
- P4: *"The faculty have been very supportive, but slower to adopt. Some is fear, some is plain lack of time, some is confusion on how to use SL in education."*
- P30: *"We were lucky. We had the president's attention from the outset. She was sold on it. We are an example of whizbang on the campus. And they need that. My chair trots us out for the dog and pony show when he wants to show that we innovate. I'm not sure that he really gets it, but he supports. We still have our island and promises of continued funding.."*
- P3: *"This requires a total different method [of teaching]. You can't just stand in here and lecture, those kind of things, you know."*

This was likewise the case among administrative leaders and students. For example, reactions among students were mixed, with prior exposure to similar technologies, seemingly making a difference:

- P14: *"Mixed reactions from the students - initially in 2007 they were not fully accepting - however over time they are seeing the value. The biggest problem is that they are used to console games with intense graphics and amazing interactivity - this is not the same and they have to relearn. Newer students who have grown up with club pengiun are better at accepting SL."*

(b) From the interview transcripts, we noticed that a strong value proposition and/or an established process for adopting *SL* are either missing or, at best, not clear. In addition, the reason for adopting *SL* varied. For example,

- P7: *"It's the usual: people are either very interested and see the possibilities for distance learning immediately or they just think we've lost our minds."*

- P21: "We have a lot of 'old style' instructors. *From day one, it was wall after wall. (It) was only after they heard Harvard used SL in courses."*

- P27: "…we're finally beginning to see the true power of the environment is being *able to leverage the environment to do the actual application of learning.* We've gotten over the hype of it. We've gotten over the glam of it."

Learning and Support
From the interview transcripts we found that learning *SL* entails a huge up front commitment of time and effort and that the learning curve was steep. Deploying *SL*, in a teaching context, required even more time, effort, and creativity. For example:

- P30: *"I think it is a struggle for faculty because there is so much out there."*

- P12: *"Plan to spend a lot of time in Second Life. It's not necessary to spend a lot of money; it is necessary to spend a lot of time. Second Life has its own unique culture…it's very much like a different world, and you sort of have to get used to it before you can put it to effective and constructive use. It's also true to students."*

- P1: *"You have to plan well and prepare - and to do that, you really have to be in it enough to know what's going on and what can go wrong."*

- P5: *"For faculty, I suggest they - that before they jump in and have a class in it, that they get very comfortable with it because what's going to happen is that students are going to come in, they're not going to know what to do, and you're not going to know how to help them, and then everybody gets frustrated and nobody has a good time, which isn't good."*

- P22: *"I'd encourage them to use SL recreationally a bit, just get familiar with it and then we'd talk about the classes they're teaching and brainstorm ideas. Part of what we're doing here is trying to make the faculty efficient. They're a very expensive resource, so we're trying to utilize their skills instead of having them doing clerical tasks."*

- P19: *"One of the biggest challenges is the learning curve for the students. I had a few months to wander around but they only have a few weeks if that at the beginning of the semester to learn the basics, how to walk, fly, chat, etc."*

- P19: *"…while presently students need explanations for why a prof would use an environment like this I think that will become less and less of an issue. I think middle school kids, who grew up with things like Club Penguin will understand these environments naturally."*

Because the learning curve for *SL* was steep, facilities and faculty support are necessary and vital. For example,

- P5: *"I didn't know what I was doing. So I went in and then I immediately got right out again because I didn't know what was going on."*

- P30: *"We were lucky. We had the president's attention from the outset. She was sold on it. We are an example of whizbang on the* *campus. And they need that. My chair trots us out for the dog and pony show when he wants to show that we innovate. I'm not sure that he really gets it, but he supports. We still have our island and promises of continued funding.."*

- P28: *"(Our university) has a special lab for instructors only. Many would stop by and ask about SL and we would sit down with them to discuss what they wanted to do and help them get started. We also told them to prctic for at least a month before teaching because they needed to be smarter than the students at least as far as moving, TP, LM, and inventory."*

- P24: *"In my dept, they've been very generous with $$ to rent land and provide Linden dollars to faculty working in the space."*

Some faculty members do not need support and venture and learn *SL* on their own. For example,

- P24: *"I was self-taught. I used YouTube vids, chat boards, and wikis to learn how to do it all - plus lots of trial and error."*

Other faculty members, on the other hand, needed face-to-face, on-going support. For example,

- P3: *"Some of them, you know, we have to sit with them and – I mean, we could sit with faculty four, five times."*

In addition to support within the institution, other sources of support include the following:

- P11: *"NMC is top dog in education in SL. They can rally help you a lot – lots of knowledge, lots of help."*

- P2: *"...look to the SL community to get help. Join SLED list and ISTE and develop your support network within SL. I actually think it is important to do that first before trying to teach in SL."*.

- P8: *"...there's a strong educational community, so my first recommendation would be to join the virtual education round table, to join some of the education groups, support groups that meet weekly in world to find out what other people are using through their blogs and other."*

- P2: *"Becoming a docent (and) joining groups are all ways to get immersed in the immersive."*

SL to Enhance Learning

Is *SL* a tool that can enhance learning? Instead of merely assuming that *SL* enhances learning, we reviewed the transcripts. The reactions are varied. For example,

- P14: *"...engage the virtual if it actually does the job better or if it clearly extends or enhances your current practices - otherwise consider not using it."*

- P4: *"As we move into more and more online learning, student engagement is vital. Teaching and learning in a virtual environment gives the student and the professor the opportunity to keep that interactive engagement going."*

- P8: *"I think the most significant challenge is having content, because you can see the power of this world. If you were teaching literature, wouldn't it be great if you had immersive literature scenes from your books here?"*

- P9: *"[Reproducing real world campus buildings]...offers something familiar but what really makes virtual worlds so powerful is what you can do to make unfamiliar concepts familiar through creative means."*

- P9: *"...in Second Life you see everyone actually scaling something. It feels like you are really doing something. You are a participant within the image instead of an observer."*

- P26: "*There was talk at one time about making a virtual campus replica, and that coincided with discussions about a university Web site. I am pleased that we did not make the mistake of replicating too much brick and mortar."*

***SL* Commitment for the Long Term**

SL is one of many virtual world environments for IHEs to choose from. The choice to adopt *SL* within an institution will necessitate a commitment in terms of facilities and support. When we analyzed the transcripts we found that *SL's* business model, long term viability and commitment to continuously develop were critical factors in adoption decisions. For example,

- P24: *"OpenSIm seems to be the big one. I myself am looking for other worlds because SL is now very expensive, and it's just too shaky to justify the expense. It is still a beta technology, IMO...SL's business model is very immature."*

- P13: *"…then there's Linden Lab and all the potential that they've built and then let rot leaving a lot of talent and money on the table because they 'lack focus' and didn't know what they had, much less what to do with it."*

- P17: *"The educational potential here is enormous and as we all know our education system is in serious need of innovation. I think it is socially irresponsible of Linden Lab to blow off the edu community. They should bring back John Lester And Claudia L'Amoureaux as education and spin off SLED as a brand with full support."*

- P27: *"We went through this period where everybody was anti-SL in education and then they left SL and went to some of the OpenSim platforms and what's funny is over the past six months or longer we're starting to see all of those folks (laughs) gravitate back because they don't get the same level of consistency in technology that they would get otherwise. They're the big boys on the block, still. And I have to say we've been here already long-term. We've been working in this space for, what, five or six years now."*

- P12: *"Hmm. Coming from a business management standpoint, Linden Labs is just such an interesting case study. I don't know what they should do. This environment, this Second Life universe really wasn't built by Linden Labs at all, it was built by the residents in the communities that live here that did exactly as I did, that learned the building tools and started putting things up. Linden Lab hosts it, but in many respects Second Life has evolved in directions that Linden Labs probably didn't anticipate. So while Linden Labs has focused a lot of their efforts on stabilizing the grid and allowing much more -- a much finer degree of control over what can be built and the beauty and realism of some of the constructs that can be put into Second Life, they've made enormous strides in the last five years on just the quality and the richness that Second Life is capable of."*

- P8: *"And the viewer, I think, is the most - the strongest obstacle. While the current viewer was supposed to be very usable, it's, instead, glamorous looking but not usable. The speak button has disabled the active speaker list so you can't configure individuals to turn them up or down. Some of the controls work very strangely, and they've hidden some of the features that made it much more comfortable for users"*

NEXT STEPS

Building grounded theory requires an iterative process of data collection, coding, analysis, and planning what to study next. The researcher needs to be theoretically sensitive as they are collecting and coding data to sense where the data is taking them and what to do next. Coming into a research program with an existing theoretical framework will merely blind them to the richness of the incoming data … let the data be your guide.

Glaser & Strauss, 1967

Our first iteration of data analysis led us to have an initial understanding of the richness of the context of our study. For example, we developed a deeper appreciation for the wide variety of stakeholders especially when analyzed with direct excerpts from their live setting, their reactions, concerns, fears, circumstances, learning capacities, and current and desired or expected levels of support. It was interesting to note that as stakeholders *weigh adopting* a virtual world environment such as *SL*, they were just as equally concerned with the long-term commitment and viability of *SL*.

Letting the data be our guide (Glasser & Strauss, 1967), we intend to perform more iterations of data analysis. Our next iteration will be on similar groups (faculty, instruction technologists, and administrative leaders) to gain sensitivity to differences between groups (Glasser & Strauss, 1967). Ultimately, our aim is to identify emergent themes to help us develop a thick description and a better understanding of the adoption of a virtual world environment. This understanding, we believe, will enable us to better develop and support appropriate adoption processes.

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SUSTAINABILITY: EVERYBODY'S HEARD ABOUT THE WORD

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John Golden, Slippery Rock University

ABSTRACT

In 1987, the United Nations Brundtland Commission, formally the United Nations World Commission on Environment and Development (UNWCED), defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (UNWCED, 1987). This sounds simple enough. Since then, the term "sustainability" has been used in many different contexts in business, government, and science. Recently, it has been appearing more frequently in the higher education curricula. Particularly interesting are its applications in universities' business school programs (Rusinko, 2010).

After several decades there are still many questions regarding sustainability: What exactly does the term "sustainability" mean? Does it have different meanings in different contexts? Is there a definition that includes a set of principles or specifics that would allow a determination that something is actually "sustainable"? What would that mean? Can it be verified so that "greenwashing" is mitigated? Who would arbitrate this? Given all these open questions, is a definition of sustainability even useful? Without the answers to these questions, might sustainability be one of those words that anyone can use anytime?

This paper is ground work for discernment. In it, we examine the many facets of the term "sustainability" as it is used in its most common contexts. Our goal is not to craft yet another definition, but rather to offer the reader perspicacity for a term that is broad, varied and poorly understood in our culture.

INTRODUCTION

The purpose of this paper is not to provide yet another definition, but to provide a better understanding of sustainability and its many similar terms that are used and now leading to confusion and complexity as opposed to its original simplicity. This Word has been used in many different contexts in business, government, science, and most recently higher education. However, this paper focuses on the context in business.

We will first provide a brief background and history of sustainability. Next we will discuss sustainability's "kissing cousins" or similar terms of the Word. The next section will discuss the contextual use—connotations and denotations from a business perspective followed by "The Power of the Word." Lastly, we will discuss greenwashing and other contradictions of the Word.

SUSTAINABILITY BACKGROUND

The etymology of both sustainable development and sustainability dates back to times of conservationism, environmentalism and ecology backgrounds from the early twentieth century (Linnenluick & Griffiths, 2010). Although these fields are from the sciences, sustainability on the other hand has come into its own by also integrating a business perspective. It thereby has become a more balanced and harmonized concept that businesses now can understand and incorporate into their business strategy. Indeed, comparisons can be made with the science fields; however the concept of sustainability is now different and unique. For example, businesses for the first time are now expected to be sustainable (SHRM, BSR, & Aurosoorya, 2001).

In the past, from the onset of the industrial revolution through the 1950s, companies worked solely in their own interests for profits. During this time, "companies needn't do more than the pursue profit goals, but some also provided philanthropy" (SHRM, *et al*., 2011, p. 19).

The 1960s sparked the "environmental movement," Rachel Carson's seminal book *Silent Spring* (1962), many environmental laws, and the establishment of the Environmental Protection Agency (EPA). A "reality shift" began as the Vietnam War took place, man landing on the moon, and other events and influences caused the Baby Boomers to question authority like never before on issues such as pollution, overpopulation, and other environmental issues (SHRM *et al*., 2011).

The 1970s brought about several more environmental laws and the "consumer movement" with the help of consumer advocate, Ralph Nader (SHRM *et al*., 2011). The consumer movement helped companies expand roles from only making profits and providing some philanthropy to making profits, providing philanthropy, protecting the environment and safeguarding products (SHRM et al., 2011).

The 1980s brought about additional environmental concern when several major corporate environmental disasters occurred around the world. Some environmental disasters included: the Union Carbide gas leak in Bhopal, India (1984), the Chernobyl nuclear disaster in the Soviet Union (1986) (and other nuclear accidents), and the Exxon Valdez oil spill in Alaska (1989) (Saha & Darnton, 2005). Society needed more protection against self-serving corporations (SHRM *et al*., 2011). As a result, environmental legislation was enacted to prevent such disasters from reoccurring.

In addition to the environmental legislation in the United States, a response was also initiated by the United Nations World Commission on Environment and Development (UNWCED). The UNWCED, headed by G. H. Brundtland, Prime Minister of Norway, was established as an independent body in 1983 by the United Nations. Its seminal report entitled *Our Common Future* (i.e., the Brundtland Commission) re-examined the critical environmental and developmental problems on the planet and formulated proposals to solve them. This hoped to ensure that human progress would be sustained through development, but without bankrupting or depleting the resources of the future generations. The report served notice that the time had come for a marriage of economy and ecology. As a result, governments and their peoples must take responsibility not just for environmental damage, but also for policies that cause the damage (UNWCED, 1987). This report renewed and revived the environmental movement with a new name and purpose: "sustainability." It also provided a new mandate –the survival of future generations. Businesses soon took notice.

The 1990s decade is coined the "green movement." According to SHRM *et al.* (2011), "companies now are expected to be responsible for promoting diversity, protecting workers, preventing child labour, fostering public health, ensuring human rights, eradicating poverty, opposing corrupt government regimes, providing technology, policing supply chains, engaging stakeholders, measuring and reporting, and continuously improving in general" (p. 20). During this time, many of the larger multinational companies began to integrate sustainability practices.

Berry and Rondinelli (1998) argue that corporations who did not adopt a proactive approach to sustainability would simply not be competitive in the 21st century global economy. Many organizations now understand that sustainability can strengthen their competitive advantage as well as increase innovation in new products and services, processes, markets, business models or methods of management and reporting and many other opportunities (Aaron, 2010; SHRM *et al*., 2011). Therefore, Blackburn (2007) posits that sustainability is not just a fad for organizations.

SUSTAINABILITY AND ITS "KISSING COUSINS"

After several decades there are still many questions regarding the vagueness of the Word. The Word sustainability can be very confusing and complex, many similar terms, i.e. sustainability's "kissing cousins" are used (see Figure 2 in the appendix) throughout various studies describing and discussing sustainability. Given the sustainability construct, measures of sustainability are not standardized (Reilly, 2009). Many measurements and standards also vary by industry. Some measurement examples of sustainability include: Global Reporting Initiative (GRI), ISO 14001, and Dow Jones Sustainability Index (DJSI), to name a few.

"Sustainability"—what does it mean?

Table 1 (see Appendix) defines the many similar terms to sustainability. As you can see from Table 1, terms and definitions describe basically the same thing but from different perspectives (perhaps more simplified words that people may more easily understand). One of the definitions of sustainability is "the commitment by organizations to balance financial performance with contributions to the quality of life of their employees, the society at large and environmentally sensitive initiatives" (SHRM, BSR, & Aurosoorya, 2011, p. 5). In addition, concepts such as the "Triple Bottom Line," (TBL) and "Corporate Social Responsibility" and a few other similar terms provided businesses with the understanding of what is now expected.

Triple Bottom Line

The Venn diagram in figure 1 illustrates how businesses can achieve sustainability through the TBL concept of the three P's: People (social factors – standard of living, education, community, equal opportunity, workers rights, and stewardship), Planet (environmental factors – natural resources use, environmental management, waste management, and pollution prevention) and Profit (economic factors – energy efficiency, profit, cost savings, fair trade, and economic growth). The TBL, which is also known as the "three spheres of sustainability," is about the three major stakeholders in organizations and each has their own sub-stakeholder groups. By satisfying these three major stakeholder groups at the same time requires major sustainability strategies.

Figure 1 diagram also helps to reveal that as the three sprears of the TBL overlap, strategic opportunities emerge from sustainability by helping the orgainzation achieve a competitive advantage. Some of the possible new opportunities for a competitive advantage may include: creating new products, new processes, new markets, new methods of management and reporting, and new business models *(Savitz & Weber, 2006)*

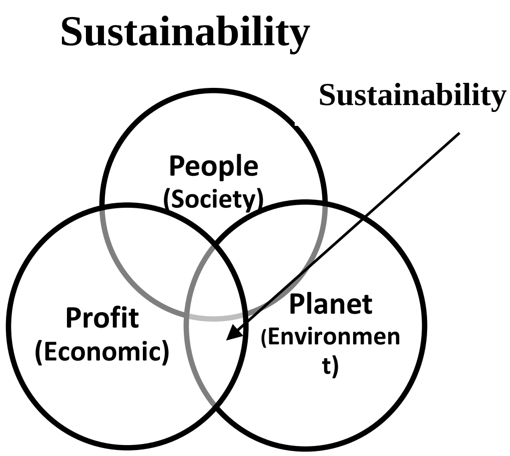

Figure 1

Triple Bottom Line in relation to Sustainability for businesses

Corporate/Organizational Sustainability

Linnenluecke and Griffiths (2010) state that the origin of corporate sustainability is directly derived from the concept of sustainability. Fox (2008) describes sustainability from a business perspective as the "organizations ability to make a profit without sacrificing the resources of its people, the community and the planet" (p. 46). Dyllick and Hockerts (2002) adds that corporate sustainability is defined as meeting the needs of all stakeholders (directly and indirectly) without compromising its ability to meet the needs of future stakeholders. Is it necessary to say corporate or organizational sustainability as opposed to just using the Word, sustainability?

Corporate Social Responsibility

In the past, Corporate Social Responsibility (CSR) and Corporate Sustainability were viewed as having separate paths (van Marrewijk, 2003). For example, CSR was viewed as social aspects while Corporate Sustainability viewed as environmental aspects. Today however, these paths have now converged and are considered synonymous. Indeed, according to Jabbour and Santos (2008) the definition of a sustainable company is symmetric to the concept of a socially responsible company.

Jenkins (2006) explains that CSR can be "seen as an 'all embracing' idea that concerns having an awareness of the impacts of the business, and wanting to have a positive impact on a wide range of stakeholders through the business decisions that are made" (p. 245). Snider, Hill, and Martin (2003) describe the CSR construct as the relationship between business and its larger role with society and environment. Therefore, Jenkins (2006) asserts that CSR and sustainability can be considered synonymous. However, both terms can be complex and confusing to organizational members as there are many different perceptions and definitions (Linnenluecke & Griffiths, 2010). In correlation, Reilly (2009) explains that CSR and sustainability may overlap in organizational initiative since both areas attempt to address the accountability and policies to its stakeholders in the aspects of social, ethical, and environmental outcomes. The visions of CSR and sustainability must be communicated effectively to its stakeholders. Some examples of CSR activities may include: Community initiatives, philanthropy, environmental management and employee related initiatives such as sustainability programs for health and wellness (Jenkins, 2006).

"Green" terms

Another similar term of sustainability is "green organization" (or another facet of the word 'green'). The Society for Human Resource Management (SHRM, 2008) defines green organization/workplace as an environmentally sensitive, resource efficient and socially responsible workplace. This means a "green" organization seeks to "minimize the use of virgin materials and non-renewable forms of energy" (Shrivastava & Hart, 1992, p. 186). Once again this is the same meaning as sustainability but using a different Word. One can say that 'green" is the layman's term of sustainability.

All of the terms discussed above imply the same definitions and can be interchangeable and are in essence using the term sustainability without using the word. Hence, figure 2 (see in the appendix) presents a "wheel of sustainability" which lists a plethora of similar terms and is often used interchangeably.

SUSTAINABILIY'S CONTEXTUAL USE

Does the Word have different meanings in different organizations? In the aforesaid, the term sustainability and other related terms still remains unclear and broad – or some say "vague" (Jabareen, 2008; and Van Marrewijk, 2003). This ambiguity leads to many meanings and open to interpretations as opposed to a general agreement on how the concept should be translated into practice (Berke and Conroy, 2000). Now that sustainability and its kissing cousins have been discussed and defined, we turn our attention to the way organizations use the sustainability and similar terms. The Fortune Top 20 organizations websites were analyzed to determine how they use and describe sustainability. Table 2 of the Appendix lists the Top 20 organizations, the industry they are in, the term or terms they use for sustainability and the context the organizations use of the terms. For example, Wal-Mart's contextual use of sustainably is stated as:

> "Environmental sustainability has become an essential ingredient to doing business responsibly and successfully. As the world's largest retailer, our actions have the potential to save our customers money and help ensure a better world for generations to come" (Walmart.com, 2012).

Although Wal-Mart and the other Fortune Top 20 companies do not specifically mention the triple bottom line by name, the concept of TBL (people, planet, profit) is widely described in both company context in Table 2 (see in the Appendix) as well as all of the similar sustainability definitions listed in Table 1 (see in the Appendix). Even companies using different terms such as environment, responsibility, green, etc. are basically stating the same TBL definition but from their own perspectives. The problem then lies with so many different terms from so many companies but all using the same context. As you can imagine this can be confusing to stakeholders, such as the consumer. The next sections discuss this topic further.

THE POWER OF THE WORD

The word "sustainability" has become almost ubiquitous and yet it is very difficult to articulate a consensus meaning (Acken & Bingham, 2011). One issue with "sustainability" is that it has evolved more power than just the word itself. It could be described as a social or environmental movement, a lifestyle, a business strategy, a philosophy, an image, a perception on climate change, a governmental approach as well as many others. It recognizes challenges in the areas of poverty elimination, population stabilization, female empowerment, employment creation, human rights observance, and opportunity redistribution, to name a few (Sillanpaa, 1998). The use of common words like sustainability are meant to network a community with collective power and are longer in duration than rare words (Hochhaus & Swanson, 1991). However the term sustainability also divides and paralyzes. And any word without a consensus meaning can be meant to be anything, as the following section means to demonstrate.

GREENWASHING

An increasing number of marketers target sustainability as a new marketing technique. New products are positioned on the basis of environmental appeal and green advertising is increasing as more manufacturers are informing their consumers about sustainable aspects of their products and services. Consumer cynicism about green products was exacerbated in the 1990s when many companies touted unproven green claims and tried to make unchanged products appear environmentally friendly in order to boost sales (Peattie & Crane 2005). Any short-term gains they received may have been offset by a long-term consumer mistrust of green marketing claims (Mendleson & Polonsky 1995). While the public concern for the environment seems to ebb and flow, it is increasingly important for today's corporations to maintain an environmentally-friendly image in order to retain public support and a loyal customer base (Montague & Mukherjee 2010).

Greenwashing has become a common term to describe the "act of misleading consumers regarding the environmental practices of a company or the environmental beliefs of a product or service" (TerraChoice Group Inc., 2009, p. 1). In the TerraChoice Group (2009) study, "The Seven Sins of Greenwashing", the company found that 98% of the companies they surveyed had committed at least one of their 'sins' (Montague & Mukherjee 2010).

In October 2012, the Federal Trade Commission (FTC) released revised guidelines for the use of environmental marketing claims in order to reduce confusion, increase consumer confidence, and give marketers guidance to help them avoid making misleading environmental claims.

In the area of "General Environmental Benefit", the FTC warns that marketers should not make unqualified general environmental benefit claims, stating that they are difficult, if not impossible, to substantiate. The examples of terms used to demonstrate included such terms as "green" and "eco-friendly." The Commission's consumer perception study found that 61 percent of respondents viewing an unqualified "green" claim believed the product is made from recycled materials; 59 percent believed the product is recyclable; 54 percent believed the product is made with renewable materials; 53 percent believed the product is biodegradable; 48 percent believed the product is made with renewable energy; 45 percent believed the product is non-toxic; and 40 percent believed the product is compostable. Averaging across these seven attributes, 52 percent of respondents viewing an unqualified "green" claim stated that the claim definitely or probably suggested that the product had these specific green attributes.

Of respondents viewing an "eco-friendly" claim, 57 percent believed the product is recyclable; 56 percent believed the product is made from recycled materials; 55 percent believed it is biodegradable; 51 percent believed it is made with renewable materials; 47 percent believed it is non-toxic; 43 percent believed it is compostable; and 36 percent believed it is made with renewable energy. The average value was 49 percent. Moreover, 27 percent of respondents interpreted the unqualified claims "green" and "eco-friendly" as suggesting the product has no negative environmental impact (FTC, 2012).

The analysis of the term "sustainable" brought about completely different findings and results. The Commission found evidence that consumers view sustainable claims to be different from the general unqualified environmental claims such as "green" or "eco-friendly." The consumer perception evidence gathered by the FTC indicated that the word sustainable has no single environmental meaning to a significant number of consumers. It also does not follow that it necessarily implies non-environmental characteristics such as being durable or long-lasting. Consumers were less likely to believe that unqualified sustainable claims suggested specific, unstated environmental benefits than respondents who viewed "green" and "eco-friendly" claims. For example, while, on average, 52 percent of respondents viewing unqualified "green" claims, and 49 percent of respondents viewing "eco-friendly" claims, stated that these claims suggested that the product had several specific environmental attributes, only 17 percent of respondents viewing "sustainable" claims stated the product had these attributes (FTC, 2012, p. 126).

Therefore, the Commission opined as follows:

> "The Commission, however, is unable to provide specific advice on sustainable as an environmental marketing claim. Unlike other claims we tested, the term contains no cue alerting consumers that it refers to the environment. If used in combination with environmental terms and images, consumers may perceive "sustainable" as an environmental claim. However, given the diversity of possible phrases and imagery, testing the claim in context was not practical. Therefore, the Commission lacks a sufficient basis to provide meaningful guidance on the use of sustainable as an environmental marketing term" (FTC, 2012, p. 127).

The Commission may have also specifically ignored guidance on the term "sustainable" given the propensity for it to be utilized in conjunction with a company's communication of its philosophy and image. Both of these may fall within the purview of protected speech under the First Amendment. And since the term sustainable can (in any given context) contain elements of both commercial and non-commercial speech, the U.S. Supreme Court has previously indicated that such incidences must be decided on a case by case basis using a "totality of the circumstances" test (Riley v. Nat'l Fed'n of the Blind, 1988). It was enough of a caveat for the Federal Trade Commission to refrain from regulating the term and for it to survive in our vernacular as a powerful and confusing term.

CONCLUSIONS

Ancestral concepts of the term sustainability date back to the days of conservationism and environmentalism. Each decade witnessed of a progression of meanings, but most environmentally oriented. Only with the marriage of ecology, economy and human rights did the present day concepts of sustainability, e.g., the TBL come to fruition. This marriage mandated the survival of future generations. Today many similar terms share similar meanings which we refer to as sustainability's "kissing cousins." However, as the term came to represent increased stakeholder responsibility, it also grew in power and complexity. Its ubiquitousness was coupled with a lack of a consensus meaning. It became a very large concept, capable of different meanings to different entities. As more of these entities self-identified with the term by adopting it as "image" or philosophy, it trended beyond its 1987 U.N. definition. Consumers no longer necessarily link it to the environment or economy or human dignity. Paradoxically, it could now be a furtive area for greenwashing.

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APPENDIX

Figure 2

Sustainability wheel of similar and related terms (adapted from Signitzer & Prexl, 2008, p. 4)

Table 1

Definitions of sustainability and related terms

Author	Article/Book Title	Terms	Definitions
United Nations World Commission on Environment and Development (UNWCED, 1987)	*The Brundtland Report* aka *Our Common Future*	**Sustainable Development**	Is development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 8).
Vesilind et al., (2006)	The moral challenge of green technology	**Sustainability**	"Refers to the stage of economic and technical development where the use of material and energy is at a steady state" (p. 23).
Colbert & Kurucz (2007)	Three concepts of triple bottom line business sustainability and the role for HRM	**Sustainability**	Sustainability "implies a simultaneous focus on economic, social, and environmental performance" (p. 21).
SHRM, BSR, & Aurosoorya (2011)	Advancing Sustainability: HR's role	**Sustainability**	Defined "as the commitment by organizations to balance financial performance with contributions to the quality of life of their employees, the society at large and environmentally sensitive initiatives" (p. 5).
Fox (2008)	Get in the business of being green:	**Corporate/Organizational Sustainability**	Sustainability from a business perspective as the "organizations ability to make a profit without sacrificing the resources of its people, the community and the planet" (p. 46).
Dyllick and Hockerts (2002)	Beyond the business case for corporate sustainability	**Corporate/Organizational Sustainability**	Defined as meeting the needs of all stakeholders (directly and indirectly) without compromising its ability to meet the needs of future stakeholders.
Vesilind et al. (2006)	The moral challenge of green technology	**Green Technology**	"Recognizes that engineers and scientist are central to the practical application of the principles of sustainability to everyday life" (p.23).
Jenkins (2006)	Small business champions for corporate social responsibility	**Corporate Social Responsibility (CSR)**	CSR can be "seen as an 'all embracing' idea that concerns having an awareness of the impacts of the business, and wanting to have a positive impact on a wide range of stakeholders through the business decisions that are made" (p. 245).
Van Marrewijk (2003)	Concepts and definitions of CSR and corporate sustainability	**CSR and Sustainability**	In general, corporate sustainability and, CSR refer to company activities – voluntary by definition - demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders" (p. 102).
Reilly (2009)	Communicating sustainability initiatives in corporate reports: Linking Implications to organizational change	**CSR**	CSR "addresses the notion of an entity's accountability to its stakeholders in terms of social and ethical dimensions as well as environmental outcomes" (p. 33).

Snider, Hill, and Martin (2003)	Corporate social responsibility in the 21st century: A view from the world's most successful firms	**CSR**	CSR construct is the relationship between business and its larger role with society and environment.
Kaur (2011)	Impact of human resource factors on perceived environmental performance: An empirical analysis of a sample of ISO 14001 EMS companies in Malaysia	**Environmental management systems (EMS)**	EMS is defined as a "framework for continual environmental improvement through effective management of an organization's environmental impacts" (p. 211).
The Society for Human Resource Management (SHRM, 2008)	Green Workplace	**Green Organization/ Workplace**	Defined as an environmentally sensitive, resource efficient and socially responsible workplace.
Shrivastava & Hart (1992)	Greening Organizations.	**Green Organization/ Workplace**	Seeks to "minimize the use of virgin materials and non-renewable forms of energy" (p. 186).
Elkington (1997)	*Cannibals with Forks: the Triple Bottom Line of 21st Century Business*	**Triple Bottom Line (TBL)**	In order to reach sustainability, one must achieve not only economic bottom line (profit) performance but environmental (planet) and social (people) performance as well (Elkington, 1997).

Table 2
Contextual use of Sustainability in Top 20 Fortune Companies

	Fortune Top 30 Company	Industry	Sustainability and other terms used	Meaning of that term And/or the use
1	Exxon Mobil	Energy	• Sustainability	"At ExxonMobil Lubricants & Specialties (L&S), we recognize the importance of addressing sustainability in today's global marketplace. We manage this challenge as part of our focused commitment to act as a responsible employer, business partner, and neighbor. Putting sustainability in motion means we follow a holistic approach across our products, processes, and people" (Exxonmobile.com, 2012).
2	Wal-Mart	Retail	• Environmental Sustainability • Global Responsibility	"Environmental sustainability has become an essential ingredient to doing business responsibly and successfully. As the world's largest retailer, our actions have the potential to save our customers money and help ensure a better world for generations to come" (Walmart.com, 2012).
3	Chevron	Energy	• Sustainability	"As we assess the needs of each client, we design a comprehensive energy program from inception to completion, encompassing the whole site. Our services include: An Energy Assessment, Clean Energy Engineering and Sustainable Design, Equipment Procurement, Educational Program Development, Communication Outreach, and New Technologies" (chevron.com, 2012).
4	Conoco Philips	Energy	• Sustainable development • Sustainability	"For ConocoPhillips, Sustainable Development is about conducting our business to promote economic growth, a healthy environment and vibrant communities, now and into the future. Our approach to sustainable development stems from our fundamental intent to prosper as a business and to meet the energy needs of present and future generations" (conocophillips.com, 2012).
5	General Motors	Automotive	• Environment • Environmental Impact • Sustainability	Our Commitment to the environment: "We're committed to continuous improvement as we reduce the environmental impact of our vehicles and facilities. We're making progress—through vehicles live the Chevrolet Volt, our 100 landfill-free facilities and by receiving Energy Star's Partner of the Year award for energy efficiency" (GM.com, 2012).
6	General Electric	Electronics	• Sustainability • Green	"Balancing the needs of diverse stakeholders can seem impossible – regulators (and our own sense of stewardship) demand reduced impact on our environment; shareholders require that we protect their investment; and customers won't accept reduced quality or increased costs. Individual initiatives seem to offer a path to improvement on a specific front – energy reduction, water optimization, or emission/effluent reductions – but understanding whether all other priorities are balanced is difficult at best" (GE-ip.com, 2012).

7	Berkshire Hathaway	Insurance	N/A	N/A
8	Fannie Mae	Banking	• Sustainability	"Using sustainability principles to improve rental housing and preserve affordability" (Fanniemae.com, 2012).
9	Ford Motor Company	Automotive	• Sustainability • Climate Change • Environment	We promote sustainable business practices in our own global operations and throughout our entire supply chain. Ford's suppliers are critical allies in helping our Company to achieve success in the marketplace and meet our sustainability goals. We promote long-term relationships with our suppliers and seek alignment with them on sustainability-related issues such as greenhouse gas emissions management and human rights. Around the world, we are reducing the environmental impact of our products and facilities, supporting positive social change and ensuring economic viability for long-term growth. Water availability, quality and access are critical global issues that extend well beyond environmental concerns. It is vital for health, indispensable for agriculture and biodiversity, necessary for industry and critical for community development. The need for clean water cuts across all social, economic, environmental and political boundaries. (Ford.com, 2012).
10	Hewlett-Packard	Technology	• Environmental Sustainability • Global Citizenship	"HP's commitment to environmental sustainability helps guide the direction of our company, positions us as a leader in our industry, and drives the innovation of new products and solutions that make a positive impact in the world" (hp.com, 2012).
11	AT&T	Technology	• Environment • Sustainability	"Sustainability is a way of doing business that understands our company's impact on society, and the impact that social issues have on our business. How we integrate the concerns of our communities into our business strategies helps strengthen and create shared value among us. Sustainability can't be defined as a single program or token initiative. It's an explicit and defined aspect of who we are as a company and how we run our business. It's an obligation to operate better and smarter — and run our business in a way that makes sense for both our company and our world. AT&T organizes our sustainability initiatives into three focus areas, which reflect the issues we feel embody our commitment: People and Community, Environment, and Technology" (att.com, 2012).
12	Valero Energy	Energy	• Environment • Environmental Stewardship • Green	Valero makes significant environmental improvements, demonstrating its commitment to a cleaner environment. Valero has achieved significant emission reductions and made improvements in producing cleaner-burning gasoline, diesel and ethanol-blended fuels. Valero understands the importance of pursuing alternative energy opportunities and using latest technologies to protect the environment. Valero values recognition for its environmental stewardship" (Valero.com, 2012).

13	Bank of America Corporation	Banking	• Sustainable Business • Sustainability • Environmental Commitment • Green	"Today, as we make a transition to an environmentally sustainable economy, everyone is going to be impacted - directly or indirectly. Business success will depend upon a company's ability to adapt to the challenge of global climate change and its related issues of energy, forests, water and biodiversity. Bank of America believes we can be both sustainable and profitable, and we want to play a role in helping to lead the way into this new, sustainable and profitable era" (Bankofamerica.com, 2012).
14	McKesson	Health care services	• Corporate Citizenship • Environmental Sustainability • Green initiatives	"Today's most pressing environmental challenges impact all of us, both as individuals and as business leaders. McKesson's dedication to creating a sustainable healthcare system is mirrored by our commitment to run our operations in an environmentally sustainable way, both stem from our commitment to help create a healthier world. We aim to conduct business in a way that's sustainable for the company and the planet. By integrating environmental sustainability principles into the way we do business, we hope to ensure a healthy, vibrant company and planet for generations to come. McKesson Employee Environmental Councils green initiatives focus on: Transportation & Emissions, Recycling & Waste, Energy Efficiency, and Encouraging Sustainability" (McKesson.com, 2012).
15	Verizon Communication	Telecommunications	• Corporate Responsibility • Sustainability	"We are committed to minimizing our environmental impact and to finding sustainable solutions for customers that accelerate the transition to a low-carbon economy" (Verizon.com, 2012).
16	J.P. Morgan Chase & Co.	Banking	• Corporate Responsibility • Sustainability • Go green • Greening • Carbon footprint	"We take seriously the need to manage our use of resources. Leading by example matters. Find out what we are doing to shrink our environmental footprint: Reducing our Emissions, Greening JPMorgan Chase's World Headquarters, branches and supply chain" (jpmorganchase.com, 2012).
17	Apple	Computers	• Environment	"Responsible manufacturing: Apple is committed to ensuring that working conditions in our supply chain are safe, workers are treated with respect and dignity, and manufacturing processes are environmentally responsible." Apple reports environmental impact comprehensively: We do this by focusing on our products: what happens when we design them, what happens when we make them, and what happens when you take them home and use them. Total Footprint = Manufacturing + Transportation + Product Use + Recycling + Facilities" (Apple.com, 2012).

18	CVS Caremark	Drug Stores	• Corporate Responsibility • Footprint • Sustainable Solutions • Environment	"It is now standard procedure, for example, to continually assess our operational footprint and create more innovative, sustainable solutions to address our impact on the environment. We know, for instance, that the energy used to power our more than 7,300 retail pharmacy locations accounts for the vast majority of the company's total energy use and is our most significant environmental impact. So, in 2011, we implemented various measures aimed at reducing energy use in our stores without compromising the customer experience. We also value openness with our customers, stakeholders and the communities within which we do business" (cvscaremark.com, 2012).
19	IBM	Information Technology Services	• Green • Energy and Environment • Stewardship • Sustainability Solutions	"At IBM, our approach is twofold: we are working to make our existing products and processes more efficient for both the environment and for business, while also developing new innovations that can help the world become smarter, drive economic and operational improvements, increase accountability and lessen environmental impact. Today's energy—and climate—related issues are at the top of our strategic agenda. IBM solutions can help customers reduce costs and systemically minimize energy, water, carbon emissions and waste. IBM is helping customers to become more energy efficient, implement new ways to source, manufacture and distribute goods and services in a more sustainable manner, enable safe and renewable sources of energy and manage resources at a macro level, transforming entire industries. IBM takes a holistic approach to our planet's challenges that combine our innovative technology, deep business insight, and industry expertise. Together, we can enhance the sustainability of business-and our planet" (ibm.com, 2012).
20	Citigroup	Banking	• Environment • Sustainability • Carbon Footprint • Green	"We believe that working to promote sustainability — both for our firm and our client base — is good business practice. This belief, reflected in our dedication to reducing our operational footprint, actively managing environmental and social risks, and financing environmental business opportunities, is aligned with and contributes to Citi's goal to create the best outcomes for our clients and customers with financial solutions that are simple, creative and responsible" (Citigroup.com, 2012).

OUTCOMES ASSESSMENT VIA RUBRICS: A PILOT STUDY IN AN MIS COURSE USING A PROCESS ORIENTED APPROACH

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ABSTRACT

Outcome assessment is a focal point at progressive colleges and universities looking to establish a new process oriented paradigm to measure quality and program goal attainment. Applying outcomes assessment as a paradigm, the authors have initiated a series of projects and papers that apply psychometric research techniques in validity theory as a guide to answering difficult questions such as "does course pedagogy enhance critical thinking, does collaboration improve student performance, and do outcomes assessment efforts actually measure and validate quality improvements and goal attainment?" While these difficult questions demand to be answered, the effort on the part of faculty and administrators is daunting and the available resources are few. Thus, the authors have embarked on developing a computer-based system to assist in collecting, measuring, and validating outcomes assessment using a variety of rubrics, including custom-derived ones; and to support the shift from functional oriented course development to a process oriented approach. The experimental design is interesting because the actual measure under scrutiny is the assessment of student submissions by faculty who actually teach the course. The test instrument is a problem solving rubric; however, the authors plan to expand this effort to other rubrics. Finally, statistical findings are reported, but they are preliminary because statistical validation is not the primary focus of this paper.

INTRODUCTION

This paper addresses process issues related to outcomes assessment. The authors' previous outcomes assessment research addressed cognitive issues related to critical thinking and collaborative learning (Eddins and Strouse 2011, Strouse and Eddins 2010). While these are pressing concerns, the effort is demanding. Many faculty members will be daunted by both the effort and the domain knowledge required for developing and testing hypotheses about better teaching. Leading to the question, how can a faculty member who thinks this is a function more appropriate for the administration's personnel be persuaded to participate? So, the question at hand is, can the goals of the faculty and administration be combined? That is, can we research outcomes assessment issues that pertain to teaching better, while supporting an educational institution's goals of satisfying external stakeholders that we are attaining the level of teaching quality promised?

Further, many educational institutions are new to outcomes assessment. Granted, most colleges and universities will have some support for institutional research in their budgets. However, there will be little room in the institution's budget to support individual faculty who wish to research and apply what the literature indicates are better pedagogies.

Recently, because of pressure from state governments, accreditation organizations, and other stakeholders, colleges and universities are moving toward establishing credible outcomes assessment efforts that involve both faculty and administrators. With that in mind, we wish to thank the Dean of Academic Affairs, Dominic DelliCarpini for his efforts to establish a meaningful outcomes assessment program at York College of Pennsylvania. He has led the drive by setting up committees of interested faculty and administrators, and provided support for faculty in the form of sabbaticals and research assistance.

The question, then, is how to institutionalize new processes that are long lived and productive? Given the authors' background, a natural approach is the development and application of a computer-based tool or system that promotes change, and become an "agent" of change. The term in the computer information system literature is "structuration" (Stones, 2005). This paper describes how that tool and process may be implemented, while providing a statistical methodology that moves toward establishing a process oriented paradigm to measure quality and program goal attainment.

For our inspiration, research had indicated that there are several movements designed to establishing on-going process improvement. The choice made is the process improvement manifesto supported by Carnegie Mellon's Software Engineering Institute known as CMMI-SVC (Forrester et al, 2011). Without describing the CMMI-SVC in detail here, it furnishes processes for Incident Resolution and Prevention, Service Delivery, Service System Development, Service System Transition, and Strategic Service Management. However, within the

CMMI-SVC, the notion of outcomes assessment seems best embodied in the process called Service System Development. The definition follows.

> "The purpose of Service System Development (SSD) is to analyze, design, develop, integrate, verify, and validate service systems, including service system components, to satisfy existing or anticipated service agreements" (Forrester et al, 2011, p561).

DISCUSSION

This section is based upon the SSD's description of the basic activities which should be addressed in an outcomes assessment effort.

Analysis and Design

Figure 1 in the Appendix gives the use cases which acted as the requirements of the tool and/or process to be established. There are two roles, faculty and administrative assistant. The use case that best describes the experimental process in this paper is Apply Rubric. The description follows.

> "Each faculty member will use the system to apply the rubric to student responses, both pre and post. The faculty member will cycle through the set of student responses to tests, case projects, or other assessment instruments, and select the appropriate milestone for each rubric criterion. The system will not display the student identifier or the type of the response (pre or post) as the faculty member cycles through the complete set of responses."

The Apply Rubric description indicates a pre/post experimental design, and that the dependent variable is the faculty response--the assignment of a level of attainment for each criterion comprising a given rubric. The rubrics can be found at the Association of American Colleges and Universities website (AACU 2011). They provide a collection of 15 rubrics in areas such as critical thinking, civic engagement, and ethical reasoning, to name a few. How one of these rubrics might be employed (Problem Solving) is the focus of this paper.

Another major requirement area involves the data to be collected for analysis. See Figure 2 of the Appendix for the Logical Data Model of the Faculty Rubric Evaluation Demo. Insight for creating the logical data model comes from Haga et al (2010).

Develop

A software system was developed using Microsoft Visual Studio, C# and .Net (dot Net), running over a Microsoft Access database to facilitate the evaluation and data collection process. The database was pre-loaded with minimal data regarding the student submissions that were to be evaluated (course number, student ID, path name to where the student submission was stored and whether or not the related document was a pre or post submission). The basic relationships among the data are shown in Appendix Figure 4.

The software tool menu system, displayed in Appendix Figure 5, shows the relationship and interactions of the software in support of the use case diagram outlined in Appendix Figure 1. The various forms support the 1) creation of rubrics by selecting any of the criteria from the AACU rubrics, 2) creating and selecting a custom rubric, 3) creating and selecting custom criteria, and/or 4) creating and selecting modified criteria. These capabilities allow faculty and departments the greatest flexibility in creating, selecting, combining and modifying rubrics and criteria to specifically establish, measure and track assessments. Specific criteria can be included or excluded to create the exact composite level of granularity desired for any rubric.

Appendix Figure 6 shows the form used to evaluate student submissions. This form supports multiple evaluators who can evaluate multiple courses using course rubrics created for assessing the appropriate level for each criterion in a rubric. The form allows the evaluator to display the submission of a specific student in a second scrollable window containing the submission. Then, the form walks the evaluator through each criterion as the evaluator assigns the appropriate level of student attainment for each of that specific rubric's criteria (See Appendix Figure 7 for an image displaying the form and part of a student's submission while an evaluation is in process.). This iterative process continues until all the criteria have been evaluated under the rubric for each student submission. The software provides positive feedback throughout the process by indicating the number of criteria remaining, the current criterion name and number being evaluated. When all student submissions have been completed the software indicates the evaluation is finished. Additionally, the evaluation process may be stopped at any time and can be restarted and completed at the evaluator's convenience.

Integrate

Activities in this area are related to establishing the institutional will to conduct outcomes assessment processes as an on-going collaboration between faculty and administrators. First, the Academic Dean as the primary stakeholder set the stage for the use of rubrics by conducting several meetings of faculty and administrators. These meetings, known as the Assessment Program Learning Committee, focused on the critical thinking rubric from AACU but latitude was given to change the rubric by rewording and/or employing additional criteria. For the research in this paper, the problem-solving rubric was adopted primarily due to the Vision Statement of the Business Administration Department. That vision is at the top of all syllabi of the department and is repeated below.

> "The Department of Business Administration at York College will be recognized as a leading business educator in the Mid-Atlantic region. Our business students will be regarded as the best and most sought after graduates due to exceptional academic preparation, **professionalism and integrated business problem-solving experiences**."

By focusing on the notion of professionalism and problem solving in the syllabus of IFS305-Management Information Systems, interested stakeholders are guaranteed a potential feedback mechanism into college activities related to outcomes assessment. Further, the experimental nature of the project should provide a sense of legitimacy or face validity in the eyes of the research community while satisfying concerns related to current service-agreements specified in the syllabus.

Verify and Validate

As alluded to above, face validity is an important first step in verification and validation. That is, does the test instrument appear, "on its face," to obviously measure what it is supposed to measure? Face validity is a cursory feature of a test item which is generally not argued at great length. But, by tying the problem-solving rubric to the vision statement, it should confirm that a program unit is a headed in the correct direction. The reader can find the problem-solving rubric employed in the experimental design of this paper in the Appendix in Figure 3 – AACU's VALUE Rubric for Problem-Solving.

Next, what can be said about the overall validity of the approach described here? Content validity is a process involving subject matter experts and other stakeholders who develop a test item based upon what they think the content of the target behavior will be and then applying statistical techniques beyond those applied by face validity. The first part of the preceding statement is what the AACU did. They assembled teams of academic experts and others to develop the VALUE rubrics. This paper will illustrate the application of statistical techniques to show that the rubric does measure the content of the target behavior of a professional engaged in problem-solving activities.

Construct validity is the notion that a test instrument supports or is designed around a higher-level cognitive skill such as critical thinking, problem-solving, and ethical behavior, to name a few. While the current research design does not directly support construct validity the interested reader should review previous research (Eddins and Strouse 2011, Strouse and Eddins 2010).

Finally, another area of concern in verifying a process in this study is inter-rater reliability. In fact, the AACU recognizes this issue as a major concern. Their website states that "Reliability scores are being developed to assess the degree of shared understanding of rubrics across and within disciplinary areas" (AACU 2011). This research incorporates an inter-rater reliability process in its statistical design.

EXPERIMENTAL DESIGN

The study is a pre-post repeated measure design utilizing selected criterion from AACU's problem solving value rubric. Students were given business case problems involving decision support systems as assignments and asked to create professional memos that 1) indicated a clear and insightful problem statement outlining all evidence and relevant contextual factors, 2) proposed alternate solutions to specific questions about the case study taking into consideration business, logical, and cultural dimensions. Additionally, students were requested to include a final paragraph that evaluated their solution and make recommendations for future improvements to the decision support system.

Four of these assignments were given but only the submissions for the first and fourth assignments were selected for evaluation purposes. Rational for selecting the first submission was to establish two things--1) threshold capabilities of the student before completing the course, and how well, in general, previous coursework had prepared students for work involved in this course, and 2) the final, fourth, case was selected to assess the level of rubric criterion satisfaction after the application of treatment (having completed the course).

The repeated measure assessments of student submissions were recorded and each criterion level assigned was treated as Likert-scale ordinal data. Both nonparametric (Wilcoxon test) and parametric (*t*-tests) were run for comparison purposes to determine if a statistically significant difference would be exhibited at an alpha (α) level of 0.05 between pre and post submissions. Additionally, all evaluators' independent level rankings were examined to determine if any individual evaluator's criterion-level assignments differed significantly from other evaluators (the examination of inter-rater reliability) using nonparametric (Kruskal-Wallis Chi Square statistic) and parametric (One-Way ANOVA) tests to determine if statistically significant differences between evaluators existed at an alpha (α) level of 0.05.

FINDINGS

The pre/post repeated measure evaluations of the chosen criteria from the AACU's problem solving value rubric are shown in Appendix Figure 8. The statistical comparisons were made using SPSS's nonparametric Wilcoxon test for differences and the parametric *t*-test for paired samples. The outcome of all the repeated measure statistical tests, both nonparametric and parametric, yielded the same statistical outcome. When comparing the combined pre versus post evaluations (Case #1 versus Case #4 memos) for all three criteria (overall comparison) the findings were statistically significant (nonparametric $Z_{STAT}=5.244$, $N=81$, $\alpha=0.05$, p-value=0.000 and parametric $t_{STAT}=6.402$, $N=81$, $\alpha=0.05$, p-value=0.000). It is hoped that researchers will accept that this approach supports content validity for this research.

Each chosen criterion within the rubric was also evaluated individually by comparing the pre and post student submissions both nonparametrically and parametrically. The results for the "Define Problem" criterion were statistically significant (nonparametric $Z_{STAT}=3.343$, $N=27$, $\alpha=0.05$, p-value=0.001 and parametric $t_{STAT}=4.284$, $N=27$, $\alpha=0.05$, p-value=0.000). Results for the remaining two criteria, Propose Solutions/Hypotheses and Implement Solution were also found to be statistically significant with nonparametric $Z_{STAT}=2.761$, $N=27$, $\alpha=0.05$, p-value=0.006 and parametric $t_{STAT}=3.217$, $N=27$, $\alpha=0.05$, p-value=0.003 and nonparametric $Z_{STAT}=2.959$, $N=27$, $\alpha=0.05$, p-value=0.003 and parametric $t_{STAT}=3.502$, $N=27$, $\alpha=0.05$, p-value=0.002 respectively (See the Pre versus Post Student Submissions table in Appendix Figure 8.). This finding is additional support for content validity.

The independent ratings from the three evaluators were then compared to determine if any individual evaluators were outliers and to validate the consistency of the levels assigned (inter-rater reliability). This was accomplished by comparing each evaluator's ratings against the other evaluators' ratings for both pre and post evaluations separately (the pre (Case #1) evaluations were compared and then the post (Case #4) were compared for each criterion). None of the comparisons were statistically significant at $\alpha=0.05$ for an $N=27$ (See the Evaluator Comparisons table in Appendix Figure 8.). Finally, it is hoped that the research community will conclude that the problem solving rubric is a reliable instrument.

CONCLUSIONS

The statistically significant findings of all the pre/post student submissions indicate that the methodology does in fact measure improvement in student problem solving capabilities. However, without established levels of performance goals for each criterion within a rubric it is impossible to determine if course, program and even organization-wide objectives are being attained over time.

Further, the failure to find significant statistical differences among professional evaluators (professors who teach the course) indicates that the methodology and subsequently the tool provide the level of inter-rater reliability as discussed above.

Therefore, the authors believe that outcomes assessment is akin to the process of service system development. The process of outcomes assessment is just that, an ongoing process similar to those assessment processes found in business. Since a "process" is defined as the value added transformation of inputs to outputs, utilization of a process approach to validation and verification with a focus on establishing levels of performance for courses in a program offering (multiple sections taught by multiple faculty for a common core of knowledge for instance) appears most appropriate. The ongoing process effort should include ongoing monitoring of goal and quality attainment, and it is argued that the methodology outlined here can be effective in supporting that process. Additionally, the ability to apply statistical process control techniques to the process of outcomes assessment enables the identification of current performance levels, the establishment of acceptable levels of performance, and the comparison of current and future performance levels to data collected sequentially over periods of time. It can also identify the opportunities to improve teaching processes while developing a historical perspective.

The authors feel that the implementation and use of the AACU's rubrics in a service system process oriented approach is both valid and beneficial. However, to make the application and use of the methodology worthwhile to the faculty who must use them, the process must be more than just valid and beneficial--it must be perceived by faculty users as providing them with specific meaningful, value-imbued feedback that exceeds the cost in both time and effort required to evaluate, collect, and assess the data. That is why the tool must be flexible and allow the creation of rubrics and criteria that can be custom tailored to satisfy the objectives and goals of the faculty. Faculty members want to know that the hard work they put into enhancing a course yields benefits which are useful to them. Also, they want to know if students entering their classes have been adequately prepared by previous coursework to enable the students to succeed in their downstream courses. Finally, they want to know that their efforts are yielding an acceptable level of student performance in higher level cognitive outcomes.

Future consideration should be given to applying this methodology and tool more broadly to both a greater number of students and to a variety of courses and/or programs of study. Additionally, consideration should be given to integrating faculty outcomes assessment efforts as described here with student course evaluations using the MSLQ cognitive scale and/or a collaboration scale (Eddins and Strouse 2011, Strouse and Eddins 2010).

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APPENDIX

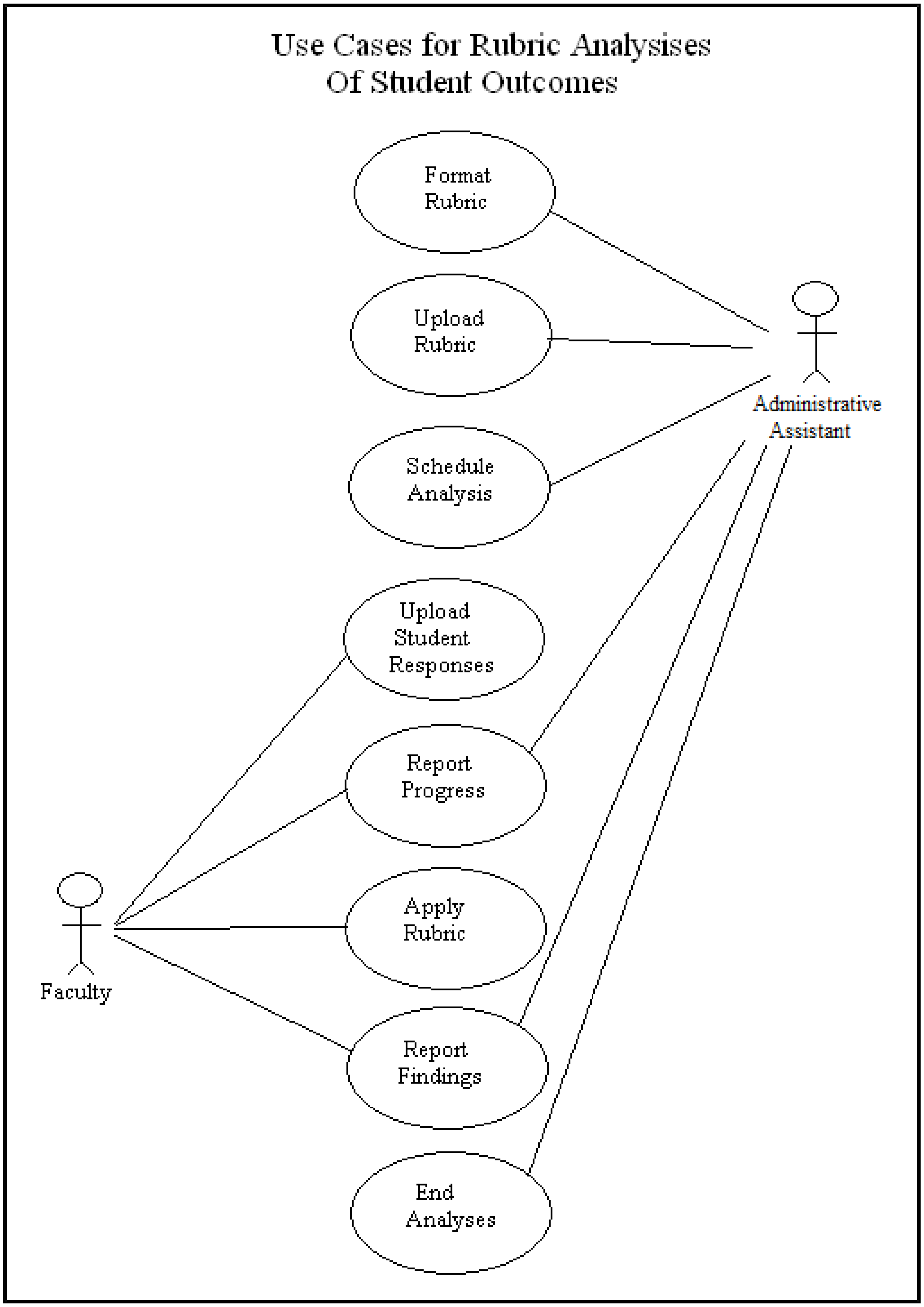

Figure 1 – Use Cases for Rubric Analysis of Student Outcomes

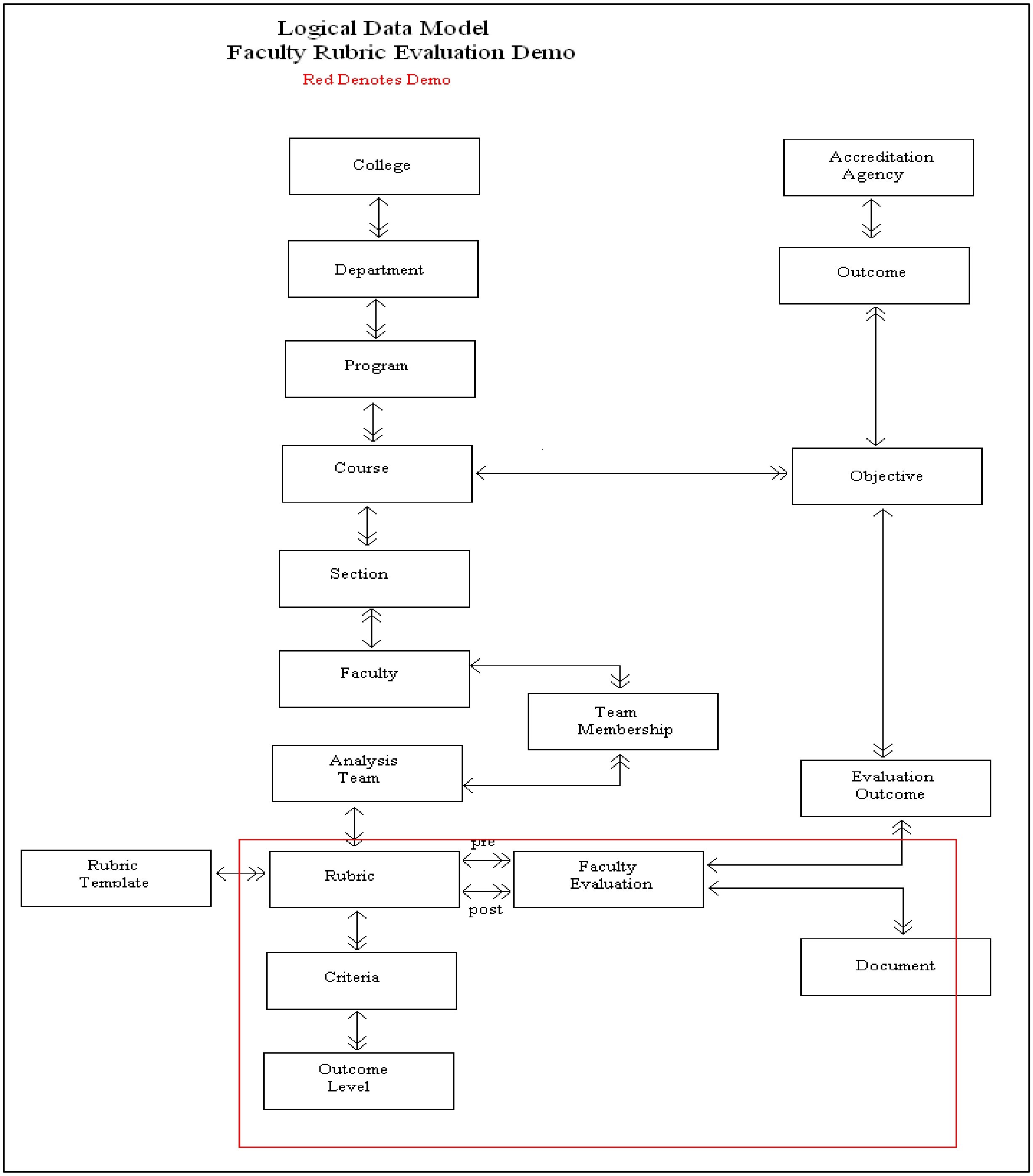

Figure 2 - Logical Data Model of the Faculty Rubric Evaluation Demo

	Capstone	Milestones		Benchmark
	4	3	2	1
Define Problem	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.	Begins to demonstrate the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
Propose Solutions/ Hypotheses	Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem. Solution/hypotheses are sensitive to contextual factors as well as all of the following: ethical, logical, and cultural dimensions of the problem.	Proposes one or more solutions/hypotheses that indicates comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as the one of the following: ethical, logical, or cultural dimensions of the problem.	Proposes one solution/hypothesis that is "off the shelf" rather than individually designed to address the specific contextual factors of the problem.	Proposes a solution/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.
Implement Solution	Implements the solution in a manner that addresses thoroughly and deeply multiple contextual factors of the problem.	Implements the solution in a manner that addresses multiple contextual factors of the problem in a surface manner.	Implements the solution in a manner that addresses the problem statement but ignores relevant contextual factors.	Implements the solution in a manner that does not directly address the problem statement.

Figure 3 – AACU's VALUE Rubric for Problem-Solving

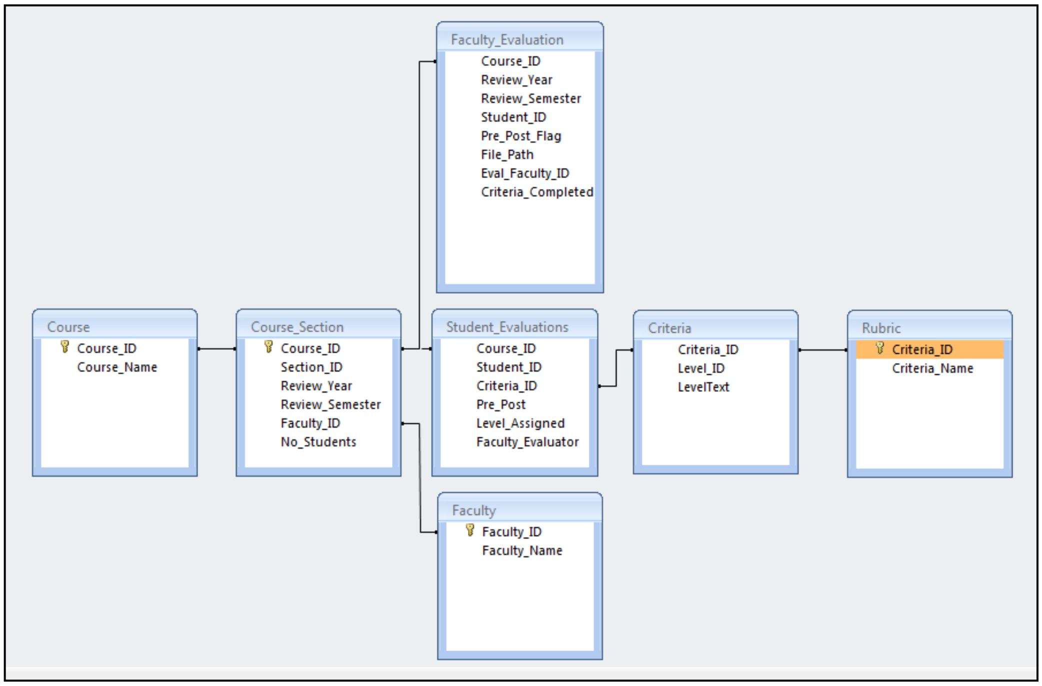

Figure 4 – Microsoft Access Relationship Diagram

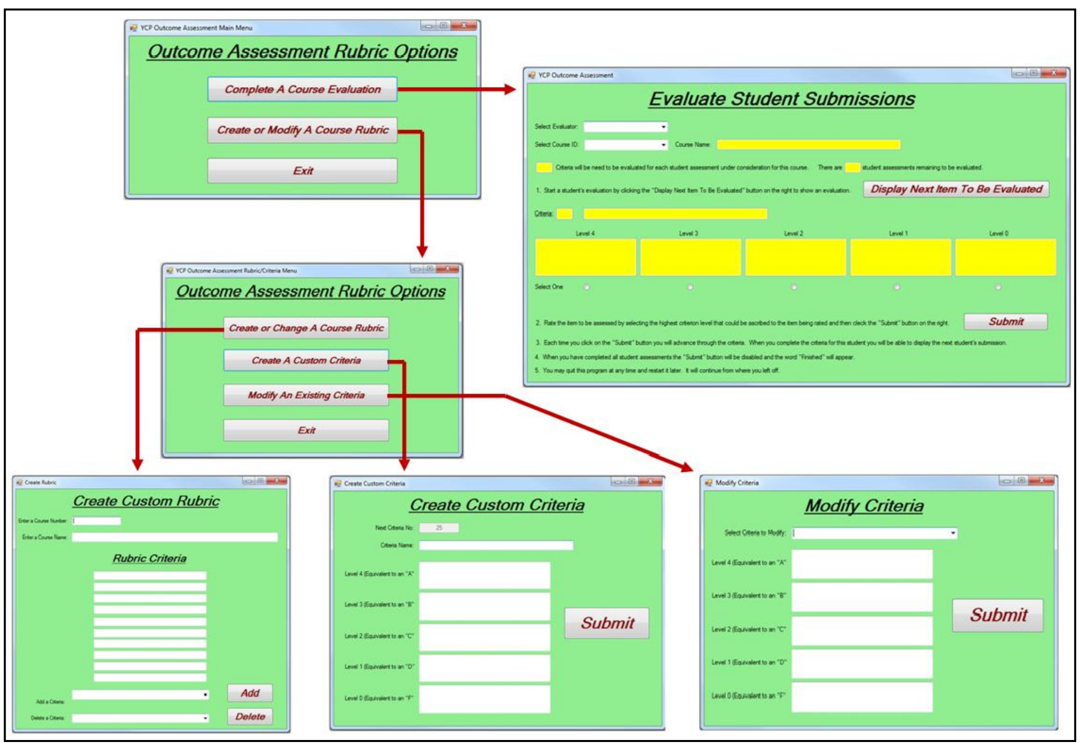

Figure 5 - Software Menu

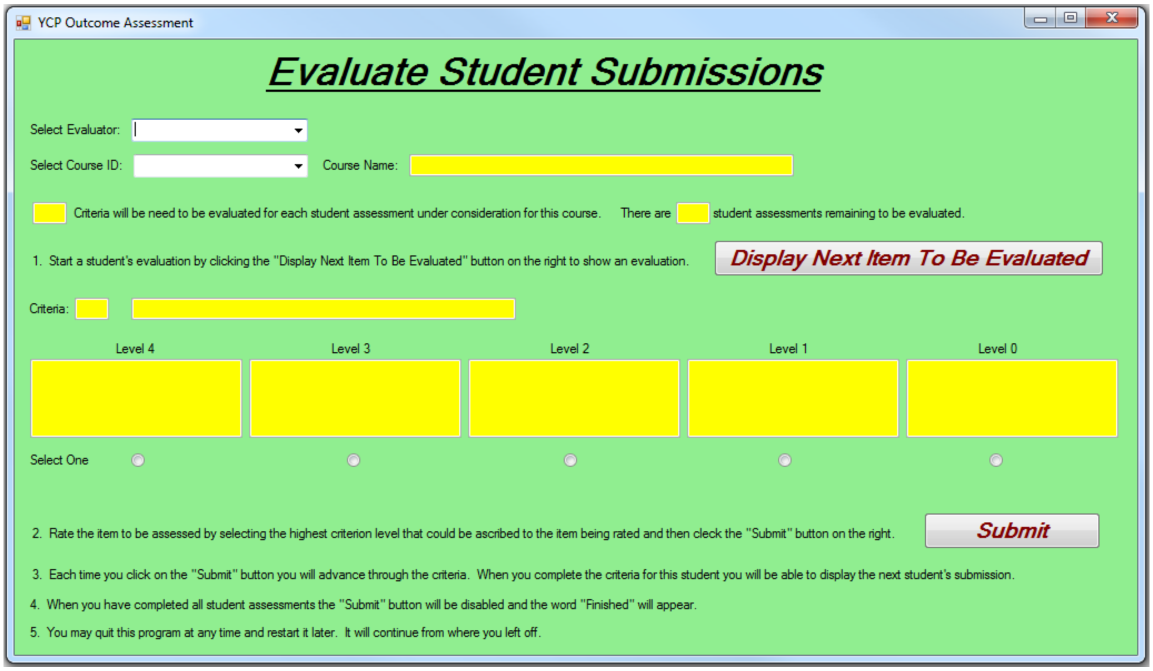

Figure 6 - Form to Evaluate Student Submissions

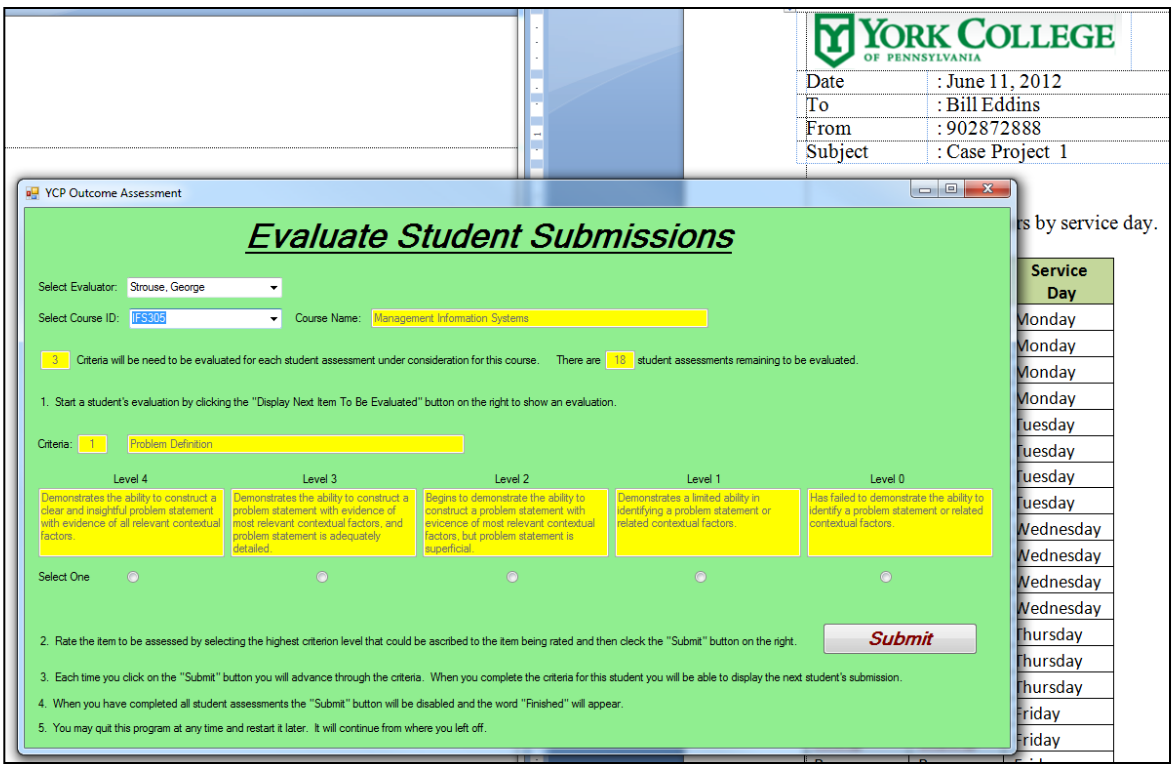

Figure 7 - Form to Evaluate Student Submissions Showing Criterion Levels and Student Submission Window

Pre versus Post Student Submissions

Nonparametric and Parametric Repeated Measure Comparisons

Pre/Post Comparison Category	Test Type	N	Statistic	Value	Significance
Rubric (All Criteria)	Nonparametric Wilcoxon	81	Z_{STAT}	5.244	0.000*
Rubric (All Criteria)	Parametric Paired *t*-test	81	t_{STAT}	6.402	0.000*
Define Problem (Criterion)	Nonparametric Wilcoxon	27	Z_{STAT}	3.343	0.001*
Define Problem (Criterion)	Parametric Paired *t*-test	27	t_{STAT}	4.284	0.000*
Propose Solutions/Hypotheses (Criterion)	Nonparametric Wilcoxon	27	Z_{STAT}	2.761	0.006*
Propose Solutions/Hypotheses (Criterion)	Parametric Paired *t*-test	27	t_{STAT}	3.217	0.003*
Implement Solution (Criterion)	Nonparametric Wilcoxon	27	Z_{STAT}	2.959	0.003*
Implement Solution (Criterion)	Parametric Paired *t*-test	27	t_{STAT}	3.502	0.002*

Evaluator Comparisons

Nonparametric and Parametric Independent Measures

Comparison Category	Test Type	N	Statistic	Value	Significance
Define Problem (Criterion) Pre	Nonparametric Kruskal-Wallis	27	X^2	2.055	0.358
Define Problem (Criterion) Pre	Parametric One-way ANOVA	27	F	1.185	0.323
Define Problem (Criterion) Post	Nonparametric Kruskal-Wallis	27	X^2	0.290	0.865
Define Problem (Criterion) Post	Parametric One-way ANOVA	27	F	0.122	0.886
Propose Solutions/Hypotheses (Criterion) Pre	Nonparametric Kruskal-Wallis	27	X^2	2.880	0.237
Propose Solutions/Hypotheses (Criterion) Pre	Parametric One-way ANOVA	27	F	1.595	0.224
Propose Solutions/Hypotheses (Criterion) Post	Nonparametric Kruskal-Wallis	27	X^2	1.724	0.422
Propose Solutions/Hypotheses (Criterion) Post	Parametric One-way ANOVA	27	F	0.503	0.611
Implement Solution (Criterion) Pre	Nonparametric Kruskal-Wallis	27	X^2	1.798	0.407
Implement Solution (Criterion) Pre	Parametric One-way ANOVA	27	F	0.972	0.393
Implement Solution (Criterion) Post	Nonparametric Kruskal-Wallis	27	X^2	5.394	0.067
Implement Solution (Criterion) Post	Parametric One-way ANOVA	27	F	3.310	0.054

Figure 8 - Results of Nonparametric and Parametric Statistical Assessments

RATIO ANALYSIS AT PRIVATE COLLEGES AND UNIVERSITITES IN PENNSYLVANIA

Michael J. Gallagher, DeSales University

ABSTRACT

This paper provides a comparison of financial ratios for the year ended june 30, 1997, to financial ratios for the year ended june 30, 2011, at 10 non-selective private liberal arts colleges and universities. Gallagher (1999) provided a summary of ratios at 34 private non-selective liberal arts colleges in pennsylvania and ohio for the fiscal years ended june 30, 1997, and june 30, 1996. The original paper was designed to discuss the changes to financial reporting because of the incorporation of financial accounting standards boards (fasb) statements 116, 117, and 124. This paper provides business officers at private colleges and universities benchmark comparisons of the changes in areas of financial measurement contained in the annual reports of these institutions including affordability, changes in expenditures, financing issues, revenue sources, and the ratios used by the united states department of education to measure the viability of the institutions.

INTRODUCTION

The financial plight of private higher education has long been a concern of trustees, as well as enlightened governors, higher education coordinating agencies, and legislators. Rudolph (1990) described private non-selective liberal arts colleges that were kept afloat financially by paying their professors with produce begged from neighboring farmers. Toward the end of the "baby boom" of the 1960s, experts expressed concern of an impending demise of the independent sector, due in part to declining high school graduating classes and the establishment of cheaper public college and university alternatives.

Clearly, upon entering the 1990s, the fiscal health of independent institutions of higher education continued to be of concern to federal and state policy-makers. In 1991, the Education Commission of the States weighed in with its report, *The Essential Role of Private Colleges and Universities,* co-chaired by John Ashcroft and Clark Kerr, former Chairman of the Carnegie Commission on Higher Education. This report strongly endorsed expanded state student financial aid programs, deeming the state's role in preserving private higher education to be important. The launching of the American Council on Education's "College is Possible" program, designed to allay concerns over the misinformation that parents and students receive regarding availability of financial aid for college, was directly due to heightened concerns over college affordability (American Council on Education, 1999).

Comparing the fiscal health of independent institutions of higher education has always been a concern of the trustees at their institutions. It has also become an on-going concern of forward-thinking state and federal policy-makers, and indeed, anyone who recognizes the vital role played by this nation's vibrant private sector of higher education.

The purpose of this article is to analyze the financial performance of 10 private colleges and universities in Pennsylvania and Ohio for the years ended June 30, 2011. This analysis will be compared to a 1999 (Gallagher) dissertation that analyzed the same colleges. The financial ratios for 1997 will be compared to the 2011 ratios to analyze the changes in the financial position and results of operations for these universities. The discussion of key implications and benchmark results will be useful for business officers in determining their comparable success in the previous 14 years.

Financial statements are important to trustees and institutions for a variety of reasons. First, in order to qualify as an institution that can administer federal student financial aid in this country, institutions submit information from their financial statements to the U.S. Department of Education and the Internal Revenue Service. Because student financial aid from all sources approached $60 billion in 1997-98, providing millions of students with both access and choice to the world's most diverse set of higher education institutions, virtually all independent institutions submit their financial statements (American Council on Education, 1999). Second, to qualify for state-supported student financial aid as well as to meet legal corporate registration requirements, most independent institutions submit their financial statements to the corresponding state's higher education coordinating agency in the state in which the institution is chartered. Third, donors are interested in the financial statements of institutions to see if the institution manages its resources well, and is worthy of receiving substantial endowment investments. Fourth, trustees care about being able to "benchmark" the relative performance of their

institutions to one another. Finally, since trustees are individually and collectively liable for inaccurate financial reporting, they have a legal obligation to foster accurate financial reporting that goes beyond their responsibility to provide good, sound management.
This paper will provide a framework of a methodology to interpret the results of operations and the financial position of these institutions. The ratios in Tables 1 – 8 measure affordability, changes in expenditures, changes in financing, revenue sources, and the financial viability of 10 private colleges and universities.

AFFORDABILITY OF BACCALAUREATE ARTS II COLLEGES AND UNIVERSITIES

The tuition costs at colleges and universities have been discussed because of the recent economic downturn and the budget deficits of the states. The general tone is that college costs are growing at a rate higher than inflation. President Obama stated on January 27, 2012, to an audience at the University of Michigan at Ann Arbor that "If you can't stop tuition from going up, then the funding that you get from taxpayers will be going down" (Obama, 2012). This statement by President Obama may be true of public universities and private, highly-selective liberal arts colleges. The colleges and universities in this study contradict President Obama's statement as it applies to non-selective liberal arts colleges and universities.

The results of Table 1 illustrate that the 10 "tuition driven" colleges calculate an increase in net tuition at a rate below the consumer price index from 1997 to 2011. Table 1 indicates that tuition increased 2.60 times, but the financial aid increased 3.27 times causing an increase in the net tuition to be 2.37 times. The consumer price index (CPI) during this same period of time (1997 -2010) increased 2.39 times (Annualized Growth Rates and Graphs, 2011). Public policy and public opinion should take note that the colleges, with a smaller amount of endowment support (as compared to the elite colleges) and with less support from the public (as compared to the public universities), have been able to control their increase in net tuition support from the students. This may be a result of increased market pressures caused by the changing landscape of higher education rather than a concerted effort to limit the increase in net revenue.

The result of the recent economic crisis has caused private colleges to limit increases in tuition pricing. "At the beginning of the economic downturn, many institutions increased tuition minimally or not at all, hoping to maintain their enrollments. The enrollments did remain stable, a result of both pricing and increases in acceptance rates to ensure that more students would enroll" (Nelson, 2010). These colleges and universities are also controlling costs at their institutions but the methods of controlling cost may be at the expense of the competitive advantage of the small liberal arts college.

EXPENDITURE INCREASES AT PRIVATE COLLEGES AND UNIVERSITIES

The tuition discount increase to 37% from 31% indicates that these colleges and universities are spending more on institutional financial aid and less on instructional and student programming. One of the ways that colleges and universities accomplish this reallocation of funding is by using additional part-time instructors and less tenure-track, full-time college professors. According to McArdle (2012), adjunct professors are helpful budget-wise as, "It's a pool of cheap labor for the university". The current economics of the non-selective liberal arts colleges require additional institutional financial aid to attract the freshman class along with retaining the returning students at their colleges and universities. They are finding ways to cut the budget in areas critical to the mission of the college.

The expenditures have increased 2.12 times over the 14-year period (Table 2). The increase of 12.7% ((2.39 – 2.12)/2.12) is less than the increase in the CPI from 1997 to 2010 of 2.39 times. "Colleges and universities in resource-poor institutions are likely to feel increasingly overwhelmed and demoralized by the growing institutional demand placed on them and their inability to identify sufficient resources to maintain traditional levels of support for undergraduate education" (Arum & Roksa, 2011). The data indicate that non-selective liberal arts colleges and universities are spending more of their resources in attracting students to their campuses by discounting tuition and cutting the expenses of their operations.

Table 2 indicates that the unrestricted net assets of these colleges and universities have not increased at the same rate as the increase in expenses. The average ratio of unrestricted net assets to expenses in 2011 has decreased from .92 in 1997 to .88 in 2011. The increase in expenditures was 2.12, but the increase in the unrestricted net assets was 1.97. This indicates that the colleges are spending less money on their mission and are losing the financial flexibility to change operations to more profitable areas because of the proportional decrease in the unrestricted net assets. Unrestricted net assets at a private institution act like the retained earnings of the corporation. The retained earnings of the corporation provide a buffer for entities to accumulate funds for purchasing property, plant and equipment or to take advantage of an opportunity with a high rate of return.

Table 3 indicates that these institutions may be funding the infrastructure at a higher level because the temporarily and permanently restricted net assets are growing at a rate higher than the inflation rate. The increase of 3.27 times of the temporarily and permanently restricted net assets is 1.3 times higher than the 1.97 times increase in unrestricted net assets. This may be caused by colleges and universities adding to the infrastructure rather than carrying the cost savings of reducing expenditures to the unrestricted funds. Institutions may be spending less on salaries and other operating costs but may be adding buildings and facilities to remain competitive. Standard and Poor's reported in 2006 a university construction boom and described this increase as an arms race. The implication is that the spending was tangential to their educational mission and expensive to build and maintain (The Economist, 2012).

The "arms race" metaphor may apply to the selective colleges and universities but it may be survival for the colleges in this study. These colleges must compete with both institutional financial assistance and by providing the facilities that will attract students to their institutions. The result is better facilities, but at the expense of keeping the current facilities viable and the ranks of the professoriate strong.

FINANCING OF COLLEGES AND UNIVERSITIES

The colleges and universities in this study illustrate the increased construction on the campuses of the private institutions especially student housing options and fitness facilities. Each college needs to add or update their living and recreational facilities to keep up with the other colleges who are also adding to the infrastructure. These colleges are building to stay competitive when a high school senior tours the campus. The fitness facilities and new living space for the next generation of students is increasingly being built with new debt. Table 4 and 5 illustrate that the unrestricted net assets and the total net assets of these universities are decreasing as compared to the debt of the colleges. The unrestricted net assets decreased from 1.62 times to 1.50 times the amount of debt and the total net assets decreased from 2.81 to 2.60 times the amount of debt.

The long-term debt increased 2.48 times from 1997 to 2011. This increase is higher than the consumer price index (CPI) increase of 2.37 times (Annualized growth rates and graphs, 2011). The increase in unrestricted net assets (1.97) and total net assets (2.32) illustrate an increase in the net asset base at a rate that is lower than the CPI and more importantly at a rate significantly lower than the increase in the debt of the colleges and universities. The net assets of the not-for-profit are similar to the owners' equity of the for-profit corporation because it is the portion of the assets of the entity that is not claimed by the creditors. This would mean that these institutions have increased risk caused by a higher asset base.

The increased building on campuses may come at the expense of the operating budgets of the institution, but the buildings are built to attract donations and students. This increase in building is attracting the attention of the bond rating agencies and the federal government. Johnson (2012) noted, "They get very concerned when they see a college our size doing this much building at one time." The private college and university sector may experience their own housing bubble as they continue to build facilities (many funded by donors) on their campuses with the hope of adding to their revenue base by attracting more students and donors. The donors want their name on facilities, but the deferred maintenance grows because the institutions do not have the operating budget to run their existing facilities, and the new facilities will add to this burden. The increase in building is increasingly going towards student housing and fitness facilities.

The "arms race" is evident in the building of fitness facilities or adding to the existing facilities. Colleges and universities are building architecturally-beautiful facilities with climbing walls, fitness rooms for aerobics along with self-defense classes. These institutions must have these facilities because their competition has built or is in the process of building a new fitness building. These fitness rooms have TVs on the treadmills, juice bars for socializing after your workout or instead of the workout (Recreation Management, 2012). Another reason for the increase in the fitness facilities is that many of the colleges in this study rely on sports programs to recruit their freshman class. These sports teams need a place to prepare for their sports seasons. The spring season requires indoor facilities because the start of the season is February and March. A time of the year that may make outside practices impractical.

The building of student living facilities contributes to the debt load and the building on college campuses. Colleges competing for students are constructing better student housing to attract the freshman class. Colleges and universities are designing the new residence halls to attract students and provide the students with living arrangements designed for comfort rather than areas that help shape their social and academic development at college. The university looks at the room and board charges as revenue centers and may even outsource the operations to private, for-profit companies. The new living area may be a private-suite arrangement that will cater to students demand for privacy and comfort and the institutions goal of creating a profit center (Arum & Roksa, 2011). The elite colleges and universities are able to provide these luxuries to attract students with the academic profile that will advance their status in the college rankings. Struggling tuition-driven colleges may need to cut costs in other areas to pay for this arms race and the increased financial aid necessary to compete for students to enroll in their freshman class.

SOURCES OF REVENUES

Colleges and universities have several sources of income including tuition, room charges, board charges, endowment income, government grants, and other miscellaneous income streams. The colleges analyzed derive the majority of their income from tuition revenue. This type of college is designated as a "tuition driven" school. The elite colleges derive revenue for their operations from tuition, but the tuition revenue does not cover the cost of educating the students. Endowment income supplements the tuition revenue at these elite private colleges. These colleges will have a waiting list of students to accept a spot in the institution if other students decline their admissions offer. The public universities are supported by state governments. The non-selective liberal arts colleges are (in most cases) not operating at full capacity and do not have the diversity of funding options that exists at the elite colleges and the public universities.

Table 6 demonstrates the decrease in the change in net assets from educational sources as compared to the total revenues from these sources. The pressure of "making the freshman class" is causing these colleges to show a decreasing margin in their major revenue sustaining activity. The 42% decrease in margin (.19 to .11) illustrates a potential problem for these colleges and universities. They may be experiencing pressure from the more selective colleges offering admissions to their potential top students. "The median selectivity rate rose to nearly 61% from 57%" (Stripling, 2012). The trend is that the selective colleges are admitting students who may have attended the non-selective universities. The non-selective colleges may also be experiencing pressures from the for-profit colleges that are able to operate with lower per student expenses. In addition, students now are taking college-level courses in high school and on-line courses during summers and even during the semesters. This is causing a significant decrease in the margin for the principle revenue source of the institutions in this study (Table 6).

The colleges and universities in this study have compensated for the decreasing margins in tuition and revenue sources by increasing their margins in the auxiliary enterprises of the institution. This is helping to keep the colleges afloat much like the early days of the United States history in higher education. Table 7 calculates a 33% increase in the margins for the auxiliary enterprises of the non-selective liberal arts colleges. One of the potential problems with this mix of profit margins is that it may cause these colleges to focus on other issues rather than their educational mission of providing undergraduate education to the traditional college age student. When the profit margins of ancillary products increase, the entity may focus more on these activities at the expense of the primary mission. Colleges and universities will rent their new fitness facilities and the student living facilities for conferences and sports tournaments resulting in students at the institutions possibly not being able to use the facilities that attracted them to the college.

Colleges and universities are also outsourcing many of the support processes at the institutions of higher education. This may be a short-term method of keeping the college viable, but potential long-term changes may alter the strategic plan of the university. Bookstore, food service, security, dormitories, information technology, and other support products have been outsourced to for-profit companies. These for-profits are looking at the "bottom line" causing the services to be offered as value added only if they increase profit. These support activities when operated by the college would have a strategy of supplementing the educational mission. This may decrease the appeal of attending the small liberal arts college in the future because of increased expenses at the bookstore and cafeteria, and without the potential learning opportunities these functions may provide.

DEPARTMENT OF EDUCATION RATIOS

The United States Department of Education (DOE) received a report from the accounting firm KPMG Peat Marwick LLP on August 1, 1996 "to assist the DOE in developing an improved methodology, using financial ratios, that could be used both as an initial screening device to identify financially troubled institutions and as a mechanism for efficiently exercising its financial oversight responsibility" (KPMG Peat Marwick LLP, 1996). This report started my analysis of non-selective private colleges and universities resulting in the book "Using financial statement analysis to assess economic conditions at non-selective liberal arts colleges" (Gallagher, 1999). These ratios are now being used by the United States Department of Education (DOE) to measure the viability of private colleges and universities. Table 4 provides an analysis of the financial viability of the colleges and universities in this study while Table 8 provides an analysis of the primary reserve ratio of these institutions. The ratios in these two tables provide 90% of the data for identifying a financially troubled institution. The other 10% was a net income ratio. This paper excludes this ratio because of the not-for-profit nature of the institutions. This ratio was added by the DOE because the DOE also analyzes the for-profit higher education sector.

The viability ratio decreased 7% from 1997 to 2011 (1.50 in 2011 compared to 1.62 in 1997; see Table 4) and the primary reserve ratio decreased 37% from 1997 to 2011 (.83 to .52; see Table 8). The viability and primary reserve ratios are ratios that measure the ability of the entity to be successful in the long term. "A total of 149 nonprofit colleges failed the department of education's test of financial strength in 2009" (Blumenstyk & Richards, 2010). "This means that these colleges must post letters of credit equal to at least 50 percent of the funds they receive from financial aid" (Blumenstyk, G. & Richards, A. 2010). One of the colleges in this analysis was on this list for additional requirements because the DOE considers this college to be "financial troubled".

The cause of many of the colleges and universities on this list may be timing issues. This dilemma relates to the construction projects on the campus because funding a campus construction project causes the institution to increase its asset base. "When liquid assets such as cash or investments are converted to fixed assets, the primary reserve ratio may be negatively affected in the year of conversion" (BKD CPAs &Advisors, 2010). Endowment returns may also affect these ratios although many of the colleges and universities that struggle with the ratios do not have a large endowment, but base their success on tuition and fees from the students.

One of the other potential issues that the private college and university sector may experience is the possibility of takeovers from for-profit organizations. "A failing score has also become a signal to investors that an institution could be ripe for takeover by a for-profit company" (deVise, 2012). Private colleges and universities are experiencing many challenges in the competitive industry sector of higher education including an increased focus by the Department of Education relating to the ability of an institution to remain viable in the future.

CONCLUSION

The future plight of "tuition driven" colleges and universities seems to be dire. Previously, these institutions have been able to survive for several centuries and provide a valuable education for many students. Several of these early colleges developed into the top universities in the world including Harvard, Stanford, Columbia, Yale and the University of Pennsylvania. These universities have the top five growth rates in endowment from 2002-2008 according to the *Chronicle of Higher Education*. The problem according to this same article is that while Yale has increased its endowment by 119% during this time frame, the bottom quarter has had a decrease of 13% and the third quarter a decrease of 4.1% while the first quarter increased 7% (the universities with the highest endowment) and the second quarter 4%. "The one-year change in amount raised was progressively worse among colleges that raised less money" (The Chronicle of Higher Education, 2009).

The colleges in this survey will also be affected by state appropriation changes. According to the Chronicle of Higher Education, "states are tightening financing despite a boost from stimulus money" (The Chronicle of Higher Education, 2010). The average of all the states is a decrease of 1.1% while Ohio has a 7.9% decrease and Pennsylvania has a 3.8% decrease (The Chronicle of Higher Education, 2010). This illustrates that the universities in this survey are receiving less money in their fundraising efforts and less money from state appropriations.

The third pressure on these colleges and universities is the "vulnerability to lower-cost alternatives among public colleges and community colleges" (The Chronicle of Higher Education, 2009). For-profit and on-line delivery of courses may also add to the dilemma of the institutions in this survey. According to the *Chronicle of Higher Edcuation,* "Moody's is particularly concerned about small, tuition-dependent private colleges and some regional public universities facing serious challenges to their continued financial viability".

Private "tuition driven" colleges and universities in Ohio and Pennsylvania are going to survive by being efficient and focusing on a particular niche. "The colleges that will emerge as winners will have strong leadership" (Fain, 2010). Colleges without this strong leadership may not survive the current economic environment. Moody's states that a "college with a president that dominates the conversation and is pretty much a salesman, spinning mode the whole time would almost be certainly downgraded" (Fain, 2010). The colleges that will thrive will create a strategic plan with efficient use of resources and a focus on "value added" activities that will differentiate their university and provide a unique product to the diverse higher education industry.

The "value added" premise of the increase in higher education may be changing based on the recent pressures on the industry. The increase of the percentage of Americans with a college degree from 5% in 1944 to 40% today has possibly backfired (Samuelson, 2012). This increase in college attendance may have caused society to value the degree not the skills and knowledge behind the degree (Samuelson, 2012). The colleges and universities that will be successful in the future are the institutions that are able to compete on the academic quality of their university. Competition has increased in the higher education industry and the colleges and university that are creating their own niche will be successful.

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THE GLOBAL FINANCIAL CRISIS EFFECTS ON RESIDENTIAL INDUSTRIES IN IRELAND AND GREECE

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ABSTRACT

The American housing bubble and then total collapse starting in 2006 was a major cause of the global economic collapse starting in 2008. This collapse is well-known, but two other countries are reviewed in terms of their housing markets impacted by the current global financial crisis. Ireland and Greece will be reviewed to determine what affects America's housing collapse had on their housing industries.

INTRODUCTION

Israel, in early 2006, was the first country to start feeling the global residential housing downturn due to tighter credit restrictions, and then America's sub-prime market collapsed and the current financial crisis was born. Housing prices started an inexorable slide on a global scale that took a full two years to move from America through Europe, the Far East in Hong Kong and China in 2008 (Buchanan, 2009; Frank, 2011).

Global housing prices fell an average of 17% through 2008, but then started to bounce back when they should have languished for a time at these lower prices. Residential prices actually recovered at a 10% clip in early 2009, and by the summer of 2010, they were only 9% below their zenith years of 2006-2008 (Frank, 2011)

While America caused the housing collapse, she did not suffer the most despite losing 31% of home value. Europe was the recipient of the most damage from home value loss, and four countries stood out: Lithuania dropped home values by an incredible 63%, Latvia down by 43%, Bulgaria dropped 34%, and Ireland lost 31% (and almost 50% of home values since 2006) (Frank, 2011).

IRISH HOUSING

The dependence on the globalized marketplace places Ireland at risk from economic turndowns caused by policies of countries that influence this global economy (USA for one) (Finefacts Team, 2009b). This influence helped the average value of a home in 1996 in Ireland rising to €311,078 in 2007 compared to €75,000 in 1996 (Global, 2008) and helped Ireland to have an ownership percentage of74.5% (EU average is 68.2%) in 2009 (EMF, 2010).

The housing bubble created by new home values rising 327% and existing home rising 451% between 1995 and 2007 caused recessionary pressures in Ireland (Duffy, 2009). Homes are currently averaging around €195,000, down from €366,000 in 2007. Because mortgage lending declined between 2007-2009, the Irish housing market was down 23% from the first quarter of 2007 to the second quarter of 2009. This resulted in mortgage loans decreasing to a value of €8B - 58.5% fewer loans than in 2008 (Finfacts Team, 2009b; EMF, 2010).

The first quarter of 2011 reflected continued demand degradation due to the unending uncertainty of the sovereign debt crisis across Europe. Gross mortgage lending slid by 41.2% on quarter-to-quarter and annually by 52.7% compared to the past year, with no end in sight (EMF, 2011). Even with improvement in purchasing affordability in lower housing prices and loan costs, lower property taxes and interest rates, mortgage loans continued to shrink (EMF, 2010).

In mid-2011, the rate of decline was approximately 3.5%, down from 5% in spring 2011. Late summer 2011 average home prices nationally were €241,000 down from €249,000, in the spring (Finefacts Team, 2011a). The poor economic environment and the potential of adding two household taxes in the next year increased the declining home prices by 11.9% over last year (EMF, 2011).

In early 2010, a new mortgage program was instituted to help families in delinquency. The Code of Conduct on Mortgage Arrears, forces a lender to work with borrowers, behind more than six months, to figure out ways to bring the payments up to date. This effort has translated into low repossession rates, something that is helpful to families finding themselves exposed to foreclosure proceedings (EMF, 2010).

The rate of decline is slowing as expected when the bottom of the market gets nearer, flattens out, and then starts to rise again. This represents over four years of declines with another projected 18 months of falling prices will have a continued affect on the Irish housing economy (Finfacts Team, 2010).

As can be seen with the above horrific data, Ireland will continue to suffer in the residential housing industry for some time to come.

GREEK HOUSING

With a national home ownership rate of 80.6% (EU average of 68.2%), Greece's wealth is naturally made up of 82% household property and this property investment accounts for 25% of the total investment in Greece. Even so, up until the Bank of Greece started monitoring it's country's property values in 2009, there was no widely accepted basis for a systemic real estate price index (EMF, 2010; Reuters, 2011).

The reason for the lack of price indexing is that the Greek market is so different from north to south. Crete and Mykonos have a different market than Thessaloniki and the northern sphere of Greece. In addition, local desirability and preferences can make a large difference in real estate values (i.e. within a few streets in Athens, some properties are sold before they hit the market, and other streets have many empty properties for sale) (Shuttleworth, 2009).

Like Ireland, the housing boom in Greece ended because of the global financial crisis. Property values in Greece have plummeted as much as 40% from their peak in 2009 (NuWire Investor, 2011; Calvert, 2011). In addition, mortgage credit grew 25% between 2000 and 2007 right after Greece joined the EU in 2001. Yet, Greece has the highest mortgage arrears in the 27-member bloc with a debt of €80B (Reuters, 2011).

Since 2009, Greece's real estate market has cooled down because homeowners are being a bit cautious putting their homes on the market, which is causing a bit of some oversupply of homes for sale. This uncertainty is also aggravated by the sovereign debt crisis currently surrounding Greece and its future in the EU. In addition, buyers are expecting home values to drop in the future, and thus delaying their buying decisions. In addition, banks are also cautious in giving out loans, which causes a vicious circle of strangling the housing market (EMF, 2010). Foreign investing has also dried up for the same reasons (NuWire Investor, 2011). However, this data is not altogether reliable since it comes from agents, they are a secondary source, and tend to be biased (Property Abroad, 2011a).

Today, Greek banks are delivering increasing amounts of default notices as the recession keeps homeowners from making their payments. In an effort to stop the foreclosure sequence, the government has suspended these notices until 2012. This saved over 55,000 delinquent loan holders from vacating their homes. The suspension (second one since last year) is limited to mortgages under €200,000. The real worry is the potential wave of repossessions that might come in 2012 (Tzivilakis, 2011).

In the face of all of the negativity of Greece's housing situation, there are still reports that suggest that all is well and that the Greek property market will just roll along without any worries. Nevertheless, what is the truth? Has the residential market dried up? Well, not yet. The latest data available indicates that the housing market has barely been affected, but the economy has worsened since the data that is currently available has been released (Property Abroad, 2011a).

The future is extremely cloudy. Greece will receive another bailout in November 2011 and will stay afloat for a few months after that following the government's budget adjustments and approvals. Beyond this, all bets are off (Economist, 2011).

CONCLUSION

The subprime mortgage market collapse illustrates a potential problem when economic decisions are not based on the free enterprise system. The government subsidies to allow housing purchases created an inflated value within the housing market. This may be a factor in a globalized recession that has spread throughout the global markets through the current period (fourth quarter of 2009).

This paper illustrates that economic development may be hit harder when their economic prosperity is based on global economic policies. The housing market in Ireland grew at a faster rate than the housing markets in the United States and other more established economies. This was caused by an insurgence of European Union funds to improve the infrastructure coupled with the worldwide housing "bubble". Ireland had a developing economy and this infusion of funds caused an unsustainable strategic business model.

Greece's situation parallels Ireland's in that, the property values also had a run up prior to 2008. The difference between the two countries is that Ireland's freefall drop in housing prices were not duplicated in Greece. In fact, some would say that Greece came out very favorable compared to Ireland. The jury is still out on Greece due to the almost destructive debt level and the bailouts that keep coming in order to keep the country in the EU and stable.

Only time and events will provide the possible recoveries of these country's housing markets. Let's hope and pray that the results are positive.

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THE POWER OF ONE: EFFECTS OF CEO DUALITY ON COMPENSATION COMMITTEE QUALITY AND CEO COMPENSATION

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ABSTRACT

This paper contributes to the corporate governance literature by focusing on how Chief Executive Officer (CEO) duality and compensation committee quality are related to CEO compensation in the period since passage of the Sarbanes Oxley Act (SOX). Unlike research prior to SOX that focused chiefly on committee members' independence, we measure compensation committee quality in two ways. We consider the average number of board directorships held by compensation committee members as well as the proportion of committee members with prior or current CEO duality experience. We introduce the latter variable as a new measure of quality as it has not been utilized in research conducted prior to or since the passage of SOX. Using a sample of 100 2007 Fortune 500 firms, we find that CEO duality does not have a significant effect on CEO compensation. However, we document a positive relationship between average number of directorships and CEO compensation and also find evidence that CEO duality moderates the relationship between our measures of compensation committee quality and CEO compensation.

INTRODUCTION

Shareholders expect boards of directors (boards) to protect their interests by insuring that management is accountable for their decisions and actions. In short, boards act to reduce or eliminate the principal-agent problem through a variety of mechanisms and processes collectively described as corporate governance – they provide oversight, advice and counsel to the chief executive officer (CEO), monitor management's actions and if necessary, discipline the CEO (Finkelstein & Mooney, 2003, p. 101). This board function sounds simpler than it is since in reality corporate governance is a "complex web of multiple interactions and relationships among multiple actors in and around the firm" (van Ees, Gabrielsson, & Huse, 2005, p. 5).

Evidence that existing corporate governance structures were flawed emerged during the 1990s, leading to calls for change. This public outrage over corporate fraud led to passage of the Public Company Accounting Reform and Investor Protection Act of 2002 (SOX) or "Sarbanes-Oxley" (United States Congress, 2002). Legislative changes mandated by SOX and subsequent regulations issued by the Securities and Exchange Commission (SEC) required stricter corporate governance rules designed to increase the quality of oversight by boards of directors. In particular, the SEC regulations affect the composition and responsibilities of the board's compensation committee with its most significant provision mandating that publicly-traded firms may not have any "insiders" on the committee; rather, the compensation committee must be composed entirely of independent board directors.

The capacity of a board to monitor management effectively depends on the distribution of power between the board and its CEO (Finkelstein & Hambrick, 2010). An important indicator of CEO power over a board is CEO duality (Baliga & Moyer, 1996; Finkelstein & Hambrick, 1996), a term used to describe a "combined" leadership structure where the same individual holds both the position of board chair and CEO. This contrasts with a "split" leadership structure where the CEO and board chair positions are held by two individuals (Schooley, Renner, & Allen, 2010). Although the intent of SOX was to enhance board oversight as a means to restore investor confidence, the law does not establish any restriction on a CEO also serving as board chair. The absence of a mandate by SOX to separate the leadership structure raises the question as to whether the presence of CEO duality may undermine the capacity of a board or its compensation committee to carry out its role independently.

A large and rich body of research investigates how CEO duality and board independence impact firm-level outcomes such as financial performance (e.g., Baliga & Moyer, 1996; Iyengar & Zampeli, 2009; Lam & Lee, 2008) and individual-level outcomes such as CEO compensation (Core, Holthausen, & Larcker, 1999; Dorata & Petra, 2008; Fosberg, 1999; Sapp, 2008). Mixed findings from these studies prevent clear conclusions as to whether CEO duality is associated with higher levels of compensation.

What is clear is that CEOs continue to receive lucrative, some would argue excessive, compensation and despite calls to separate the two positions and a substantial number of studies on the consequences of CEO duality, many firms continue to be led by individuals who hold both the CEO and chair positions. In the US, CEO duality continues to be the dominant board leadership structure (Chhaochharia & Grinstein, 2007; Lam & Lee, 2008) with about 70% of the largest public US firms being led by dual CEOs for the past 20 years (Giove, Connolly, & Lilienfeld, 2011).

Research that investigates the effect of compensation committee quality on CEO compensation typically relies on data from the pre-SOX period and generally examines the effect of compensation committee independence on executive compensation (Newman & Mozes, 1999). With the passage of SOX, however, boards and compensation committees must comply with the legislated mandate of director independence, effectively eliminating it as a meaningful measure of board or committee quality. Scholars have begun to examine compensation committee quality using variables other than independence (Sapp, 2008; Sun & Cahan, 2009). Further, recent studies measure the composition and quality of the committee and their effects on CEO compensation directly or in combination with firm performance (e.g., Conyon & Peck, 1998). Little research examines the relationship among these three critical corporate governance variables: CEO duality, compensation committee quality and CEO compensation. In fact, we found the relationship between CEO duality and CEO compensation to be a primary focus in only nine studies prior to the passage of SOX. Research that examines corporate governance in the post-SOX era is just now emerging (e.g., Petra & Dorata, 2008; Sapp, 2008; Switzer & Tang, 2009; Huang, Lai, McNamara, & Wang, 2011; Valenti, 2008). We identified only four published empirical studies that examine the relationship between CEO duality and CEO compensation and only two of those studies use exclusively post-SOX data.

This paper contributes to the corporate governance literature by focusing on how CEO duality and compensation committee quality are related to CEO compensation in the post-SOX period. In particular, we build on the work of Sun and colleagues (2009) to investigate the role that average directorships play in affecting committee quality and determining CEO compensation. We extend their work by introducing a new measure of committee quality, the proportion of CEO directors on the committee who have prior or current CEO duality experience themselves. First, we examine the impact of corporate governance measures of quality on CEO compensation using post-SOX data. Second, we specifically focus on the quality characteristics of the compensation committee, rather than the corporate board as a whole. Third, we examine CEO duality as a moderator of the relationship between compensation committee quality and CEO compensation.

We organize this paper as follows. We explain our choice of agency theory as the primary conceptual framework to guide our analysis. Next, we briefly review the role of the compensation committee and describe the changes that resulted from SOX as they apply to the committee. We clarify the terminology surrounding "independence" and "quality" as well as CEO duality. We then review the relevant literature on the relationships among CEO duality, CEO compensation and compensation committee quality, present our theoretical model and hypotheses, and describe our research design and findings. We conclude by discussing the implications of our findings for practice and future research, and acknowledge our study's limitations.

BACKGROUND

Conceptual Framework

Research on corporate governance relies largely on agency theory although a visible subset of work (e.g., Anderson, Melanson, & Maly, 2007; Boivie, Lange, McDonald, & Westphal, 2011; Davis et al., 1997; Donaldson, 1990) relies on alternative frameworks such as stewardship theory and resource dependence theory. In practice, however, an agency perspective has driven recent legislation such as SOX (Kaufman & Englander, 2005) and corporate governance research is often premised on the assumption that there is an agency problem in corporate control. In other words, because the interests of shareholders and the CEO diverge and CEOs hold positions of power, they are motivated to make decisions and act in ways that advance their personal goals (Jensen & Meckling, 1976). The role of the board is to constrain this self-serving behavior by governing the relationship between the principal (shareholders) and its agent (management) (Erakovic & Overall, 2010) through strong, knowledgeable and independent directors (Bennington, 2010). Therefore, consistent with current thinking, we use agency theory to guide this study.

CEO Duality

The chair of the board has the responsibility to ensure the company is following bylaws and policies established by the organization, develop agendas for board meetings, and guide the board effectively in overseeing management. As the highest ranking manager, the CEO is charged with decision making related to corporate goals, strategies, risks and integrity while collaborating with other top executives. When there is CEO duality, a single individual is accountable for completion of both sets of duties. A CEO who is also chair is potentially less objective since s/he is not only responsible to pursue management's goals but also to oversee and evaluate CEO effectiveness.

While there is good reason for the persistent debate about the desirability of CEO duality, agency theory suggests that the costs of this leadership structure outweigh its benefits. From an agency perspective, CEO duality represents less board control over management and is therefore inappropriate since it restricts the monitoring role of the board, leads to greater inherent risk (Dickins, 2010), CEO entrenchment (Kim, Al-Shammari, Kim, & Lee, 2009; Pfeffer, 1981), increased information asymmetry (Kim et al., 2009), and lower firm performance. But, without CEO duality, it is more difficult to assign responsibility for [the firm's] poor performance, increases the costs of information sharing, and limits the CEO's authority to make critical decisions and move rapidly to enhance shareholder returns. Opponents of CEO duality believe it may enable the CEO to achieve an elevated position of power and argue that it leads to CEO entrenchment, which "occurs when managers gain so much power that they are able to use the firm to further their own interests rather than the interests of shareholders" (Hermalin & Weisbach, 2003). Advocates of CEO duality cite the value added as a result of a single, unified leadership position and argue that adequate independent oversight of management can be achieved through other appropriate board mechanisms, measures and activities.

Quality of Compensation Committees

Companies may have different names for the committee, but its fiduciary role is essentially the same regardless of its title. Deloitte (2009) describes the practice of the compensation committee as "…to set appropriate and supportable pay programs that are in the organization's best interests and aligned with its business mission and strategy…" Further, as stated in the 2010 Intel proxy, the committee also: reviews and determines various other compensation policies and matters, including making recommendations to the Board and to management related to employee compensation and benefit plans, making recommendations to the Board on stockholder proposals related to compensation matters, and administering the employee stock purchase plan (Intel, 2010).

Most researchers agree that the compensation committee plays a crucial role in setting both the amount and mix of CEO pay (Barkema & Gomez-Mejia, 1998). The overarching goal is for a quality committee to carry out its monitoring responsibilities objectively to insure that "executive compensation packages are designed to align the incentives of executives and a firm's stakeholders" (Sapp, 2008, p. 711). In reality, the "CEO and the Board frequently have relationships with one another allowing the potential for inter-personal relationships and other factors to influence the executive compensation process" (Sapp, 2008, p. 717).

High quality governance can effectively offset the agency problem if the board is independent. As Fama and Jensen argued in their seminal paper (1983), the function of monitoring management and settling decision disputes is performed best by directors who are independent from management and who are decision experts (Mace, 1986) including insiders who have knowledge and expertise of the corporation's activities (Schooley et al., 2010). SOX requires increased board independence to provide more protection for shareholders, a mandate that reflects an agency perspective (Schooley et al., 2010). Included in these regulations is the requirement that the compensation committee may not have any "insiders"; rather, the committee must be composed entirely of independent board directors. This change is noteworthy because it impacts the actual composition of compensation committees as well as scholarship that examines how compensation committee characteristics are related to CEO compensation.

Studies that investigate compensation committee quality using measures other than independence and that use post-SOX data are few (Sapp, 2008). Sapp's (2008) work is notable because although his data are taken from both the pre-SOX and post-SOX periods, he moved beyond independence to assess compensation committee quality and examine corporate governance variables in relation to total executive compensation packages. He found that an increase in the percentage of current CEOs on the compensation committee is associated with an increase in CEO compensation. Sapp asserts this stems from the condition of "an increase in the closeness of the compensation committee to the CEO (more CEOs on the compensation committee means the Board is more likely to relate to the concerns of the CEO and thus may be willing to pay the CEO more...") (741). Using pre-SOX data from US firms in 2001, Sun and Cahan (2009) studied committee quality using compensation committee size and individual committee member characteristics in relation to executive pay. Their measurement of member characteristics included years of board experience both with the company and on other boards, corporate ownership, and whether appointed by the CEO. Their results show that CEO cash compensation is more positively associated with accounting earnings when firms have high compensation committee quality. In sum, despite the fact that ten years have elapsed since the passage of SOX and its mandate for an independent compensation committee, relationships among CEO duality, compensation committee quality and CEO compensation remains understudied.

THEORETICAL MODEL AND HYPOTHESES

Based on prior research and the argument posited by agency theory, we propose the following theoretical model of the relationships among CEO duality, compensation committee quality and CEO compensation:

CEO Compensation = f (CEO duality, Compensation Committee Quality, Compensation Committee Meetings, Compensation Committee Size, Financial Performance, Industry)

Diagram 1 provides a visual aid of the relationships we are testing. See Diagram 1 in the appendix.

Given the conflicting perspectives on the desirability of CEO duality, we examine its effect on compensation in the post-SOX period. Consistent with agency theory, we hypothesize it is positively associated with CEO cash compensation. When there is CEO duality, the CEO's compensation is more likely to reflect not only accounting performance and stock returns, but also the effect of the CEO's influence on the compensation committee through his or her combined and entrenched role in the company.

H1: CEO duality is positively associated with CEO cash compensation.

Research conducted prior to the enactment of SOX frequently used independence as a measure of compensation committee quality and results were mixed (e.g., Anderson & Bizjak, 2003; Newman & Mozes, 1999; Vafeas, 2003). Calls in the post-SOX period to identify "…a broader and richer set of variables related to the structure and composition of the compensation committee" (Sun & Cahan, 2009, p. 193) have increased given the legislative and regulatory mandate aimed at increasing committee quality by requiring all members to be independent.

Findings from studies that examine variables other than independence suggest that higher quality oversight by the compensation committee depends on members' available time, experience and expertise (e.g., Petra & Dorata, 2008; Sun & Cahan, 2009; Sun, Cahan, & Emanuel, 2009). Directors on one firm's compensation committee who also hold directorships with other companies are likely to be very busy. To the extent that multiple compensation committee members hold other directorships, they will have less time to fulfill their oversight function and in turn, committee quality will be reduced. Compared to the robust literature on the effects of independence on boards, less is known about the consequences for corporate governance when board members are busy due to outside commitments. There is some evidence to suggest that busy directors shirk responsibilities leading to weaker corporate governance in the form of lower committee quality and higher CEO cash compensation (Core et al., 1999; Fich & Shivdasani, 2006; Larcker, Richardson, & Tuna, 2007; Sun & Cahan, 2009; Sun et al., 2009). In contrast, Ferris and colleagues (2003) do not find any evidence that busy directors shirk their responsibilities.

Another notable determining indicator of committee quality would be members' experience and expertise on the subject of executive compensation. Holding multiple directorships could give directors opportunities to increase their expertise as well as greater incentive to effectively monitor since their reputation as a decision expert is on the line (Fama & Jensen, 1983; Shivdasani & Yermack, 1999). Agency theory suggests that too many directorships, the "busy board member hypothesis," will lower directors' effectiveness as monitors. Some research finds support for this argument (e.g., Fich & Shivdasani, 2006); however, findings are not consistent (e.g., Klein, 1998; Weir, Laing, & McKnight, 2002). In a study that explicitly focuses on the number of directorships and CEO compensation, Sun and colleagues (2009) found that a larger average number of directorships leads to lower CEO compensation. While a certain amount of expertise and prestige is derived from multiple directorships, the loss of time and commitment that can accompany numerous appointments can cancel out the benefits. It is possible that busy directors can enhance committee quality; however, the stronger argument in our view is that when committee members hold multiple directorships, the committee's quality is reduced.

H2a: The average number of directorships held by compensation committee members is positively associated with CEO cash compensation, indicating lower compensation committee quality.

When compensation committee members also hold the position of CEO in their own firms, their business leadership experience and expertise can enhance governance quality. Carpenter & Westphal (2001) argue that directors who have prior rather than concurrent CEO experience at other firms are able to better evaluate potential CEOs. Similarly, when more members of the compensation committee have CEO experience, the quality of oversight carried out in granting CEO compensation may be enhanced because the compensation committee is of higher quality. The impact of higher quality corporate governance is that the CEO's compensation may be more closely associated with accounting and stock return measures of the firm than in a situation with lower committee quality. Further, when these CEO committee members also have prior or current CEO duality experience, their objective and independent oversight role may be further strengthened, enhancing the quality of the compensation committee.

As a homogeneous and cohesive collection of individuals (Useem, 1984), when CEOs of other firms sit on a board's compensation committee, some posit that they may identify and empathize with the firm's CEO resulting in more support for favorable pay decisions and lower governance quality (Daily et al., 1998; Lorsch & MacIver, 1989; Sun & Cahan, 2009; Sun et al., 2009). Fahlenbrach et al. (2008) failed to find evidence for what they term the "buddy hypothesis" in their study of CEOs who sit on boards; however, as Sun et al. (2009) point out, there is virtually no work that examines specifically the effects of members of the compensation committee who are also CEOs. A strong case can be made that compensation committee members who themselves have CEO experience might be more effective members because of their expertise and reputation (Sun et al., 2009). Taking it one step further, when a compensation committee has a larger proportion of members with prior or current CEO experience in which they also had CEO duality, the experience and expertise of those members enhances committee quality.

H2b: The proportion of compensation committee members who have prior or current CEO duality experience is negatively associated with CEO cash compensation, indicating higher compensation committee quality.

Hypotheses 2a and 2b test whether attributes of compensation committee quality affect CEO compensation. However, we expect CEO duality to moderate the strength of both of these relationships. The interactive effect of the average number of directorships of the compensation committee and CEO duality on CEO compensation has not been tested in prior studies. Likewise, the interactive effect of committee members' CEO duality experience and CEO duality has not been examined in prior research.

While we expect the average number of directorships of the compensation committee to be positively associated with CEO cash compensation (*H2a)*, the presence of CEO duality will weaken this positive relationship, strengthening the quality of the committee. In this case, compensation committee members who serve as directors on a greater number of boards will be affected by the presence of a dual CEO and will act more judiciously in their governance of the dual CEO's compensation. Thus we hypothesize the following:

H3a: CEO duality weakens the positive relationship between average number of outside directorships held by compensation committee members and CEO cash compensation.

While we expect the proportion of compensation committee members who have prior or current CEO duality experience to be negatively associated with CEO cash compensation (*H2b)*, the presence of CEO duality will weaken this negative relationship, reducing the quality of the committee. In this case, compensation committee members who have CEO duality experience are expected to be less judicious in their governance of CEO compensation because they align more with the dual CEO. Given their similar experience and perspective, the objectivity of committee members will be compromised in setting CEO cash compensation. Therefore we hypothesize the following:

H3b: CEO duality weakens the negative relationship between the proportion of compensation committee members with prior or current CEO duality experience and CEO cash compensation.

REGRESSION MODELS

Model 1: $\ln(\text{CashSalary2008}) = B_0 + B_1\text{CEO duality} + B_2$ Compensation Committee Quality (*CompCommitteeMemberDuality, AverageDirectorships)* + B_3Compensation Committee Meetings + B_4Compensation Committee Size + B_5Financial Performance (*ROE %, Sales (log))* + B_6Industry

Model 2: $\ln(\text{CashSalary2008}) = B_0 + B_1\text{CEO duality} + B_2$ Compensation Committee Quality (*CompCommitteeMemberDuality, AverageDirectorships)* + B_3Compensation Committee Meetings + B_4Compensation Committee Size + B_5Financial Performance (*ROE %, Sales (log))* + B_6Industry + B_7*CEOduality*CompCommitteeMemberDuality* + B_8*CEOduality*AverageDirectorships*

METHOD

Sample Selection

The data set consists of 100 randomly selected 2007 Fortune 500 Companies. Fortune 500 companies are used because their larger executive compensation packages have caused the recent controversy regarding the level of CEO compensation. All 500 companies were assigned a random number. The first 100 firms with the lowest assigned random number that met the criteria for the study were selected. In total there were 184 exclusions out of 284 Fortune 500 companies that were examined. A summary of the exclusions is provided in Table 1. See Table 1 in the appendix.

Financial and public utility companies are excluded because the regulation of those industries may mask the efficiency differences across firms within the industry (Vafeas, 2003). Due to the economic events during the latter part of 2008, we include only companies with a fiscal year end of December 31, 2007, thereby avoiding fluctuations in financial results for firms with fiscal years ending in 2008. Also if there was a change in CEO or CEO duality status between 2007 and 2008, the company is excluded from the sample. These eliminations are made to ensure the consistency of the CEO and their position within the firm. There are a variety of factors included in "Miscellaneous Exclusions" such as a mid-year change in compensation committee composition. "Multiple Exclusions" refers to circumstances in which a company is excluded from the sample for more than one reason, such as being a financial company with a fiscal year end in September.

Dependent Variable

CEO Cash Compensation. CashSalary2008 is the dependent variable and captures the cash component of CEO compensation in calendar year 2008. The log of cash compensation is used so that the difference in magnitude of compensation across companies is reduced, and it is more likely the variable has a normal distribution (Sun & Cahan, 2009). CEO cash compensation was obtained from each company's 2008 proxy statement. Similar to prior studies of executive compensation, we use cash compensation since it reflects current CEO performance rather than future performance, thus representing the immediate reward component of compensation (Sun & Cahan, 2009). Based on previous studies using agency theory as the framework for executive compensation, cash compensation helps align the interests of stockholders and executives through monetary incentives.

Independent Variables

CEODuality represents whether or not the CEO of the corporation is also the board chair in 2007. *CEODuality* is a dummy variable where '1' signifies that CEO duality exists and '0' signifies split leadership. This information was gathered by examining disclosures on company websites and its 2007 and 2008 annual reports. The CEO duality status was verified over these two years to ensure consistency of the individual serving in that capacity in both years.

Compensation Committee Quality. We measure the quality of the compensation committee using two variables: the average number of directorships held by committee members (*AverageDirectorships)* and the proportion of compensation committee members with prior or current experience as a CEO with duality (*CompCommitteeMemberDuality*). *AverageDirectorships* is determined using the weighted average number of other board directorships held by members of the compensation committee in 2007. This variable is calculated by dividing the sum of current other directorships held by all compensation committee members by the total number of members serving on the committee. Information about current other directorships was gathered from committee members' biographies provided in the company's proxy statements. *CompCommitteeMemberDuality* represents the proportion of compensation committee members (in 2007) who either have prior or current experience serving as both CEO and board chair of a company. This variable is calculated by dividing the total number of CEOs on the committee who have prior or current CEO duality by the total number of committee members.

Control Variables

Consistent with prior research on executive compensation, we include control variables in our analysis. The variable *Meetings* measures the number of compensation committee meetings held during the calendar year 2007. This information is reported in the company proxy statements. *CommitteeSize* represents the number of directors serving on the compensation committee in 2007 and is also reported in proxy statements. Prior studies examine the size of the board in relation to CEO compensation (e.g., Agrawal & Knoeber, 1999; Core et al., 1999). Since this study examines the effect of compensation committee quality on executive compensation, we use the size of the compensation committee rather than the size of the entire board. *Return on Equity (ROE)* measures the financial performance using the percentage return for the calendar year 2007. Controlling for company size, *Sales* represents the log of sales of the company for the fiscal year 2007. *ROE* and *Sales* data were obtained from the Mergent Online database. *Industry* represents the company's classification according to the Standard Industrial Classification (SIC), also obtained from the Mergent Online database. The five industries used are mining, manufacturing, communication, retail and service. Each industry is represented by a dummy variable for that industry and the service industry is withheld from the model for comparison purposes.

RESULTS

Descriptive Statistics

Table 2 presents a summary of the descriptive results for the sample data collected. Table 3 presents a breakdown of the sample by industry. Table 4 summarizes the correlations among the study variables. See Tables 2, 3 and 4 in the appendix.

The average CEO cash salary in 2008 was $1,168,191. Seventy percent of the corporate CEOs in the sample had CEO duality, consistent with the findings of Giove, Connolly, and Lilienfeld in 2011. Forty-two percent of compensation committee members had either prior or current CEO duality experience. The average number of compensation committee meetings was 6.46 times per year, somewhat higher than previously documented by Vafeas (2003). This higher meeting frequency is likely the result of greater emphasis placed on corporate governance since the passage of SOX. The average compensation committee size was 4.30 members, a result that is comparable to the average of 4.37 members found by Vafeas (2003). Each compensation committee member in our sample held on average just over 1.62 other board directorships.

Model 1 Empirical Results

Table 5 presents regression results (Model 1) for study variables excluding the interaction terms. Table 6 includes the interaction terms in the regression analysis. See Tables 5 and 6 in the appendix.

Model 1 results summarized in Table 5 do not support Hypothesis 1, as there is not a statistically significant association between CEO duality with CEO cash compensation (B = .138; *p*=.176). Thus, whether there is split leadership or CEO duality has no bearing on CEO cash compensation in this sample. The results support Hypothesis 2a, since an increase by one in the average number of directorships (*AverageDirectorships*) leads to a 14.9% (B = .149; *p*=.008) increase in CEO cash compensation. This rise in compensation supports the argument that when a compensation committee member holds more directorships, the member may be less effective in carrying out their oversight role, thereby resulting in lower governance quality.

Hypothesis 2b is not supported by Model 1 empirical findings. We expected the proportion of compensation committee members with prior or current CEO duality experience to be negatively associated with CEO cash compensation, indicating higher compensation committee quality. Although the variable *CompCommitteeMemberDuality* is marginally statistically significant (*p* = .082), the coefficient is positive (*B*=.299). An increase by 10% in the proportion of compensation committee members with duality is associated with an increase in CEO compensation of 2.99%. Thus, when there are more committee members with prior or current CEO duality experience, it is likely that close inter-personal relationships between the CEO and those committee members compromise the objectivity of committee members, resulting in weaker governance over executive compensation.

Results for control variables in Model 1 are as follows: 1) meetings (*B* = .039; *p* = .031), 2) ROE (*B* = - .004; *p* = .029), 3) log of sales (*B* = .075; *p* = .102), and 4) the communication industry (*B* = - .483; *p* = .010). Committee size and other industries did not have significant coefficients. The R squared for Model 1 is .363 and the Adjusted R squared is .284.

Model 2 Empirical Results

Model 2 tests Hypotheses 3a and 3b by adding two interaction terms to Model 1. The change in Adjusted R squared from Model 1 to Model 2 (.047) is significant at the .05 level (F-change p = .036). Consistent with Model 1, the effect of CEO duality on CEO cash compensation is statistically insignificant (B = .328, p = .144). Likewise, the coefficient for *AverageDirectorships* is significant and positive (B = .278, p < .0001) indicating that when the average number of directorships held by members of the compensation committee increases, so does CEO compensation. However, the coefficient for *CompCommitteeMemberDuality* is not statistically significant (B = -.255, p = .479) in Model 2.

Hypothesis 3a is supported. We expected that as a moderator, CEO duality would weaken the positive relationship between average number of directorships held by compensation committee members and CEO cash compensation, thereby strengthening the quality of the committee. The coefficient of the interaction term *CEODuality*AverageDirectorships (B* = -.252, p = .022) reflects a significant and strong negative association with CEO cash compensation. It indicates that in the presence of CEO duality, as the average outside directorships increases, CEO compensation decreases. Thus, the presence of CEO duality as a moderator strengthens the quality of the compensation committee as hypothesized. Given CEO duality, compensation committee members with more directorships tend to be more judicious in their governance of executive compensation. The net result is that while CEO compensation increases by 27.8% when average directorships increases by one, this increase is reduced to only 2.6% in this sample when there is CEO duality.

Hypothesis 3b receives marginal support. We expected that as a moderator, CEO duality would weaken the negative relationship between the proportion of compensation committee members with prior or current CEO duality experience and CEO cash compensation. The coefficient of the interaction term *CEODuality*CompCommitteeMemberDuality* (B = .690, p = .089) reflects a marginally significant positive association with CEO cash compensation. This outcome suggests that the presence of CEO duality as a moderator weakens the quality of the compensation committee in its oversight of CEO compensation. That is, when a higher proportion of compensation committee members themselves have CEO duality experience, in the presence of a company with CEO duality, those committee members may tend to align with the corporate dual CEO. This alignment compromises their objectivity in carrying out the committee's responsibilities in setting CEO compensation and may reflect closer inter-personal relationships.

CONCLUSION

This study investigates the effects of CEO duality on compensation committee quality and CEO cash compensation in the post-SOX period. Unlike research prior to SOX that focused chiefly on committee members' independence, we measure compensation committee quality in two ways. We consider the average number of board directorships held by compensation committee members as well as the proportion of committee members with prior or current CEO duality experience. We introduce the latter variable as a new measure of quality as it has not been utilized in research conducted prior to or since the passage of SOX. Further, we examine whether CEO duality moderates the relationship between these measures of compensation committee quality and CEO compensation.

In establishing the requirement that all members of the compensation committee be independent, the intent of SOX legislation and related SEC regulations was to improve the committee's governance quality. However, CEO duality was not prohibited for public companies subject to these rules. Consistent with agency theory, this condition could undermine the ability of compensation committee members to act objectively and independently in setting CEO compensation. Their decision making may unduly favor the dual CEO rather than represent the best interests of stockholders by rewarding the CEO based on the firm's financial performance under the CEO's leadership.

Our findings do not support our hypothesis that CEO duality is associated with higher levels of CEO cash compensation. However, we present evidence that CEO duality moderates the effects of measures of committee quality, in both instances weakening the impact of these measures. First, the positive relationship between average number of directorships held by compensation committee members and CEO compensation is reduced in the presence of CEO duality, suggesting CEO duality strengthens committee quality. This outcome indicates that when there is a dual CEO, committee members with more directorships are inclined to make more careful compensation package decisions in order to protect against the tendency of the dual CEO to influence those decisions in his or her favor. Thus, in this situation, CEO duality is a factor that enhances corporate governance by offsetting the tendency of "busy" committee members with more directorships to otherwise relax their oversight. Second, we document a positive relationship between committee members' CEO duality experience and CEO compensation. This finding is not what we expected and suggests that the "buddy hypothesis" may warrant further investigation. Further, in the presence of CEO duality, we also note this positive association with CEO compensation is increased, which represents a further weakening of compensation committee quality. This outcome indicates that when there is a dual CEO, committee members with prior or current CEO duality experience are inclined to relax their objective oversight of compensation decisions, reflecting their tendency to align with the dual CEO. Thus, CEO duality in this circumstance is a factor that compromises effective corporate governance by the compensation committee, leading to higher CEO cash compensation.

Like any study, we recognize that our research has some limitations. First, our study uses sample data of 100 firms drawn from only the largest companies in the United States. It is unclear whether our findings can be applied to firms of all sizes or generalized to firms operating in other countries. In addition, this relatively small sample size may be one explanation for the lack of findings in the case of CEO duality's influence on CEO compensation or the marginally significant findings in the case of several other variables, including CEO duality's moderating influence. Future research may explore the effect of compensation committee quality on CEO compensation using data from firms of varying sizes as well as from international firms. In addition, future testing of our hypotheses on a larger sample across multiple years may yield different results.

Another limitation is the possibility of omitted variables that may influence CEO cash compensation. These variables could include other CEO characteristics besides CEO duality, other corporate governance quality measures of the compensation committee, and other financial performance measures. Future research should incorporate these additional characteristics. The use of cash compensation is another limitation of the study that could be overcome by including additional components of the CEO's compensation package such as bonuses or equity holdings. Finally, we combined into a single variable the compensation committee members with prior or current CEO duality experience. Future research may refine the analysis by separating those committee members with prior CEO duality experience from those members who are currently serving as a dual CEO. These changes to future research designs might yield more conclusive findings.

However, this study contributes theoretically and practically to the field of corporate governance and in particular has implications for future research on CEO duality, compensation committee quality and CEO compensation. First, by utilizing post-SOX data, our research expands the examination of compensation committee quality beyond the narrower pre-SOX measure of committee independence. Second, we examine a new measure of committee quality, which is the prior or current CEO duality experience of compensation committee members. Consequently, our research contributes to prior literature built on agency theory related to the influences on the compensation committee in setting CEO compensation.

We find the impact of CEO duality on compensation committee quality to be a double-edged sword. Our results indicate that CEO duality may undermine the capacity of the committee to carry out its role independently, when a greater proportion of committee members have prior or current CEO duality experience. Given the higher CEO compensation rewarded in this circumstance, committee members execute less effective oversight since those with CEO duality experience may be less likely to oppose the firm's dual CEO as a sign of support of a colleague (Daily, 1998). In contrast, we observe that CEO duality may strengthen the committee's quality in setting CEO compensation, since members with multiple board directorships who might otherwise be distracted respond to the dual CEO by carrying out more judicious oversight in setting CEO compensation. Thus, given the mixed results on the effect of CEO duality on compensation committee quality in determining CEO compensation, our work extends the debate regarding the desirability of CEO duality.

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APPENDIX
DIAGRAM 1

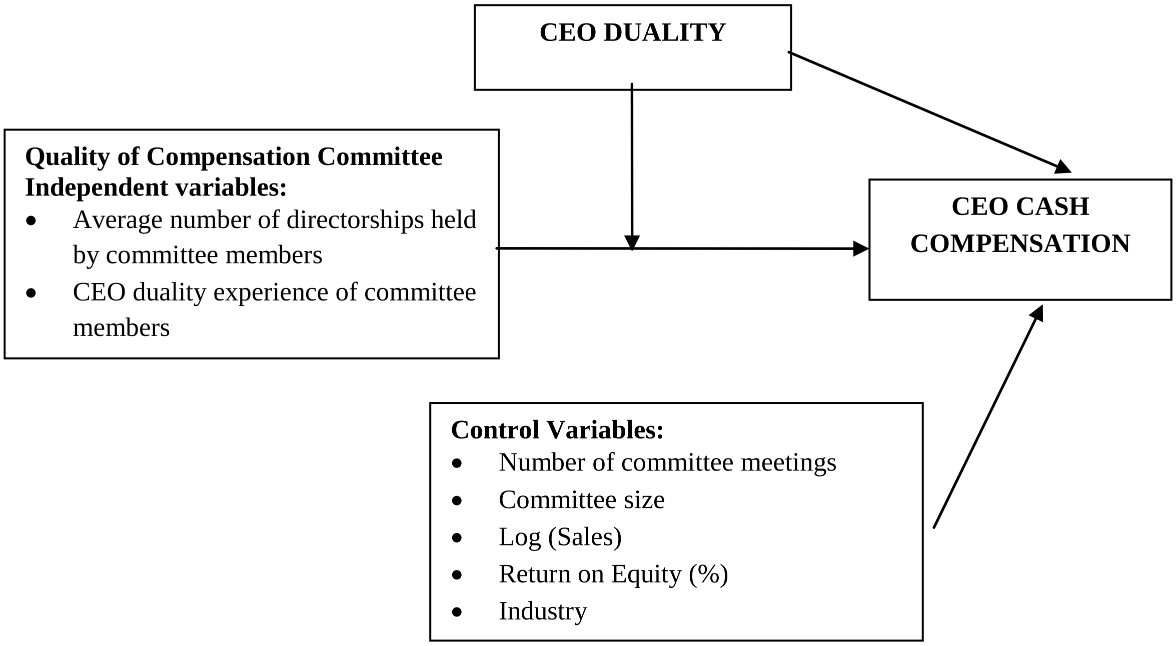

TABLE 1
Sample Selection

Reason for Exclusion	**Total**
Financial Companies	40
Public Utilities Companies	23
Non-Calendar Fiscal Year End	65
Change in CEO	11
Change in CEO Duality	2
Miscellaneous Exclusions	24
Multiple Exclusions	19
Total	**184**

TABLE 2
Descriptive Statistics (N=100)

Variable	Mean	Standard Deviation
***Dependent variable*:**		
CashSalary2008 (log)	13.88	0.49
Independent variables:		
CEODuality	0.70	0.46
AverageDirectorships	1.62	0.84
CompCommitteeMemberDuality	0.42	0.28
Control Variables:		
Meetings	6.46	2.49
CommitteeSize	4.30	1.01
ROE (percentage)	18.27	26.27
Sales (log)	23.08	1.06

TABLE 3
Sample Breakdown by Industry

Industry	Companies
Mining	6
Manufacturing	59
Communication	11
Retail	14
Service	10
Total	100

TABLE 4
Pearson Correlations

	1	2	3	4	5	6	7	8
1 CashSalary2008 (log)	1							
2 CEODuality	.14 (.16)	1						
3 AverageDirectorships	.29** (.00)	-.14 (.16)	1					
4 CompCommittee-MemberDuality	.31** (.00)	.26** (.01)	.18 (.07)	1				
5 CommitteeSize	.14 (.16)	.11 (.28)	-.12 (.23)	.11 (.26)	1			
6 Meetings	.18 (.07)	-.07 (.48)	.17 (.09)	.06 (.58)	-.04 (.70)	1		
7 ROE (%)	-.07 (.50)	.24* (.02)	.03 (.77)	.14 (.18)	.05 (.60)	.05 (.59)	1	
8 Sales (log)	.25* (.01)	.17 (.09)	.24* (.02)	.27** (.01)	.16 (.11)	.08 (.41)	.09 (.39)	1

(Significance 2-tailed at 1% level)**
(Significance 2-tailed at 5% level)*

TABLE 5
Model 1 Regression Results
R^2=0.363, Adjusted R^2=0.284

	Coefficient	*Standard Error*	*T-Statistic*	*P-value*	*Significance*
Intercept	11.255	0.994	11.319	0.000	***
Independent Variables:					
CEODuality	0.138	0.101	1.365	0.176	
AverageDirectorships	0.149	0.055	2.711	0.008	***
CompCommitteeMemberDuality	0.299	0.170	1.760	0.082	*
Control Variables:					
Meetings	0.039	0.018	2.196	0.031	**
CommitteeSize	0.063	0.043	1.481	0.142	
ROE (%)	-0.004	0.002	-2.220	0.029	**
Sales(log)	0.075	0.045	1.653	0.102	*
Mining	0.331	0.222	1.495	0.139	
Manufacturing	0.044	0.153	0.870	0.775	
Communication	-0.483	0.184	-2.623	0.010	***
Retail	-0.043	0.180	-0.390	0.812	

TABLE 6
Model 2 Regression Results
R^2=0.410, Adjusted R^2=0.321

	Coefficient	*Standard Error*	*T-Statistic*	*P-value*	*Significance*
Intercept	11.058	1.000	11.059	0.000	***
Independent Variables:					
CEODuality	0.328	0.222	1.476	0.144	
AverageDirectorships	0.278	0.073	3.800	0.000	***
CompCommitteeMemberDuality	-0.255	0.359	-0.710	0.479	
Interaction Terms:					
CEODuality*AverageDirectorships	-0.252	0.108	-2.326	0.022	**
CEODuality*CompCommitteeMemberDuality	0.690	0.401	1.721	0.089	*
Control Variables:					
Meetings	0.034	0.017	1.949	0.055	**
CommitteeSize	0.064	0.043	1.475	0.144	
ROE (%)	-0.004	0.002	-2.624	0.010	***
Sales(log)	0.083	0.045	1.857	0.067	*
Mining	0.293	0.217	1.346	0.182	
Manufacturing	0.020	0.149	0.134	0.894	
Communication	-0.559	0.182	-3.077	0.003	***
Retail	-0.066	0.176	-0.376	0.708	

***significant at the 1% level, **significant at the 5% level, *significant at the 10% level

TRAINING, TECHNOLOGY, AND THE OLDER WORKER: WHERE IS HRD?

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ABSTRACT

As the extensive list of references demonstrates, I examined literature across several disciplines, in addition to human resource development (HRD), including psychology, sociology, management, and adult education. This is not a comprehensive review of all literature related to training effectiveness, HRD, leadership, and organizational culture but is intended to be representative of the current challenges faced by organizations in the context of training older workers in technology. This paper seeks no policy sanctions to increase the retirement age but to offer an alternative to those that decide to remain in the workforce with training opportunities. The need for skilled technology workers within healthcare organizations will impact HRD to re-examine how training is delivered to the current workforce. The design and delivery of Healthcare Information Systems (HIS) training for older workers is of growing importance due to the aging workforce. HRD combining principles of adult learning, human capital theory, and industrial gerontology can develop new dimensions to training interventions producing skilled workers with organizational leadership support.

INTRODUCTION

The impending retirement of the baby boom cohort could pose dramatic challenges for the U.S. labor force for at least two reasons. First, the boomers, adults born between 1946 and 1964, are large in number. Second, in 2008, boomers made up 34 percent of all adults in the United States, and 38 percent of all workers (Neumark, Johnson, Li, & Schiff, 2011, p. 8). Healthcare advances have contributed to society in the form of increased availability of medicines and better diets producing an enhanced quality of life. The healthier lifestyles allow employees who desire to stay in the work place longer. By 2018 the population aged 55 years and older is projected to increase by nearly 21 million, to reach a total of 91.6 million (Bureau of Labor Statistics, 2009, p. 33). Subsequently, the healthcare industry is a growth area with technical and support workers being the largest growing segments. Based on the Bureau of Labor Statistics (BLS, 2012), 2008 special report there were 595,800 healthcare establishments. About 76 percent of healthcare establishments are offices of physicians, dentists, or other health practitioners. Although hospitals constitute only 1 percent of all healthcare establishments, they employ 35 percent of all workers within the US (Bureau of Labor Statistics, 2008). Healthcare organizations have critical service and delivery metrics that include preventative, maintenance, and emergency services for individuals in all socio-economic levels (Mantzana, Themistocleous, Irani, & Morabito, 2007). The services offered are based on the healthcare organizations purpose, vision of leadership and the capacity of its workers.

To enable the delivery of services to customers many healthcare organizations rely on information

technology from initial admission records to preparation of surgical kits used in operating rooms. “Healthcare and computer science occupations [will] lead the way in terms of projected rates of employment growth” (Neumark, et al., 2011, p. 10). To support the deluge of information processing needs within healthcare many organizations are relying on healthcare information systems (HIS) to harness the volumes of data. “The amount of health and medical knowledge is increasing at such a phenomenal rate that we cannot hope to organize and retrieve it without HIS” (Mantzana, Themistocleous, & Morabito, 2010, p. 10). Therefore, with changing workforce dynamics training older workers should be targeted to ensure successful acquisition of necessary skills which contribute to healthcare operations through the provision of skilled workers. Despite the excessive amount of money and countless working hours spent on system modernization of the healthcare sector HIS projects have failed worldwide (Heeks, 2006). One reason for project failures from an organizational prospective is the lack of skilled workers to operate the system.

The population of workers within society today is diverging from traditional retirement schedules with many choosing to remain employed with reasons ranging from supplementing retirement income to social interaction and intellectual gains. Due to the increased needs of healthcare organizations for skilled technology workers to support design and delivery of healthcare information systems (HIS) training for older workers it is of growing importance due to the aging workforce. Human resource development (HRD) using the principles of adult learning, human capital theory, and industrial gerontology can develop training interventions with the support of organizational leadership.

THE OLDER WORKER

The baby boomers are getting older. In fact, nearly all employed members of this mammoth generation, comprised of the 76 million persons born between 1946 and 1964 (Goldberg, 2000), can be classified as "older workers" according to the U.S. government. They are protected by federal regulations prohibiting age discrimination. There is widespread variation on how "older workers" are defined within the literature with who should and who should not be defined as an older worker remaining elusive (Samuels, 2010, p. 14). Aging refers to changes that occur in biological, psychological, and social functioning through time. All three types of aging are associated with, but are not identical to, chronological age. Biological age can be defined as an individual's position relative to his/her potential life span. Psychological age is indicated by the individual's capacity to adapt behavior to the demands of the environment. Social age refers to social norms and roles applied to an individual with respect to a culture or society. All three aspects play a critical role in the aging process at work (Birren & Birren, 1990; Sterns & Miklos, 1995, p. 48). In the Congo, old age is not primarily a chronological concept. Instead of chronological age, having social responsibilities, and being of good moral behavior are seen as major aspects of being old (Westerhof, Dittmann-Kohli, & Katzko, 2000, p. 655). AARP uses 50 as the age of eligibility for membership. The Older Americans Act of 2000 defines 55 as an older worker. The Age Discrimination in Employment Act (ADEA) of 1967, as amended in 1978 and 1986, protects workers over the age of 40. According to the ADEA of 1986, it is illegal to discriminate against a worker over 40 on the basis of age, age-related stereotypes, or assumptions concerning abilities, physical status, or performance, for any employment decision. Some think that 40 years of age is too young to be considered as an older worker (MetLife Mature Market Institute, 2005). However, aging is a multidimensional process that is difficult to adequately reflect in a single definition (Sterns & Miklos, 1995, p. 250). However, for the purpose of this paper the term 'older worker' will be used with reference to people aged 40 years and older as defined in the ADEA and cognitive components set forth in the literature. Psychological well-being is considered to be an important aspect of successful aging (Peeters & van Emmerik, 2008, p. 357). Theoretically, training of older workers is limited based on cognitive aging literature and individual learning skills. On average, older adults experience declines in processing speed (Salthouse, 1991), working memory (Baddeley, 1992), and inhibition function (Hasher & Zacks, 1988). These declines are viewed as components of age-related differences in cognitive performance and can start as early as age 40 (Park, 2000). Human capital theory developed by Mincer, (1958) , Becker (1964) and Ben-Porath (1967) posit human capital decisions based on training investments are linked to time until retirement. Predicting younger workers provide an increased payback on investment over older workers. Bartel and Sicherman (1993) provide when technology and organizational change are introduced to human capital theory it is influenced in two distinct ways. First, workers will continue working and forego retirement correlating additional training with increased wages past retirement age. Second, increased technological and organizational change induces earlier retirement indicating a high rate of depreciation not recoverable through training (p. 174). As chronological age increases individuals change both "biologically and psychologically, reflecting declines in some attributes such as eyesight, reaction time and hearing, as well as increases in other areas including experience and judgment" (Peeters & van Emmerik, 2008, p. 355). "Not all the cognitive abilities appear to deteriorate over the years....intelligence remains stable until on the average the age of 80" (Peeters & van Emmerik, 2008, p. 356). Older workers can support and mentor young workers but desire the same in return creating what Bennett, Pitt, and Price (2012) describe as a "two-way relationship" but I propose to include training into the relationship therefore creating a *'tri-directional interaction'*. Regardless of chronological characteristics career aspirations are still relevant for older workers. There are more opportunities now in the 21st century than ever before. Opportunities are not confined to physically intensive labor but increasingly include technological functions. Advances in technology and global markets have opened career options unimaginable previously. As the door of opportunity opens domestically and abroad many older workers are highly skilled and ambitious enough to pursue them. "Mark Driscoll, an employee for a professional services firm took his first overseas posting, from the US to India, at the age of 50....he is at the lower age range of the older generation moving for work" (British Broadcasting Channel News, 2012). Opportunities should not be regulated only for young workers but for all with the capability and desire. Every job requires training, "rapid pace of technological … increase[s] the demand for highly skilled and well-educated workers. This implies that workers, especially older…will continually need to engage in training and retraining activities to remain competitive in the work force" (Lee, Czaja, & Sharit, 2009, p. 17). "Even in old age they will still produce fruit; they will remain vital and green" (Psalms 92:14, NLT). Training opportunities provide human resource development practitioners options in deliver learning in environments conducive to this segment.

TECHNOLOGY, TRAINING, AND HRD

Cau-Bareille, Caudart, and Delgoulet (2012) found that older employees were not alone in experiencing learning difficulties on software application training rather the difficulties resulted from "a combination of three different elements: format, objectives, and learning method…" (p. 139). "Training and development are key human resource [development] management practices, primarily targeted at enabling employees to acquire job-related knowledge, skills and behaviours that improve their ability to meet organizational goals" (Lazazzaraa, Karpinskab, & Henkensc, 2011, p. 3). Human resource development (HRD) professionals play an important role in workforce learning initiatives due to their responsibility for managing people and their influence on training and development practices (Lazazzaraa, et al., 2011, p. 4). Adult learning theories that discuss motivation, interactive participation (e.g., hands-on activities), and time paced learning should be explored for application to the older worker. Human resource development professionals should keep in mind that "it does make a difference what the age group of your participants is for the kind of training… provide[d]….one size does not fit all" (ASTD, 2011). Strategically developed and delivered training plans can grow human capital. Talented people including older workers prefer to work in an environment that provides opportunities for learning (Robert, 2012, p. 4). Older workers participating in healthcare information system (HIS) training noted that "…the[ir] training was really interesting and some commented that they should be trained more often on topics related to new technologies and management" (Mantzana, et al., 2010, p. 10). Mantzana, et al., (2010) identified significant findings for workers over 40. One finding promoted flexible scheduling allowing "…participants…to study when they did not have…busy schedules" (p. 10). Furthermore, Lorge (1947) posits an adults' ability to learn after removing time pressures resulted in adults up to age seventy performing as well as younger adults (p. 326). Workers who indicate fluctuating periods of higher productivity can use self-directed learning techniques, such as diagnosing needs, evaluating learning, and finding resources (Knowles, 1975) to enhance their learning performance. Conversely, Cau-Bareille et al., (2012) identified that when "the trainer did not take account of the [age] diversity [it] was a source of serious learning difficulties" (p. 131). A study conducted by the Society for Human Resource Management (SHRM) in conjunction with the American Association of Retired Persons (AARP), surveyed nearly 400 human resource professionals on their attitudes of older workers (SHRM, 1998) and found;

- 77% agreed that older workers have a higher level of commitment to the organization than younger workers (only 5% disagreed)
- 68% concluded training older workers costs less or the same as training their younger counterparts (6% disagreed)
- 57% reported that age does not affect the amount of time required to train an employee (14% disagreed)
- 49% determined that older workers grasped new concepts as well as younger workers (18% disagreed)

One of the largest challenges for organizational human resource development practitioners is to create positive learning goals. Learning goals are very important for HRD practitioners directly linking financial input to organizational goals. Older workers can be pivotal in attaining organizational goals and avoiding historical failures. "Organisations have collective memories…. in individuals, in the culture of the organisations the unwritten rules, habits, myths, stories, etc….organisational memory…as a positive contribution it prevents organisations from making the same errors over and over again…" (Robert, 2012, p. 3).

One method of avoiding historical mistakes is to reconsider how age is factored into training decisions to meet organizational goals. Capital is one of the primary assets organizations use to meet goals. Capital is an asset that generates income and benefits over a specific time period.

Human resources are rightfully described as capital with older workers becoming a large portion of this equation. Education and training are also valuable assets for companies and investing in them increase earnings, knowledge, and skills (Lazazzaraa, et al., 2011, p. 6). There is a defined linkage between older workers and training that provide an economic impact to organizations. The decline of training for older workers is often based on the balance between labor cost and productivity. In the current context Conen, Henkens, and Shippers (2011)believe an older workers higher salary may exceed their productivity. Human capital theory suggests that investing in human capital by means of training improves work productivity over time and closes the gap between labor costs and the productivity of workers. Human capital theory which examines the determinants of investment in human capital and rates of return on education and training commonly exclude, older workers, from training for economic reasons (Becker, 1964). Therefore, the fact that older workers are routinely excluded from training highlights the question whether older workers are potentially less productive because of an expected physical and mental decline or due to under investment in continuing training (Warwick Report, 2006). There can also be a psychological aspect underlying low investment by organizations in the training of older workers. The underlying phenomenon is known as "ageism" (Butler, 1969), a set of discriminatory attitudes and behaviors based on age and on attribution of a number of negative characteristics and stereotypes toward older workers. One of the most persistent of preconceived notions about older workers is the belief that they are not interested in training and development opportunities that they are ''checked out,'' or worse, ''slow to learn,'' or difficult to train (Kite, Stockdale, Whitley, & Johnson, 2005; Rosen & Jerdee, 1976). Human resource development practitioners can create benchmarks that redefine training initiatives to include capitalizing on older workers life experiences in a format that meet their needs.

"Delivering training in an environment that fits the physical and psychological needs of older workers is a strategy of meeting the needs of this special population" (Allen & Hart, 1998, p. 8). Pennington and Downs (1993) recommend providing learning environments for older workers that provide audio and visual learning methods designed to compensate for any hearing or sight loss, reducing distractions, using good diction, speaking clearly, speaking at a normal rate of speech, and allowing the group to determine time requirements for assignments (p. 8). To equip human resource development practitioners and the workforce to effectively support older workers Lefkovich (1992) suggests;

- Appointing several employees as advocates for older workers training needs,
- Designate one or more employees to participate in conferences and seminars on industrial gerontology and have them report current findings,
- Partner with AARP (American Association of Retired Persons) or other organizations concerned with older worker issues,
- Provide career counseling for the older worker, and
- Offer educational seminars for managers and supervisors to overcome stereotypes about older employees.

Feeling good about yourself and your work enables individuals to be more positive and productive. "With regard to the affective dimension, a broad distinction can be made between
positive affect feelings of joy, interest, enthusiasm…and negative affect feelings of anxiety, depression, worry or other distressing psychological symptoms" (Peeters & van Emmerik, 2008, p. 357). The focus on the "positivity of words and their ability....are the greatest driver for diversity and inclusion at organizations" (Straczynski, 2012, p. 1). Additional factors for consideration when analyzing training opportunities for older workers is organizational leadership. Taylor and O'Driscoll (1998) posit that leadership decision makers and a culture of organizationally valued training define sustainability for initiatives and creditability to training managers (Taylor & O'Driscoll, 1998).

ORGANIZATIONAL LEADERSHIP

In the corporate knowledge economy chief executive officers (CEO) and business leaders are focused on organizational growth. Leaders understand one of the key factors in sustaining competitiveness lies in developing and retaining a highly skilled and knowledgeable workforce. Leadership also recognizes the strategic link between employee learning and performance measures that impact organizational results (Elkeles & Phillips, 2007, p. xxv). Organization size can be a significant factor in choices made by organizations in terms of human resource practices in general. Specifically regarding training and development practices the larger the workforce the more likely organizations will implement formalized practices (Garavan, Walton, Cross, & Carbery, 2008) for older workers. Through organizational leadership support human resource development practitioners administer training and development programs that create a motivated workforce to increase productivity. "Through the provision of high quality training in the field of HIS, well-educated health care professionals world-wide are expected to raise the quality and efficiency of health care…[and] significant economic benefits" (Mantzana, et al., 2010, p. 10). To help facilitate positive training opportunities leadership should have an age centric mindset for the aging workforce. Leaders should be proactive when implementing initiatives that embrace the knowledge and abilities of this segment in the workforce. Business objectives linked to human resource policies can increase workforce capabilities. Human resource policies and processes along with organizational culture can promote positive attitudes toward older workers. "The term older worker evokes a mental image....this mental image may be positive or negative, but [leadership and] HRD...professional[s] must have a balanced view of an individual" (Allen & Hart, 1998, p. 95). The aging workforce's need for respect, an appropriate work environment, and learning opportunities are most often neglected by enterprises (Leibold & Voelpel, 2006, p. 100). Even with perfect design and enthusiastic trainees, positive change requires organizational support (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Mindset should primarily be changed by leadership within the organization. Success depends on the beliefs of various groups including organizational leaders, supervisors, trainees, human resource development managers, and training facilitators. A clash of behavioral norms among any of these groups will thwart effectiveness (Bunch, 2007, p. 148). Organizations that are serious about overhauling company attitudes need to implement a step-by-step program (Steinhauser, 1998). To influence workforce culture human resource development practitioners should conduct cultural audits to identify stereotypical attitudes toward older workers. Identification of internal bias will help inform human resource development practitioners on appropriate intervention designs to debunk older worker myths. Diligences in reviewing managerial practices are necessary to manage corporate culture which filters from the top down. "Employees rely on cultural cues to determine the importance of training (Cromwell & Kolb, 2004; Franklin & Pagan, 2006). Training that is valued and promoted by leadership formulate the best support for older workers.

Literature has identified a direct correlation between organizational support to system usage and perceived usefulness (Igbaria & Iivari, 1995). Strengthening organizational support can yield dividends in the form of increased self-efficacy, more favorable beliefs, and eventually increased computer usage (Igbaria & Iivari, 1995, p. 549). Hemphill and Haines (1997) and Ferris, et al., (1999) posit "organizational values shape the overall perception of training as an expense or an investment…[age] diversity training, [is] doomed to fail when training content collides with organizational values" (p. 149). Training designed to promote older worker diversity will not overcome a culture that supports a youth centered environment. No intervention will succeed in the face of conflicting values (Bunch, 2007, p. 149). Failed interventions can result from incompetent or indifferent trainers (Baldwin & Ford, 1988; Salas & Kosarzycki, 2003; Swanson, 2001; Tannenbaum & Yukl, 1992); however, highly qualified practitioners, ready to assess needs and evaluate results, may be stymied by a lack of leadership support or an unwillingness to spend time and money on appropriate interventions (Bunch, 2007, p. 146). Organizational leaders can trivialize training through symbolic behavior that yields hiring unqualified practitioners, excluding human resource development leaders from the strategic planning process, or reflexively firing trainers at the first sign of an economic slowdown (Ruona, Lynham, & Chermack, 2003). On the other hand, supervisory behaviors such as encouraging subordinates before training or praising new behavior after training build positive perceptions of training (Rouiller & Goldstein, 1993; Xiao, 1996) through organizational support.

CONCLUSION

Baby boomers are the largest and first cohort to significantly challenge the organizational perception of workforce characteristics for training older workers. Healthcare advances have contributed to society with worker longevity and enhanced quality of life. With 2018 labor force projections of older workers expected to reach 91.6 million (Bureau of Labor Statistics, 2009), human resource development practitioners are strategically placed to develop training initiatives that incorporate and promote this cohort. "There is little rationale in today's service and information economy for denying elders the opportunity to work, or for compulsory retirement at the age of 65, a practice that was common throughout much of the 20th Century" (Rothenberg & Gardner, 2011, p. 12).

Leaders are co-authors needed to champion HRD's proactive measures implementing initiatives that embrace the knowledge, skills, and abilities of this workforce segment. Human resource development practitioners address major obstacles implementing the design of appropriate training interventions for older workers, combating workforce stereotypes, and garnering leadership support. Pennington and Downs (1993) suggest designing an environment that compensates for hearing and sight loss, reducing distractions and providing trainers that speak clearly at a normal rate of speech incorporating time requirements based on group input (p. 11). Rethinking the development of training, delivery, and evaluation can produce a new equation which rejects the traditional retirement age as a criterion. Skilled worker performance benefits can counter human capital perceptions of return on investment for the organization. Human resource development practitioners should proactively challenge the human capital theory when faced with organizational training initiatives. To provide better training opportunities for older workers a change in organizational mindset may be required. The primary champion necessary to promote positive change is leadership support through strategic vision, goals, and policy. The result of having a prepared workforce is priceless. "It is commonly known that trained workers support the organizations goals to achieve the desired standards of service, quality, efficiency, and productivity...and can make the difference between success and failure of the organization" (Elkeles & Phillips, 2007, p. 17). Human resource development is the congruent element necessary to develop successful training interventions throughout the organization in collaboration with leadership support that promote a diverse age centric training culture. Ultimately, a new composite of the older worker can be created, one that is an economic benefit to the organization through effective training interventions.

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A STUDY TO DETERMINE THE EFFECTS OF SOCIAL MEDIA USAGE ON COLLEGE ADVISING EFFORTS

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ABSTRACT

This study attempts to determine whether or not social media users have different perceptions on the effectiveness of advising resources provided by the college than those who do not participate in social media activities. The data for this study came from a survey given to students taking Foundation of Business Administration (FBA) course during fall semester of 2011. It included 132 freshmen and 64 sophomores of business majors. It was found that 90% of respondents were social media users, and majority of them viewed facebook was important to their daily life.
But, freshman students used facebook significantly more often than the sophomores did. This study also showed that there were some significant differences between the two groups in their perceptions of the helpfulness of several advising resources such as, advisors, catalogs, course instructors, parents, friends, and the FBA course. Additionally, non-facebook users relied on their parents and catalog for help more than facebook users.

INTRODUCTION

Using facebook as a tool for advising has not gained much attention at the local university. Thus the effectiveness of facebook in advising cannot be measured directly. However, there are a number of different advising resources that are available to every student. The objective of this study is to compare the opinions of two groups of students, facebook users and non-facebook users, concerning their perceived helpfulness of these advising resources.

To better advise students, the College of Business at the University faculty developed a first-year seminar course, Foundations of Business Administration (FBA). The FBA is a 2-credit interdisciplinary course. The major goals of this course are to help student understand the different functional areas in business and to provide exposure for students regarding possible careers in business. Students are required to meet with their advisor and draw a four-year study plan which includes all course requirements and the prerequisites. So, the course is most beneficial for freshman and sophomore students.

LITERATURE REVIEW

According to a national poll in the spring of 2011 conducted by the Harvard Institute of Politics, at least 90% of student at four-year colleges reported having facebook profiles. Students primarily interact with existing friends rather than creating new connections and social interactions is the main purpose as reported in Pempek, et. al. (2009). Researchers give mixed reports concerning the impact of facebook activities on students' academic performance. One study by Kirschner & Karpinksi (2010) concludes that the average grade point of facebook users is significantly lower than that of non-facebook users. On the other hand, study by Kolek & Saunders (2008) has found no significant relationship between average grade point and the use of facebook or other social network.

Due to the popularity of social media usage among high school students as well as college students, Barnes & Mattson (2010) and Barnes & Lescault (2011) have found that many colleges and universities are also making efforts to use social media, especially facebook, to recruit and research potential students. They also set up facebook account for admitted students in an attempt to help incoming freshman students become acquainted with their new environment and make connections with other freshman students or school officials. Because the practice is new, Nyangau, et al. (2012) finds that there is no clear metric to measure the success.

NACADA (National Academic Advising Association) Technology in Advising Commission recommends the use of social media in academic advising. There are also several blogs posted on the web that advocate using facebook as a tool in academic advising. A few successes have been reported by individual faculty members who use facebook giving academic advices. Other faculty members are reluctant to join the practice and have concerns such as privacy issues, technical obstacles, or effectiveness, etc. The outcome of such practice has not been measured or published.

METHODOLOGY

A survey was conducted in FBA course at the end of fall semester 2011. Information on gender, year in school, perceived helpfulness (strongly agree, agree, neutral, disagree, strongly disagree) in providing academic advice on resources such as FBA, four-yr study plan, advisors, parents, friends, catalog, staff, and freshman orientation, and facebook usage were collected and analyzed.

A total of 247 responded to the survey. There are 132 freshman, 64 sophomores, 45 juniors, and 6 seniors. For the nature of FBA course and this study, the authors only consider responses from freshman and sophomores with a total of 196 respondents. Tables and figures are constructed to display the results visually. Statistical analysis tests are also performed to draw conclusions.

RESULTS

It is not surprising that 90% of respondents reported using facebook. When asked to give a scale (1=least often, 10=most often) as to how often they used facebook for academic purpose, 56% of facebook user gave a scale of 1 or 2, additional 20% gave 3 or 4. The result is consistent with what has been reported in the literature that the majority of students use facebook for non-academic activities.

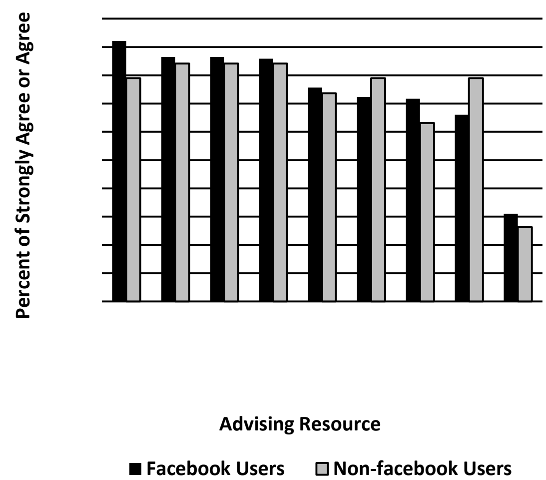
Table 1 shows that freshman uses facebook in their daily life significantly more than sophomores. There are 18.8% of sophomore respondents do not use facebook, while only 5.3% of freshman respondents are non-face users.

Table 1. Cross Tabulation of Year vs. facebook usage

	Facebook Users	Non-facebook Users	Total
Freshman	125 (94.7%)	7 (5.3%)	132
Sophomore	52 (81.3%)	12 (18.8%)	64
Total	177	19	196

Figure 1 shows that facebook users and non-facebook users perceived the helpfulness of the advising resources differently. For facebook users, the top five most helpful advising resources are study plan, course instructor, staff, FBA, and friends. On the other hand, for the non-facebook users, they are FBA, course instructor, staff, parents, study plan and catalog. (The last 3 are tied.) In addition, non-facebook users rate all advising resources lower than the facebook users, except parents and catalog. Surprisingly, no more than 30% of students from either groups felt freshman orientation is helpful.

Figure 1. Percentage of strongly agree or agree the advising resource is helpful



Respondents also give their opinions on whether or not their advisor discusses study plan with them or is willing to answer questions. Table 2 reports the percentage of strongly agree or agree expressed by respondents concerning their advisor. It shows that non-facebook users have less faviorable view about their advisor than the facebook users.

Table 2. Percentage of strongly agree or agree concerning the advisor perceived by students

	Facebook Users	Non-facebook Users
Discuss study plan with me	79.10%	52.60%
Answer my questions	80.20%	73.60%

CONCLUSION

Study plan, course instructor, and FBA course are consistently perceived by students as some of the most helpful advising resources. However, these helps are mostly obtained from face-to face meetings between the students and their advisor. Unfortunately, students (facebook users or non-facebook users) do not feel that their advisor is as helpful as other available resources. In addition, non-facebook users rely on their parents and catalog for help much more than facebook users do.

This study shows that there are significant differences in student's perception concerning the advising resources between facebook users and non-facebook users. However, it is not clear that the differences are solely due to the facebook usage. Nevertheless, if students do not think that their advisor provide better help than some of the other advising resources in a face-to-face environment, it is hard to believe that utilizing facebook by the advisor would significantly change the perceptions, especially, most students do not use facebook for academic purposes.

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APPLYING QUALITY MANAGEMENT TOOLS TO STUDENT-LEARNING DATA

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ABSTRACT

Assessment has evolved as the overarching issue within institutions of higher education, since accrediting agencies now require assessment of outcomes from all levels of these institutions, including academics. Deans, department chairs, program directors and faculty struggle with meeting these accreditation requirements. Accrediting agencies provide a broad outline of how to achieve these requirements, but details are limited. This paper suggests that the models provided in the literature are, in reality, a restatement of the Deming cycle as articulated in the quality management literature and in what quality practitioners do on a daily basis. Finally, this paper suggests models academics can use to determine where they can make improvements in student learning outcomes

INTRODUCTION

Assessment of student learning is a fact of life for colleges and universities as accrediting agencies require assessment of outcomes from all levels of the institution. These same agencies demand the use of the results to improve student learning, but provide little detail on how to meet these requirements, allowing institutions to use their own methods, but as researchers provide some guidance.

Prior to the 1980s, the academy worked in a teaching model using inputs (students, teachers, materials of instruction, etc.) that were assessed to determine success. In the 1980s the academy adopted a learning model with a change in emphasis from teaching to learning that resulted in the need to assess student-learning outcomes.

The Spelling Report forced higher education accrediting agencies into student-learning outcomes assessment under the threat of losses of revenue. Accrediting agencies also added the use of the data for improvement of learning processes. In addition, external stakeholders, such as governments, parents, alumni and funding sources, started demanding evidence that their money was educating students. Colleges and universities needed to comply or lose Federal and state financial aid.

Student-learning outcomes assessment reduces to two objectives: accountability to internal and external stakeholders and guidance to improve teaching and learning.

After a difficult struggle, higher education finally is finding its way in measuring student-learning outcomes through instruments such as rubrics, e-portfolios, embedded assessment, comprehensive examinations, internships, and senior, alumni and employer surveys and National Student Survey of Engagement (NSSE) and the Collegiate Learning Assessment (CLA). However, educational institutions still cannot figure out what to do with the overwhelming amounts of data once they are in hand

It appears that three models exist: multiple measures (i.e. two direct and two indirect measures, the scorched-earth plan and satisficing. Under the multiple measures, such as the two direct and indirect model, the results from a comprehensive exam and a capstone course constitute the direct measures of student learning and the results from NSSE and an employer survey make up the indirect measures.

With the scorched earth policy, universities look at the results from a comprehensive exam, a capstone course, internships, multiple course assessments, NSSE, CLA, employer survey, senior-exiting survey and teaching evaluations (student, peer, chair, dean). The decision criterion is to pick the ones that make the university look good

With the satisficing model, colleges do everything in sequence until the right combination of measures (the ones that make the college look good) is found. As soon as the right combination is found, the process stops without looking at any other measures.

The plethora of data generated from these models requires academics to determine where they can make improvements in student learning outcomes. This is the sticky part since academics love the debate aspects of this process, but not the planning, executing and evaluation for and their learning systems. This is where the teachings of Dr. E. Edwards Deming with his quality management concepts can help. Deming proposed the model of his mentor, Walter Shewhart, that continuous improvement cycle of plan, do, check and act, which has come to be known as the Shewhart or the Deming Cycle. Some prefer to use "study" instead of "check."

By properly executing this model, academics can improve their learning systems in a simple, but effective way. Since student-learning assessment is a slow process with data collected in periods of months or academic years, the use of the statistical control charts does not seem appropriate. But some soft tools are available in the quality management toolkit that can help prevent academics from tampering with the education system. Tampering is continually adjusting a process to compensate for variations (Business Dictionary.com, 10-2012).

Using Soft Quality Management Tools

The following discussion is an example of the use of four of these soft quality management tools to plan, executive and evaluate a scheme to improve student learning. The tools, consisting of brainstorming, affinity diagrams, relation diagrams and systematic diagrams, are use sequentially to achieve the desired outcome.

Brain Storming

Figure 1 shows the output from a hypothetic brain storming session dealing with the problem of low scores on assessment of the common professional core. This session would follow the normal rules of brainstorming. (While a limited number of concepts and ideas are given, in a brain storming session, a larger number would come forth.)

In far too many cases, the results of a brain storming session are marked on easel paper, which is taped on the walls as they are filled, and then everyone leaves the room thinking these ideas would drive improvement. But, these sheets of easel paper are taken down from the walls for delivery to a manager where they are quickly forgotten in favor of that manager's idea..

Affinity Diagrams

Affinity diagrams provide a means to slice and dice the concepts generated in brainstorming sessions and to find emerging patterns within the data. Figure 2 provides a visual rendition of a complete diagram. Essentially, the group working with the data scans the data to find common attributes and characteristics among the data elements. Once these patterns are identified, the like concepts are put together and given labels that indicate their contents.

Results of Brain Storming

Internship not required
Course objectives
Socio-economic status
Class ranking
Student's unvoiced need for assistive technology
Educational level
Teaching style
Student age
Faculty age
Faculty ethnic background
Student ethnic background
Sequencing of courses
Course objectives
Course content
Internship not required
Curriculum over-emphasis on one area
Non-alignment of courses with assessment tool
Gender (faculty and student)
Chair's leadership style
SAT scores
Health Problems (student)
<u>Problem Statement:</u>
Low scores on assessment of common professional core.

Figure 1

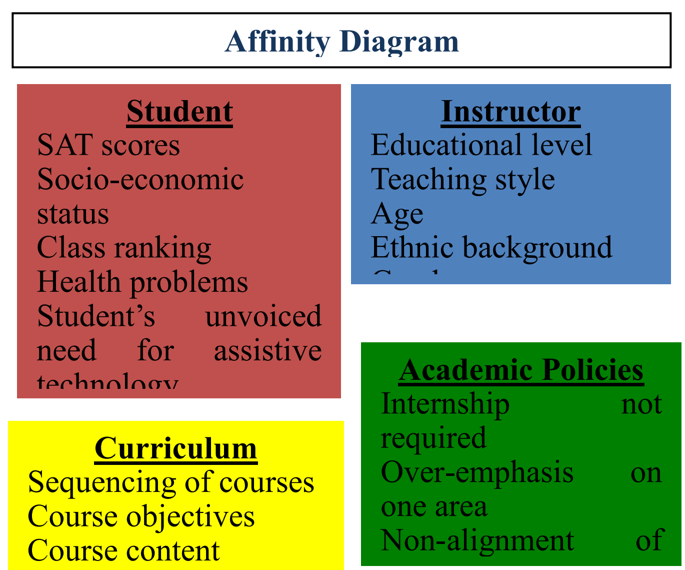

Figure 2

Relations Diagram

With the completion of the affinity diagram, the relationships among and between the collections of data are determined using a relationship diagram (see Figure 3). The question used in the relations diagram is whether one group of data influences or is influenced by another group of data.

The questioning can start at any group of data and can move clockwise or counter-clockwise, but the direction once determined remains the same throughout the exercise. Arrows are used to indicate direction and influence. An arrow going from data group one to group two indicates that group two is influence by group one. The questioning involving data group one continues to group three, group four, etc., until all data groups are questioned. Data group two now becomes the questioner and continues around to the last data group. This process is continues until all data groups are questioners.

The analysis can begin. The number of arrows going out (influencer) of a data group is counted and recorded as is the number of arrows coming into (influenced) the data group. Once all of these arrows are counted, the chief influencer and influenced is easily determined. The most influential data group by arrow count is the group of interest.

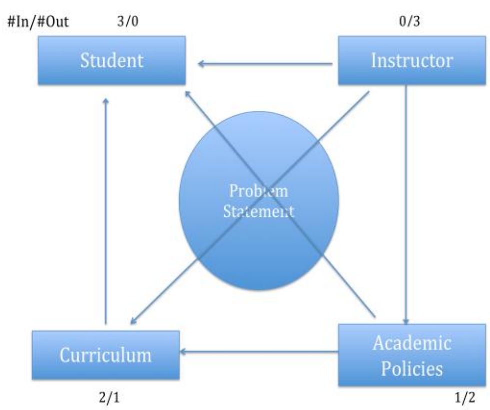

Figure 3

The Systematic Diagram

Those studying the problem can develop a systematic diagram once the a concept is chosen (this might require a repetition of the brainstorming-affinity diagram-relations diagram framework). The system diagram provides a representation of the various levels of actions needed to achieve the solution to the problem, objective or goal tasks and deadlines to participants and track the status of the project (see Figure 4). Additionally, these action items are used to test an improvement theory, or standardize an action or to plan for continuous improvement. The use of a systematic diagram provides focus to complex projects, objectives or goals.

The steps to completing a systematics diagram are for the academic unit to generate first level elements, which are broad statements of the means to achieve the desired outcome. The key question that needs answering is "What needs to occur for this outcome to come about?" Moving rightward on the diagram, the second level, the group needs to continuing answering the question "What needs to occur for this outcome to come about?" for each item identify in first level of elements. This question-answering sequence continues from left to right across the diagram with the required tasks getting more and more specific.

Academic units can review the completed diagram by moving from right to left asking, "Will this set of elements achieve the next set of elements." When all of the answers are "yes", the diagram is complete. However, the group can enhance the diagram by

assigning responsibility to members for the timely completion of the action item. Three columns are added denoting who is responsible, when the action item is due and what is the status of the work.

The process (brainstorming-affinity diagram-relations diagram-systematic diagram) provides a means for academic units to organize complex data and problems into a simple framework for action. The result needs evaluation using the same instruments that garnered the original data.

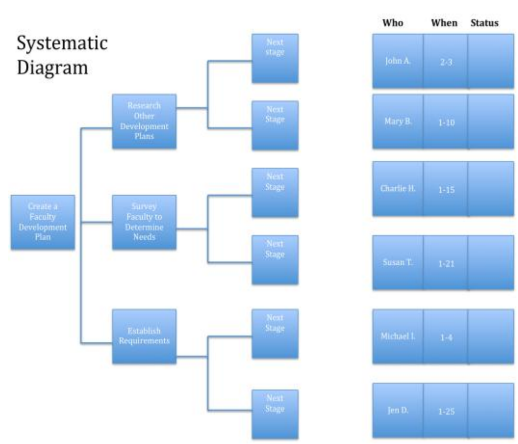

Figure 4

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CORPORATE TAX REFORM IN PENNSYLVANIA

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ABSTRACT

Much publicity has been given to closing the "Delaware Tax Loophole" in Pennsylvania. As legislators across the country look for ways to balance state budgets, perceived abuses such as this one have come under attack. This paper explores the nature of the state tax avoidance techniques employed and their impact, including the landmark Geoffrey case involving the Toys"R"Us group of companies. Recent developments in other states are compared to proposed legislation in Harrisburg. The legislation is then analyzed in the context of solutions employed by various jurisdictions.

INTRODUCTION

Pennsylvania currently has the dubious distinction of having the highest state corporate tax rate in the US (9.99%). Although the the marginal tax rate may be high, many multistate corporate businesses have have employed related party transactions to significantly reduce or eliminate their income tax in the state. Attempts to reform taxes in 2012 by reducing rates and addressing abuse have failed. Hopefully, the next legislative session will succeed in bringing much needed and long anticipated corporate tax reform to Pennsylvania.

THE DELAWARE LOOPHOLE

In recent media campaigns, candidates for the state legislature have called attention to the "Delaware Tax Loophole." Although this abuse was used as an attention-grabber, it was never explained in detail. It so happens that this scheme was singled out in 2004, by a special commission to investigate tax reform. Commission members were appointed from the business community and worked with the state Department of Revenue to evaluate reform alternatives in terms of projected revenue impacts to the state. One of the opportunities to raise revenue came from what is popularly referred to as the "Delaware Loophole".

In order to reduce the tax paid by corporations doing business in the state, a number of corporate groups establish passive investment companies (PICs) as subsidiaries. These PICs take ownership of significant intangible assets, such as trademarks, licenses and other intangibles. The PICs then charge related operating companies a royalty or fee for use of these intangibles in generating income in states such as Pennsylvania. This effectively shifts the income out of the operating company's state and and avoids taxation. The PICs are incorporated and located in states such as Delaware, where the passiveincome from licensing royalties goes untaxed, or is taxed at a very low rate.

Pennsylvania currently taxes each legal entity separately. Each member of an affiliated group of companies is treated under the law as a separate stand-alone corporation. Since these PIC royalties and fees are strictly intercompany charges within a group of related companies, there is no impact on group results, apart from reducing taxes in states where the operating companies do business. The intercompany charges and revenues are eliminated for consolidated financial reporting. In effect, these intercompany charges simply shift income out of high tax states like Pennsylvania, and into no or low tax jurisdictions. Such PICs are often "nameplate" corporations, with no operations, employees or tangible assets. A registered agent puts the name of the PIC on a door or wall, and that is typically the only substance such companies possess.

THE GEOFFREY DECISION

Many states have effectively closed the PIC loophole, through various means. The landmark case in the area is *Geoffrey, Inc. v. South Carolina Tax Comm'n,* (1993). In the Geoffrey case, the state supreme court upheld the tax commission's disallowance of Toys"R"Us royalty payments to the groups' passive investment company, named Geoffrey, after the well-known giraffe character featured in company logos and advertising.

The tax commission prevailed on the argument that Geoffrey, Inc was taxable in the state by reason of "economic presence." The company had relied on the fact that it had no physical presence or employees in the state of South Carolina and therefore should not be taxable.

The creation of the economic presence doctrine in this case shattered schemes relying on out-of-state related parties. The court found that the company's income from licensing of intangibles in-state constituted a minimum connection with the state, necessary for taxation. Likewise it also found that the state conferred benefits on the taxpayer, since the source of the royalty income, the Toys“R”Us Stores, enjoyed protection and benefits provided by the state (*Geoffrey, Inc. v. South Carolina Tax Comm’n, 1993).*

Many other states adopted laws and regulations based upon this concept of economic presence. In fact, states have since sought to expand the doctrine to tax other out of state companies in various industries (Lippman, 1996).

Although Toys“R”Us attempted to have the United States Supreme Court overturn the state court decision, the high court declined to accept the case (1993). Thus states adopting this doctrine are free to tax out-of-state PICs in similar circumstances.

For over a decade, Pennsylvania did not join other states attacking PIC licensing abuse. Instead, taxpayers continued to siphon off profits into states like Delaware. Finally in 2004, the governor assembled the Pennsylvania Business Tax Reform Commission. The commission, composed of 12 business professionals, issued a report recommending lowering the corporate tax rate and closing the “Delaware Loophole” (2004). The report is a lengthy 212 page document, with detailed statistical analyses performed by the state department of revenue.

The commission opted to close the loophole by means of a different tax policy, avoiding the issue of economic presence. Instead they recommended adopting the unitary basis of taxing corporate groups. This would end the abuse, since the taxable income of the group would not be reduced by the intercompany royalty charges. Unitary taxation has far broader implications for both the state and for taxpayers. Such other unitary tax considerations are beyond the scope of this paper.

PAINFULLY SLOW PROGRESS

The governor’s commission, working with the state department of revenue, estimated that the Delaware Loophole costs $500 million in lost revenue annually. So while South Carolina and other states chose to attack this abuse in 1993, Pennsylvania had not yet taken legislative action eleven years later. The commission’s investigation and report were finished in a span of about ten months in 2004. Incredibly, it took a 2011 special resolution in the state General Assembly (House Resolution No 286, 2011) to spur serious legislative action. Considering the state’s continuing budget challenges and the size of this particular tax expenditure, such inaction appears to border on negligence.

Finally, in 2012 the Assembly passed HR 2150, which proposed lowering the corporate income tax rate to 6.99 % (from 9.99%) and attempting to close the Delaware Loophole by disallowing related party licensing deductions.

POORLY CRAFTED TAX REFORM

The house committee which reported the tax reform bill rejected the commission’s call to drastically alter the basis of taxation to the combined reporting / unitary approach. By crafting language to disallow operating company royalty and licensing deductions for PIC payments, the house chose a weak solution to attack this abuse. A similar disallowance approach was one of South Carolina’s arguments in the *Geoffrey* case. In that case, the state supreme court rejected the disallowance approach (1993).

The proposed legislative attack on this abuse is flawed, and the wording of the bill leaves much to be desired. However, the other major reform objective: lowering the tax rate, was preserved. Although the House finally passed this bill, it languished in Senate committee, never experiencing a Senate vote.

FUTURE TAX REFORM EFFORTS

The lack of urgency to reform Pennsylvania state corporate income tax is regrettable. The failure to get any legislation passed, even the flawed HR 2150, reflects poorly on both the legislature and the state as a whole. Allowing this abuse to drain $500 million in revenue a year from the state coffers is unacceptable.

Instead of attacking the deduction via disallowance, adopting the economic presence doctrine as an addition the the state’s nexus standard would be a prudent intermediate step. It would close the loophole while not forcing the legislature to accept the drastic change of moving to unitary taxation. Complementing this revenue measure, the corporate income tax rate could be lowered in a revenue-neutral fashion.

To ignore well-established tax doctrines and allow the loophole to continue should not be an option. Pennsylvania has an opportunity to change corporate perceptions about the state being an unfriendly, high-tax environment to that of a progressive, pro-business state. Hopefully, the inaction and deadlock of prior years can be overcome and true reform can take place.

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RIVAL MODELS OF POLTICAL ECONOMY IN AFRICA

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ABSTRACT

Our paper will look at the rivalry between a U.S. government that must depend on private firms motivated by profit to operate in a high risk environment competing against a Chinese regime whose firms are state-owned and have motives other than profit. We will study which model will be most effective in advancing national interests and what constitutes the national interests of Beijing and Washington. In the end, we will consider which model of political economy is most compatible with African conditions.

INTRODUCTION

On August 2, 2012, the U.S. House of Representatives passed a bill that extended and expanded a number of multilateral trade agreements by voice vote. Later the same day, the Senate also passed the legislation by voice vote. President Barack Obama signed the bill into law the next day. Such speed and unity in a government that has been characterized by partisan gridlock for nearly two years indicates that there are some international issues upon which a broad consensus exists across party lines. At the core of H.R. 5986 was the Africa Growth and Opportunity Act (AGOA) originally enacted in 2000. AGOA provides substantial trade preferences that, along with those under the Generalize System of Preferences (GSP), allow virtually all export goods produced in AGOA-eligible countries to enter the U.S. market duty-free. It is a unilateral "free trade" agreement offered by the U.S. that does not provide reciprocal duty-free exports from America into Africa.

The intent of AGOA is to use "trade as aid" to stimulate economic growth, encourage regional economic integration, and to foster sub-Saharan Africa's integration into the global economy. AGOA added over 1,800 products to the more than 4,600 products already included under GSP. In 2011, U.S. goods imports from sub-Saharan African (SSA) under AGOA and the related GSP program totaled $70.6 billion, five times the amount in 2001.

The U.S. Chamber of Commerce, in league with its affiliated chambers in Nigeria, Ghana, Kenya, South Africa, Tanzania, Uganda, and Zambia, sent a letter to Capitol Hill stating, "AGOA is the first and only comprehensive policy for U.S.-Africa economic engagement, and as such represents an overwhelmingly positive tool of soft power on the continent. This goodwill is felt on a daily basis byU.S. companies on the ground."[1] It concluded by arguing, "If the United States is to continue to play a leadership role in the global economy, it is imperative that it dedicate significant attention to making inroads in frontier markets….U.S. companies are presently at risk in Africa." But from where does the risk come? The Chamber warned, "Last year China surpassed the United States and assumed America's long-running status as Africa's single largest trading partner."

CHINA BECOMES AFRICA'S LARGEST TRADING PARTNER

Though couched in commercial terms, the Chamber's letter presented the concept of strategic competition between the United States and the rapidly rising power of the People's Republic of China (PRC). The AGOA extension was acted upon by Congress during a trip through Senegal, South Sudan, Uganda, Kenya, Malawi, South Africa, Ghana, and Benin by Secretary of State Hillary Clinton (July 31-August 10). Clinton's trip followed by less than two weeks the 5th Forum on China-Africa Cooperation (FOCAC) held July 19-20 in Beijing.

FOCAC was created in 2000, the same year as AGOA. Delegations from 50 African countries attended the forum. Chinese President Hu Jintao promised the gathering $20 billion in financial assistance to the African continent. The theme of the conference was to "build on past achievements and open up new prospects for the new type of China-

[1] U.S. Chamber of Commerce, "Multi Industry Letter Regarding Opportunities for Growth In Africa" October 17, 2011. http://www.uschamber.com/issues/letters/2011/multi-industry-letter-regarding-opportunities-growth-africa

Africa strategic partnership."[2] As reported by the Congressional Research Service (CRS) in 2009, "China's foreign aid is difficult to quantify. The PRC government does not release or explain Chinese foreign aid statistics and much of PRC foreign aid does not appear to be accounted for in the scholarly literature on foreign aid. … China is a relatively small source of global aid. However, when China's concessional loans and state-sponsored or subsidized overseas investments are included, the PRC becomes a major source of foreign aid."[3]

According to Hu, the Chinese government has built more than 100 schools, 30 hospitals, 30 anti-malaria centers and 20 agricultural technology demonstration projects in Africa.[4] Beijing has also successfully rolled out US$15 billion in preferential lending, trained close to 40,000 Africans in various sectors, and provided more than 20,000 scholarships to students from African countries to study in the PRC.

In addition to becoming Africa's largest trading partner, these loans will make China Africa's largest financier, ahead of the World Bank and International Monetary Fund. Hu said the move was designed to stop "the big bullying the small, the strong domineering over the weak and the rich oppressing the poor" a thinly disguised slap at America and Europe. The loans will go towards supporting infrastructure, manufacturing and the development of small businesses. However, the general practice of Chinese state-owned banks is to finance Chinese firms in building the roads, ports, factories, mines, wells, power plants, and shops which will be counted as African growth.

In Beijing, as in Washington, economics is tied to broader strategy. The final FOCAC document proclaimed, "We believe that the development of the new type of strategic partnership between China, the largest developing country, and Africa, the largest group of developing countries, is of great significance for the peace, stability and development of the world and serves the fundamental and strategic interests of both sides."[5] And the term "balance of power" was also used.

WHAT IS REALLY AT STAKE

U.S. and PRC economic goals in Africa are not very different. A paper published by the Council on Foreign Relations last February stated, "[China] has increasingly focused on securing the resources needed to sustain its rapid growth, locking down sources of oil and other necessary raw materials across the globe. As part of this effort, China has turned to Africa. Through significant investment in a continent known for its political and social risks, China has helped many African countries develop their nascent oil sectors while benefiting from that oil through advantageous trade deals." [6] The CRS has also reported, "Overall, China's foreign assistance during the past several years has been driven primarily by Beijing's desire to secure and transport natural resources and secondarily for diplomatic reasons."[7] The annual report by the Secretary of Defense to Congress on Chinese military power and strategy stated in 2011,

> China's engagement, investment, and foreign construction related to energy continue to grow. Beijing has constructed or invested in energy projects in more than 50 countries, spanning nearly every continent. This ambitious investment in energy assets is driven primarily by two factors. First, Beijing is increasingly dependent upon imported energy to sustain its economy. A net oil exporter until 1993, China still lacks trust in international energy markets. Second, energy

[2] Ministry of Foreign Affairs of the People's Republic of China, "Biejing Declaration of the Fifth Ministerial Conference of the Forum on China-Africa Cooperation" July 20, 2012. http://www.fmprc.gov.cn/eng/topics/gfmmotfocac/t953958.htm

[3] Congressional Research Service, "China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia," February 25, 2009. http://china.usc.edu/ShowArticle.aspx?articleID=1423

[4] Speech by President Hu Jintao at the Opening Ceremony of the Fifth Ministerial Conference of the Forum on China-Africa Cooperation, Beijing, July 19, 2012.

[5] "Beijing Declaration" 2012.

[6] Christopher Alessi and Stephanie Hanson, "Expanding China-Africa Oil Ties" Council on Foreign Relations, February 8, 2012. http://www.cfr.org/china/expanding-china-africa-oil-ties/p9557

[7] CRS, "China's Foreign Aid."

projects present a viable option for investing China's vast foreign currency holdings.[8]

China imports over half the oil it uses and obtains over a quarter of its oil imports from Sub-Sahara Africa (compared to half from the Middle East). Its largest African suppliers are Angola, Sudan, the Republic of Congo, Equatorial Guinea, and Nigeria. Other African countries that export oil to China include Gabon, Algeria, Liberia, Chad, and Kenya.

The issue that dominated discussion of AGOA in the United States was the textile trade. The most active lobbyists for the bill were from the American and African textile and apparel industries. A letter from fourteen trade associations (four of them African) to House and Senate leaders argued that upon AGOA "hundreds of thousands" of jobs were "hanging in the balance."[9] In an op-ed column for *The Hill*, a newspaper catering to Congress, ambassadors Somduth Soborun of Mauritius and Sheila Siwela of Zambia stated that, "In the textiles and apparel sector, [AGOA] provides essential certainty and predictability for American manufacturers and retailers who depend on African workers to produce high-quality goods for the U.S. market."[10] The textile and apparel industries are the largest employers in Mauritius, Lesotho, and Swaziland, and constitute 70 percent of Kenya's exports to the U.S.

Yet, a look at the numbers reveals that textiles play a small role in overall U.S.-African trade. According to the Office of the U.S. Trade Representative, the main African sources of textile and apparel exports to America were Lesotho, Kenya, and Mauritius. These three countries account for only $775 million in goods sent to the U.S. out of a total of $53.8 billion in total exports from AGOA members. From Zambia, $37 million of its $51 million in exports to the U.S. came from steel, not textiles.[11] The top five SSA exporters to America in 2011 were Nigeria ($31.0 billion; mainly oil), Angola ($11.8 billion; mainly oil), South Africa ($3.7 billion; mainly vehicles and parts, iron/steel, fruits and nuts), Chad ($3.0 billion; mainly oil), and Republic of the Congo ($1.9 billion; mainly oil). Thus, U.S. trade with Africa is dominated by the same commodity as is Chinese trade: oil. And like China, America has the problem of how to pay for the oil with exports to the continent.

HOW TO PAY FOR OIL?

The U.S. trade deficits in goods with the four largest African suppliers of oil in 2011 were $28.9 billion with Nigeria (a $2.5 billion increase from 2010); $12.1 billion with Angola (a $1.5 billion increase from 2010); $3.1 billion with Chad (a $1.1 billion increase from 2010); and $439 million with the Democratic Republic of Congo (virtually unchanged from 2010). According to the USTR, Nigeria is the 44th largest market for U.S. exports, Angola ranks 69th, and the DRC is 136th. Exports to Chad are so low the USTR does not bother to rank them.[12]

According to the Census Bureau, among America's top 15 trading partners, who account for 70 percent of its trade in goods, not a single one is in Africa. The reason for this is obvious: there is no significant purchasing power in Africa. According to the World Bank, GDP per capita averages only $1,176, with three out of every four Africans living on less than $2

[8] Office of the Secretary of Defense, "Military and Security Developments Involving the People's Republic of China 2011" p. 20. http://www.defense.gov/pubs/pdfs/2011_CMPR_Final.pdf

[9] Letter to Sen. Max Baucus, Chairman, Committee on Finance; Sen. Orrin Hatch, Ranking Member, Committee on Finance; Rep. Dave Camp, Chairman, Committee on Ways and Means; and Rep. Sander Levin, Ranking Member, Committee on Ways and Means from the African Coalition for Trade, African Cotton and Textiles Industries Federation, American Apparel & Footwear Association, American Fiber Manufacturers Association, American Manufacturing Trade Action Coalition, Corporate Council on Africa, Emergency Committee for American Trade, National Council of Textile Organizations, National Foreign Trade Council, National Retail Federation, Outdoor Industry Association, Retail Industry Leaders Association, U.S. Association of Importers of Textiles and Apparel, U.S. Chamber of Commerce, June 13, 2012. http://www.nftc.org/default/Publications/Trade_Policy/120613_MultiIndustry_ThirdCountryFabricCAFTA.pdf

[10] Somduth Soborun and Sheila Siwela, "Protect jobs supported by US-Africa textile trade," *The Hill*, May 8, 2012. http://thehill.com/opinion/op-ed/226229-protect-jobs-supported-by-us-africa-textile-trade

[11] Office of the U.S. Trade Representative, "Africa" http://www.ustr.gov/countries-regions/africa

[12] Office of the U.S. Trade Re4presenttive, *2012 National Trade Estimates Report on Foreign Trade Barriers*. http://www.ustr.gov/about-us/press-office/reports-and-publications/2012-1

a day. Trade with South Africa, where GDP per capita is $10,000 and the country accounts for three-quarters of the SSA aggregate economy, was more balanced, but still in the red: Imports of $8.2 billion versus exports of $5.6 billion. As a whole, the World Trade Organization reported for 2010 that Africa took only 3.1 percent of world imports, about the same as Italy alone.

The U.S. approach to Africa as an export market has been inconsistent and half-hearted. At a May Symposium on Global Agriculture and Food Security, President Barack Obama said, "We've seen from Latin America to Africa to Asia, a growing middle class also means growing markets, including more customers for American exports that support American jobs. So we have a self interest in this." The U.S. exported $143 billion worth of agricultural goods in 2010. Yet, three paragraphs later, the president says, "Most of the world's unused arable land is in Africa. Fifty years ago, Africa was an exporter of food. There is no reason why Africa should not be feeding itself and exporting food again."[13] So is Africa a market or an export platform? Towards which outcome will American policy move the continent?

Speaking before the Africa Growth and Opportunity Act Forum in Washington, D.C in 2010, Francisco Sánchez, under secretary of Commerce for International Trade, identified Africa as a key market for U.S. exports. "Emerging markets, like those in Africa, are the largest source of untapped opportunities in trade," declared Sánchez. "I believe that the people of Africa will benefit from world class American products and services, as well as our technologies and business practices. This is a win-win opportunity for both of our countries. "[14] It is not his remarks that are telling, but the setting. AGOA is about promoting African exports. The American hope is that as Africa develops out of poverty; its ability to buy imports will grow. This is, however, a very long-run strategy.

In the short run, AGOA actually helps China pay its bills in Africa. This is because AGOA contains a third-party fabric provision which allows African textile producers to use fabric from China (and other places outside Africa or the U.S.) to manufacture goods sold duty-free in the American market. The current regional supply of yarn and fabric cannot fully meet the needs of apparel producers. For example, in Madagascar, apparel production capacity is estimated to be 20 to 30 times higher than that of Madagascar's capacity to produce textile inputs. As a result, most of the fabric used in the production of apparel for the U.S. market is imported into SSA from third countries, mainly China and other Asian suppliers. The largest textile manufacturing firms in Africa are Taiwanese who have ready access to fabric from China.

While it would make sense to expand the African-based industry upstream to yarns and fabrics, the higher skill levels of workers and the greater capital investment required are not available. The infrastructure to support manufacturing growth, such as transportation networks, electrical power grids, and water sources, are also lacking."[15] Thus Africa will likely remain merely a cheap labor operation while the higher, value-added component of fabric manufacturing will earn profits for China in the American market. Chinese emphasis on investing in natural resources, paying for minerals and fuels with inexpensive manufactured goods produced in China, pushes Africa away from higher, value-added industrial development. This move keeps the continent's economy based on cheap labor and primary products which will stymie long-term development.

David Zweig, a professor at the Hong Kong University of Science and Technology has stated, "In the past, if a state wanted to expand, it had to take territory. You don't need to grab colonies any more. You just need to have competitive goods for sale."[16]

[13] Remarks by the President at Symposium on Global Agriculture and Food Security, Washington, DC, May 18, 2012. http://www.whitehouse.gov/the-press-office/2012/05/18/remarks-president-symposium-global-agriculture-and-food-security

[14] "Senior Commerce Department Official Highlights President Obama's National Export Initiative at Africa Growth and Opportunity Forum" International Trade Administration, August 3, 2010. http://trade.gov/press/press-releases/2010/senior-commerce-department-official-highlights-president-obamas-national-export-initiative-at-africa-growth-opportunity-forum-080210.asp

[15] U.S. International Trade Commission, *Sub-Saharan Africa: Factors Affecting Selected Industries, Second Annual Report*, April, 2008, p. 3-46. http://www.agoa.gov/build/groups/public/@agoa_main/documents/webcontent/agoa_main_003856.pdf

[16] Quoted in Serge Michel and Michel Beuret, *China Safari: On the Trail of Beijing's Expansion in Africa*, (Nation Books, 2009) p. 115.

Chinese goods sell at prices that are only a fraction of what comparable goods cost from Europe. Nor are they all low-end items. The proportion of machinery and electronic products accounts for more than half of China's exports to Africa. America no longer makes inexpensive consumer goods, having conceded that market to China even in the U.S. Chinese telecom giants Huawei and ZTE are pushing Western firms out of new networks, providing better service in over 30 SSA countries.[17] China is also expanding the export of automobiles to SSA. French journalists Serge Michel and Michel Beuret argue that "Cheap goods can be an even more habit-forming drug in poor countries than they are in rich ones."[18] Yet, this can slow local growth not only in manufacturing, but in the formation of a business class as Chinese merchants handle the distribution and sale of Chinese goods down to the retail level so as to extract every Yuan from their exports. Indeed, many Chinese are moving to Africa not only to start small businesses, but also to become farmers.

Assistant to the President and Deputy National Security Advisor for International Economic Affairs, Michael Froman, led a high-level delegation consisting of senior Administration officials from the Department of Commerce, the U.S. Agency for International Development, USTR, the Overseas Private Investment Corporation, the Department of State, and the National Security Staff to SSA in July of this year. The trip included stops in Tanzania, Ethiopia, Kenya, and Nigeria, the last stop being the only major oil producer.

IDEOLOGY OR COMMERCE?

The trip was to promote the Presidential Policy Directive, *U.S. Strategy Toward Sub-Saharan Africa* issued in June. The PPD, however, says little about promoting American exports to Africa other than the government will "assist U.S. businesses in identifying and seizing opportunities in sub-Saharan Africa" to invest as well as trade. Creating a larger market in Africa is mentioned, but it is linked to regional integration and "global trade." How "to increase Africa's capacity to produce goods for export that are diverse, competitive, and meet global standards" is given more attention.[19] American policy is to help African producers to become more competitive and to diversify beyond the export of natural resources.

In 2010, 29 percent of total U.S. official development assistance (ODA) went to SSA ($7.7 billion), and five of the top ten countries receiving ODA were in Africa (Ethiopia, $875 million; Sudan, $726 million; Kenya, $566 million; South Africa, $530 million; and Tanzania, $457 million).[20] Overall, ODA concentrates much more on health, humanitarian assistance, and civil society projects than on economic infrastructure development.

In the strategy's list of four priorities, spurring economic growth, trade, and investment comes in second to the top priority to "strengthen democratic institutions." It promises that "The United States will expand efforts to support and empower key reformers and institutions of government at all levels to promote the rule of law, strengthen checks on executive power, and incorporate responsive governance practices." In short, it is a declaration of war on most African leaders and on the goal of forming strong central states. Such an approach to government is not a priority for Beijing, and, indeed, runs contrary to the principles that underlie China's own regime. Beijing made this connection explicit in its 2011 white paper *China's Peaceful Development*. In its foreign policy section, the official document states,

> The Chinese people adhere to the social system and path of development chosen by themselves and will never allow any external forces to interfere in China's internal affairs. China….does not form alliance with any other country or group of countries, nor does it use social system or ideology as a yardstick to determine what kind of relations it should have with other countries. China respects the right of the people of other countries to independently choose their own social system and path of development, and does not interfere in other countries' internal affairs.

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[17] David E. Brown, *Hidden Dragon, Crouching Lion: How China's Advance in Africa is Underestimated and Africa's Potential Underappreciated*, Strategic Studies Institute, U.S. Army War College, September, 2012, p. 33.

[18] Michel and Beuret, *China Safari*, p. 115.

[19] The White House, *U.S. Strategy Toward Sub-Saharan Africa*, June 14, 2012, p. 4. http://www.whitehouse.gov/sites/default/files/docs/africa_strategy_2.pdf

[20] U.S. Official Development Assistance Database, USAID Economic Analysis and Data Services. http://usoda.eads.usaidallnet.gov/data/fast_facts.html

African leaders welcome this approach. They are not only expanding business with China, many are also adopting what has become widely known as "the Chinese model" of political management. It is the promoting of economic development while ensuring the continuation of a one-party state. Case in point: the recent "election" in Angola, a country that is a major provider of oil to both China and the United States. The Popular Movement for the Liberation of Angola won with 72 percent of votes, extending Dos Santos's 33-year rule by five years. Dos Santos had relieved himself of the inconvenience of having to openly run for president. A new amendment automatically gives the presidency to the leader of the winning party in the parliamentary vote.

The PRC Foreign Ministry said on September 4, "China noted that the election was successfully held in Angola on August 31. Overall, the situation was peaceful and orderly. We were pleased to see that. …China respects the Angolans' choice and stands ready to continue to push forward bilateral friendly cooperation with the Angolan side."[21] In contrast, the U.S. State Department greeted the election outcome with caution. On Sept. 5, State said, "Angola's 2012 election marked an important step toward strengthening Angolan democratic institutions." But it added, "Nevertheless, Angolan civil society and opposition parties raised important concerns about unequal access to the media, problems with voter rolls, and lack of timely accreditation of domestic, international, and political party election observers. We urge the Angolan authorities to investigate and address promptly all electoral complaints, while working to augment political rights and civil liberties."[22] Given that Dos Santos and his party hold an absolute grip on power with no sign of giving any of it up, the U.S. statement was far less "realistic" than the Chinese.

THE CHINA/ANGOLA MODEL

Angola has been one of the four biggest recipients of Chinese financing for infrastructure projects including electrical grids, water systems and road and railroad construction. China and Angola's partnership has come to be known as the "Angola model" and has become prevalent across Africa. Under the Angola model, the recipient country receives a loan from the China Export-Import Bank. The government then awards infrastructure projects to Chinese firms, while also giving rights for extraction of its natural resource to a Chinese company as repayment for the loan. The terms of the loan are usually concessional in nature, with low interest rates (ranging from one to six percent), long repayment periods (from 5 to 25 years), and a generous grace period (from 2 to 10 years).[23] As with consumer exports, Chinese investments primarily fund Chinese businesses. The result may be higher growth statistics, but African governments have not been able to ensure a wide range of benefits at the national and regional levels.

Chinese banks are also expanding, with South Africa becoming their financial hub. Besides funding Chinese business ventures, Beijing's state banks are leveraging their influence by buying into Western banks operating on the continent. Industrial and Commerce Bank of China (ICBC) has bought a stake in Standard Bank and China Development Bank has invested in Barclay's. [24]

The ICBC-Standard partnership recently announced $825 million in financing for a coal-fired power plant in Botswana. The contract is expected to go to a Chinese firm. In February, China National Electric Equipment Corporation activated Botswana's Morupule coal fired plant, construction of which had been started in 2009 as a way to boost Chinese exports during the global financial crisis. Another state enterprise, China National Machinery Industry Corporation (Sinomach), provided much of the machinery for the $900 million project financed through the efforts of the PRC Ministry of Commerce.[25]

[21] Foreign Ministry Spokesperson Hong Lei's Regular Press Conference on September 3, 2012. http://www.fmprc.gov.cn/eng/xwfw/s2510/2511/t966464.htm

[22] Patrick Ventrell, Acting Deputy Spokesperson, Department of State, "Angola Post-Election" Sept. 5, 2012. http://www.state.gov/r/pa/prs/ps/2012/09/197347.htm

[23] *Economic Diversification in Africa: A Review of Selected Countries, A joint study by the United Nations Office of the Special Adviser on Africa and the NEPAD-OECD Africa Investment Initiative*, 2010, p. 15. http://www.nepad.org/system/files/OSAA-NEPAD_Study_Final5Oct.pdf

[24] Brown, *Hidden Dragon*, p. 20.

[25] Press release, "Botswana Coal-fired Power Plant Unit 1 Successfully Connected to Grid," China National Machinery Industry Corporation (SINOMACH), March 3, 2012. http://www.sinomach.com.cn/templates/T_news_en/content.aspx?nodeid=161&page=ContentPage&contentid=10208

Chinese firms often bring their own workers to Africa, especially in skilled or technical fields. Dozens of the more recent China Export-Import Bank financed projects listed at the Angolan Ministry of Finance website give information about Chinese versus Angolan workers. Using this data, Deborah Brautigam, Professor and Director, International Development Program, Johns Hopkins University/SAIS, calculated an average ratio of 54 Angolans to 46 Chinese over 19 separate infrastructure projects as of 2010. She has found a wide variety of ratios in other African countries.[26] Chinese working on major infrastructure projects or in the oil industry (where security is a bar to hiring locals) usually live on site and do not mix with the native population.

It is thought that about a million Chinese have immigrated to Africa in the last decade. While this may not seem threatening to a native workforce of 340 million, the concentration of Chinese as merchants, managers, and engineers gives the impression that the foreigners are skimming the best jobs. The number is large enough to spark discussion even on controversial subjects. For example, some have suggested that if there is a large-scale marrying of African women to Chinese immigrants, it can effectively solve China's "surplus male" imbalance that has resulted from the use of gender-selective abortion to comply with the one-child policy of the Beijing regime.[27]

The influx of Chinese is starting to have political impacts. Zambia, the African country with which the PRC has had the longest relationship, elected a new president in September, 2011. The voters chose Michael Sata, who had run on a populist platform calling for better wages and working conditions at Chinese-owned mines. Shops owned by Chinese and other foreign merchants closed when the election results were announced fearing victory riots against their operations. The Chinese-owned Chambishi Copper Mine printed two sets of payroll checks. A low amount if Sata lost and a higher amount if he won.[28] Zambia is Africa's largest copper producer and is the fifth largest supplier of copper to China, the world's leading importer. Managers of Chinese mining companies have banned union activity and on at least two occasions, have fired on protesting African workers.

Besides mining reform, Sata had also called for controls on Chinese immigration. The minimum wage has been raised for all work, in part, because Chinese merchants pay Zambian clerks less than do Zambian merchants, who then felt pressured by their foreign rivals to cut wages to stay competitive on retail prices.

In Namibia, new regulations ban all foreign investment in hair salons and public transport, and there is a more restrictive permit system for shop owners. This was in response to a plea from the Windhoek chamber of commerce, "There has been rapid growth in the number of small-scale retailing outlets throughout the country, offering low-quality products and replacing long-existing, locally-owned businesses."[29]

THE ARMS TRADE: COMMERCE, VALUES AND SECURITY

Beijing has another source of trade revenue which endears itself to African governments: weapons. Though China is only the sixth largest arms dealer globally, it sells to more SSA countries (16) than any other country and is the continent's top source for weapons. The policy of "noninterference" is used as cover for China to sell military equipment to rogue states like Sudan and Zimbabwe, but in reality, Beijing is intervening in these states in favor of the existing dictatorships. Chinese weapons also regularly show up in the Democratic Republic of the Congo which is under an international arms embargo.

Most Chinese weapons for export are less advanced and sophisticated than weaponry available from the

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[26] Deborah Brautigam, "China in Africa: The Real Story", blog at http://www.chinaafricarealstory.com/p/chinese-workers-in-africa-anecdotes.html

[27] Damien Ma, "Chinese Workers in Africa Who Marry Locals Face Puzzled Reception at Home" *The Atlantic*, June 20, 2011. http://www.theatlantic.com/international/archive/2011/06/chinese-workers-in-africa-who-marry-locals-face-puzzled-reception-at-home/240662/

[28] Alexander Mutale, "Zambia's new President Sata sets new mining rules for China" The Christian Science Monitor, September 28, 2011. http://www.csmonitor.com/World/Africa/2011/0928/Zambia-s-new-President-Sata-sets-new-mining-rules-for-China

[29] Tessa Thorniley, "Big in Africa" *Danwei*, August 2, 2010. **http://www.danwei.org/china_and_africa/independent_chinese_entreprene.php**

U.S., Europe, or Russia. China's clients in Africa are those states seeking quantities of small arms and light weapons, rather than major combat systems. Such arms have generated massive amounts of death in the region's many border skirmishes, interventions, and civil wars. China is the world's top exporter of light arms. The prospects for significant revenue earnings from these arms sales are limited. One of the selling points for Chinese weapons is that they are cheap. The U.S. government has estimated that China sold only $800 million worth of arms to Africa during 2007-2010, not nearly sufficient to balance the bill for imports from Africa.[30] Chinese arms exports were, however, significantly higher than the $85 million in military sales to Africa by the United States during the same period. Beijing likely views such sales as being political rather than commercial, enhancing China's access to oil and other natural resources. Indeed, the dollar figures understate Chinese arms transfers because they do not take into account the barter of weapons for access to oil and minerals.

Chinese arms sales have been controversial. In 2008, South African dock workers refused to unload weapons from a Chinese ship that were destined for the brutal dictatorship in Zimbabwe. Other countries followed their example and refused to let the Chinese ship dock. It finally turned around and headed home to the PRC.[31]

Sudan has been a special case where Chinese military support has been a central element in a strategic oil policy in a conflict zone. Sudan has been torn by decades of civil war waged along religious and tribal lines; the Muslim north against the Christian and Animist south. The north-south civil war cost the lives of 1.5 million people, and a continuing conflict in the western region of Darfur has driven two million people from their homes and killed more than 200,000. The Sudanese president, Omar al-Bashir, has been charged with war crimes in Darfur by the International Criminal Court. Under Western pressure, a comprehensive peace agreement was signed in January 2005. The accord provided an option for the south to secede, which it did by vote in July 2011, creating the new state of South Sudan. However, tensions remain high because most of Sudan's oil was in the south. Battles have raged for control of the Heglig oil field, and the Sudan regime has refused to pump southern oil through its pipelines for export.

China has been the principle supplier of arms to the Sudan regime, and Sudan was China's seventh-largest supplier in 2011, exporting about 260,000 barrels a day. Chinese state firms invested $15 billion in Sudanese oil fields and infrastructure, and deployed significant security forces to protect them. Oil exports were halted in January 2012, but resumed in August after a deal was struck on transit fees South Sudan would pay to Sudan for pipeline use. In April, the PRC had urged Sudan and South Sudan on Monday to protect the rights and interests of Chinese oil companies. "Chinese oil companies and their partners have major projects in both Sudan and South Sudan. Their legitimate rights and interests deserve substantial protection," declared a Foreign Ministry spokesman at a regular press conference.[32] South Sudan wants to build a new pipeline through Uganda to Kenya for export to the global market. China, the main buyer of South Sudan's oil, has refused to fund the much-publicized alternative oil pipeline, preferring to keep oil flowing through Sudan.[33]

While U.S. oil companies have not been active in Sudan due to American-backed UN sanctions imposed in 1995, a new state and pipeline could make further development of South Sudan oil tempting. In September, Exxon "agreed in principle" to take over part of an oil field formerly held by French Total.[34] China's most important investment in Africa may be lost to politics, not economics. South Sudan has been brought into the AGOA system. As Mauro De Lorenzo, Resident Fellow at the American Enterprise Institute testified to the U.S.-China Economic and Security Review Commission in 2008,

[30] Richard F. Grimmett, "Conventional Arms Transfers to Developing Nations, 2003-2010" Congressional Research Service, September 22, 2011, p. 51. http://fpc.state.gov/documents/organization/174196.pdf

[31] Mark Tran, "Zimbabwe Arms Shipment Returns to China" *The Guardian*, April 24, 2008. http://www.guardian.co.uk/world/2008/apr/24/zimbabwe.china

[32] "China urges Sudan, South Sudan to protect interests of Chinese oil companies" Xinhua, April 24, 2012. http://www.focac.org/eng/zxxx/t925685.htm

[33] "Viewpoint: South Sudan has not lived up to the hype" BBC News Africa, June 26, 2012. http://www.bbc.co.uk/news/world-africa-18550314

[34] Nicholas Bariyo, "South Sudan Shakes Up Oil Sector", *The Wall Street Journal*, Sept. 14, 2012. http://online.wsj.com/article/SB10000872396390444023704577651482433957326.html

"If China is foolish enough to think that, first of all, you can control anything in Nigeria or Chad in some kind of permanent way, they're welcome to make that mistake. And there's a reason why a lot of the assets that China is developing were not developed previously by our firms or others, because they're dangerous and risky and not always profitable."[35]

OTHER AMERICAN OBJECTIVES

The United States has also been concerned about security issues in Africa, with the war on Islamic terrorism receiving more attention than trade. These concerns have taken on renewed urgency with the rise of Boko Haram in Nigeria, the establishment of al-Qaeda bases in Mali, and the capture of large weapon caches by extremists during the Libyan revolution. [36]

U.S. African Command became operational on October 1, 2008 (headquartered in Stuttgart, Germany). It is one of six U.S. military commands that cover geographical regions around the world. Its core mission is to assist African states and regional organizations to strengthen their self-defense capabilities, especially against "transnational threats", which means terrorism. There is, however, an economic component in the belief that security is essential for development. And again, there is the American philosophy at work, with the aim of creating in African states "professional militaries that respect human rights, adhere to the rule of law, and more effectively contribute to stability in Africa."[37]

The mixture of values in U.S. policy was manifest in the testimony of Johnnie Carson, Assistant Secretary of State, Bureau of African Affairs, before the U.S. House Foreign Affairs Subcommittee on Africa, Global Health, and Human Rights on September 13, 2012. He told the members of Congress, "If we are to assist our African partners in achieving a more democratic, prosperous, stable, and secure Africa, we must address these conflicts. Conflict destabilizes states and borders, stifles economic growth and investment, and robs young Africans of the opportunity for an education and a better life. To address these conflicts, we need well-resourced UN, African Union (AU), and regional peacekeeping operations."[38] The emphasis is on training local forces, not deploying U.S. combat troops other than advisors, support personnel, and special operators.[39]

China, however, has not been neglecting regional security organizations. In January, the new headquarters of the African Union opened in Addis Ababa, Ethiopia. The 20-story, $200 million complex was donated by Beijing. Construction began three years ago by the China State Construction Engineering Corporation, using mainly imported Chinese materials.[40]

On September 19, the Senate Foreign Relations Committee approved legislation (S 2215) that seeks to boost U.S. exports to Africa by 200 percent over 10 years while combating competition from China.

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35 Mauro De Lorenzo, Testimony, U.S.-China Economic and Security Review Commission, March 18, 2008. http://www.uscc.gov/hearings/2008hearings/transcripts/08_03_18_trans/08_03_18_trans.pdf#xml=http://www.dmssearch.gpo.gov/PdfHighlighter.aspx?DocId=203&Index=D%3a%5cWebsites%5cUseIndex%5cUSCC&HitCount=12&hits=1ef+1f0+1f1+63c+63d+63e+965b+965c+965d+96a9+96aa+96ab+

36 Greg Miller and Craig Whitlock, "White House secret meetings examine al-Qaeda threat in North Africa," The Washington Post, October 1, 2012. http://www.washingtonpost.com/world/national-security/white-house-secret-meetings-examine-al-qaeda-threat-in-north-africa/2012/10/01/f485b9d2-0bdc-11e2-bd1a-b868e65d57eb_story.html

37 Mission Statement, U.S. African Command. http://www.africom.mil/getArticle.asp?art=1644

38 Assistant Secretary of State Johnnie Carson, Testimony before the U.S. House Foreign Affairs Subcommittee on Africa, Global Health, and Human Rights, Washington, DC, September 13, 2012. http://www.state.gov/p/af/rls/rm/2012/197773.htm

39 In September, the 2nd Brigade of the 1st Infantry Division was "aligned" with AfriCom. The unit remained in Kentucky, but troops could be called upon for service in Africa as needed, with some personnel rotating through African assignments to gain experience in the theater. However, AfriCom commander Gen. Carter Ham reiterated, "We don't want big forces in Africa." See Paul McLeary, "U.S. Unit's Africa Deployment Will Test New Regional Concept," *Defense News*, Sept. 26, 2012. http://www.defensenews.com/article/20120926/DEFREG04/309260003/U-S-Unit-8217-s-Africa-Deployment-Will-Test-New-Regional-Concept?odyssey=mod|newswell|text|World News|p

40 Yara Bayoumy, "Glitzy new AU headquarters a symbol of China-Africa ties" Reuters, January 28, 2012. http://uk.reuters.com/article/2012/01/28/uk-africa-china-idUKTRE80R0RG20120128

The bill calls on the President to establish a comprehensive strategy for trade and investment with Africa. It would create the new position of White House Africa Strategy Coordinator. The Export-Import Bank would be instructed to increase its export financing for projects in Africa and counter trade-distorting lending by China. Yet, even if the goal set out in the bill is met, it would not bring trade with Africa into balance. The U.S. trade deficit with Africa in 2011 was $60.1 billion, with imports nearly triple exports. So doubling exports, while somehow keeping imports constant, would still not close the gap in a decade. Indeed, merely doubling exports during a time when SSA GDP is expected to double would only keep up with demand, it would not expand America's market share.

China, in contrast, has kept its trade balance with Africa as both exports and imports have grown rapidly over the last decade. Though China still runs bilateral trade deficits with its main suppliers of oil and minerals, it counterbalances these deficits with trade surpluses with other nations, selling cheap consumer goods in nearly every corner of the continent and winning major construction contracts. Thus, while the U.S. envisions rapid future growth linked to democratic reforms creating a larger market for American goods and services; China is better positioned to trade with Africa as it is today, laying the foundations for robust commercial ties as the continent develops.

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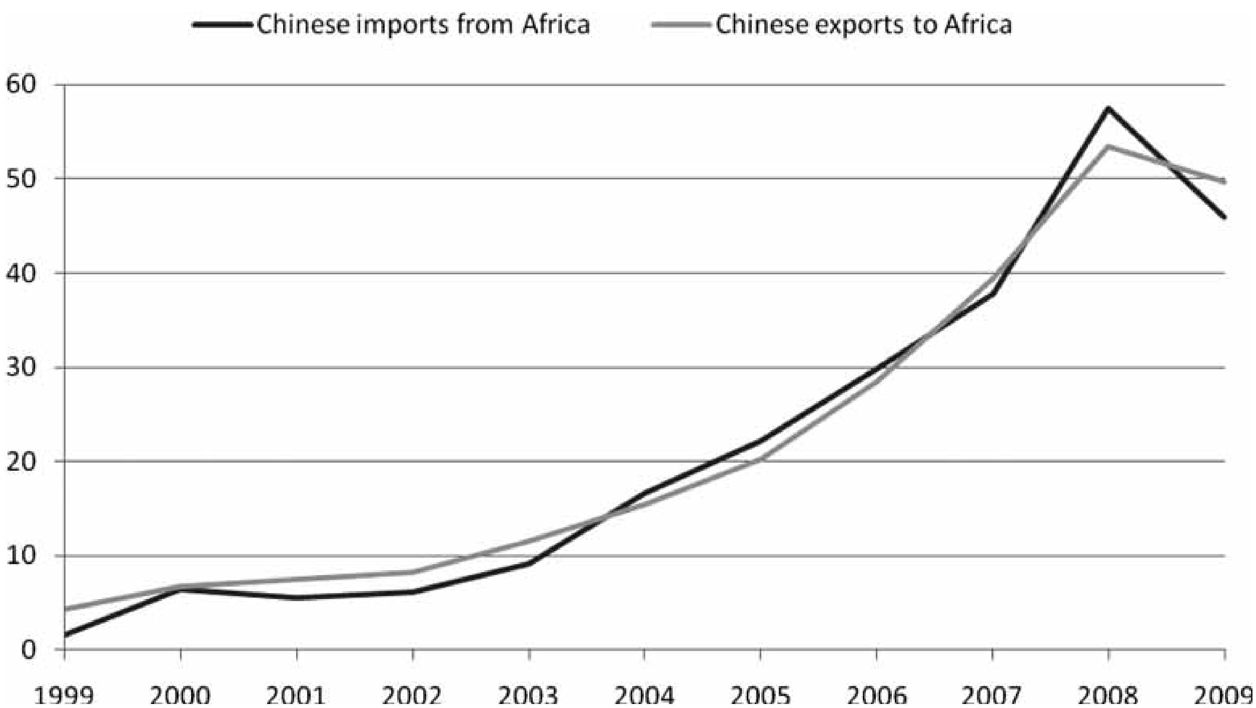
SINO–AFRICAN TRADE, 1999–2009



Based on data from UN Comtrade 2010. Absolute numbers (not adjusted for inflation). As reported by the People's Republic of China, including Hong Kong.[1]

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GREAT VALLEY TECHNOLOGY ALLIANCE REVISITED: AN ANALYSIS OF THE BUSINESS PLAN COMPETITION FINALIST AND THEIR EFFECT ON THE COMMUNITY

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ABSTRACT

The Great Valley Technology Alliance (GVTA) was created in North Eastern Pennsylvania in March of 2002 as a regional public-private partnership designed to facilitate the development of a knowledge-based, technology-focused economy for Northeastern Pennsylvania. Among the many issues facing the GTVA in the region were a perceived non-entrepreneurial business climate and a failure to create an entrepreneurial sector. In this case we look at the Business Plan competition (BPC) to quantify its effect in creating an entrepreneurial sector and to determine if a climate friendly to the entrepreneur exists today.

INTRODUCTION

In North East Pennsylvania (NEPA), a partnership between several public and private groups formed the Great Valley Technology Alliance (GVTA). The purpose of the alliance was to better understand and address the structural obstacles in order to help the region transition to what some saw as the 21st century economy.

Over the past decade, many communities have supported activities meant to develop business enterprises. Many of these well-intentioned activities have not lived up to the expectations of its founders. Locally, observers believe the money earmarked to the alliance could be better spent, and as plans emerge to reduce or eliminate much of public funding for the GVTA, private donors are questioning the efficacy of the alliance.

Presumably, the rationale for establishing the GVTA was sound when established, and at least, parts remain reasonable more than a decade later. In fact, a study commissioned in the latter part of the 20th century to provide insight into what was considered a regional jobs crisis provided the basis for the programs offered at the GVTA. According to the research, the area suffered from several job- and business-inhibiting forces. The Battelle Memorial Institute (BMI) study (1999) identified five important issues to address, including: the non-entrepreneurial business climate, lack of financial support for local entrepreneurs, level of research at local educational institutions, lack of a network between technology-based businesses and colleges and universities, and quality of work-life issues that makes attracting and retaining knowledge workers difficult. Indeed, as a reaction to the report and perhaps the positive hype business incubators receive, the GVTA was born. Now in its second decade, can the alliance be shown as relevant?

A previous paper presented a case study of the GVTA as a public/private alliance supporting local business development. Specifically, that paper revealed certain programs appeared to work well while others needed new focus. This paper seeks to definitively show one particular GVTA program – the Business Plan Competition – works very well.

Before proceeding with the study at hand, a review of the history of the GTA is presented, including a description and assessment of its programs.

A BRIEF HISTORY OF THE GVTA

The GVTA, established in 2000, is located in downtown Scranton, Pennsylvania. It is a regional body funded in part by local colleges and universities. Initially, additional funding came from a number of government agencies including the federal Department of Labor, the Commonwealth of Pennsylvania and the Ben Franklin Partnership.

GVTA was conceived as a BMI strategy for developing a knowledge-based economy centered in the communities of Scranton and Wilkes-Barre, Pennsylvania. The BMI study identified six strategic areas on which to focus: 1) Technology Growth, 2) Technology Infrastructure Investment, 3) Innovation and Entrepreneurship, 4) Knowledge Worker Retention and Attraction, 5) Enhancement of Quality of Life, and 6) Industry Assistance and Networking. From this work came GVTA and its mission, to "facilitate the development of a knowledge-based technology-focused economy in North Eastern

Pennsylvania" (Battelle Study, 1999). To facilitate development of these areas, a number of programs were initiated.

Initially, the GVTA offered six major programs including:

- an entrepreneurship institute;
- activities to support the region as a great place to work ;
- a business plan competition (BPC);
- a computer contest aimed at high school-aged kids;
- an angel network; and
- Keystone Innovation Zone Coordination.

In total, these programs were meant to address the major shortcoming to the business climate in the region. Each is discussed in brief with a focus on the return on investment and the desired outcome.

The BPC has proved to provide skills for entrepreneurs to initiate a business. This is done through guidance in creating an effective business plan along with the opportunity to network and interact with the area's business leaders in a positive business environment.

The BPC is open to students from the area's fifteen colleges and universities as well as non-collegiate teams including technology businesses based in NEPA.

Business plans are judged based upon focus, uniqueness, economic feasibility, evidence of customer acceptance and potential growth related to job, revenues and profitability. This competition is the major source of potential new businesses. The budget for this program is small and the reach is significant.

PURPOSE OF THIS STUDY

This study was conducted to understand the impact of the BPC. Particularly, the researchers wanted to understand what happened to competitors after the competition. The three research questions thought to help understand what happened to the competitors and the impact on the community were developed. The questions are: do competitors start viable companies as a result of the competition and to what extend is there current activity benefiting the community.

To address these questions, data were collected to assess direct participation in the GVTA BPC and its effect on participants starting their own business. A secondary goal was to learn if any of the successful participants fit the description of a "serial entrepreneur." A serial entrepreneur is defined as a business professional that classifies themselves as risk takers willing to accept failure in business ventures. Such a person typically searches for change and exploits available opportunities. When questions were developed for a survey, they were broken down into three areas: demographics, results from participation in the GVTA BPC, and personal entrepreneurship ratings. The latter category encompassed the definition of a serial entrepreneur so as to allow researchers to rate the participant's responses as to the degree of serial entrepreneurship.

DATA COLLECTION

A survey consisting of 23 questions was sent to all finalists of the GVTA BPC since 2003. A finalist was defined as a competition participant in the top six positions in the annual competition. The initial list included 60 potential companies; one contact was identified for each. The survey was administered electronically using email as the contact method with links to commercial survey software. The results were collected during a four-week period in late summer and early fall 2012.

Names and contact information were supplied by the GVTA. Not surprisingly, data collection was hampered by an inability to find some participants. Since many were student competitors, the college e-mails they provided as their point of contact when in the BPC were no longer functional. Still an initial set of 55 participants were sent the survey. After receiving some bounce-back e-mails deemed undeliverable, a set of 36 participants were confirmed to be contacted. Of this group, fifty percent responded to the survey.

SUMMARY OF DATA FINDINGS

From a demographic perspective, the data collected revealed 88.6% of participants were male with two-thirds under the age of 25 during the competition. Approximately 85% of the participants participated in the competition since 2007.

The survey also revealed that over 60% of the participants credited the start-up of their company to be a direct result of participation in the GVTA BPC. Further, of the companies that were started, 82% of them are still operating today. Also, one-third (1/3) of the businesses have been in operation for at least one year and another 1/3 have been operating for three years or more.

In terms of community impact, approximately 60% of the participants who started a business work at their business full time, while 78% of the companies employ at least one person (some as many as five). One of the companies still operating today employs more than ten people. This particular company can be characterized as high-tech; they develop software applications for smartphones.

It was also revealed through the survey that over 60% of participants received some type of assistance, such as academic/faculty guidance. Of the participants who received assistance, over 80% found the assistance helpful or extremely helpful.

A review of the participant's self-analysis questions discovered over 50% would be described as serial entrepreneurs. In fact, 55% of the participants have started other companies besides their original concept with 40% of those new ventures operating for one to two years and over 30% are still operating today.

CONCLUSION

We, the researchers, were somewhat shocked by the data in this study. For the past four years, we had no real concept of how successful the BPC. The organizers of the competition, the GVTA, had little research on the outcomes of the BPC. Some of the participants in the competition from past years would state that they were the only companies that survived. What we found was that this program works. In fact, its success is far greater than anyone could have imagined. The intended goals of founding a business, employing a staff, and maybe most importantly, staying and succeeding in NEPA were achieved. This study will fuel new rounds of discussion into how we can do more. It also reveals that the role of faculty, mentors and organizations like GVTA play an enormous role in the development of the participant ideas, the formation of the entities and the eventual success of the participants. This study gives all involved a reaffirmation that they are on the right path to producing positive outcomes in terms of business creation, employment and student retention in NEPA.

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An Empirical Analysis: The Impact Of Prior-To-Exam Activities (Study, Exercise, Or Meditation) On Student Performance

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ABSTRACT

This empirical analysis studies the impact of the student's actions just prior-to-exam[1] on the performance of the student on the exam. Further analysis was done on different types of exams (i.e. cognitive only, or hands-on cognitive and kinesthetic actions). College students were randomly assigned to one of three treatment groups (study, exercise, or meditation) or a control group. A multiple analysis of covariance (MANCOVA) was conducted, and a significant difference was found for the hands-on computer application exam. The Between Subjects Effects showed that there was a significant effect using the 90% confidence interval of the Research Group of Prior-To-Exam Activity on the Hands-On Computer Application exam (n= 171, p=.047), but not on the Terms and Concepts multiple choice exam (n=171, p=.233) when the average GPA was controlled as a co-variable. Although the same pattern is seen in both the IT Concepts exam and the Hands-On Computer Application exam, significance was only reached in the latter as the control group mean was close enough to the meditation group mean that within group variance may have accounted for the difference. The study group performed about the same as the control group. The exercise group performed much worse. The meditation group did better than any other group in the study.

The authors conclude that prior-to-exam activity may be a strong influence in exam performance, especially when the exam is testing a combination of kinesthetic and cognitive information such as that needed for hands-on computer application exams. Further research is needed to determine the parameters for the scope of activities that influence performance.

[1] Originally we used the term "pre-test activity", but after conducting the search of the literature, we realized that the wording would be misleading because the term "pre-test" is so often used in another context in research. "Prior-to-exam" appears to be less confusing

INTRODUCTION

Student performance is influenced by a myriad of factors; cognitive ability, prior learning and experience, amount of study, current attention level. Generally, it is thought that if a student has not studied or does not possess the cognitive abilities necessary, there is nothing that can be done to help that student just before a test or exam.

But what if we could improve student performance on tests and exams just by changing the activity they do *just prior* to taking the exam? Does the activity the student perform during the 15 minutes prior to an exam make a difference in the results of the exam? Can a student boost their performance by studying? By exercising? By meditating?

SEARCH OF THE LITERATURE

There doesn't appear to have been much research into prior-to-exam activities and their impact on the performance for a student on computer applications exam, either conceptual or hands-on. There have been quite a few studies on the impact of meditation and/or exercise for overall performance and success. Additionally, learning computer concepts and applications has been researched quite a bit over the years since technology has become so ubiquitous in our society. Our search of the literature focused on these three topics: meditation and performance, exercise and performance, and learning computer applications.

Research on Meditation and Performance

In the seventies, there were quite a few studies on transcendental meditation and its impact on test anxiety. Linden, may have been one of the first to see if students could learn to relax by meditating. They benefited by using meditation to cope with anxiety responses in testing situations. (Linden, 1973).

After a spate of similar studies where self-reported anxiety decreased, more studies looking for objective evidence commenced, especially when compared to other potential anxiety-reducing behaviors. Unfortunately, very little difference in the objective measurement of anxiety could be found. For example, Dr. Kindlon used a difficult and stressful test to determine objective levels of anxiety. He randomly assigned 35 college students to either meditation or napping groups and measured anxiety in three ways: self-report, performance, and physiological indices such as blood pressure. The study concluded that meditation and napping equally reduced test anxiety. (Kindlon, 1983)

While many studies show that the practice of meditation can improve a student's performance, few indicate whether the timing of the meditation has an effect. Fiebert & Mead conducted a study to determine if students practicing meditation before studying and before examinations would perform significantly better than a control group who did not meditate at those times (though they were taught to meditate and asked to do so at other times). The results suggest that the meditation techniques mildly improved academic effectiveness in both the control group and the experimental group, but the students who meditated just before studying and taking the exam did better on the exams than the control group. It appeared that giving the experimental group explicit directions to perform the meditation before study and examination times improved performance. (Fiebert & Mead, 1981)

After a period of decreased attention in the topic in the late eighties and early nineties, new neurological studies identifying important changes in the brain due to meditation renewed interest. Once again, researchers were looking at the impact of meditative and relaxation activities and behaviors to improve performance. (Benson, 1997; Haynes & Zabel, 2004) Stress reducing activities were recommended for adults in business as well as children in school. (McNaughton, 2003; Patterson, Bennett, & Wiitala, 2005; Ryan, 2007)

Fergusson's study of art students demonstrated benefits of meditation on kinesthetic activities and creativity. That study found that field independence (a type of cognition that relies on internally derived information) measurements have been higher for Maharishi International University students who practiced meditation than students who did not. Fergusson cites evidence to support his proposal that a systematic study of the influence of meditation on college achievement in art would be beneficial, and would show a higher ability to focus. (Fergusson, 1993)

Seventy six college students enrolled in a Taijiquan (a type of moving meditation) course displayed increased mindfulness and improved sleep quality, mood, and perceived stress, when compared to a recreation control group. The Taijiquan group did not, however, exhibit a significant difference in self-regulatory or self-efficacy behaviors. (Caldwell, Emery, Harrison, & Greeson, 2011)

Travis, et al studied meditation practice and its impact on college students to manage stress. Fifty students were randomly assigned to treatment (meditation practice) or control (delayed treatment). Brain Integration Scale is a composite of three measures: 1) frontal coherence in alpha, beta, and gamma bands 2) alpha/beta absolute power ratios, and 3) timing and magnitude of brain preparatory responses as reflected in the contingent negative variation task difference scores. (In essence, the Brain Integration Scale tests how well students of meditation integrate their meditation experiences with waking, sleeping and dreaming. It reflects the structural and functional connectivity between brain areas.) The Brain Integration Scale scores increased ($F(1,36)=17.5$, pb.0001), and sleepiness decreased ($F(1,36)=10.6$, $p=.001$). The students in the treatment group were less tired as compared to the control. The real test came during high-stress times. Students who practiced meditation appeared to buffer the effects of high stress of finals' week. (Travis et al., 2009)

Elder, et al studied the impact of meditation on a diverse population of minority students. A total of 106 secondary school students (68 meditating and 38 non-meditating students) were studied in both baseline and 4-month post-testing. Results indicated reductions in general psychological distress and anxiety among the students who meditated. Within-group effects on depressive symptoms were observed as well, and the authors recommended that school administrators implement programs of stress reduction because of the association between psychological distress and both adverse school performance and poor physical and mental health outcomes. (Elder et al., 2011)

Nidich, et al, studied 189 at-risk students, and found that regularly practice sessions of meditation at school helped the at-risk students improve academically. Meditating students improved their scores on standardized English tests ($p = .002$) and standardized math tests ($p < .001$) when compared to the control group. A greater percentage of meditating students improved at least one performance level in math and English compared to controls (p values $< .01$). (Nidich et al., 2011)

Kozasa, et al, studied the brain patterns of meditators and non-meditators and found that meditation training improves neurological efficiency, possibly due to an improved ability to sustain attention and increased impulse control. (Kozasa et al., 2012)

Haaga, et al studied the impact of meditation on college students' smoking and use of drugs and alcohol. Although there was no impact on the frequency of smoking and drug use, male college students did decrease their alcohol use after three months (N = 295, F (1, 62) = 7.10, P < .05.). (Haaga et al., 2011)

Research on Exercise and Performance

Exercise and its impact on health has been accepted as legitimate for much longer than meditation or relaxation activities. Exercise does not normally connote the idea that cognitive function can be increased in children and young adults, though there is an accepted research conclusion that physical exercise can stave off dementia in the elderly. (Aarsland, Sardahaee, Anderssen, & Ballard, 2010)

Budde, et al, found that increased exercise led to improved cognitive processes (such as attention) after high intensity exercise. They studied forty six college students, having some of them exercise until they reached their maximal heart rate, and some of them rest (the control). They found a significant interaction between physical activity participation level and exercise effect on cognitive performance. The students in the exercise group improved their performance in the cognitive test after the exercise, while the control group students did not improve. (Budde et al., 2012)

DelGiorno, et al, found the opposite. They tested thirty participants exercised for 30 min at maximum (ventilatory threshold, VT) or below maximum (75% of VT). They used as two different tests (card sorting and contingent continuing performance) as measures of executive control. The tests were administered before, during, and immediately after exercise, and 20 min later. The students who exercised below maximum did better than the students who exercised at maximum intensity. They believe the brain needs time to return to normal after intense exercise before being given cognitive decision making tests. (Del Giorno, Hall, O'Leary, Bixby, & Miller, 2010)

Efrat reviewed seven major studies from 1997 to 2009, looking at the impact of physical exercise and school performance. Efrat found that regardless of socioeconomic status or ethnicity, a positive relationship exists between physical activity and academic-related outcomes, and suggested that integrating more physical activity into the school day may be an effective strategy to improve performance. (Efrat, 2011)

John Ratey, a Harvard clinical associate professor of psychiatry, goes a step further. He argues for more physical fitness for students in school today, and calls physical exercise "Miracle Gro" for the brain. (Peterson, 2008)

Sibley, Etnier, and Le Masurier studied college students. The experimental group would do an aerobic exercise for 20 minutes, while the control group did a sedentary activity. The students doing the exercise had improved performance on the cognitive task (Stroop color-word test), but no change in performance on the negative priming task. They felt that exercise may enhance cognitive performance by improving goal-oriented processing in the brain. (Sibley, Etnier, & Le Masurier, 2006)

Research on Learning Technology

Since its introduction in the latter part of the century, microcomputer use in schools have been studied. (ACM, 1993; Calingaert, Parker, Gallie, Brooks, & Ferrell, 1969). It was determined early on that learning computers was different than learning typical school subjects such as English, math, or social studies. (AECT, 2004; Editor, 2002) ("Jump start on computer literacy," 1998).

Some researchers have even called for an entirely new theoretical framework in which to study human/system interaction. (Fass, 2006) However, for most people, it is enough to realize that using a computer is a combination of both conceptual knowledge, perceptual knowledge, and kinesthetic ability. (Djajadiningrat, Matthews, & Stienstra, 2007), (Eddins, 2005)

There have been many articles written that purport to help schools determine the best way to teach information technology and its odd-mixture of types of knowledge. (Eddins, 2007; Fundaburk, 2004). There have been articles on the impact of technology in the schools on all subjects. (Wyatt, Saunders, & Zelmer, 2005) (Vogler & Virtue, 2007) (Yildirim, 2000) (Dusick & Yildirim, 2000)

There have been articles that investigate the brain changes and the motor-neuron connection when using computers. (Shih-Wei, Delgado, & Maloney, 2009; Ugrinowitsch, dos Santos-Naves, Carbinatto, Benda, & Tani, 2011).

Furthermore, there has been much discussion on whether and how computers can be used to test the ability to use them, as well as other kinesthetic activities such as nursing or driving. (Hauer, Holmboe, & Kogan, 2011; Kennedy, Long, & Camins, 2009; Nourbakhsh, 2006; Odhabi, 2007; Steele, 2006; Yaghmaie & Jayasuriya, 2004; Young, 2004)

Research Integration of Multiple Domains

It is obvious, both from reading the research and from professional experience as instructors of a hands-on computer course that computer applications must be taught and tested very differently from teaching computer concepts. It is also obvious that a hands-on computer test, given on a computer about computers, is often much more stress-inducing than a typical test (even when that typical test is given on computers), and therefore may be more prone to being influenced by test anxiety. In an attempt to identify a way of improving the performance of students in the computerized exams given in an information technology (IT) course, the researchers conducted this study.

RESEARCH METHOD

This is an experimental research study to identify whether or not the prior-to-exam activity has any impact on performance on either concept-based multiple choice tests, or hands-on computer application mastery tests. The course used is required for all Business students, and is typically taken by Freshman or Sophomores as part of their core business courses before choosing a major course of study. The course typically has four exams; two of which are more conceptual (i.e. terms, definitions, theory, categorizations) and two of which are hands-on Office applications (spreadsheet and/or database). It was determined that it would be beneficial to compare meditation and exercise as prior-to-exam activities, and to make that determination based upon the conceptual exam or the hands-on exam.

The null hypotheses:

1. There will be no difference in the student performance on the IT concepts exam based upon the prior-to-exam activity groups when controlling for Grade Point Average.

2. There will be no difference in the student performance on the hands-on computer applications exam based upon the prior-to-exam activity group when controlling for Grade Point Average.

3. There will be no interaction between the type of test, and the prior-to-exam activity when controlling for Grade Point Average.

It would be necessary to control for grade point average as a co-variable in order to avoid that variable mitigating the results.

Independent Variable

Students were randomly assigned to one of four research groups. Group One was told to sit quietly, close their eyes, breathe deeply, and envision getting an A on the exam, for 5 minutes prior to the test. Group Two was told to exercise vigorously (running up and down stairs, doing jumping jacks, etc.) for 5 minutes prior to the test. Group Three was told to study, either alone or in groups, in the classroom for 5 minutes prior to the test. All three experimental groups were given a written instruction sheet describing the purpose of the study and identifying which group they were in along with a written description of the activity. The group activity was demonstrated by the instructor and the student groups were monitored at random points throughout the period until it was time to come in and take the exam. Group Four was not told anything, was not given any written instructions, and did not do anything differently prior to the test. (In the initial design, the study group was considered the control, but after further discussion and thought, it was determined that it would be better to have an actual control group; one that didn't do anything differently prior to the test. This extended the time invested in the research as we needed multiple semesters to have enough students to separate into four different groups, but improved the design of the study.) At the end of all the semesters in which the experiment took place, the exam results were placed into a database and analyzed using SPSS.

Independent Variable

This analysis was conducted on two different types of tests. One, the **IT Concepts exam**, was a multiple-choice exam on terminology and concepts typical of that given in an information technology course. The exam itself is given using an on-line exam tool (in this case, using Desire2Learn, the course management system utilized by the university). The other, the **Hands-on Computer Application exam** was a hands-on assessment of their mastery of computer applications (Microsoft Powerpoint and

Excel) in actual use. The students are given a paper sheet of instructions, where they are told where to get the datafiles necessary to complete the exam. They copy the datafiles into their own personal exam folder (set up at the beginning of the semester), and follow the instructions to make changes to the files. When they are finished, they go into the on-line exam tool and answer questions about the files they just completed. Often they are asked to copy and paste formulas or the results of formulas into the answer blank of the on-line exam.

Data Analysis

The data was reviewed for missing variables. Any records with missing dependent variables (IT concepts or hands-on computer application exam results) were eliminated. In the case of GPA, an independent covariate, we replaced the missing variable with a "C" grade (2.0). Next, the data was checked for outliers, normality, linearity, and homoscedasticity of each of the variables.

The variables initially had outliers, so the data was transformed, replacing those values that exceeded the Mahalanobis chi-square cut-off criteria (16.288 at p>.001 with 3 df) with the minimum value. A manual review of Box-plots showed that all outliers had been eliminated. The data was also reviewed manually for linearity and normality. Skewness and kurtosis were within tolerances (ranging from -.9 to -.09), so the assumption for a normal distribution for each individual dependent variable was met despite the fact that Komogorov-Smirnov calculation was significant. Leven's Test indicated that the assumption of homoscedasticity in each variable was also met (i.e., was not significant). The IT Concepts exam variable had a Levene's result of F=.41, p=.75, and the Hands-on Computer Application exam variable had a Levene's result of F=1.2, p=.31.

After each individual variable had been assessed, the normality, linearity, and homoscedasticity for each group of multivariate data was assessed. All measurements met the assumptions for normality, linearity, and homoscedasticity.

RESULTS

A multiple analysis of co-variance (MANCOVA) on the dependent variables (IT Concepts exam, and Hands-on Computer Application exam) was conducted based upon the independent factor assigned group (Exercise, Study, Meditation, or Control) controlling for the co-variable Average GPA.

A significant difference was found for the hands-on computer application exam. The Between Subjects Effects showed that there was a significant effect using the 90% confidence interval of the Research Group on the Hands-On Computer Application exam (n= 171, F=2.714, p=.047), but not on the IT Concepts multiple choice exam (n=171, F=1.439, p=.233), as can be seen in **Error! Reference source not found.**.

Table 1 Between-Subjects Effects of Dependent Variable (IT Concepts exam and Hands-on Computer Application exam)

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	ITConcepts_1	1811.546[a]	4	452.887	3.130	.016	.070
	HandsOnApps_1	5464.022[b]	4	1366.006	3.026	.019	.068
Intercept	ITConcepts_1	19498.933	1	19498.933	134.753	.000	.448
	HandsOnApps_1	24219.453	1	24219.453	53.644	.000	.244
AverageGPA_1	ITConcepts_1	1076.087	1	1076.087	7.437	.007	.043
	HandsOnApps_1	1743.882	1	1743.882	3.863	.051	.023
RschGrpLabel	ITConcepts_1	624.494	3	208.165	1.439	.233	.025
	HandsOnApps_1	3676.346	3	1225.449	2.714	.047	.047
Error	ITConcepts_1	24020.455	166	144.702			
	HandsOnApps_1	74946.937	166	451.488			
Total	ITConcepts_1	769607.528	171				
	HandsOnApps_1	1052633.640	171				
Corrected Total	ITConcepts_1	25832.001	170				
	HandsOnApps_1	80410.959	170				

a. R Squared = .070 (Adjusted R Squared = .048)
b. R Squared = .068 (Adjusted R Squared = .045)

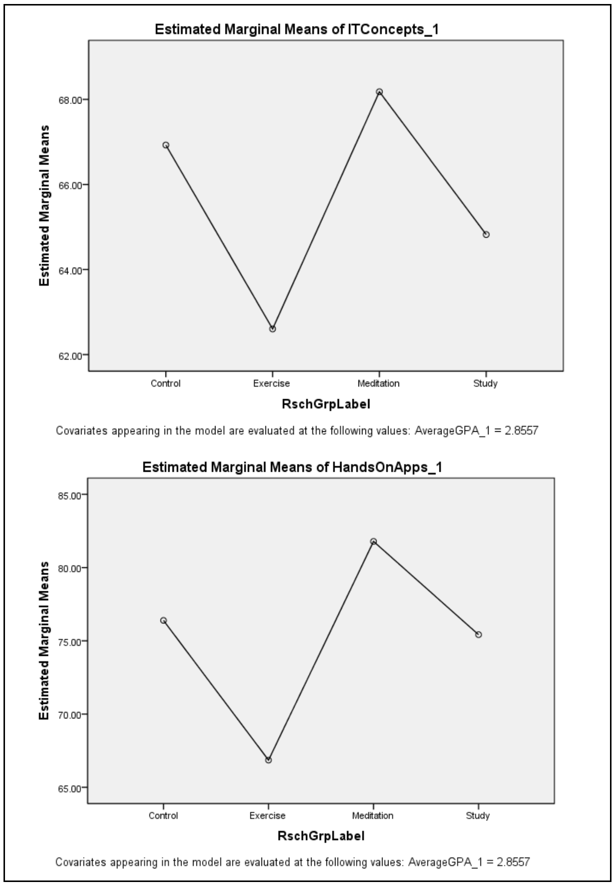
The estimated marginal means for the two dependent variables for each of the research groups (exercise, meditation, study, and control) are shown in **Error! Reference source not found.**. In general, students did better on the hands on computer application exam than they did on the IT concepts exam.

Table 2. Estimate Marginal Means of Groups

Dependent Variable	RschGrpLabel	Mean	Std. Error
ITConcepts_1	Control	66.927[a]	1.392
	Exercise	62.604[a]	2.129
	Meditation	68.180[a]	2.173
	Study	64.822[a]	2.129
HandsOnApps_1	Control	76.391[a]	2.459
	Exercise	66.853[a]	3.761
	Meditation	81.786[a]	3.839
	Study	75.418[a]	3.761

A review of the plots of those means demonstrates the direction of the effect in **Error! Reference source not found.**. The meditation group clearly did better than any of the other groups. The exercise group performed the most poorly. The study group performed about the same as the control group (thus invalidating the reason for identifying a completely different group to serve as a control, for the study group would have served just as well, though that was not known at the time). Although the same pattern is seen in both the IT Concepts exam and the Hands On Computer Application exam, significance was only reached in the latter. In the IT Concepts exam, even though the control group mean was lower, it was close enough to the meditation group mean that within group variance may have accounted for the difference.

Table 3 Plots of Estimated Marginal Means



CONCLUSIONS

It is not surprising that meditation would impact a hands-on computer application exam more than the IT Concepts exam. Since a hands-on exam requires much more logical thought and clear thinking along with integrating kinesthetic activities (involving eye-hand coordination) rather than simply memorizing terms, it seems reasonable that the effect of the prior-to-exam activity would more clearly impact the results. It must be noticed, however, that even though the terminology and concepts exam did not demonstrate a significantly different result, the pattern (the meditation group outperforming all other groups) remained the same. Clearly it is more beneficial to meditate and envision getting an "A" than it is to do jumping jacks or run up and down the stairs prior to a hands-on exam, and probably would be helpful for any exam. Teachers might take note of this and, given enough time, encourage their students to sit quietly, breathe deeply, and think about getting an "A" prior to each exam.

There are limitations to this study. Although the research groups were randomly assigned, the control groups were a factor of semester; there may have been some difference in the semester that the control groups were added that didn't impact the semester when just the research groups were assigned. However, the fact that the study group resulted in a very similar mean as the control group would indicate that there were no meaningful differences due to the semester.

The researchers recommend that these preliminary results should be replicated with a larger group of students, and perhaps with a larger variety of test types. Furthermore, the research design could be improved by extending the time devoted to the prior-to-exam. In this case, the amount of time available for the exam was very limited, and the researchers did not feel it would have been fair to the students to take more time. However, in practice, based upon the comments of the students, the five minutes actually seemed like a very long time (especially to the group assigned to do jumping jacks and run up and down the stairs)!

Further research is needed to determine the parameters for the scope of activities that influence performance. It would be interesting to identify, for example, whether this effect is only seen in computer application exams, or whether other kinesthetic/cognitive exams such as an automobile driving test or a vo-tech exam on plumbing or mechanics would be equally impacted.

The authors conclude that prior-to-exam activity may be a strong influence in exam performance, especially when the exam is testing a combination of kinesthetic and cognitive information such as that needed for hands-on computer application exams, and that meditation may be an effective coping mechanism to mitigate test anxiety and improve exam performance.

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A PRIMER ON TEACHING THE UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS (CISG) IN UNDERGRADUATE LEGAL STUDIES CLASSES

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ABSTRACT

First, curricular efforts should be the primary area of emphasis for business schools that seek to globalize. If business schools are serious about ensuring that their graduates have the global awareness and competencies to succeed in a global business environment, the necessary place for each school to start is by paying attention to the curriculum. [1]

INTRODUCTION

The need to include globalization in the business law and legal environment curriculum is well documented.[2] A recent exhaustive report by the AACSB on the topic heightens the need for business schools to examine and redefine how they are providing the dimension of globalization to their students.[3] While the report provides a myriad of suggestions for ways—large and small—that students can be exposed to globalization, the key remains the curriculum.

Elements of contracts are covered in the vast majority of undergraduate business law courses. Traditionally, this includes common law and some sections of Article 2 of the Uniform Commercial Code. The objective of this coverage is to provide a basic understanding of contract formation to all business majors. The underlying logic is that persons holding an undergraduate degree in business should have a basic understanding of how contracts are formed and how their companies may be bound by their actions.

This basic understanding of common law and select UCC provisions may no longer be sufficient. Businesses today operate in a global marketplace, businesses that used to complete with others in the same geographic region, now may be competing with companies from another country. The other side of this coin is that the ideal business partner may also be in another country. To this end, our students need exposure to laws that might govern these transactions.

The first author teaches the Legal Environment of Business in section sizes ranging from 40 to 112. A hybrid traditional-legal environment approach, the content of the course covers a wide variety of topics. Like most business law professors, the author struggles with integrating global aspects into the course. Reasons for the struggle are many but chief among them are her lack of in-depth knowledge of many international business law topics and the bane of all professors, lack of time.

The second author teaches the Legal Environment of Business in sections of up to 30 students. He also teaches Business and Commercial Law, a second course required for all accounting majors at his institution and optional for other students. The Business and Commercial Law course is typically around 20 students in size. The second author is interested in including global concepts into his law courses. However, he has found many current business law texts are not particularly helpful as it relates to helping students understand the CISG.

Regardless the obstacles, the AACSB's increased interest in globalization and the needs of business managers indicate that the time has come to cover the United Nations Convention on Contracts for the International Sale of Goods (CISG) in some detail in law courses. The Convention was created over thirty years ago and had been the law in the Unites States since 1988. Ignoring international business law and the CISG is no longer an option for most legal studies professors. Based on that premise, the authors decided to "face their fears" of international business law and to come up with some ways of integrating the CISG into both face-to-face and on-line learning. The second author, who is a relatively new professor, joined in the project in Spring 2012. The two decided to collaborate on a way to incorporate the CISG into the legal studies coursework and to provide a primer for others wishing to do so.

FACING THE FEAR OF THE CISG

Legal studies professors are not alone in fearing the CISG. Even though the CISG has been the law of the United States since 1988, many attorneys, business law professors and business people appear to be totally unaware of the application of the convention to most international sales contracts. Recent studies indicate that judges, legal practitioners and business people around the world have been reluctant to learn about the CISG and to use it in commercial transactions. [4] The lack of coverage of the topic in law school curriculum, state bar exams, continuing legal education and business law text books presents a challenge that must be addressed creatively. [5]

The approach designed by the author involves three steps: 1) an in class lesson on when the CISG applies and the exceptions to its application using an on line shopping experience; 2) an on line lesson that can be adapted for in class use with a "Road Map" comparing the common law, Article 2 and the CISG; and 3) a Quiz covering both of the lessons (on the theory that if there is no quiz, the students are not likely to study). Both lessons are very basic but are intended to provide enough information so that even the most reluctant business law professors will be tempted to at least give them a try when introducing international business law and/or the CISG.

After teaching contracts (both common law and Article 2) to her students, the first author then presents the lecture shown below. The lecture is based on the author's experience of shopping for a pet tag for her dog "Louisa" on line and discovering, after the transaction was completed, that she had entered into an international sales contract. The lecture uses the web site http://www.pet-tags.com but can easily be adapted to any product that is sold on line (and is of interest to students or the professor). Like most web sites, the Pet-Tags.Com site changes often. The author prefers to use screen shots of the site rather than doing the exercise live since it is more reliable (and makes class goes smoothly even when the site is down).The PowerPoint slides also use a wonderful resource that students should be exposed to, the CISG Database Maintained by the Pace School of Law at Pace University. [6]

The Lecture: A Brief Primer on International Sales of Goods

The following material can be used to make PowerPoint slides to guide the lecture; material in brackets [ ] either answers the question or provides lecture material. These slides can be reproduced easily using the Pet-Tags.Com site or any other on line seller.

Slide #1

- It's very easy to enter into an international contract (and can be done so without knowing it is "international"!)

Slide #2

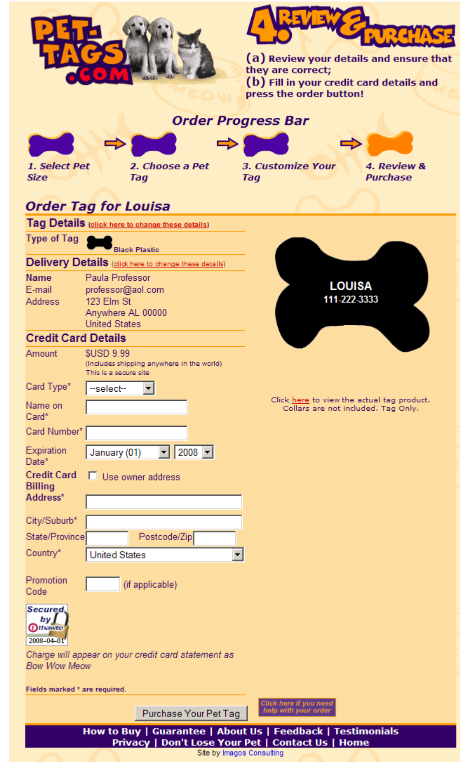
- Professor X is a very busy person who hates to shop (Professor X did not get the "shopping gene"!)
- Professor X needed a new dog tag. The Professor went to a popular search engine (Google) and typed in "pet tag."
- Here's what she got: Pet-Tags.com at http://www.pet-tags.com.
- Professor X navigated the interactive site and purchased a pet tag for Louisa.

Slide #3 Here is the opening web page:

Slide #4 Since the professor's dog is a medium sized, Professor X clicked on the Bull Dog and got this:

Sldies #5 Louisa is white and is not a “heart tag” kind of a dog, Professor X selected white dog, red color and bone tag (since Louisa does love bones!). Here is what the Professor got:

Slide #6 Professor X clicked purchase and here is the order form:



NOTE: No where on the form is there any indication of where the seller is located.

Slide 7

- Professor X did not realize that (he or she) had entered into a contract for the international sale of goods until the tag arrived via air mail (which, of course, we do not have in the United States!)
- Like any legal studies professor, Professor X began to wonder what law governed the transaction.
- To find out, (he or she) looked to the CISG!

Slide 8

- United Nations Convention on Contracts for the International Sales of Goods (CISG)
  - Convention adopted by 77 nations to harmonize international sales law in the global community
  - Ratified and became a part of national law in the United States in 1988.

- Modeled after Article 2 of the Uniform Commercial Code (sort of, CISG is considerably more concise than Article 2)
- Reflects application of lex mercatoria (law of merchants)
- When dispute arises between merchants of different countries involving tangible moveable goods, US courts will apply the convention to resolve disputes between said merchants

Slide 9

- Article 1 of CISG states that unless there is an express choice of law, CISG will be the law of dispute in two situations
  - If the two parties have their places of business in different countries and both the countries have ratified the CISG
  - If parties have more than two places of business, the place of business which has the closest relationship to the transaction controls
  - The U.S. does not allow parties to agree to the application of CISG.

Slide 10

- CISG applies to transactions involving tangible moveable goods.
- Exclusions
  - Goods purchased at auctions, electricity, securities, ships, vessels, consumer sales (family, personal or household use) and aircraft.
  - In a mixed goods and services transaction, CISG will apply if goods are the predominant aspect of the transaction.

Slide 11

- Let's go back to Professor X's purchase of a dog tag on-line
- Is this an international sale of goods? [It depends on the answers to the following questions]
- What is the principal place of business of the seller? [Looks like probably Australia or New Zealand; it is difficult to tell! Emphasize to students that they should always know the physical location of the person or entity with whom they are contracting! There is often no way to tell from a web site.]

Slide 12

- What is the principal place of business of the buyer (Professor X)? [United States]
- Have both countries (in this case three possible countries: Australia, New Zealand and the U.S) ratified the CISG? [To find out go to the CISG Database at Pace School of Law at Pace University at http://www.cisg.law.pace.edu/ (click on table of contracting states)].

Slide 13

- Has the United States ratified CISG? [yes]
- Has Australia ratified CISG? [yes]
- Has New Zealand ratified CISG [yes]
- [This is good time to talk about the number of "developing" countries that have ratified the CISG (there a lots of examples in the slide above) and what countries are missing that might be expected to have joined the convention. Two notable U.S. trade partners are missing: Great Britain and India.)]

Slide 14

- Is a dog tag a good?
  - Is it tangible and movable? [yes]

Slide 15

- Is this transaction subject to one of the exceptions to CISG? [Look back to slide 10 for a list of exceptions]
- The major exceptions are illustrated on the following slide [Goods purchased at auction, securities, ships, vessels, aircraft and goods bought for family, personal or household use.]

Slide 16

Slide 17

- Does the CISG Apply to Professor X's Pet Tag Purchase?
    - No, because Professor X bought the tag primarily for family, personal or household use.

Slide 18

- What law will apply? [Likely either the law of the United States (some state version of Article 2 or the law of Australia or New Zealand will govern the transaction)]
- Regardless: a donation went to the World Wildlife Fund and the tag looked great!

A. On line Lesson on Common Law, Article 2 and CISG

The on-line lesson was designed to be very short and simple and contain the following:

1. Learning Objectives
2. Content (e.g., readings, links to web site, video, etc.).
3. Self-testing questions (ungraded) and/or exercises.
4. Graded quiz.

The on-line lesson can be utilized in an on-line or hybrid course, or these on-line components can be used as supplemental content to a traditional course.

Learning Objectives

The learning objectives of this learning module are as follows.

1. To understand the CISG is the main source of contract law governing the sale of goods in most international sales transactions.
2. To know when the CISG applies to an international sales transaction.
3. To know when the CISG does not apply to an international sales transaction (refer to material covered in class).
4. To know three main differences between contract law under the CISG, the common law and Article 2.

In an online or hybrid class room environment, the objectives prime students as to what is important in the online lesson they are getting ready to begin. In a traditional classroom environment if the learning objectives are posted prior to class the students arrive with an expectation and roadmap for that class.

Overview

International sales contracts can be governed by a wide variety of laws.

For example, in the United States, contracts for the sale of goods are usually governed by one state's version of Article 2 of the Uniform Commercial Code. The one exception to this rule is when the contract is governed by the laws of the state of Louisiana, which has not adopted most of Article 2. All other states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands have adopted most of Article 2.

If a transaction does not involve a sale of goods, then general contract principles of a state will apply. The principles may come from state statutes or common law. Parties who contract within the United States are free to agree which law will control.

In international transactions, the question of choice of law (what law to apply to formation and interpretation of the contract) becomes even more complex. The parties may choose to apply the laws of one of the states of the United States or even the laws of a foreign country. Generally, the parties to a contract are free to choose and to specify in the agreement, which law will govern the contract.

In the international sale of goods, the United Nations Convention on Contracts for the International Sale of Goods (known as CISG) provides a uniform law for international contracts in approximately 77 countries.

If both parties to a contact have their principal places of business located in different countries, the contract may be subject to the CISG if the countries have both adopted the CISG.

Currently the CISG is the uniform international sales law of countries that account for over two-thirds of total world trade.

Thus, when parties in different countries enter into a contract, there are at least four possible sources of law which will govern the contract:

• General contact law of a state or territory in the United States
• General contract law of the foreign country
• Article 2 of the Uniform Commercial Code if the contract is for a sale of goods
• UN Convention on Contracts for the International Sale of Goods (CISG)

There are similarities between the CISG and both the common law and Article 2. The application of the CISG and Article 2 to sales of goods is outlined in Table A:

Similar to Article 2, the CISG is designed to promote the observation of good faith in international trade. Some of the rules provided by CISG are similar to those provided by Article 2. There are, however, some major differences between Article 2 and CISG. These include

Statute of Frauds Requirement of Writing. One major change, which the CISG adopts, reflects the law in most of the world except the United States: contracts under CISG do not have to be in writing in order to be enforceable. Under Article 2, contracts for the sale of goods for the price of $500 or more have to be evidenced by a writing in order to be enforceable. The CISG states that a contract for sale of goods "need not be concluded in or evidenced by a writing and is not subject to any other requirements as to form. It may be proved by any means, including witnesses."[7]

Price term. Article 2 provides that the price can be left open in a contract. CISG requires that the contract make provision for determining both price and quantity. For example, A sugar cane farmer in Mexico agrees to sell all of the sugar cane he grows to a buyer in Chicago, Illinois. The contract does not specify the price to be paid. Under Article 2, the agreement is a contract; under the CISG it is not.

What could the parties have done? They could agree on the price or the agreement could "make provision" for determining the price. A statement in the agreement that the price will be the "spot price of sugar cane at the Chicago Board of Trade on the day of delivery" would be sufficient under CISG. However, simply leaving the price to be determined later without "making provision" for how the price would be determined would not constitute an enforceable contract under CISG.

Firm Offers. Under Article 2, as with general contract law, offers can be revoked any time before they are accepted. One exception to this is an offer under Article 2 to buy or sell goods, made by a merchant, in writing, signed by the merchant which states that it will be held open for a specified time. If all these requirements are met, the offer is irrevocable for the stated time but in no event longer than three months.

The CISG makes two major changes in the law of firm offers. First, an offer that indicates it will be held open is irrevocable according to its terms. [8] No consideration and no further formalities are required.

Second, the offer is irrevocable when it is sent – not when it is received.

An Overly Simplistic, Short-hand Comparison of Contract Formation Under the Common Law, Article 2 and CISG is found at Table A. Students are encouraged to use this "road map" to review the common law of contracts and Article 2 and to learn more about the CISG in the future. [9]

Self-Testing Questions

Self-Test #1: Have all of the countries that are parties to the North American Free Trade Agreement (the United States, Canada and Mexico) ratified the CISG?

The answer to the question is "yes."

To review the countries that have or have not ratified the CISG go to CISG Database at the Pace School of Law at http://www.cisg.law.pace.edu/cisg/countries/cntries.html

Self-Test #2: Among the 77 countries that have ratified the CISG, look for major U.S. trading partners like Japan, the United Kingdom (UK) and China. Which of these parties has (or has not!) ratified the convention? Are you surprised by anything you found?

Quiz (on line or in Class)(open book; open note)

Question 1: A, a company with its principal place of business in New York, New York, contracts to provide road grading equipment to B, a company with its principal place of business in Mexico City, Mexico. Absent any other terms in the contract, what law will govern formation and performance of the contract?

a. Article 2 of the UCC because it is a sale of goods.

b. General contract law of Mexico.

c. UN Convention on Contracts for the International Sale of Goods (CISG) [correct]

d. The terms of the North American Free Trade Agreement (NAFTA)

Question 2: Under CISG, an oral offer which states that it will be held open for 30 days can be revoked

a. never.

b. anytime.

c. before performance.

d. only after the 30 days has passed. [correct]

Question 3: One term need not be specified in a contract under Article 2 of the UCC but must be specified in a contract that is governed by CISG. What term is it?

a. quantity.

b. delivery date.

c. price. [correct]

d. warranty.

Question 4: One state in the United States has not adopted Article 2 of the UCC. What state is it?

a. Texas.

b. Louisiana. [correct]

c. Nevada.

d. New York.

Question 5: When must a contract for the sale of goods which is governed by CISG be evidenced by a writing to be enforceable?

a. Always.

b. Never. [correct]

c. When price of the goods is $500 or more.

d. When price of the goods is $5,000 or more.

Question 6: When must a contract for the sale of goods which is governed by Article 2 of the UCC be evidenced by a writing to be enforceable?

a. Always.

b. Never.

c. When price of the goods is $500 or more.

[correct]

d. When price of the goods is $10,000 or more.

Question 7: What major trading partner(s) of the United States is/are not a party to CISG. What country is it?

a. Great Britain. [correct]

b. Japan.

c. Mexico.

d. All of the above.

Question 8: Which of the following transactions is/are specifically excluded from the coverage of CISG?

a. Sales by auction.

b. Consumer sales.

c. Sales of airplanes.

d. All of the above. [correct]

Question 9: When a party in the United States enters into a contract with a party in another country, possible sources of law governing the contract include:

a. General contract law of one of the 50 states of the United States.

b. General contract law of the country of the other party

c. United Nations Convention on Contracts for the International Sale of Goods (CISG). [connect]

d. All of the above. [correct]

Question 10: Country X has not ratified the CISG. Company X, with its principal place of business in Country X, enters into a contract to purchase digital switches from Texas Instruments, Inc. a company with its principal place of business in Texas, United States of America. Based on those facts, which of the following law for sure will **not** govern the sales transaction?

a. Article 2 of the UCC.

b. Contract law of Country X.

c. UN Convention on Contracts for the International Sale of Goods (CISG) [correct]

d. None of the above is correct.

REFLECTIONS AFTER CLASSROOM IMPLEMENTATION

The second author was able to implement the steps listed in the primer above. This CISG lesson was taught in a traditional classroom setting and enhanced with delivery of some content on-line through Blackboard. The class size was twenty-two students and it was entitled Business and Commercial Law. The students in this course have previously passed a Legal Environment of Business or equivalent course as a prerequisite for registering for this course. The make-up of this class is undergrads, primarily accounting majors (14) but the course is open to any student who has completed the prerequisite. The next most populous major in this class is entrepreneurship (4), there are also a few other majors represented. At the second author's institution the CISG is not covered in the Legal Environment of Business course. However, in the prerequisite course, each student was exposed to common law and select UCC Article 2 sections relegating to contracts.

Prior to teaching the CISG lecture referenced above, the second author posted review materials on Blackboard touching on key common law and UCC provisions to jog the memories of the class for those needing this refresher. He also posted the learning objectives described above so the students would know what to look for during the lecture. At the start of the class period the CISG lecture was to be presented, the professor reviewed the hierarchy of sources of law, and generally discussed how treaties become United States law. Also, discussed was the supremacy of treaties over all other sources of law except the United States Constitution. Next, the second author started through a set of lecture slides he created based on the guidelines above.

During this particular lecture, the author noted the class as a whole was more engaged than usual. The class was substantially more attentive and asked more lecture related questions would be experienced with another lecture. Some students begun to ask the very questions legal scholars spend much time researching, including issues related to translation of the CISG or the difficulty in applying the CISG uniformly in courts worldwide. After the lecture above the author asked the class to break up into small groups and to think through the self-testing questions listed above. These questions were reviewed en masse. The lecture concluded with a comparison of the biggest differences among common law, the UCC and the CISG using Table B as a guide.

Post lecture there were two assessments that the students were to complete individually. The first assessment was an online quiz, based on the questions above. The questions above were pooled and each student was administered five of them. The class average for this assessment was 80%. The next assessment was an in class writing assignment based on the prompt below:

Gamer and Gamete operate a small gaming and collectable shop named Games4U (G4U), the shop is located in Michigan. G4U operates one retail location and they also sell through a website. Periodically they also sell through eBay. The retail location accounts for 70% of G4U revenue and the website and eBay account for 25% and 5% respectively.

Gamer likes to be on the cutting edge of technology and is what most would call an early adopter. Accordingly, Gamer is extremely excited about the Playcenter Accolate, a new handheld gaming system that is scheduled for a phased release worldwide. Playcenter is releasing the system in Japan 4 months earlier than the rest of the world. Gamer sees this as an opportunity to make some money. He telephones Games Boutique, a retailer in Japan, and makes arraignments to import 50 Accolades to be delivered to his shop in Michigan. During this phone conversation he mentions his intention to keep two of the Accolades (one for him and one for his Gamete, of course) and to sell the rest in his shop.

Of the remaining 48 units, eighteen were sold through the G4U retail location. Of those 8 were sold to 8 different Michigan residents. G4U and each of these 8 residents agreed that in the event of dispute the CISG would be applicable. Ten units were sold to Jacques a French retailer who was in Michigan on Holiday (what Americans would call a vacation). Jacques planned on selling the Accolades in his store in France.

At this point, 30 Accolades left over, 15 were sold through the G4U website. All of the Accolades sold through the G4U site were bought by Hans a German retailer. The terms of use for the G4U website include the clause "All sales originating from this website are governed by Michigan state law." The final 15 units were sold through eBay at auction. The winning bidder for the lot of 15 was Hogan. Hogan is an Australian retailer.

Required: For Each transaction above, state whether the CISG would be applicable. Please be sure to provide a detailed analysis of each component of CISG applicability. Assume the US, Japan, France Germany and Australia are CISG member nations. Please organize your response based on the criteria for CISG applicability as it relates to each transaction. If you determine the CISG is not applicable, please give an indication of what law might be applicable.

The average for this assessment was 74%.

Based on this experience, the second author believes that the lecture described in this primer above is of great value to the undergraduate legal studies class. The students seemed to understand why this topic has importance and were interested in learning about it.

CONCLUSION

Teaching the CISG using these exercises and a good basic business law or legal environment textbook give the student a memorable exposure the basics of the convention. The authors have discussed the teaching of the CISG with scholars who regularly publish in the area and teach in law schools. The advice they received was that the most important things business students should know is 1) when the CISG applies and 2) how to opt out of its application. The authors decided that while the former is very important the latter is of less importance to business managers. The topics they chose to emphasize through these brief lessons include when the CISG applies and some of the major differences between the contract laws regimes of the common law, Article 2 and CISG. The chart that appears at Table B is a road map that is designed to take the students through the course and also beyond the course and these lessons. Hopefully, these lessons will engage students and help prepare them for the CISG contracting regime that they are surely to encounter throughout their careers. As an added bonus, integrating the CISG provides a clear international aspect to the introductory legal studies course and provides much needed emphasis on globalization that is demanded by the AACSB and our other stakeholders.

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[8] *Id.* at Art. 16.

[9] The first author would like to thank and acknowledge her sales professor, Emeritus Professor of Law Stephen K. Huber, who taught her Article 2 at the University of Houston Law School in 1973 and introduced the concept of a "road map to Article 2" which she has adapted to use in teaching the CISG

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TO HUB OR NOT TO HUB – MEETING WITH THE PROBLEMS

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ABSTRACT

This paper addresses the issues faced by the airlines after the federal deregulation of airlines in 1978. The deregulation allowed the airlines the option of eliminating the non-profitable routes and to use a centralized distribution system (called hub). Practically all major airlines chose the "To Hub" option for obvious cost-cutting-profit-boosting reasons. The unprecedented growth in flight technology combined with reduced cost of travel and globalization have led to crowding of the hubs resulting in long delays and customer dissatisfaction at the airports and with the airlines themselves. In this paper, we examine the hub- and- spoke system of transporting passengers from origin to destination and examine the effect of increasing number of hubs on the ranking of an airline and extensions of the hub and spoke system that could be used by an airline to alleviate present and future customer dissatisfaction.

INTRODUCTION

One of the major challenges faced by any manufacturing and service industry is the cost of transportation or distribution of goods and people from one point to another. Several network models exist that have been used extensively for this purpose. A point-to-point system is one such system used to convey goods and services from point A to point B. Other systems like Top-down and Bottom-up distribution, where movement is along a linear path, for example like in an assembly line, have limited applicability especially when the goods to be distributed do not routinely follow the same predetermined trajectory. Round-about is another network where goods/services are moved through the same preset route, visiting the cities in the same preset order but drawing supplies from a single source. Supplies can access the round-about at any point in the network. Beltways around major cities are examples of such a network. The most commonly used network models are Hub-and-Spoke, Fortress Hub-and-Spoke, Mesh, and Hybrid networks. It is to be noted that there is no 100% point-to-point or % hub-and-spoke networks. In spite of the efficiency advantages, all distribution systems gravitate to some kind of a blend of the two. Some of the most commonly used networks are seen below in figures 1, 2, and 3.

KEY DEFINITIONS EXPLAINED

Hub: A location which acts as a centralized distribution point in a network from which other destinations in the network can be accessed.

Focus City: A location which is not a hub. Airlines offer several non-stop flights to other cities (not hubs) from a focus city. The number of flights offered out of focus cities is smaller in comparison with that offered through hubs and are likely to be served by smaller regional aircrafts. They are generally serviced by low-cost carriers.

Fortress Hubs: A location where the proportion of the hub capacity that is used by a single airline is greater than 70% of the hub's capacity. A classic example is Charles/Douglas International Airport in South Carolina. US Airways uses 85 of the 97 available gates which amounts to 88% of the airport's capacity. A fortress hub is likely to dissuade competition from other major airlines due to the unavailability of extra capacity. Demands on available capacity could play an important role in the airline performance (Fawcett, 1988; Rutner, 1996.

Figure 1. Round-About

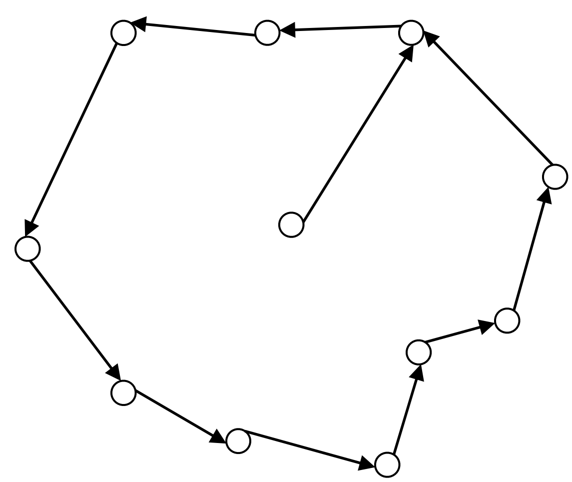


Figure 2. Hub-and Spoke

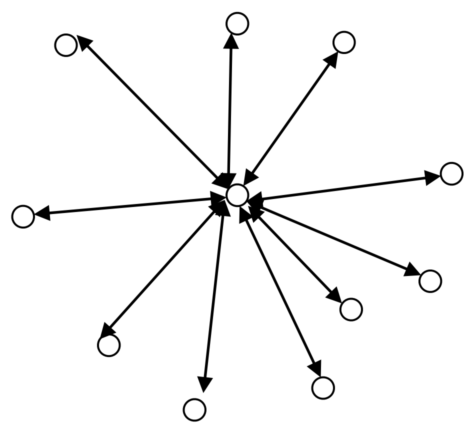
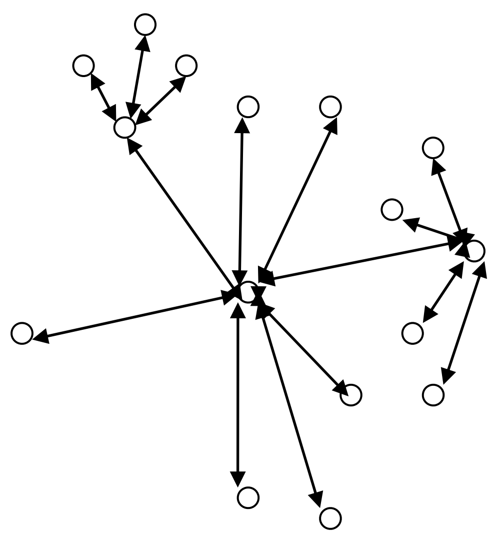


Figure 4. Hybrid Network



The mathematics of cost effectiveness of a hub-and-spoke system over a point-to-point system is self evident when we consider a network of n cities to be connected. In a point-to-point network, the number of routes that need to be operational is n (n - 1)/2. In a hub-and-spoke network, the number of needed routes drastically reduces to (n – 1). Since Cost Passenger Mile (CPM), the cost incurred by an airline in flying one passenger over a distance of one mile, is directly proportional to the number of routes flown by an airline, it is evident that hub-and-spoke arrangement is more cost effective than the point-to- point system. This cost effectiveness is undermined by the problems brought about by the hub-and-spoke system (Smith, 1995).

SOME APPLICATIONS OF HUB-AND-SPOKE NETWORK

Industrial Distribution

The hub-and-spoke model finds its use in economic geography theory in the classification of type of industrial district. Industrial districts housing one or more important firms act as hubs. Businesses and suppliers benefiting from the key industry play the role of spokes. Merkusen (1996) describes the main characteristic that defines such districts as the importance of the industry that forms part of the hub. Some examples of cities with such districts include Seattle where Boeing is housed and Toyota City with Toyota.

Finance

Smaller investment vehicles (spokes), managed individually, pool their assets into one central investment (hub). In addition to providing economies of scale to the participating investment vehicles, the main benefit of the hub-and-spoke structure is the substantial tax savings. This type of structure is also known as Master-feeder-structure.

Distribution of goods and services

Some of the major companies that have achieved competitive advantage with the use of a hub-and-spoke structure are Federal Express and UPS. This method of distribution reduces transportation costs, improves cycle times, and reduces inventory. With transportation costs accounting for 6 to 21% of a company's gross revenue, these firms and many other companies are now realizing that significant cost savings can result from improving their distribution processes.

Application in the Airline Industry

The hub-and-spoke network system was first used in airline industry by Delta Airways. Prior to its use, airlines used point-to-point network system wherein they were allowed to fly directly between any two markets, irrespective of the size of the market and the number of passengers they carried on that route. This resulted in the breakeven point or the seat price to be high on a less travelled route and caused considerable losses to the airlines. The US Federal government deregulation of airlines in 1978 allowed the airlines to pool their passengers into an intermediary airport (called as hub) and then branch the passengers on different routes (spokes). Airlines adopted these cost saving measures gladly and today, with the exception of very few airlines like Southwest, all airlines follow the hub-and-spoke network system in their service delivery. The many advantages as well as drawbacks of deregulation are listed below:

Positive Effects of Deregulation

* Lower Fares and Greater Choices (Smith, 1995)

* Increase in the number of passengers

* Creation of major Hubs as a direct result of reduced governmental control (Kahn, 1990)

* More profitable airlines (Fawcett, 1988)

Negative Effects of Deregulation

* Increased delays, noise and level of dissatisfied customers

An airline can select any one of the airports it operates in as a hub, but criteria for selecting an airport depends on a host of factors such as:

1. Technical requirements of the airplanes using the airport

2. Usable Capacity of the hub

3. Economy of the region

4. Availability of skilled/trainable workforce

5. Ease of expanding current, future airport facilities

6. Strength of the market serviced

7. Automated and multiple instrument weather arrival capability

8. Tax incentives offered by the region

9. Political climate

10. Geographic location

1. Technical requirements of the airplanes using the airport

Selection of airports to service airplanes depends on the characteristics of the “critical aircraft”. Critical aircraft is the airplane having the largest requirements that can use the airport facilities. An airport can have a reference code of 1A, 2B, 3C, 4D, 4E, 4F. The code refers to the critical aircraft’s wing span and the distance between the outer walls of the tires on its main landing gear. This becomes more important in the current times with the invention of bigger aircraft capable of carrying more passengers per flight.

2. Usable Capacity of the hub

An airport can serve as a hub to several airlines at the same time. The use of an airport as a hub by an airline decreases the available capacity of the airport. When a single airline operates more than 70 percent of the flights in and out of the airport, the airport is referred to as a fortress hub. The airline then practically has a monopoly of the hub and therefore, can dissuade the competition.

Factors numbering 3 to 10 are self explanatory and determine the primary criteria for an airport to serve as a hub. These factors would determine the basis of prescreening of the airport “candidate”. Factors 1 and 2 are the qualifiers that could make or break a selection of a hub and are mentioned here in a slightly greater detail.

The centralized distribution point in a distribution network, often referred to as hub is classified under different categories ranging from large to small based on the percentage of passenger boarding in one year.

Not all airlines use the hub-and-spoke approach. For example, Southwest Airlines is one of the exceptions to the hub-and-spoke network system. It uses the old-fashioned point-to-point system, transporting people short distances with few connecting flights. However, it is to be noted that Southwest Airlines offers very few non-stop flights on longer routes. At the end of 2011, Southwest served approximately 502 one-way, non-stop city pairs. Its point-to-point system provides a more direct route than a hub-and-spoke airline can offer.

Faced with increased competition and the need of a customer to be better informed on the airline performance prior to booking their flight, airlines have been rated by several agencies based on passenger surveys. Two of such agencies are:

"Zagat (9) Survey": Based on 16 domestic and 74 international airlines, 30 major airports and input by over 8,000 frequent fliers. Zagat, since 1990, has been rating individual airlines on their performance in areas of 1) comfort, 2) service, 3) food, and 4) website. Also covered in the survey were factors such as value of service as perceived by the passenger, on-time performance, waiting time at airports, policies of check-in and luggage, and in-flight entertainment. Each airline was rated on a 30-point scale. The results of the survey show a decrease in the airline rating over time.

"The Smart Rating": Rating on a scale of 0–100, Smart Rating is based on: Airline Statistical Information, Weighted Average of Sky track's airline quality rating, and Travel & Leisure's World's Best Awards.

Despite the many advantages of customer reaction to various aspects of service provided, a survey is generally descriptive and lists customer reactions to various factors involved in the service provided. Customer reactions/opinions are later used to generate a ranking. One can learn, using the results of a survey, about an airline's relative performance on factors of customer interest like quality of food, and on board customer service.

A survey, in general, falls short of prescribing what an airline's action should be in order to improve its ranking. Some of the questions left unanswered by a survey could be:

-should effort and money be spent on providing the passengers with better quality food

-would airline ranking be improved by providing passengers with better quality food

-What role does leg-space (referred to as pitch) play in determining passengers' perception of a comfortable flight

-How does a less crowded aircraft (having a higher Pay-Load factor) help

Relating airlines ranking to different factors – a multiple regression model

The purpose of this study is to find the important factors that could improve an airline's ranking on "The Smart Rating" and on "Zagat Survey". A multiple regression model will be developed to relate the importance of the factor considered in measuring an airline's performance.

The ranking of an airline usually is the result of such surveys as zagat and the smart rating. The results are based on the experiences, both favorable and unfavorable, of the passengers. It can be summarized that passenger dissatisfaction can arise from any one or more of the following reasons:

- Delayed flights due to weather
- On ground service
- On board service
- Quality of food

Operating parameters of the flight which can be further subdivided into into the following:

- number of hubs used by the airline.

From the concept of a hub-and-spoke system, the cost effectiveness of an airline is improved with increased number of hubs that is used by an airline, leading to a greater efficiency in its operation. Also it is to be noted that usage of multiple hubs could reduce the demand on a single hub. However, the increased number of hubs could increase the travel and waiting time of the passengers causing a greater level of dissatisfaction.

- number of focus cities

Focus cities are intended to reduce congestion at the hub and could contribute positively to the customer satisfaction.

- number of destinations

As the number of cities served by an airline increases, increased demand is likely to be placed on the airlines resources and on the hub capacity as well.

- fleet size

The larger the number of aircrafts an airline has, the greater the number of markets it can serve and therefore have a better customer service. It is to be noted that an airline's fleet will consist of several different aircrafts of different capacities.

-domestic pay-load factor:

Pay-load factor, measured as a percentage is the proportion of the used capacity of a aircraft to the available capacity. All aircrafts have a critical pay-load factor depending on the size and type of the aircraft. Flying with a pay-load factor below the critical level will cause an airline to loose money on the particular route flown. While having a high pay-load factor is financially advantageous to an airline, it is likely to leave an impression of an aircraft being "overcrowded" and lead to customer dissatisfaction.

-international pay-load factor.

This is similar to domestic pay-load factor and has the same effect on customer satisfaction or dissatisfaction.

-seat pitch:

This is distance between the back rests of two consecutive rows of seats. It usually varies from 29" to 34" in the economy class. This can be used to measure the comfort of the flight.

Passenger satisfaction/dissatisfaction is expressed in surveys. Irrespective of the organization conducting it, it marks the culmination of numerous factors and experiences that passengers are subjected to before, during and after their flight experience. Some of the factors are uncontrollable like delays or cancellation of flights due to inclement weather, threats to the security of the passengers and are unlikely to cause a poor airline ranking by the passengers, but some factors can be monitored and improved upon. This study considers seven such factors that could play a role in the respective ranking of an airline. This study further looks at each factor and determines the extent of their influence in determining the ranking of an airline.

Data collected by RITA (2011) is used in this study to develop a multiple linear regression model covering major U.S. passenger airlines. In 2011, U.S. airlines carried a total of 730 million passengers (domestic and international) of the worldwide market of 2.75 billion constituting an important 26.55% of the world market. The method proposed can, however, be expanded to include all IATA member airlines.

Let x_i be the ith factor influencing the rankling (i = 1, 2…7) and represent the following:

x_1 Seat Pitch

x_2 Domestic Payload Factor

x_3 International Payload factor

x_4 Fleet Size

x_5 Number of Destinations

x_6 Number of Hubs

x_7 Number of Focus Cities

And

y Airline Ranking.

Linking the factors to the ranking with a multiple regression equation gives us:

$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \varepsilon$

where

$\alpha =$ intercept. No practical value can be assigned to an intercept.

$\beta_i =$ coefficient, also called the regression parameter associated with factor x_i for i = 1,…7 and represents the change in the ranking per unit change in the corresponding factor when all other factors do not change.

$\varepsilon =$ error term caused by random fluctuations that makes the value of y to deviate from the predicted level. It represents the effect of all factors other than the 7 considered on the dependent variable.

The regression relationship will be established between the seven factors mentioned above and airline ranking of two well established agencies: Smart Ranking (1) and Zagat (9).

The SMART rankings are based on extensive consumer surveys and statistics maintained by the airlines and airports. The ZAGAT rankings are based on consumer surveys based on consumer's perception of their flight experience. The purpose of this study was to find if there were any operating characteristics of an airline that could be improved upon by the airline in order to get a better ranking.

Table 1 in the appendix gives a list of 12 U.S. airlines along with their respective ratings in the first two columns along with the value of the associated factors in the remaining columns. Smart Ranking for Continental and Sky West are not available.

Using the above data, two multiple regression equations were developed, one relating the factor values to Smart Rating (ys) and the second one relating the factor values to Zagat Rating (yz) are given below:

y_s = - 82.71 - 1.13x_1 + 1.08x_2 + .95x_3 + .03x_4 - .04x_5 - .69x_6 + .5.31x_7 (Model I)

And

y_z = 67.08 - 1.91x_1 - .04x_2 + .18x_3 - .00x_4 - .02x_5 + .61x_6 + 1.45x_7 (Model II)

Both models exhibit an existing relationship between the independent variables selected and the dependent variable as evidenced by the Coefficient of Correlation R and the Coefficient of Determination R^2 as listed in Table 2.

Table 2. Strength of Relationship between Factors and Airline Ranking

Coeffs. Of	Correlation (R)	Determination (R^2)
Model I	.95	.90
Model II	.96	.91

ANALYSIS OF RESULTS

The performance of various factors with regards to their ranking are detailed below:

Seat Pitch (x_1): The seat pitch or the distance between two successive rows of seats in the economy class varies from 29" to 34". Going beyond the 34" affects the economic feasibility of the flight in question. The difference of 5" is barely perceptible by a consumer.

Pay-load Factor Domestic (x_2): In general, the higher the pay-load factor, the airline is using its available capacity more efficiently and is reflective of a better operated flight. This is brought out in the corresponding coefficient being +1.08 for the regression model using SMART ranking as a dependent variable. The value of the same coefficient is -.04 for regression model II. The higher the pay-load factor, a consumer would perceive it as an overcrowded craft with longer service times.

Pay-load Factor International (x_3): The coefficients of the factor is positive for both the regression models and are +.95 and +.18 respectively.

Fleet Size (x_4): Represents the number of aircrafts operated by an airline. Whereas, Model I shows a coefficient of +.03, the airline could operate more efficiently due to economies of scale. Model II has a corresponding value of 0. The second result is to be expected for a consumer response on their relative satisfaction with the flight they recently took. The consumer is unlikely to be impressed by the number of aircrafts the airlines has.

Number of Destinations (x_5): The greater the number of destinations served by an airline, the greater will be the demand on airline's resources and this may lead to a decrease in the ranking of an airline. It is to be noted that both models I and II report coefficients of -.04 and -.02 respectively.

Number of Hubs (x_6): With increased number of hubs, airlines are operating with increased cost efficiency. The -.69 on regression Model I represents the negative effective on ranking due to increased waiting time at airport connections and increased travel time. The same coefficient is +.61 in Model II because the ranking in Model II relates to customers' perception of being connected to many destinations.

Number of Focus Cities (x_6): The coefficients of this factor display the strongest link to the ranking in both the models. They are +5.31 for Model I and + 1.47 for Model II. They reflect both the cost effectiveness and the positive customer perception of shorter flights and less time spent in transiting at airports.

CONCLUSION

The conclusion that can be drawn from this study is that while establishing hubs by airlines increases operational efficiencies, airlines should now move in the direction of establishing a hybrid network and expand the concept of focus cities in their network. The expanded version of this study will include all airlines that are members of IATA and take into consideration the many other factors that could influence the ranking of an airline

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Table 1. Factors Influencing Airline Ranking

Airline	SMART Rating (yS)	ZAGAT Rating (yZ)	Seat Pitch (inches) (x1)	PLF(Pay-Load Factor) Domestic (x2)	International (x3)	Fleet Size (x4)	Number of Destinations (x5)	Number of Hubs (x6)	Number of Focus Cities (x7)
Air Tran	54	14	31	81.03	82.04	140	70	0	4
Alaska	51	18	31	85.09	86.10	120	91	4	0
American	55	14	31	81.07	79.81	611	260	5	1
American Eagle	22	15	31	75.25	65.87	264	160	6	0
Delta	54	14	32	84.87	80.95	744	247	11	0
Frontier	55	16	33	87.25	85.12	75	74	1	2
Hawaiian	55	20	31	86.32	78.52	43	22	2	0
Jet Blue	77	19	34	83.05	79.11	172	71	1	5
Southwest	59	15	33	80.77	0	710	110	0	14
US	56	12	33	84.82	80.82	338	204	4	1
United	54	13	31	86.62	81.32	703	378	10	0
Continental	N/A	21	31	83.63	80.84	346	140	4	0
Sky West	N/A	22	34	80.04	78.16	294	163	1	0
Source			(3)	(3)	(3)	(3)	(3)	(3)	(3)

CONSTRAINING ROGUE BEHAVIOR IN FINANCIAL INSTITUTIONS

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Abstract

Rogue trading is seen as a pathological manifestation of necessary risk taking activities among successful financial institutions. While rogue traders expose their institutions to considerable danger and may impose a high cost to society, a continued pattern of reoccurrence suggests that the traditional response of increased regulation of affected institutions by governmental regulatory agencies have not successfully addressed this problem. This paper examines the motivation for rogue trading by individuals from the differing perspectives of edgework theory in sociology, coercion theory in criminology, and regulatory focus motivation theory in psychology. Given the market imperative for risk-taking among financial institutions, it is suggested that prohibiting pathological behaviors through the use of external controls will continue to be ineffective. Preventing the rise of pathological behavior among financial traders is seen to require self-regulation. It is suggested that effective self-regulation can be accomplished by a combination of developing appropriate cultural values within the organization and by explicitly considering the moral principles of the traders themselves.

INTRODUCTION

Given the recent history of organizations that have suffered serious losses from rogue traders (e.g., Bruno Iksil at JP Morgan, Nick Leeson at Barings Bank, Yasue Hamanaka at Sumitomo Corporation and Jérôme Kerviel at Société Générale) and the continuing saga of rogue trading activity in the credit default swaps and sub-prime mortgage markets of the mid 2000's (Wexler, 2010; Karpoff, 2010; Lowenstein, 2010), the question becomes why do financial institutions continue to permit the broad discretion to traders that allows traders to become rogue? Despite the highly documented disasters that rogue traders cause their organizations to experience, financial institutions continue to tolerate (if not encourage) conditions which contribute to rogue behavior by their selection of personalities who are prone to love risk for employment as financial traders and reward them through "superstar" compensation systems that provides special privileges and munificent rewards to successful traders (Wexler, 2010).

The answer to this question arises from the dynamics of the financial industry. As a result of increasing consolidation, deregulation, globalization, and technological advancements, financial markets have become hyper-competitive (Patterson, 2012). In this environment the profit margins on mature products are eroded to barely cover costs. Innovative products that promise success and high profitability are soon duplicated by competitive institutions and that competitive pressure rapidly erodes these profit margins. Financial institutions find themselves on a treadmill where success requires constant and increasing innovation (Karpoff, 2011).

High profile trading gone bad that gets a lot of media attention is but a small part of risk taking. Instances where edgeworkers successfully make exemplary returns having exposed their organization to considerable risk are certainly as common as those that have resulted in spectacular failure; they just do not receive the publicity (Lowenstein, 2010; Benos, 1998). An example of this would be Lewis Ranieri's development of the mortgage backed bond industry at Salomon Brothers. As a significant innovation in financial instruments, MBS initially proved exceptionally profitable. However top management did not understand these securities and needed a special seminar 18 months after the product was launched to help them understand the risk involved (Lewis, 1989). As an innovation, top management only knew MBS were highly profitable.

Following the collapse of the financial system in 1932, the Federal government initiated a series of financial reforms designed to curb risk taking in financial markets. In 1933 the Glass-Steagall Act brought a plethora of rules and regulations to the market all designed to control risk in banking institutions. The continuing evolution of financial markets brought forth waves of additional rules and regulations all of which were good at preventing the last economic crisis, but inadequate to preventing the next financial crisis (Calomiris, 2010).

The futility of a reactive approach to regulating financial risk taken by financial institutions was recognized in the creation of the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010. The Dodd-Frank Act is unique in that it recognizes the need to create new rules that anticipate market problems (Gaffney, 2011). The basic problem with this approach is that it is very difficult to anticipate future threats because financial products and markets evolve so rapidly and move so unpredictably (Currell, D., Helbekkmo, H., Miles, R., and Went, P., 2012). Regulatory oversight does not take into account the dynamic nature of these markets. Rogue-precipitated disasters not only threaten the affected financial institutions, but may generate financial contagion in allied markets and eventually require expensive government intervention (Topol, 1991; Tropeano, 2011). Thus a social desire to avoid rogue behavior appears to be mutually exclusive with the need for risk taking by financial institutions.

Risk and innovation are two closely bound concepts. Innovating behaviors and activities by definition explore something new, untried and uncertain and, therefore, risky. Different organizations have a different tolerance for risky behavior. An organization in a static market using a static technology and with limited prospects for growth will do well to shun risk. In an earlier era where technological change was minimal, competition in financial markets was largely domestic and limited by regulation. Banks, insurance companies and other traditional financial institutions generated satisfactory profits by avoiding change and shunning risk.

At the same time, financial institutions have always been different from other types of business firms. Financial institutions 1) hold a fiduciary duty to their customers, 2) are much more highly leveraged than other types of businesses, and 3) are licensed by the state to operate as depositary institutions which recognizes their special nature. In particular, risk-taking by these institutions differs from that of other businesses and thus requires some regulatory limitations to those risk-taking activities.

Recent decades have seen an explosion of dynamic change in financial markets. Globalization has eradicated national boundaries. The increased reliance on free market ideology has resulted in massive government de-regulation. Technology has revolutionized data management, communication and information transfer. The widespread acceptance of the Internet and the pervasive use of mobile communication devices have moved the boundaries of what is possible. Traditionally profitable market niches resulting from asymmetrical information and geographical dispersion have been eroded by an avalanche of competition putting pressure on the profit margins of financial institutions. The overwhelming context of current financial markets has become incessant change. Organizations in more dynamic, uncertain markets need a higher tolerance for risk taking. O'Malley and Mugford (1994) suggest that the acceleration of dynamic change in the post-modern era has resulted in organizations consciously shifting risky behaviors away from the organization itself to specific individuals in the organization.

This never-ending cascade of change has created the need for risk-taking in financial organizations aggressively seeking growth and profits. Financial institutions are on the horns of a dilemma. If they shun risk, they get trapped in static markets where the forces of competition inexorably grind down profit margins and circumscribe growth opportunities. If they encourage their traders to move quickly into new products, services and markets (so quickly they do not have time for formal organizational sanction), they can capture the profits available to first movers, before the forces of competition gather to diminish profitability (Sobel, 1993). Exploiting such opportunities does not come without risk. Financial organizations understand this and are willing to accept reasonable risks. The difficulty with this strategy is that permitting traders considerable latitude in their activities opens up the possibility that traders will take unreasonable (pathological) risks (Dash, 2009). The question now for successful financial organizations is thus not how to avoid risk, but how to control desirable risk taking activities and avoid those risk taking activities that become pathological.

Pathological risk-taking can be defined as risk-taking that occurs outside the normal expectation of risk taking within an organization. Normal risk taking activity would be determined by the organization's past behavior, culture, rules and policies. The normal risk-taking expectations for the organization may be expressed as an organization's taste for risk. Depending upon the organization's specific context and goals, an organization will have a higher or lower taste for risk (Rubin and Paul, 1979).

The problem for financial institutions is that their taste for risk must necessarily be high. In dynamic, uncertain, and unpredictable markets, past behavior may no longer be appropriate for determining future behavior. Rules and policies can quickly become outmoded by changing conditions or unexpected events. Cultural values as to what constitutes acceptable or normal risk may be vague and ambiguous. The danger of destructive pathological behaviors may be increased where there are pressures for short-term financial gains.

According to the contingency perspective of management, while stable environments suggest mechanistic structures that emphasize centralization, formalization, and standardization to achieve efficiency and consistency, unstable environments suggest adaptive structures which emphasize decentralization to achieve flexibility (Burns and Stalker, 1961). Uncertainty and unpredictability require general problem solving methods for non-routine tasks and problems with no one best way to manage an organization (Lawrence and Lorsch, 1967). The optimal organizational structure and management protocols under dynamic conditions depend on the relationship between the internal attributes of the organization and its external context.

The market context of financial institutions may require allowing traders considerable discretion in their activities. Further, the rapidity of change and the continuing emergence of new financial markets and products create an environment where traders have opportunities to abuse that freedom. The market context of financial institutions provides the opportunity for traders to become pathological, yet not all traders become pathological. Therefore, the factors or conditions that result in rogue trading activities must be considered. In the next section, we review the literature at large as it informs us on the triggers that turns acceptable risk-taking behavior into delinquent behavior within the firm's context. Section II examines the set of external and internal controls we recognize as tools to help organizations prevent the drift of traders from appropriate edgework to unapproved rogue trading. We then conclude the research by providing general guidelines to organizations.

Motivation for Rogue Behavior

If the market context of financial institutions provides opportunities for, or even encourages, risk-taking behavior, and yet not all traders with this opportunity turn rogue, i.e., take on pathological risk, there must exist contextual and/or personal characteristics that differentiate a rogue trader from those traders who conform to the organization's normative expectations about risk-taking. Current research in sociology, in criminology, and in psychology seeks to explain the emergence of rogue behavior in individual traders. We survey this literature to gain deeper insights in the motivation to turn rogue, a pre-requisite to developing mechanisms to constrain and prevent such abuse.

Research in sociology and edgework theory

Sociologists have theorized that a possible explanation for rogue behavior lies in the unique character of individuals who may be described as edgeworkers. Stephen Lyng (1990) has characterized edgework as voluntary risk-taking activities where the risks are considered extreme. This approach focuses on individual behavior where edgework may be seen as the individual's mechanism for transcending institutional constraints or resisting the mundane attributes of structural organizational imperatives. Edgework may also be seen as driven by the psyche of an individual who finds the taking of extreme risks seductively attractive for its own sake (Goffman, 1967). In either case, edgework takes place at the boundaries of what the organization typically considers permissible behavior. The term edgework refers to behavior or activities of work in that grey area between what is normally sanctioned by the organization and the unkown. Edgeworkers are needed by the firm because absent such edgework, opportunities for important innovations may be lost. Edgeworkers may be necessary to facilitating an adaptive and responsive organizational strategy to dynamic changes in the market.

Traditionally in finance, arbitrage by a risk averse population is presumed to result in a high correlation between risk and return. In contrast, individuals engaging in edgework are risk seekers, that is, they seek risk for its own sake. Risk is valued by such individuals because of their need to experience the pure thrills of taking a risk or the fun derived from taking that risk (Lyng, 2005 (B)). The literature in edgework distinguishes between amateur edgeworkers (sky divers, technical mountain climbers) and professional edgeworkers (FOREX traders, commodity speculators). Risk seeking behavior in either case may be explained by the Foucaultian concept of individuals exploring limits as an expression of their desire to achieve personal freedom (Foucault, 1973). Thus rogue behavior, as an extension of or uncontrolled edgework behavior, may be seen as rebellion against organizational and institutional constraints that deny individuals opportunities for self-actualization. Preliminary research suggests that lifestyle risk taking preferences are not different from financial behavior risk taking preferences (Belcher, 2010).

Alternatively, the propensity to take risks can be seen as a manifestation of the transition in modern society to an increasingly risk oriented milieu (Lyng, 2005(A)). Wexler (2010) notes the tie between the behavior of risk takers and the evolution of institutional and organizational macro structures and attributes at least part of the motivation towards excessive risk taking from the organizational and institutional context of rogue traders. The notion that financial traders see themselves, or are seen within the organization, as gamblers is rejected. This general view is supported by Lyng (2005 (B)) who acknowledges the legitimacy of multiple interpretations explaining edgework. Some research (Jadlow and Mowen, 2010) suggests that while gamblers and investors share certain behavioral traits with respect to risk taking (e.g., material resource needs, competitiveness, and superstition) they differ in others (e.g., gamblers have a higher need for arousal, investors do not; gambling behavior tends to be positively associated with emotional instability while investment behavior is associated with emotional stability).

It may be argued that financial traders do not ply their trade to seek personal gratification from the thrills they get in taking risks, but rather take dangerous risks by framing such behaviors in the context of the overall process of investing in financial markets (Smith, 2010). Financial edgeworkers may have their propensity to take risks increased by mathematical tools and models which allow them to reify the market (Wexler, 2010). Wang (2009) notes that this process allows objective knowledge to mediate subjective knowledge on risk taking. Their behavior is rationalized as being a normal part of the process and the risks they take are seen as controlled.

Individuals with the psychological attributes of edgeworkers may be just what financial institutions are looking for in their risk-taking traders (Gapper, 2011). Such traits may even be a prerequisite for success in that fast-moving field. A combination of globalization, deregulation, accelerating dynamic technology and a harsh competitive environment requires successful financial institutions to encourage and reward edgework in order to develop innovative financial products and services and secure positions in emerging markets. Hierarchical and rule-bound institutions move too slowly to compete in such markets. Edgeworkers functioning within a contingent style of management may be guided and motivated by upper management, but cannot be tightly controlled without preventing the edgework itself. This situation results in a considerable degree of freedom for edgeworkers to both reward and harm the company.

In this context, we see that the potential for rogue behavior is in fact allowed and sanctioned by the institution in its attempt to maintain and improve competitiveness. The firm empowers risk-seekers to take risks for the benefit of the organization. Considering these individuals do love risk, giving them a freer hand is a good policy as edgeworkers would be likely to rebel against strict rules and policies.

Research in criminology and coercion theory

Rogue behavior may be interpreted as criminal behavior because such behavior requires that facts be concealed from upper management (even if there is tacit complicity on the part of supervisory management) and regulatory agencies. Rogue traders lie by omission or commission to those to whom they have a fiduciary responsibility; that constitutes a felony (*mal en se*). The American Institute of Certified Public Accounts (AICPA) comments on financial fraud of this type in its Statement on Auditing Standards No. 99 (AICPA, 2002). Although primarily directed towards problems of embezzlement, the Statement specifies a situation in which a “fraud triangle” of a unique financial problem, opportunity, and a potential for rationalization (Cressey, D., 1953) exists. While each of these elements may be found to characterize the rogue behavior of financial traders (Wexler, 2010), we focus on the potential for rationalization since we do accept that financial institutions provide edgeworkers with the opportunity to solve financial problems.

Research on criminal behavior has focused on how group processes and environmental conditions result in criminal behavior. While this orientation has generated a plethora of models, the most relevant to rogue behavior is that research dealing with deviant subcultures and social disorganization (Donegan and Ganon, 2008). This research draws on the paradigm known as “strain theory” as established by Merton (1957). According to this research, criminal behavior arises from the failure to resolve the tension between the need for reconciling socially approved ends and socially approved means (Langton and Piquero, 2007). In the case of rogue behavior, strain arises from the need to accomplish profits and take on risk by using strategies that require exposure to more than the normal level of risk or, more specifically, above the company-sanctioned acceptable level of risk. In addition, the research on differential association theory argues that criminal behavior is learned by exposure to the attitudes, beliefs and values of others (Hoffman, 2003). Thus rogue behavior, arising from strain or not, may be further encouraged by an organizational culture that excessively values risk. This is particularly likely to occur where the values of the traders sub-culture differs from the values of the culture of the larger organization (e.g., those formalized in "Codes of Ethics").

Colvin, Cullen and Ven (2002) synthesize strain and differential association theories into what they term the "Coercion and Social Support" model. Within this theory, strain becomes a causal factor that is a necessary antecedent to rogue behavior. This strain becomes then legitimized in the mind of the rogue when the trader receives social support from a deviant subculture (the trading group) and consequently engages in criminal behavior.

Research in psychology and regulatory focus motivation theory

Psychologists have long been interested in explaining risk-seeking behavior (Schneider, 1992). Elaborate psychophysical theories have been proposed to explain risk-seeking behavior under loss (Kahneman and Tversky, 1984). Prospect theory, the best known such theory, suggests that the existence of self-protective psychological mechanisms to avoid regret underpin the individual's risk-seeking behavior. These theories, however, do not explain why when an individual's *status quo* is threatened some individuals opt for increasingly risky behavior and some for avoiding risky behavior. In other words, the theories are silent about the trigger we investigate.

More recent work has sought to develop a self-regulatory theory of the motivational aspects of risk-seeking behavior (Higgens, 1997). Scholer, Fujita, Stroessner and Higgens (2010) argue what drives the choice of taking or not taking a risky option in the face of a threat to the status quo is a function of how well that option serves a valued goal, where the selection of a risky option is not constrained by the degree of risk or an individual's taste for risk. The goal of the individual may be described as either promotion oriented or prevention oriented. The promotion orientation focuses on needs related to advancement and achievement. Individuals with a promotion orientation will be more motivated by positive changes from the status quo. The prevention orientation focuses on needs related to duty and the behavioral expectations of others. Individuals with a prevention orientation will be more motivated by potential negative shifts from the status quo.

Scholer, et. al. (2010) feel that a prevention orientation is the more critical factor in explaining risk-taking behavior; this is in keeping with prospect theory whose results are driven by regret. We argue that both orientations are capable of explaining rogue behavior. It is true that the most dramatic examples of risk-taking by rogue traders appear to involve a doubling-up strategy to avoid losses, i.e., a prevention behavior. Yet, instances of rogue traders taking undue risks for personal or organizational gains, i.e., a promotion behavior, are not uncommon. Consequently, psychology reinforces our sense that rogue behavior while seemingly rare, is a serious and widespread threat to financial institutions.

Summarizing the motivation for pathological risk taking

Research in sociology, criminology and psychology each provide insights into the behavior of rogue traders from their respective perspectives. Sociology suggests that the kind of individuals hired for positions as risk-taking traders in financial institutions must have the kind of personality that describes "edgeworkers." Otherwise such individuals would not be able to function successfully in an environment where success is found to be at the edge of what has been done conventionally. Financial institutions will continue to value such individuals because they are necessary to the success of the institution. Yet the majority of edgeworkers do not turn rogue, so the question remains as to the cause of rogue behavior.

Criminological research has provided an explanation of pathological risk-taking with the development of coercion theory which argues that the transition from normal risk-taking activities to pathological risk-taking reflects the need to address the strain resulting from the gap between the expectations of high profit and the ability of normal risk-taking activities to deliver that profit. Where the temptation to address this strain with pathological risk taking is abetted by a deviant sub-culture, rogue behavior is seen to result.

Research in psychology suggests that extreme risk-taking results from the importance to an individual of valued goals that are supported by either an extreme promotion or prevention focus. While all individuals are to some extent motivated by a desire to improve the status quo (promotion) or prevent a reduction in the status quo (prevention), all individuals do not engage in pathological risk-taking.

Each of these perspectives resonates as relating to the motivation for turning rogue. Indeed, *post mortems* of rogue behavior incidents frequently explain the behavior of the rogues as reflecting edgeworker personality traits, acting to maintain the *status quo* at their institutions in order to either prevent a disaster or to promote a valued goal, with such behavior reflecting the tacit approval of a sub-culture that does not support the larger organizational values (Wexler, 2010; Leeson and Whitley, 1996; Bullen, 2004; Dellaportas, Cooper, and Braica, P. 2007; Mayer, 2006; McLean, 2008). With these insights in addition to our reading of rogue trading incidents, we examine two approaches to stem the risk of traders turning rogue.

CONTROLLING ROGUE PATHOLOGIES

Two general approaches may be taken to controlling pathological rogue behavior. The traditional approach has involved the use of external controls such as the use of rules, policies, job descriptions, and statistically monitoring financial institutions or individual traders (Levin, 2012; Schweter, 2011). More recently, concern has shifted to the ethical climate in which rogue trading takes place (Erhard and Jensen, 2012; Currell, et. al., 2012; Shadnam and Lawrence, 2011; DeLoughy; Jin, and Drozdenko, 2011; Ryan, Bechholtz, and Kolb, 2010). This alternative approach recognizes that external constraints via rules, policies and monitoring fail to prevent rogue behavior and that, therefore, potential rogues must self-regulate. In this section, we first provide an overview of the tradition external remedies to rogue behavior and highlight their shortcomings. Then we turn to the more promising avenues of self-regulation via internal controls and relate how these prospective measures are better suited at curbing rogue behavior as they address more directly the motivation that the research in the previous section recognize as causes to the switch to pathological behavior by traders.

External regulatory controls

Attempts at external regulation of risk taking by financial institutions generally begin by acknowledging the necessity of encouraging financial innovation, but then fail to address the process by which innovation occurs in favor of a series of *ad hoc* patches designed to prevent a repeat of the latest crisis (Tropeano, 2011). A problem is that no matter how tight operational controls are (tightness being measured by how little discretionary behavior is allowed the trader), the system is subject to failure through human lapses, misunderstandings, familiarity, informality, and short-cutting adherence to the rules (Poster and Southworth, 2011; Forte and Power, 2008).

Almost all statistical control models (e.g., those promulgated by Dodd-Frank or Basel III) rely on the assumption of a Gaussian copula. In probability theory and statistics, a copula is a distribution function which describes the dependence between random variables. The cumulative distribution function of a random vector can be rewritten in terms of marginal distribution functions and a copula. The marginal distribution functions describe the marginal distribution of each component of the random vector and the copula describes the dependence structure between the components. Copulas allow the modeling of random vectors by estimating the marginal distributions and copula separately, thereby simplifying the modeling of complex risk relationships; however, these models are sensitive to the assumptions of the marginal distributions and copulas, which are typically the province of technicians, not top managers. As future scenarios are inherently uncertain the assumptions used are arbitrary and are often “cherry picked” to produce what top management would consider a desirable outcome (Currell, et. al., 2012). Consequently, it may be argued that promoting the use of such models to ascertain risk is “inherently flawed” (Levin, 2011, p. 288) or, at least, easily side-stepped by enterprising and imaginative rogue traders.

Recent examples of what can go wrong abound. A particularly high-profile instance of what has been generally thought of as excessive risk-taking was revealed when J.P. Morgan announced that un-vetted risk-taking in its London Office could potentially expose the bank to some $5 billion of losses (Henry, 2012). These losses represented mostly un-hedged bets made by Bruno Iksil (AKA the “London Whale”) who joined J.P. Morgan in 2005, and had great discretion because his trading had heretofore been successful - $100 million profits in 2011 alone (Keoun, 2012).

Iksil’s trading was monitored by a series of internal controls the most important of which was VaR (value-at-risk) which is a technical measure of the total risk exposure of a financial institution. VaR is relevant to our discussion because it is both a statistical technique and a technique external regulators recommend companies use and disclose. As with all such quantitative models, VaR does not a perfectly predict losses, but even so, as requested by regulators, it is widely used as a metric by risk managers, traders, and investors. Thus, VaR is an accepted technology for measuring risk by fiat though there are numerous idiosyncratic assumptions embedded in its model. These flaws are nevertheless deemed acceptable since 1) few adequate and reliable alternative measures exist and 2) the flaws are known to the organization. In the case of the J.P. Morgan losses, not only is the model flawed but some observers infer that the company consciously changed the way it calculated VaR to understate the risk associated with the positions taken by Iksil (Henry and Horowitz, 2012). It is not clear the extent to which top management knew of these changes or of the actual risk Iksil's positions entailed. Subsequent to these events, the SEC promulgated a new set of rules dealing with revisions of VaR methodology (SEC, 2012).

As we exemplify above, the dynamics of financial markets coupled with the desire to foster innovation render rule-bound regulatory systems, no matter how sophisticated, unable to address the issues of systemic risk (Schwerter, 2011). This may be considered another incidence of "closing the barn door, after the horse has left." Consequently, we find that internal controls might be more adept at preventing such drift in behavior.

Internalized regulatory controls

It is possible that financial institutions employ edgeworkers who foster innovation and ferret out market disequilibria with resultant high risks and extraordinary profits, without such individuals becoming pathological. This situation requires 1) the creation of appropriate tacit cultural values and 2) the vision of authentic leadership, both that will combine to establish a moral framework for edgeworkers, a framework aimed at reducing the strain that would tempt traders into pathological risk taking.

Organizational culture

A tenet of Coercion Theory in criminology would be that for rogue behavior to occur, it must be supported by a deviant sub-culture. The macro culture of financial institutions generally reflects high ethical standards as the success of financial institutions is based on trust and service to its customers. However, organizational cultures tend to be pluralistic in the disaggregated, diverse organizations such as large financial institutions. Schein (2010) has defined organizational culture as a pattern of shared basic assumptions which are in response to the need for internal integration and external adaptation. This definition implies that an organization's culture is a response to external and internal forces. This response can manifest itself at three levels: (1) artifacts (organizational attributes that take a material form), (2) personal values that are formally expressed and widely shared within the organization (codes of conduct), and (3) tacit assumptions that are not normally articulated or cognitively identified in everyday interactions between organizational members.

Insofar as financial institutions seek to promote ethical behavior in their organizations, great emphasis is placed on artifacts and formal codes of conduct, but little attention is paid to the tacit embedded cultural assumptions. It is these tacit assumptions that, if unchecked, constitute and contribute to the development of a deviant sub-culture.

Ignored in the macro corporate affectations of a conservative approach to risk taking are the tacit assumptions which operate as hidden rules of the road and are often unspoken or even taboo to speak of. Jones and Ryan (1998) argue that these tacit assumptions in fact reflect the perceived morality of the organization's behavior or activities, rather than the artifacts or formal value statements of the organization. Worse, addressing ethical issues at a financial institution through artifacts and codes of conduct can result in cynicism and disrespect on the part of employees who are quick to observe discrepancies between what the organization says and what the organization actually does. The use of such artifacts and pronouncements may be also interpreted as an attempt to manipulate the moral values of individuals within the organization (Cave, 2007). Individuals with edgeworker personalities are likely to be hostile to such attempts and may consider them as unduly manipulative. In truth, these organizational measures might embolden edgeworkers to rebel against these organizational and institutional constraints to achieve self-actualization. We conclude that the organization can only stand if it takes explicit care of its three cultural pillars (artifacts, code of conduct and tacit philosophy). This necessary condition we feel can be fulfilled via the auspices of authentic leadership.

A**uthentic leadership**

Creating or changing the tacit assumptions embedded deep within an organization's culture can be difficult since they are hidden from view and not to be spoken of. This is the important role authentic leadership can play (Driscoll and Hoffman, 2000). The goal of authentic leadership is to create a positive ethical organization. A positive ethical organization requires that individual values in the organization be the "cognitive, affective, and behavioral manifestation of an ethical organizational identity" (Verbos, et. al., p. 1). This construct is based on a process of ethical development that relies on individual recognition, judgment, intent and behavior where the organization's moral stance (or lack of it) is communicated to individuals and affects their moral behavior (Rest, 1986).

What is needed on the part of financial institutions to create an environment where edgeworkers do not engage in pathological risk taking is a different approach. Organizations need to utilize a positive approach to what is expected from organization members. The organization's goals need to shift from a direct focus on profit or short-term goals to positive individual virtues among decision makers (Seligman and Csikszentmihalyi, 2000; Cameron, et. al., 2003). Profitability and shareholder wealth are then seen as necessary and desirable outcomes of virtuous behavior. In contrast, rogue behavior is seen to arise from an institutional context of moral collapse (Shadnam and Lawrence, 2011).

The characteristics of authentic leadership are mutually reinforcing constructs which may evolve into charismatic, transformational and transactional leadership styles (Hannah, Avolio and Walumbwa, 2011). As a learned response to the process of internal integration, tacit cultural values can be influenced by ethical leadership (Resnick, Hanges, Dickson and Mitchelson, 2006). Given that leadership is an inherently interactive process (Crittenden and Crittenden, 2008), authentic leadership can address and impact the embedded tacit cultural assumptions.

From the perspective of Social Identity Theory, leadership is a process enacted in the context of a shared group membership, and leadership effectiveness is contingent on followers' "perceptions of the leader as a group member" (van Knippenberg, 2011, p. 1079). Social Identity Theory argues that the leadership role derives from leader prototypicality: the extent to which the leader is perceived to embody group identity. An important attribute of a leader in this context would be their moral values and philosophy. Leaders may be said to have a moral aspect to their character that is distinct from their other personality characteristics (Hannah and Avolio, 2011). It is this moral dimension of the leader that affects the moral behavior of organizational members.

The concept of a prototypical leader is very closely identified with the construct of authentic leadership. While the literature notes many nuances to the concept of authentic leadership, the essence of authentic leadership is clear (Gardner, Cogliser, Davis, and Dickens, 2011). An authentic leader behaves in a self-aware manner and acts in accord with his true self by expressing what is genuinely thought and believed (Luthans and Avolio, 2003). Authentic leaders may be charismatic or transformational, but this is not necessarily so (De Cremer and van Knippenberg, 2002). The exact form of authentic leadership depends on context. Menges, Walter, Vogel, and Bruch (2011) found that the primary driver in achieving transformational leadership was a positive affective climate.

Authentic leadership is based on a core sense of self that consistently manifests itself over time, under stress, and in different situations. As a result, an authentic leader is trusted, respected and admired by group members who will accordingly seek to emulate their values, beliefs and behaviors. Authentic leadership encourages group cohesiveness, citizenship behaviors and empowers workers to be more effective for the organization (Walumba, Wang, Wang, Schaubroeck and Avolio, 2010). Research has consistently demonstrated that authentic leadership increases group effectiveness (De Cremer, van Dijke and Mayer, 2010). Authentic leadership directly influences moral decision-making in organizations because it encourages individuals to create their own moral identity and act on it (Zhu, Avolio, Riggio and Sosik, 2011).

Rest (1979) has suggested a four step process which can be used for the creation of a positive ethical posture in an organization that may be applicable to retarding pathological risk-taking in financial institutions. The first step in this process is to recognize the moral issues inherent in innovative or excessively risky activities. The moral element to be recognized in this context is that the individual has a fiduciary responsibility to the institution. Recognizing a moral element in risk-taking would be a precondition to taking personal ownership of the consequences of any decisions made. Where such a recognition is absent, a sense of responsibility for such actions will be absent because there will be no moral dimension to the action or behavior.

Secondly, when a moral issue is recognized, this calls for the individual to make a judgment simply because it is a moral issue. The agent must then engage in some form of moral reasoning based upon their own values to determine if the action or behavior is right or wrong. This requires consideration of the impact of risk-taking on co-workers, other employees and the firm itself.

Once the element of personal responsibility for the outcome is incorporated into the decision-making process, moral intent must be established as a basis for action. Moral intent is the outcome of the process of moral judgment. Moral issues are often complex and may be associated with both desirable and undesirable outcomes. The agent must then weigh the differing implications of those outcomes to decide what is in the best interests of both the firm and the larger society.

The basis for Rest’s approach to moral behavior in organizations lies in the theory of moral reasoning developed by Piaget (1932) and extended by Kohlberg (1981). Within this framework, the ability to reason morally goes through a series of linked progressive stages. In the context of individuals developing the capacity to reason morally within organizations, it is hypothesized that for less mature adults the morality of an action is judged by evaluating its consequences in terms of a person's interactions with others, e.g., respect, gratitude, and “doing unto others as you would have them do unto you.” This construct for moral reasoning is seen as a situation where individuals play stereotyped social roles. It is sufficient for moral reasoning at this point for the actors to “mean well.” Stenmark and Mumford (2011) found that leaders tend to make worse ethical decisions when those decisions are made in a response to relationships rather than other criteria. As individuals mature, they are seen to progress beyond their needs for individual approval exhibited in this stage and begin to transcend those individual needs. Beyond fulfilling individual needs, moral reasoning may lead to a more principled perspective for moral reasoning. Traders would be less likely to turn rogue if they were sufficiently seasoned in the firm to have a broad principled perspective of their responsibilities. Evidence supports this premise as most rogue traders are young traders, early in their career.

A principled perspective moves the moral basis for risk-taking towards concerns for the welfare of the institution. With increasing maturity, the basis for moral reasoning achieves focus on what is actually maximizing shareholder wealth. Specifically, operating from a principled moral framework reduces the strain of trading off short-run pressures for profits with a potentially disastrous level of risk (Rest, Narvaez, Bebeau and Thomas, 1999). This moral framework then can be said to define the limits of risk-taking by a general consensus among the majority (Muhlberger, 2000). This framework thus minimizes the impact of potentially deviant sub-groups on risk-taking behavior (Ryan and Ciavarella, 2002).

It may be argued that external institutional controls, formal policies and corporate artifacts actually inhibit the development of moral reasoning in its employees in an organization because the responsibility for the outcome appears to shift from the individual to the organization (Shadnam and Lawrence, 2011). Hence, there would be no moral issue associated with any particular risk-taking posture. The task of authentic leadership thus becomes ensuring that individuals within the organization are able to progress from a relationship basis for moral reasoning to a principled basis for moral reasoning. A positive ethical leadership encourages the desire of individuals to be seen as moral by themselves or others (Jones and Ryan, 1998), but the current use of external controls on risk-taking in financial institutions finesses the moral issues inherent in such decisions.

The amoral content of external controls, policies and artifacts sends a message to employees that there is no need to make this transition in adopting particular risk-taking strategies. Consequently, there is no reason to move to the principled stage of moral reasoning. Amoral tacit assumptions embedded in the organizational culture may then be cynical about institutional priorities and encourage excessive risk-taking.

For the above reasons, the organization’s ethical posture may have a profound effect on the links between moral judgment, moral behavior and activities that are dangerous to the organization such as pathological risk-taking (Jones and Ryan, 1997). An ethical posture to risk-taking that is amoral or negative tends to preclude moral judgments by individuals within the organization. Jan-Willem van der Rijt (2011) argues that if the ethical posture of the organization is coercive, it affects one’s morality. An amoral ethical posture is a form of coercion that subjugates the individuals in the organization by lessening their self-respect and by denying them a moral perspective. Whatever the cause, the suspension of moral judgment within the organization reduces the ability of individuals to feel a fiduciary responsibility to the institution. This reflects a praxeological perspective which argues that no matter how virtuous individuals may be, in a complex organization a habit of virtue does not necessarily correspond to virtuous behavior (Ballet and Bazin, 2006). The behavioral dynamics of individuals in an organizational context may differ from their behavior outside of that organizational context.

CONCLUSION

The history of financial institutions is replete with examples of trusted individuals who hold responsible positions only to engage in audacious risk-taking that threatens the existence of that institution and imposes substantial costs on the remainder of society.

Examples of this rogue behavior continue to the present day because financial institutions continue to create a context whereby rogue activity is possible and regulatory agencies have proven ineffective in preventing such activity.

The current hyper-dynamic characteristics of financial markets is seen to require a high level of risk-taking by financial institutions seeking the profits that come from creating new markets for financial securities and new financial products. Institutional and regulatory attempts to prevent this risk-taking from becoming pathological have focused on external controls and statistical monitoring, which, while well-intentioned, ignore the basic motives of high-level risk takers in financial institutions. Such risk takers may be characterized as edgeworkers - individuals who derive enjoyment from taking risks themselves. This in itself is not bad as not all edgeworkers become pathological risk takers - indeed the personality of an edgeworker may be a requirement for successful innovation in financial institutions. Risk-taking in financial institutions has been shown by research in criminology to become pathological when it is able to be rationalized by an individual seeking to reduce the strain between conflicting short-term goals and when such behavior is supported by a deviant sub-culture. Research in psychology further suggests that such pathological behavior may be furthered by a psychological desire to maintain the status quo out of a sense of duty to the institution.

As a result, the effective deterrent to risk-taking becoming pathological does not require the imposition of external controls or formalized values or rule books on risk-takers, but rather requires that a context be created where risk takers regulate themselves by adopting a principled set of moral values. This context is possible in a positive ethical organization, an organization characterized by a strong ethical identity that organization members take ownership of. Positive ethical organizations are created by authentic prototypical leaders. Such leaders create an organization where individuals are empowered to create their own moral identity. Individuals who are able to recognize the existence of moral issues in their behavior, are confident enough to make their own moral judgment on that matter, and then make a decision on that issue. Thus the behavior of the individual will be better able to reconcile the strain they feel between competing goals in a manner consistent with larger organizational values.

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OCCUPY WALL STREET AND CORPORATE SOCIAL RESPONSIBILITY

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ABSTRACT

The gap between the efforts of corporations to be socially responsible and the perception of those efforts in society is seen to result from a corporate reliance on specific responses to stakeholder needs and formal rules. This paper argues that societal expectations about social responsibility can be better aligned with corporate social performance by creating a compassionate organizational culture, where compassion manifests itself as a concern within the organization for those adversely affected by the organization or those disadvantaged in society. It is argued that compassion is the missing ingredient in aligning Corporate Social Performance with the expectations of society.

Creating a compassionate organization is seen to result from authentic leadership which works to create an ethically positive organization. The attributes of an ethically positive organization release the internalized values of employees and decision makers to more effectively address the real issues involved in the social perception of the organization. Authentic leadership is needed to move away from the traditional metrics of Corporate Social Responsibility and unleash tacit unspoken assumptions embedded in organization culture which recognize that accomplishing what is good for the long term sustainability and success of organization can only be obtained by striving for the larger social good.

INTRODUCTION

The continuing gap between social expectations for organizational performance and the actual social conduct of large organizations continues despite social outcry over the many perceived failures of business to wield their economic power for appropriate public purposes. In America, the spontaneous and widespread Occupy Wall Street movement signifies deep concerns over the functioning of the capitalist system in 21st century America (Jones, 2011). The popularity of this leaderless and unorganized movement lends credence to widespread concerns with economic inequality, corporate greed, corporate influence over government, environmental indifference, and the lingering effects of racism and discrimination (Bradford, 2011). Moreover, the discontent with big business as usual is a global concern. The Occupy Wall Street movement is intent on fostering a nonviolent "Arab Spring" type revolution world wide (OccupyWallSt.com A, 2012). Protestors in Greece are encouraged to occupy Syntagma Square in protest of the extreme austerity measures being imposed on the backs of the Greek people to the "joy and benefit" of the financial elite (Occupywallst.com B, 2012). In other parts of the industrialized world, large corporations ostensibly committed to corporate social responsibility (CSR) regularly violate price competition laws which have the effect of exploiting their customers and adversely affecting the distribution of income (Freyer, 2006). Environmentally destructive mining practices in Africa and South America, the rape of the Brazilian rainforest, and exploitative labor practices in Asian countries are all too common examples of the failure of corporate social performance as practiced in developing countries (Sheppard, Porter, Faust, and Nagar, 2009). Akyildiz (2006) chronicles the pressures which are applied to developing nations like Turkey and Nigeria by multi-national corporations (MNCs) which behave as if they were without a social conscience. There appears to be a political need unrecognized by large corporations to advance social welfare generally and to protect established social moral entitlements (Dubbink and Smith, 2011).

Aside from these recent high-profile concerns, considerable evidence exits of public dissatisfaction with CSR efforts (Cebula and Paul, 2002; Cory, 2004; Jones and Parker, 2005; Loeb, 2010). In an era of great social concern over high health costs, Spizt and Wikham (2012) found evidence of Pharmaceutical Corporations extracting oligopolistic profits from the most disadvantaged segments of society. Öberseder, Schlegelmilch, and Gruber (2011) have noted the paradoxical role of CSR in consumer behavior. Consumers wish to receive more and more CSR information from corporations, but indicate CSR has only a limited effect on their behavior.

It is a mistake for corporate leaders to ignore these concerns. If this dissatisfaction continues to increase, at some point in time the political system will be forced to address these issues in a substantive form. Government intervention in this context can be disproportionate, leading to high compliance costs and resource allocation inefficiencies (Hyak, 1973). It would be much better for both corporate and social interests if corporate executives addressed these social concerns in an effective manner, rather than asserting they are being socially responsible by meeting the metrics of a scholarly definition of CSR, limiting their focus to narrowly defined objectives, and ignoring an increasing level of social dissatisfaction with their performance.

THE EVOLUTION OF CORPORATE SOCIAL RESPONSIBILITY

The idea that the accretion of power and wealth in business organizations carried with it a moral responsibility for philanthropy, charity, and social responsibility dates to the rise of the industrial economy (Smith, 1759). Since that time, as organizational forms, markets, government institutions and technology have evolved, so has the concept of CSR. The origin of the current construct of CSR as a function of meeting stakeholder needs is relatively recent (Bowen, 1953). Initially, this construct was broadly formulated: social responsibility being "the obligations of businessmen to pursue those policies, to make those decisions or to follow those lines of action which are desirable in terms of the objective and values of our society" (Bowen, p. 6). The evolution of this concept went through a series of definitional changes which eventually matured into a number of alternative themes (Carroll, 1999). A central theme focused the specifics of corporate social performance and created a series of increasingly narrowly defined CSR constructs.

This trend was further intensified by the role of the business media. Business media contributes to the current construction of what CSR means in corporate practice by placing an emphasis on concrete corporate activities and on the business case for CSR activities (Grafström and Windell, 2011). This may reflect the fact that consumers tend to give more eleemosynary credit to corporations where there is a perceived fit between the CSR activity and the corporation (Sohn, Han, and Lee, 2012.). The absence of such a fit may raise the public's suspicion about the underlying motives of the corporation. Therefore the media emphasis on CSR specifics and the business case conflate to further alienate contemporary CSR from its roots.

This narrowing of focus was accompanied by academic research that considered those aspects of CSR that were quantifiable and measurable (De Bakker, Groenewegen, and Den Hond, 2005; Schreck, 2011). This process created a construct of CSR that was specific and distinct enough to be considered a corporate "brand" (Rowley and Berman, 2000). The branding process featured the increasing use of visual portrayals of CSR activities (phronesis) which were used to amplify and make these activities more concrete in the mind of the public (Rämö, 2011). Thus, what becomes of overarching importance to the firm is not any altruistic reason for undertaking CSR activities, but the impact of those activities on its reputation (Lii and Lee, 2012).

This resulting emphasis on the quantification and statistical analysis of CSR activities had the effect of stripping considerations of the morality of CSR from its practice (Ghoshal, 2005). The attempt to quantify and brand social responsibilities may have resulted from a corporate preoccupation with branding and quantifying its market goods and services or may have simply reflected a higher degree of comfort in dealing with the tangible needs of specific stakeholder groups than with metaphysical issues.

A force instrumental in the evolution of this CSR construct came from the well-known assertion of Milton Friedman that the "business of business is business" and that efforts to achieve social goals by corporations were misguided and should be better left to public officials (Friedman, 1970; Carroll, 1979). An extension of this argument is that any CSR activities that do, in fact, have a business case, will be undertaken anyway, while if they do not have a business case, such activities will be ineffective (Karnani, 2011). The assertion is made that corporations have no social responsibility, only a fiduciary responsibility to their stockholders.

The response to this view of corporate social responsibility took the form of numerous investigations into the relationship between corporate social activities and their success. Much effort has been put into demonstrating that maximizing shareholder wealth and being socially responsible are congruent activities (Moon and Bonny, 2001; Chaarlas, 2012). Evidence has been found which suggests that doing good for its own sake has a positive impact on the long-run performance of organizations (Wood, 1991; Dent, Higgins, and Wharff, 2005; Hollenberg, 2008; Upadhyay and Singh, 2010). It is asserted that corporate efforts to being socially responsible lead to risk and cost reductions, and both greater sales and returns to shareholders (Orlitzky and Benjamin, 2001; Orlitzky, Schmidt and Rynes, 2003): that doing good in some sense will benefit the corporation in the long run.

However, the business case for CSR is besieged by an array of methodological and conceptual problems and not universally accepted (Cochran and Wood, 1984; De Bakker, Groenewegen, and Den Hond, 2005; Barnea and Rubin, 2010; Jo and Harjoto, 2011). The most recent analyses of the relationship between CSR and firm value have been inconclusive (Jo and Harjoto, 2011; Schreck, 2011).

The iterative process of corporations attempting to fulfill their social responsibilities and demonstrate that this activity was beneficial to stockholders furthered an approach to CSR that became increasingly restricted to concrete and visible activities (Rowley and Berman, 2000). A byproduct of this effort has been to increasingly conceptualize corporate social activities as measurable and quantifiable entities to allow for more rigorous statistical analysis (Schreck, 2011). Osuji (2011) sees the consequence of tying social issues to financial performance as "stultifying" the development of a vibrant CSR effort. The evolution of the CSR construct appears to have led to a de-emphasis on the metaphysical aspects of corporate social responsibility to the point where the moral attributes of corporate social policy became largely ignored (Ghoshal, 2005).

The theme of doing good because it's good business has led to an unfortunate focus on the relationship between CSR and short-term profits by corporations. Large successful organizations appear to be satisfied with having met their CSRs when they are able to recite a litany of specific action to address specific stakeholder concerns and express only a limited concern for meeting society's expectations about their behavior (ExxonMobile, 2010; Dow Chemical, 2010). Preuss (2011) notes that taking such a narrow view of the business case for CSR has numerous drawbacks, not the least of which is mainstreaming CSR activities. This follows from the fact that closely connecting the business case to any CSR action can easily result in the impression to the employee that the only reason for CSR action is a business case.

This narrowed construct of CSR appears to characterize the socially-oriented activities of local corporations in developing nations as well. Muller and Kolk (2009) report that the CSR postures observed in developed nations are mirrored by local firms in Mexico. Gold mining firms throughout the world that have relied on the current transnational CSR paradigm to meet their social responsibilities have found it necessary to modify that approach to meet immediate local needs (Gifford, Kestler, and Anand, 2010). Chapple and Moon (2005) have also found similarities in CSR activities in seven Asian countries, although these tend to be modified to reflect conditions in the local economy. Operating in Nigeria, Shell Corporation early committed to a CSR program to increase the prosperity and protect the environment of the indigenous people. As events turned out, the result of Shell's intrusion into the local economy increased the poverty of the local people and despoiled the environment (Ite, 2006).

Where corporate value systems address individual behavior, there is an emphasis on prohibiting deleterious behaviors rather than rewarding desirable behaviors. Corporate codes of conduct tend to focus on negative behaviors rather than on positive behaviors (Jones and Ryan; 1997; Sims and Brinkmann, 2003; Verbos, Forshey, Harding and Miller, 2007). Much effort is spent in identifying prohibited behaviors, compared to encouraging behaviors that promote the welfare of those inside and outside the corporation. Google's famous aphorism "Don't be evil" illustrates this approach (Google, 2011).

Many corporations appear satisfied with meeting their social responsibilities by addressing social concerns in a narrow context. Simply put, current CSR policy in large organizations lacks a sense of compassion for the disadvantaged or less fortunate in society. There is little contemplation regarding right and wrong; instead, there is only strategizing as to maximize CSR metrics as cost efficiently as possible. In the absence of thoughtful reflection, there is no goal beyond the immediate results produced by any action (Rowley and Berman, 2000; Ghoshal, 2005; Hollenberg, 2008). A sense of compassion is the missing element in properly aligning corporate social goals with social expectations for large powerful corporations.

ETHICALLY POSITIVE ORGANIZATIONS

Consistent with Smith's original 1759 vision that considerations of morality and business market activity are inextricably entwined is the current construct of a positive ethical organization (Verbos, et. al., 2007). A positive ethical organization requires that individual values in the organization be the "cognitive, affective, and behavioral manifestation of an ethical organizational identity." (Verbos, et. al., p. 1). This construct is based on a process of ethical development that relies on individual recognition, judgment, intent and behavior where the organizations moral stance (or lack of it) is communicated to individuals and affects their moral behavior (Rest, 1986). A positive approach to ethics encourages a compassionate dimension to CSR activities that would better align corporate social performance with social expectations. The organization cannot create an ethical identity through a set of amoral values and negative policies or controls (Cameron, Dutton and Quinn, 2003)

What is needed on the part of corporations is a different attitude: an organizational application of positive psychology which shifts the organizational focus away from a focus on corporate profits or shareholder wealth to positive individual virtues among decision makers (Seligman and Csikszentmihalyi, 2000; Cameron, et. al., 2003). A positive approach to organizational ethics can yield a living ethical code that with authentic leadership can create an organizational response that truly manifests its responsibility to society (Verbos, et al., 2007).

The alignment of corporate social performance and social expectations requires a commitment from individuals in that organization to increasing the common good. The transformational leadership style possible in an ethically positive organization has been shown to increase organizational effectiveness by both empowering workers and making them more optimistic about their role in the organization (Wang, Tsui, and Xin, 2010).

Maritain (1947) defined the common good as the sum of all civic concerns, liberty and justice, material and spiritual riches, hereditary wisdom, moral rectitude, friendship, and heroism in the individual lives of all community members. Thus a positive ethical approach is what is needed to bring the social actions of corporations into harmony with what society expects from those organizations.

While amoral approaches to CSR are not *prima facie* bad, they miss the point. The need is for corporations who are bastions of power to exercise that power positively to benefit society in meaningful ways. One of the rallying cries of the Occupy Wall Street Movement is "We are the 99", referring to the unequal distribution of wealth where 1% of the population has a wildly disproportionate share of wealth and the 99% who took out loans to pay for education and home mortgages, only to end up unemployed or underemployed and on the precipice of financial and social ruin rather than with their piece of the American dream (Rushkoff, 2011). The issue of social responsibility is essentially a moral issue. Removing morality from CSR considerations assures that social expectations for corporations will continue to differ from the social performance of corporations.

The difficulty in achieving this kind of social response from large successful organizations is generally not a lack of intention. There is a general recognition that corporate power carries with it the need to at least appear to be socially responsible (Banco, 2011; Lloyd, 2010). Unfortunately, the general perception is growing that corporations are out of step with the expectations of society with respect to the application of that power.

One reason for the existence of the gap between social expectations and corporate social performance is that corporate attempts to be socially responsible are largely directed towards specific issues, objects and behaviors such as pollution, consumer safety, consumer education, discrimination, health issues and community infrastructure or various crises. The focus of their concern is rarely on the humaneness of actions or behaviors taken and too often on specific accomplishments which can be enumerated and quantified. Ditlev-Simonsen and Wenstøp (2011) found that the prevalent rhetoric in CSR reports links the benefits to the firm with the welfare effect of the action, where virtue was seldom used as a justification for CSR activity. The lack of a positive ethical approach to CSR ethics results in the absence of a sense of compassion from corporate attempts to be socially responsible. The net effect of ignoring the need for a compassionate approach to CSR leads to the gap between social expectations for society and corporate social performance.

The view of the individual in this context is that they, like the corporations they represent, are rational actors mechanically devoted to accomplishments that are largely material and can be measured. Yet, humans are not automatons. They have a soul. Humans have higher needs and concerns than the materialistic. Humans can desire a life with higher ideals than satisfying their own needs and a larger purpose than themselves (Robbins, 2011). Without a compassionate dimension, many people feel unfulfilled and incomplete. To be spiritually self-actualized is an important goal and motivating force for many people.

This metaphysical dimension to corporate social policy is largely unrecognized by the corporation. When CSR policy addresses values, the discussion revolves around such factors as behaving honestly, avoiding conflicts of interest, treating the customer fairly, not engaging in discriminatory practices, and protecting the environment. Values that are critical to effective social responsibility such as love, empathy, compassion, kindness, and caring are not part of the corporate lexicon. Yet these are the very values necessary to creating a viable social presence for large businesses.

To be effective, corporate social policy need to develop a sense of compassion in its employees or its attempts to be socially responsible will be shallow and ineffective. Corporations are properly wary of addressing the personal values of their employees because of the fear of offending a person's religious beliefs. No large organization wants to be seen as favoring one religion over another, or even as favoring religion as opposed to no religion. Organizations have a diverse employee base who must work together to accomplish common purposes. They sell to customers who are equally diverse and exist in diverse communities. To be successful, corporations generally want to avoid the subject of religion at all costs. Religious preferences and corporate activities are viewed as being in different, unrelated, dimensions.

To promote a sense of compassion does not necessarily involve promoting a specific religion or any religion at all (Dent, et al., 2005). Thaker (2009) developed the concept of practical compassion which transcends religious specifics. Practical compassion can be described as a deep, tranquil inner-state which leads to the ability to make decisions not on the basis of immediate materialistic considerations, but on the larger purpose of self and organization. Thaker (2009) refers to this approach as "righteous knowledge management" (p. 187). The goal of practical compassion practiced by employees is to lead to what have been called "exemplary business practices" (Weber, 2009). These exemplary business practices are seen to arise from a value framework that allows the individual to discern between right and wrong actions.

Compassion in this context is more aligned with the concept of dharma than with traditional religious practices (Thaker, 2009; Niakant and Lips-Wiersma, 2012). Social harmony and human happiness are seen to require that human beings discern and live in a manner consistent within a natural order of the world (Lips-Wiersma and Nilakant , 2008), rather than with the specific tenets of an organized religion such as Christian, Islamic, Judean, Hindu or Buddhist. Compassion developed from this perspective promotes independent thinking about the purpose of life (Harung, 2010). Such thinking leads to exemplary business practices based on the moral values of individuals in the organization.

Tacit Assumptions in Corporate Culture

Schein (2004) has defined organizational culture as a pattern of shared basic assumptions which are in response to the need for internal integration and external adaptation. This definition implies that an organization's culture is a response to external and internal forces. This response can manifest itself at three levels: (1) artifacts (organizational attributes that take a material form), (2) personal values that are formally expressed and widely shared within the organization (codes of conduct), and (3) tacit assumptions that are not normally articulated or cognitively identified in everyday interactions between organizational members.

CSR as currently practiced relies heavily on responses (1) and (2) and usually ignores the tacit assumptions and values held by organizational members. As discussed above, current CSR accomplishments (artifacts) are recognized in very specific terms (e.g., a reclamation project on a river, providing textbooks for a school in a poverty area, etc.) Companies also attempt to prove their meritorious CSR profile through formal commitments to good deeds and behaviors (e.g., codes of conduct, pronouncements about the importance of "doing good").

The use of such artifacts and pronouncements may be interpreted as an attempt to manipulate the moral values of individuals within the organization (Cave, 2007). The organization encourages employees to buy into a set of communal values and behaviors which serve as substitutes for the individual's own moral judgments. As a result, individuals have a different set of motives and behaviors within the organization than they would exhibit outside the organization. While such an approach to CSR is not necessarily coercive, it is *prima facie* immoral when it compromises the autonomy of the affected individual by fostering behavior contrary to that individual's moral principles (Cave, 2007).

Ignored in the corporate affectations of CSR are the tacit assumptions which operate as hidden rules of the road and are often unspoken or even taboo to speak of. Jones and Ryan (1998) argue that these tacit assumptions reflect the perceived morality of the organization's behavior or activities, rather than the artifacts or formal value statements of the organization.

The problem organizations confront in promoting a compassionate approach to CSR among its employees consistent with the desires of the larger society is that organizational artifacts, explicit ethical codes of conduct and negatively framed admonitions from corporate leadership do not impact those tacit values embedded in the culture. If those articulated values are not in harmony with the organization's tacit assumptions, paradoxical behavior can result. In formulating the moral code underlying their behavior, employees take their cue from what the organization does, rather than what it says. Actions speak louder than words.

For example, acknowledged values may be to treat the customer fairly and not cheat them. A customer with a big order may then not be told of an available quantity discount, because the tacit assumption is that taking the extra revenue from the customer is not cheating because they were not explicitly lied to. A company may have explicitly articulated values to treat the environment with respect and not pollute it, however pollution is defined by dumping chemicals into the local groundwater system that are included on an EPA list of hazardous waste. As a result of new technologies, the company produces a new type of waste that is consequently not on the list, but may well be put there in the future. The company dumps the new waste in the groundwater because the tacit assumption is that if it's not on the list, it doesn't count as pollution.

Creating a positive ethical stance characterized by practical compassion is not merely a matter of changing the organization's spoken and acknowledged values, but of changing the unspoken tacit assumptions embedded by organizational culture. Desirable tacit assumptions that further the goal of the organization to be more socially responsible can be created through encouraging a sense of compassion to be integrated into the organization's decision-making framework. The desired set of tacit assumptions necessary to a compassionate, ethically positive organization would revolve around the idea that there is a larger purpose to one's activities than taking home a paycheck or meeting this quarter's cash flow projections.

Culture is a learned response to the necessities of internal integration and external adaptation. Since business organizations are open organizations, their cultures are necessarily dynamic and subject to change over time. As the organization responds to external stimuli, the tacit assumptions necessary to make the organization more socially responsive can be addressed through a reflective perspective in the form of practical compassion practiced by its members (Thaker, 2009; Batstone, 2003). The creation of a positive ethical stance in an organization requires members who share a practical compassion for the world outside the organization's boundaries. This is not an outcome which can be imposed from the outside, but must develop from within.

Practical Compassion

Rest (1979) has suggested a four step process which can be used for the creation of a positive ethical posture in an organization that encourages an attitude of practical compassion among its members. The first step in this process is to recognize the moral issues inherent in organizational behavior. Recognizing a moral element in all organizational actions or behaviors is a precondition to taking personal ownership of the consequences of decisions made. Where such a recognition is absent, compassion will also be absent because there is no moral dimension to the action or behavior. The action or behavior is no longer the individual's moral responsibility.

Secondly, when a moral issue is recognized, this calls for the individual to make a judgment just because it is a moral issue. The agent must then engage in some form of moral reasoning based upon their own values to determine if the action or behavior is right or wrong. This requires consideration of the impact of the action on others, i.e., it introduces the element of compassion into the decision-making process.

Once the element of compassion is introduced into the decision-making process, moral intent must be established as a basis for action. Moral intent is the outcome of the process of moral judgment. Moral issues are often complex and may be associated with both desirable and undesirable outcomes. The agent must then weigh the differing implications of those outcomes to decide what is in the best interests of both the firm and the larger society from a compassionate perspective.

The basis for Rest's approach to moral behavior in organizations lies in the theory of moral reasoning developed by Piaget (1932) and extended by Kohlberg (1981). Within this framework, the ability to reason morally goes through a series of linked progressive stages. In the context of individuals developing the capacity to reason morally within organizations, it is hypothesized that for less mature adults the morality of an action is judged by evaluating its consequences in terms of a person's interactions with others, e.g., respect, gratitude, and "doing unto others as you would have them do unto you." This construct for moral reasoning is seen as a situation where individuals play stereotyped social roles. It is sufficient for moral reasoning at this point for the actors to "mean well." Stenmark and

Mumford (2011) found that leaders tend to make worse ethical decisions when those decisions are made in a response to relationships rather than other criteria. As individuals mature, they are seen to progress beyond their needs for individual approval exhibited in this stage and begin to transcend those individual needs.

Beyond fulfilling individual needs, moral reasoning may leads to a more principled perspective for moral reasoning. This is where the basis for morality moves towards unspecified concerns for the general welfare. With increasing maturity, the basis for moral reasoning achieves focus on the greatest good for the greatest number of people (Rest, Narvaez, Bebeau, and Thomas, 1999). Defining this utilitarian framework is then accomplished through the creation of a general consensus among the majority (Muhlberger, 2000).

It may be argued that the organizational focus on artifacts and formal policies arrests the development of moral reasoning in its employees. Developing moral reasoning as a basis for moral action is seen by Piaget and Kohlberg as a progressive series of understandings. A corporate emphasis on artifacts and formal pronouncements by the organization in developing its CSR agenda results in a break in this progressive process. Specifically, it alleviates from individuals within the organization the responsibility for progressing from a relationship basis for moral reasoning to a principled basis for moral reasoning. A positive ethical organization encourages the desire of individuals to be seen as moral by themselves or others (Jones and Ryan, 1998), but the current approach to CSR says there is no moral issue here. The amoral content of CSR activities sends a message to employees that there is no need to make this transition. Consequently, there is no reason to move to the principled stage of moral reasoning. Indeed, the tacit assumptions embedded in the organizational culture may reflect the implicit amoral character of CSR as perceived by the organization in its artifacts and formal pronouncements.

Consequently, the organization's ethical posture may have a profound affect on the link between moral judgment and moral behavior within the organization (Jones and Ryan, 1997). An ethical posture to CSR that is amoral or negative tends to preclude moral judgments by individuals within the organization. Jan-Willem van der Rijt (2011) argues that if the ethical posture of the organization is coercive it affects one's morality. An amoral ethical posture is a form of coercion that subjugates the individuals in the organization by lessening their self- respect and denying them a moral perspective. Whatever the cause, the suspension of moral judgments within the organization reduces the ability of individuals to feel compassion for those adversely affected by the activities of the organization. This reflects a praxeological perspective which argues that no matter how virtuous individuals may be, in a complex organization a habit of virtue does not necessarily correspond to virtuous behavior (Ballet and Bazin, 2006). The behavioral dynamics of individuals in an organizational context may differ from their behavior outside of that organizational context.

In a positive ethical organization, decision making individuals must take action based upon (1) their recognition of the moral issue involved, (2) their moral judgment, and (3) their assessment of moral intent. Such actions are sustainable in an ethically positive organization and will lead to exemplary business practices. If the organization's approach to CSR is *pro forma*, recognizing and acting on the moral issues of decision-making is very difficult. Decisions made in an ethically positive organization will be inherently compassionate and lead to a reduction in the gap between social expectations and corporate social performance.

LEADERSHIP

Creating or changing the tacit assumptions embedded deep within an organization's culture can be difficult since they are hidden from view and not to be spoken of. That is where the role of ethical leadership comes into play (Driscoll & Hoffman, 2000). The characteristics of compassion and ethical leadership are mutually reinforcing constructs which may evolve into charismatic, transformational and transactional leadership styles (Hannah, Avolio, and Walumbwa, 2011). As a learned response to the process of internal integration, tacit cultural values can be influenced by ethical leadership (Resnick, Hanges, Dickson, and Mitchelson, 2006). Inspired ethical leadership is a powerful motivating force which enhances both the individual self-fulfillment and the long-run goals of the organization, while benefiting the larger society (Dent, et al., 2005).

From the perspective of Social Identity Theory, leadership is a process enacted in the context of a shared group membership, and leadership effectiveness is contingent on followers "perceptions of the leader as a group member" (van Knippenberg, 2011, p. 1079). Social Identity Theory argues that the leadership role derives from leader prototypicality: the extent to which the leader is perceived to embody group identity. An important attribute of a leader in this context would be their moral values and philosophy. Leaders may be said to have a moral aspect to their character that is distinct from their other personality characteristics (Hannah and Avolio), 2011). It is this moral dimension of the leader that confers authority in an ethically positive organization.

The concept of a prototypical leader is very closely identified with the construct of authentic leadership. While the literature notes many nuances to the concept of authentic leadership, the essence of authentic leadership is clear (Gardner, Cogliser, Davis, and Dickens, 2011). An authentic leader behaves in a self-aware manner and acts in accord with their true self by expressing what is genuinely thought and believed (Luthans and Avolio, 2003). Authentic leaders may be charismatic or transformational, but this is not necessarily so (De Cremer and van Knippenberg, 2002). The exact form of authentic leadership depends on context. Menges, Walter, Vogel, and Bruch (2011) found that the primary driver in achieving transformational leadership was a positive affective climate.

Authentic leadership is based on a core sense of self that consistently manifests itself over time, under stress, and in different situations. As a result, an authentic leader is trusted, respected and admired by group members who will accordingly seek to emulate their values, beliefs and behaviors. Authentic leadership encourages group cohesiveness, citizenship behaviors and empowers workers to be more effective for the organization (Walumba, Wang, Wang, Schaubroeck and Avolio, 2010). Research has consistently demonstrated that authentic leadership increases both leader and group effectiveness (De Cremer, van Dijke, and Mayer, 2010). Authentic leadership directly influences ethical decision making in organizations because it encourages individuals to create their own moral identity and act on it (Zhu, Avolio, Riggio, and Sosik, 2011).

The power of authentic leadership derives from their ability to motivate and inspire employees to embrace organizational goals without compromising their own identity and ethical values. Having an orientation towards empowering employees in this manner does not arise from any Machiavellian instinct, but rather from a sense of compassion towards others inside and outside the organization. Simola, Barling and Turner (2010) referred to an “ethic of care” that characterizes transformational leaders. In exercising compassion, authentic leaders encourage employees to also show compassion toward others. Being compassionate encourages finding a purpose outside of self or short run organizational goals that can be a powerful approach to changing organizational culture to align with social expectations (Trevino and Hartman, 2003). On the negative side, research has shown that the traits of a psychopathic leader (a ruthlessness, lack of conscience, lack of compassion and the inability to love others) has a negative impact on the ability of the corporation to be socially responsive (Boddy, Ladyshewsky, and Galvin, 2010).

Authentic leadership in a positive ethical organization is likely to be an emotion-laden process, where emotions are entwined with all the factors that constitute the organization’s culture (George, 2000). The effectiveness of addressing the compassionate values embedded within the organization’s tacit assumptions may be dependent on the emotional state of organization members and the emotional state of the leaders (Lurie, 2004). The emotional state of any individual is signaled by how they act and what they say: facial expressions, vocalizations, and posture. There is evidence that the emotional state of the leaders will impact the emotional state of others in the organization (Johnson, 2009). Following George, we will use the term mood to describe these emotional states.

The construct of emotional intelligence is often discussed in the context of organizational leadership (Walter, Cole, and Humphrey, 2011). Emotional intelligence may be defined as the ability to identify, assess, and control the emotional state of oneself or others. Although the construct itself may be fundamentally flawed (Antonakis, Ashkanasy, and Dasbrough, 2009), it should be noted that emotional intelligence (as defined) is not a requisite for authentic leadership. Indeed, since the construct seems to revolve around the concept of control, it appears to be the antithesis of authentic leadership. Authentic leaders do not exercise their power by manipulating the emotions of others, but by being true to their own emotional state.

The mood of the organization can be broken down into (1) the mood of the individuals within the organization, (2) the affective tone of the organization, and (3) public expressions of mood which impact group processes like coordination and task strategy. Mood can be seen as emotional state along a continuum running from cynical, pessimistic, discouraged, and lacking hope, to optimistic, encouraged, and hopeful (Seligman and Csikszentmihalyi, 2000). The mood of the leader is also important because emotion is contagious (Hatfield, Cacioppo, and Rapson, 1993). Mood can have a powerful effect on the behavior and actions of individuals, more so in organizations because of a "herd" instinct among humans in group settings (Barsade, 2002).

One expression of a deleterious mood would be that of cynicism, which is often rampant in organizations lacking a positive ethical orientation. Cynicism may result from dissonance between the organization's formal ethical posture and the individual's desire to behave in a humane manner. Cynicism is then seen as hostile to the virtues of faith, hope and charity, upon which relationships and our sense of moral community depend (Vice, 2011). Cynical behavior among organizational leaders has been found to negatively impact both leader and employee citizenship outcomes (Rubin, Dierdorff, Bommer, and Baldwin, 2009). When present, transformational leadership was able to fully mediate these outcomes.

Authentic or transforming leadership has the task of developing in organization members the reflective orientation necessary to practical compassion requires activities and experiences which move the group along a continuum from reactive, cynical, indifferent, and uncaring to proactive, personally involved, caring and concerned.

A leader's behavior may be an important source for positive and negative emotions among organizational members. To be a leader, one must foremost be human (DeGeorge, 1994). A transformational leader is seen as integrating employee's inner perspective on the purpose of life where this inner perspective is the foundation for decisions and actions in the outer world of business (Pruzan, 2008). Leadership in an ethically positive organization needs to create situations and events that lead to an emotional response among organizational members that encourage the members to think about the larger purpose of their lives (Fry, 2003). Leader behaviors shape workplace affective events such as: giving feedback, allocating tasks, distributing resources as well as developing relationships based on trust, respect, honesty, empathy and compassion.

CONCLUSION

The argument is made that current CSR activities fail to address the basic expectations of society as to the use of their power and wealth. Social protest movements and social activists are seen as a potential catalyst for a general concern among the population that the current activities of business are not aligned with the general interests of society. It is possible that this concern could express itself in political action that, however well-intentioned, would result in a decrease in the contributions that corporate activity makes to society.

Contemporary CSR activities are found to address specific stakeholder needs with concrete accomplishments that can be enumerated and described statistically and formal pronouncements about their intentions to serve social needs in a responsible manner. This form of CSR activity is found to represent a narrowing of the original intent of being socially responsible in which the corporation was seen as a moral agent. This orientation is seen to result from a challenge to business that its responsibility is to its shareholders alone and that any attempts to meet social goals represents a breach in its financial responsibilities. The response to this challenge has been to argue that being socially responsible is in fact good business. To demonstrate this point corporation were forced to point to specific activities they engaged in, whose cost could somehow be tied to their benefit. This process was found to be intensified by the business media's tendency to focus on the visual and concrete. As a result, the orientation to CSR became amoral, divorced from considerations of humanity and compassion. It is this separation between CSR actions and the morality of the corporation that are the root cause of the difference between current CSR activities and social expectations.

It was argued that situation could be remedied by a change in attitude from the current amoral approach to CSR to CSR practiced by an ethically positive organization. Constructing an ethically positive organization is one that requires authentic leaders to address the unspoken tacit assumptions, values and beliefs embedded in an organization's culture. Authentic leadership is required to achieve an effective corporate social posture because the process to accomplish this is emotional. From the perspective of Social Identity Theory, a prototypical leader could be effective in instilling this attitude change. An authentic leader would have the moral authority to address these tacit assumptions, values and beliefs. An ethically positive organization relies on individuals to develop and act on their own moral judgment. The basis for such judgment is the outcome of a process of moral reasoning based on principle. This judgment is then exercised as practical compassion.

In summary, a reliance on traditional CSR metrics and negative ethical posturing results in the creation of social policies by the organization which sound good, but are ineffective. The reason such policies are ineffective is because they fail to promote a sense of compassion as a perspective for CSR. The substitution of organizational artifacts and formal value statements for the recognition of its role as a moral agent results in an amoral approach to CSR that is fundamentally flawed. In order to be in harmony with society's needs, effective corporate social responsibility requires an attitude of practical compassion. This attitude of practical compassion encourages individuals to address issues from the perspective of the larger meaning and purpose of their own lives. The result will be compassionate decisions made by the organization which will bring its CSR efforts in congruence with the expectations of the larger society.

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BENEFITS AND THE GOODS CLASSES

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ABSTRACT

This paper is based on the observation that while marketing academics lecture that products are a bundle of benefits, when they then classify goods, the classification is based on shopping behavior, not benefits. A benefits classes concept is developed and discussed. Some preliminary data is presented that tests whether or not the benefits classes is a viable approach to looking at the way we think about good.

INTRODUCTION

This paper proceeds from the observation that when marketing academics write or teach about products, the following sequence of ideas is one that is often presented.

First, it is noted that a product is essentially a bundle of benefits rather than attributes. Thus, a piece of chewing gum is valued by consumers because it (may) contain the following benefits: relaxation, tastes good, cleans teeth, freshens breath, and so on. The attributes that create these are the physical characteristic of the gum base, the sweeteners and flavorings added to the gum base, the particular sweeteners used (e.g., xylitol), and so on.

Second, given that there are thousands of products, how do we organize and/or classify them? The oldest classification method which is still taught in textbooks (see for example, Kotler and Keller 2011, p. 189) was presented by Copeland in 1923 – the goods classes. These goods classes are ultimately based on the amount of shopping time and effort a consumer is willing to expend to acquire the good. For example, since the amount of shopping time involved in acquiring chewing gum is typically small, the good is classified as a convenience good. It is then argued that we expend little shopping time because the type of decision is one with which we have extensive experience and so we do not need to spend much time on the decision.

What is curious is that within the space of one page or less in a textbook, we go from telling students that products are benefits and then tell them that the way we classify product is how we shop for them. The premise of this paper is that perhaps it may be more useful to reinforce the concept of product as benefit by providing a method of classification that is based on the quantity of benefit in the product rather than the amount of shopping we do for the product.

Please note that the following discussion both explicitly and implicitly uses transactions costs as part of the consumer's cost equation. In the case of the goods classes this is important since modern discussions of the goods classes typically use transactions costs only in an implied way. For example shopping goods require shopping effort (a transactions cost) by consumers. Thus, the cost of acquiring a shopping good involves both the actual price of the good as well as the time, effort, and inconvenience involved in the acquisition of the good. So, for example, while bananas are very cheap in Costa Rica, few of us acquire our bananas there since the transactions costs are so high (the time and costs involved in getting to plantation in Costa Rica far exceeds the cost savings of the low priced local free bananas).

TRANSACTIONS COSTS

When a consumer buys a product, the price of the product is important, but so too is the cost of acquiring that product. The quantity of benefit that the consumer expects from a transaction has significant direct implications for issues such as the stated price of the product, the distribution policies of the firm, and for the promotional strategies of the firm.

For example, in the case of low benefit products, firms need to be well aware of the prices charged by competitors as well as how much consumers believe that they really need the product and particular brand. Consider for example a purchase of a cup of coffee. For the average consumer the total benefit associated with having this coffee is relatively low (despite the perception in popular culture). As a consequence, prices for brewed cups of coffee are correspondingly low. From a benefits classes perspective, coffee sellers can compete on the basis of superior quality (confers higher intensity) or larger size (confers higher duration) or superior price (lower cost for equivalent quality of same price for higher quality) or lower transactions costs (cheaper to acquire due to better retail location). It is evident that a common strategy for successful manufacturers and sellers of convenience goods is partly based on lower transactions costs through intensive distribution. In this way, a lower benefit good will still have a lower total cost (price plus transaction cost). It is also interesting to note that these goods are the least likely to be impacted by direct and/or on-line marketing, as the additional transactions costs are either made as an explicit charge.

A more sensible classification of products based on the benefits provided by the product can be developed that not only reinforces the concept of benefits, but also explains why we shop differently for different products. For convenience sake, we will call this approach the "benefits classes."

BENEFITS CLASSES

We are concerned with how much benefit a consumer expects to gain from purchase and use of the product. It is proposed that the quantity of benefit in any given product is a function of the duration of the product (how long does it provide benefits) and the intensity of the benefit (how much benefit does the consumer get from any one use). Some products have a very long duration (furniture may last for decades or longer; car ownership in the US averages eight years or so per car), some products have a very short duration (a daily newspaper has a short life, ice cream all to short, a firecracker provides benefits for an instant). Similarly, some products have very high intensity (a firecracker is highly intense as may be ownership of, say, a sports or luxury car), some products have low intensity (we seem to not thrilled to have a refrigerator or a sofa).

Now, it is noted that duration and intensity are particular to individual consumers and to particular circumstances – for some consumers having a piece of fine furniture may be point of pride (with high duration and intensity), while for another ownership of the same piece of furniture may be nothing special. For an ice cream aficionado getting an ice cream cone at the Creamery at Penn State may be a high point of a vacation, while for those who live at Penn State, is an ordinary experience. Nevertheless, we can talk about average consumers at use these averages to explain various behaviors.

Any given item will produce a range of benefits across consumer groups. Some people like ice cream more than others and so the same product is likely to produce a range of total benefits. We can generalize for the time being about the "average" benefit" generated by any given product. For products taken as a whole, we would seem a range of durations and a range of intensities. To make the concept more explicit, let us assume that a product can have low or high duration and low or high intensity. This results in the following matrix:

Figure One
The Benefits Classes

		Duration	
		Low	High
Intensity	Low	I	II
	High	III	IV

In quadrant I are products that are low duration and low intensity. These goods correspond roughly to convenience goods. They don't last a long time and when you consumer them there is no great rush of pleasure and or excitement. As a consequence they provide few total benefits for consumers. A morning newspaper or a morning cup of coffee would be typical types of products purchased and consumed here. It follows that a reasonable consumer would expend relatively little effort to acquire these products since the benefits accrued are small. To put it in transactions costs terms, the time, travel and aggravation costs need to be small otherwise a purchase will not be made. This explains the phenomena where a consumer will see two Starbucks or two Dunkin' Donuts shops across the street from each other. The benefits from the purchase do not justify crossing the street for the product. A retailer would need to understand the benefits received to sensibly choose a retail location – if it is not convenient, they will get very little business.

In quadrant II, are goods that are low intensity, but have high duration. These correspond roughly to shopping goods. We are willing to invest in some extended shopping behavior (e.g., go to multiple stores, or do product and/or price research) because we expect the lifetime benefits of these products to be such that the price plus our transactions costs will still be exceeded by the benefits received. For example, we are willing to shop for a refrigerator since the expected total lifetime value (benefit) is relatively high. Although with each use of the refrigerator we receive relatively small benefit, over the lifetime of ownership, the total of benefits is fairly high. The distinction made in shopping goods between style goods and price goods is, I think, somewhat artificial, since in both cases the consumer is more or less aware of the benefits expected and acts upon that information. The expenditure of time and effort to find the best price or best style make little difference in terms of total benefits expected.

In quadrant III are goods that are high intensity, but low duration. These correspond to relatively low cost specialty goods (e.g., a particular brand of ice cream such as Penn State Creamery brand). While the intensity may be high, the duration (in this case) may be (all too) low. The transactions costs involved in this kind of product are, in proportion to the benefits produced relatively small. Because the total benefit is so high, consumers are willing to expend what would seem to others to be an inordinately high effort to acquire the goods. One would expect for a product that has achieved this status, that distribution costs may be transferred to the consumer with fewer distribution outlets resulting without a corresponding diminution of sales. In addition, consumers may also be more tolerant of stock outs and so retailers may also be able to hold smaller inventories.

In quadrant IV are goods that a high intensity and have high durations. These produce very high benefits for the buyers. As in the case of low priced specialty goods, the benefits expected for the product far exceed the transaction cost of acquisition.

In addition to these cases, in some instances, we may expect no or extremely low benefits from the product. These may correspond to unsought goods (common examples here being life insurance and funeral services). While of course, practitioners in these industries would dispute the correctness of consumer perceptions, they nonetheless need to be aware of them. If, say intensity is believed to be close to zero, then the equation of intensity x duration also comes close to zero. Where consumers lack information about products and are disinclined to seek out information, sellers are in a position to benefit from consumer disinterest, leading to higher prices (as evidenced by lack of consumer knowledge about costs associated with funerals) and higher transactions costs (as evidenced by less convenient locations) which in both cases raised the total cost to the consumer. Of course, since consumers are not willing to deal with transactions costs, it is incumbent on the seller to assume all transactions (and insofar as possible, charge for this in the price paid by consumers).

In the case of emergency goods (e.g., a voltage adapter purchased in an airport before departure, or plywood before a hurricane in Florida) because the alternatives all involve transactions costs that are excessive or exceed the price differential, retailers in these cases can charge a premium. In the benefit equation, although the duration does not increase, the intensity does. A piece of plywood just before a hurricane provides more benefits (more intensity) than does the same piece of plywood three months later. In these circumstances, retailers can charge higher prices or impose high transactions costs or both.

FIRST TEST OF THE APPROACH

As the concept of the goods classes appears in virtually all introductory marketing texts, it was decided to create from these texts a list of the examples used by the authors of these texts. To this end, 18 introduction to marketing texts (some in multiple editions) were examined. These editions produced 41 examples of convenience goods, with bread, milk, chewing gum and toothpaste each cited by four or more authors. Seven of the 41 were specific brands. There were 49 examples of shopping goods, with appliances, furniture and clothing each cited by four or more authors. Three of the 40 were specific brands. Finally, there were 31 examples of specialty goods, with only one – electronic components – cited by more than two authors. In addition, eighteen of the 31 were specific brands. Interestingly, Heinz ketchup appeared by brand name in two different texts, once as a convenience good, and once as a specialty good.

In order to test the benefits classes approach, a subset of twenty of these examples were chosen, For each item, three questions were asked (using a seven-point scale) to measure familiarity, intensity, and duration: how familiar are you with this item; how much satisfaction do you (or a user) get each time the item is used; and, how long does each item provide satisfaction. Familiarity was defined for the respondents as “Being familiar would include having bought the product, used the product, experienced the product, know about the product, and/or heard about the product.” This simple questionnaire was given to three sections of principles of marketing before they had a lecture or discussion about products. A total of 74 students completed the survey.

In Table One, products that have low intensity and low duration scores correspond roughly to convenience goods. The lowest scoring items are: Wonder bread, chewing gum, Pepperidge Farm Bread, Snickers candy bar, J.C. Penney’s suit, and, milk

Products that have high intensity and high duration would correspond roughly to specialty goods. From the student data, the highest scoring items are: Mercedes-Benz, Rolex watch, Brooks Brothers suit, shoes, kitchen radio, and, Haagen-Daz ice cream.

PROBLEMS WITH THE APPROACH

What are we to make of such data? In some cases, the benefits classes seems to work well – we would expend little effort to acquire some chewing gum, milk or a Snickers bar. Similarly we would be willing to expend some significant effort to acquire a Mercedes or a Rolex. However, even for second year college students, it may be reasonable to believe that they would expend some effort in purchasing a suit, and perhaps not so much in purchasing a kitchen radio.

There are a number of possible explanations . First, the entire concept of a benefits approach to product classification is wrong. I think that this is unlikely. It seems reasonable that people buy products because they expect some benefit from having that product. It is also reasonable to believe that different products contain different amounts of benefits – the benefits of having chewing gum would seem in general to be fewer than the benefits of having a car.

Second, the definition of how to measure benefits may be wrong. To argue that benefits are a function of duration and intensity may be excluding other important elements of benefit. These could include self-satisfaction, status, and perhaps many others. The inclusion of a J.C. Penney suit as a convenience good and a kitchen radio as a specialty good may indicate some other elements need to be put in play.

Third, the definition or intensity and duration in the survey may be inadequate. In the case of intensity, the survey asked "How much satisfaction do you get (or do you think someone would get) each time the following is used?" Satisfaction is not necessarily the same as intensity. A better test may include a more precisely defined concept of "intensity."

Fourth, although the examples are based on those commonly used in marketing textbooks, it is possible that they are not good examples for illustrating the goods classes to begin with. While to marketing scholars and textbook authors these may seem like reasonable examples, they may not be so given the perspective of college students. An example of this is reflected in the familiarity data – the students had relatively low familiarity with Brooks Brothers and J.C. Penney suits, Ford Fusion and Mercedes automobiles, and Rolex watches. It is possible that while they may have heard of these items, and if asked would make benefits assessments, their first-hand (ownership) knowledge was minimal.

CONCLUSION

At this stage, it is believed that a benefits approach to product classes is useful. Further refinement of the concept of benefit seems to be in order as does the measurement instrument, particularly choosing examples that are both relevant to the students and meaningful or the model.

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Table One

Familiarity, Intensity and Duration Scores*

Item	Familiarity	Intensity	Duration	Multiplicative Sum of I x D
Milk	6.94	3.81	2.75	10.48
Pepperidge Farm Bread	5.53	3.39	2.65	8.98
Mercedes-Benz	4.71	6.32	5.60	35.39
Godiva Chocolates	4.82	5.17	3.26	16.85
Coffee table	5.94	2.56	4.60	11.78
Ford Fusion	4.24	3.56	3.95	14.06
New York Times newspaper	5.29	4.28	2.91	12.45
Wonder bread	5.82	3.17	2.56	8.12
Edy's ice cream	5.41	4.17	2.72	11.34
Washing machine	6.41	3.67	4.45	16.33
Local newspaper	6.76	3.56	3.17	11.29
toothpaste	6.94	3.94	3.67	14.46
Haagen Daz ice cream	5.59	5.16	3.32	17.13
Kitchen radio	6.18	4.16	4.20	17.47
shoes	6.89	3.97	4.67	18,54
Brooks Brothers suit	3.35	5.06	5.02	25.40
Chewing gum	6.76	3.50	2.55	8.92
J.C. Penney's suit	2.18	2.79	3.46	9.65
Snickers candy bar	6.71	3.83	2.49	9.53
Rolex watch	4.71	5.84	5.56	32.47

* Based on seven point scale where 1= not familiar; not intense; short duration.

PRIVATE TRUTH BUT PUBLIC LIE? WHAT DID POLICY DO? AN EMPIRICAL STUDY ON TAIWANESE OVERTIME POLICY REFORIM IN 1996

Wei-Chung Wang, Juniata College

ABSTRACT

This paper investigates the effect on of an overtime policy reform in Taiwan when the Taiwanese government extended the coverage of the Labor Standards Law to every employer-employee relationship in 1996. Using the Taiwanese Human Resources Survey, and the Earning and Working Hours Statistics from 1994-2000, I am able to compare industries that were not covered by the Labor Standards Law before 1997 with the ones that were covered since the law was enacted in 1984. My results show that the coverage extension was not creating real impact on working hours and employment in Taiwan. (JEL J23, J38)

INTRODUCTION

When the Labor Standards Law was passed in 1984, it only covered Agriculture, Forestry, Fishing and Animal Husbandry, Mining and Quarrying, Manufacturing, Construction, Electricity, Water and Gas Supply, Transportation, Warehousing and telecommunications, and Mass Media [1] . After the LSL was enacted, nearly 2.8 million (out of 3.8 million) workers were covered.[2] The reason that the law only covered only a part of the industries was because the government worried about the potential impact of the comprehensive coverage might eventually hurt the economy. So the coverage of the LSL was simply replicating the coverage specified in the Labor Safety and Health Law in 1984. To enhance the protection of workers, Article 3 has a clause that granted a lot of administrative power to let the legal agency designate the industries to be covered if needed. However, this clause was hardly used. With the law extensively amended in Dec. 1996, every employer-employee relationship now has to be covered by the LSL. The amendment was mainly on Article 3, which regulates the coverage of the LSL. However, the standard workweek was kept at 48 hours per week and the overtime premium, which should be paid by the employer, was also kept at 133% of the given wage rate for the first two hours and 166% of the wage rate for the last two hours. During the years of the incomprehensive coverage, Taiwan has experienced a huge sectoral shift. Business activities and all other industries were growing at a sky-rocketing rate. At the time when the legislators were discussing the coverage extension, 43% of the workers were not covered by the LSL[3]

Although the LSL has been amended to cover all employer-employee relationship in the end of 1996, the law was passed with a transition period, stating that the law shall apply to all forms of employee-employer relationships by the end of 1998 at the latest. The new Article 3 also keeps a clause that gives the government power to exclude or include any industry to its discretion. In other words, even though all employer-employee relationship should be covered after the law amended, the government could have its final word.

The bill was proposed by the opposition party, Democratic Progressive Party, and the purpose of this amendment was to maintain fairness for all workers. It is possible that the DPP was trying to attract more votes at the time. The main purpose of this paper is to analyze how this coverage extension affects the labor market in Taiwan. Economic theory does not provide a clear prediction of how this change in overtime policy might affect labor markets; therefore, further empirical evidence is needed to tell us what the policy does. This paper examines a labor policy change that is different in two aspects from the reduction of standard workweek that were enacted in 2000 in Taiwan. First, the coverage was already comprehensive at the time when the standard workweek was reduced in 2000. Second, the enforcement cost of auditing standard workweek is larger than the enforcement cost of auditing the coverage in literature. Thus, it is of interest to see how the policy did differently in the 1996 case.

I am particularly interested in testing whether the actual weekly working hours and the employment of the industries that originally were not covered by the law has changed over the years. I use individual level repeated cross-section data and industry level data from 1994 to 2000. Under a standard differences-in-differences model, I am able to compare covered workers with uncovered ones and see if their actual hours worked and the employment level changed. I discuss the data and my empirical strategy of

[1] Mass Media includes Publishing and Radio and Television Broadcasting.
[2] An unofficial number provided by Minister of the Interior when debating the law in 1982.
[3] Legislative Discussion Record Report

conducting this experiment in Section 2. The empirical results are provided in Section 3 and Section 4 concludes.

DATA, MODEL AND EMPIRICAL METHODOLOGY

Two different datasets are used in this paper. Human Resource Survey (HRS) is a repeated cross-section data that provides individual weekly working hours, industry code specification and demographic characteristics4.And Earnings and Working Hour Statistics (ERHS) provides industry level monthly average working hours, average monthly earnings, monthly average overtime hours, monthly average overtime premium, and number of employees for employee type of workers.[4] I am able to obtain the HRS and ERHS from 1994 to 2000. In the HRS, the survey did not have a clear have a clear definition for fulltime or part-time jobs; therefore I choose to pick up the highest one among the two to be an individual weekly working hours. This enables me to examine how the employment, monthly overtime hours, monthly earnings, monthly overtime premium, changes for the employee type of workers. I had to forgo approximately 44% of observations that do not report industry specifications. I also only use the observations that represent the workers that identify themselves as employees. This accounts for the remaining 68% of the observations after cutting 44% of the total.

I construct a standard differences-in-differences model to examine the effect of the inclusion of every employer-employee relationship followed by the amendment in Article 3 in the LSL in the end of 1996. This could be illustrated by a simplified version of model:

$$H_i = \alpha_0 + \beta COV_i + \gamma law + \theta COV_i \times law + u$$

Where H_i the weekly working hours, COV equals one for workers that work in an industry that was covered after the law change in 1996, law equals one for the months when the new Article 3 kicked in January 1997. θ presents the differences-in-differences estimator. One potential problem of this estimator is that there might not be same demand for the workers between the industries that were previously covered by the LSL and the industries that were not covered by the law until the end of 1996.[5] In other words, if the industries that were previously chosen to be covered in 1984 were essentially different from the industries that were not covered in the first place, we have to pay extra attention to the empirical results that are produced by this model.

[4] The survey uses a Standard Industry Coding system. One-digit industries are the largest specification and four-digit industries are the smallest ones. The HRS provides as small as two-digit industry specification for individuals.

Empirical Strategy and Descriptive Graphs

Empirical Strategy

Notice that even the new article requires every employer-employee relationship has to be covered after 1996, the CLA could decide when and whether any specific industry is covered. The new Article 3 specified a transition period for all employer-employee relationship to the end of 1998 as the latest date to be covered after it was amended in Dec. 1996. The difficult part to examine the effect of the amendment is, even if an industry is not announced to be covered by the CLA, this does not mean it is not covered. This is because the Article 3 also grants the CLA power to exclude or include any industry to its discretion. But those that are announced to be covered have to be covered right after the date of announcement. Following this, my analysis could be separated into several parts. First I use the industries that were announced to be covered in 1984 as my comparison group (Group A). Group A consists of mostly one-digit industries and two two-digit industries. In the HRS, Group A can be broken down into two-digit industries. I estimate the effect of the law change by comparing Group A with all other industries after 1997, when the law was first enacted. Consider the law also stated a transition period; I conduct a same experiment with different cut off point of time.

While the methodology above might have ignored the influence of the announcement that CLA made about inclusions of the industries, I compare Group A with the industries that were included in March 1 1998, April 1 1998, and Dec.31 1998 respectively.[6] And to

[5] See Buchmueller and Senesky (2002)

[6] Due to data limitations, I only have the data of two-digit industries. Most of the industries in the March 1 1998, April 1 1998, and Dec 31 1998 column are two-digit industries, and these industries were presumably thought to be influenced more significantly by the amendment of the LSL in 1996. However, no observations have reported for Consultation Services. I also do not have the data for individuals working in Retail Trade, this is because the SIC system has changed in 1996 and I have to merge Retail Trade with Eating and Drinking Places

further examine how these newly covered industries have responded to the law change, I use the EWHS to see if the new law changed their average monthly earnings, average monthly overtime hours, and employment. [7] I also control seasonal changes by including monthly dummies and occupations in my regressions.

Descriptive Graphs

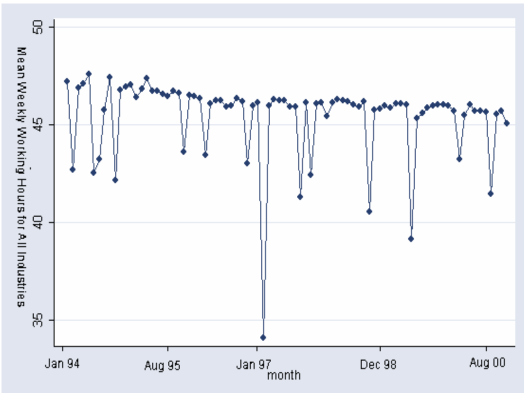


Fig 7 Mean Weekly Working Hours of All Industries across Months

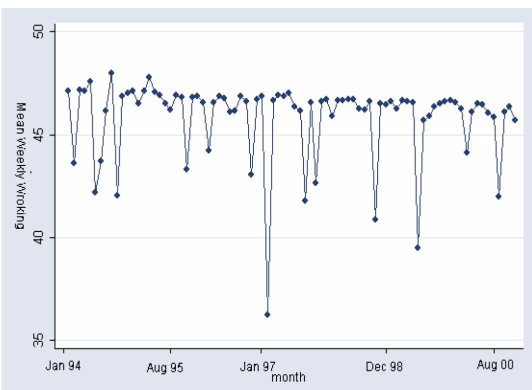


Fig 8 Mean Weekly Working Hours of Industries Not Covered in 84"

Figure 7 and 8 both exhibit noisy trends without regular patterns of the average weekly working hours of all industries and the industries that were not covered in 1984. The standard workweek regulated by the LSL is 48 hours per week and was not amended until 2000. This gives me a rough idea about how the law change really impacted the actual hours worked. We could not see a clear decrease in the weekly hours worked after January 1997 or December 1998 (when the transition period stated in the LSL ended).

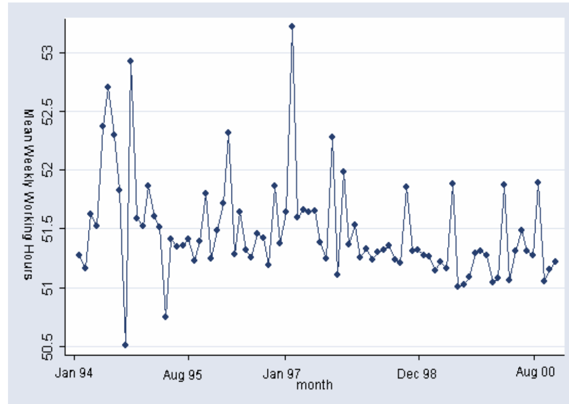


Figure 9 Mean Weekly Working Hours for Employees with Weekly Working Hours> 48

Presumably employees who work over the standard working hours will be affected more. However, Figure 9 shows the same noisy trend that we observe from the previous two figures. These graphs raise a reasonable doubt that the change in the coverage might not have real effect on the weekly hours worked. We now turn to see the graphs the mean weekly working hours of employees who work in the industries that were announced to be included by the CLA in March 1 1998, April 1 1998, and December 31 1998.

March 1 1998:

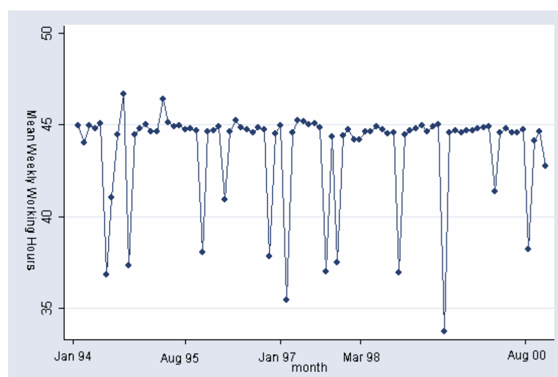


Figure 10 Financing and Auxiliary Financing

in order to keep the industry specifications consistent with the data prior to 1997.

[7] To examine if the employment changes, I use the percentage of the change of the amount of employees in industries in a specific month as a dependent variable to avoid the huge standard deviations in numbers of employees across industries.

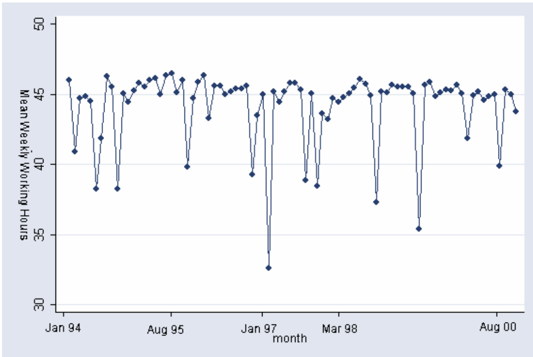


Figure11 Data Processing and Information Services

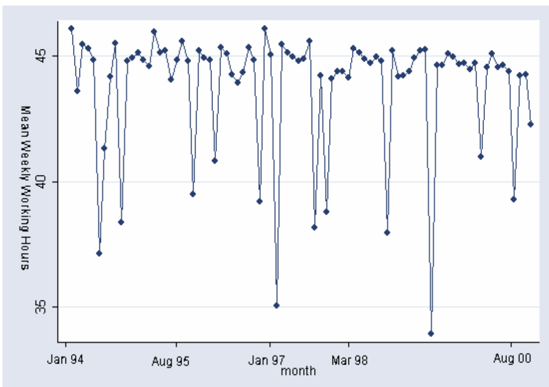


Figure 12 Securities and Futures

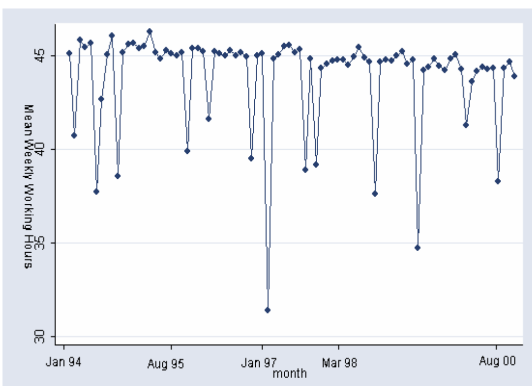


Figure 13 Foreign Trade

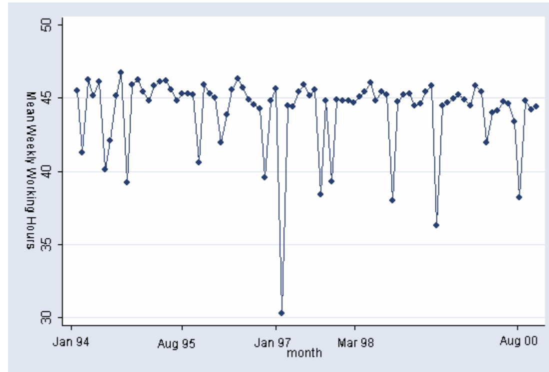


Figure 14 Architectural and Engineering Technical Services

April 1 1998:

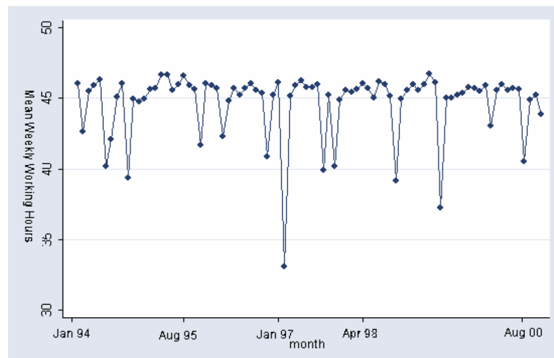


Figure 15 Insurance Carriers

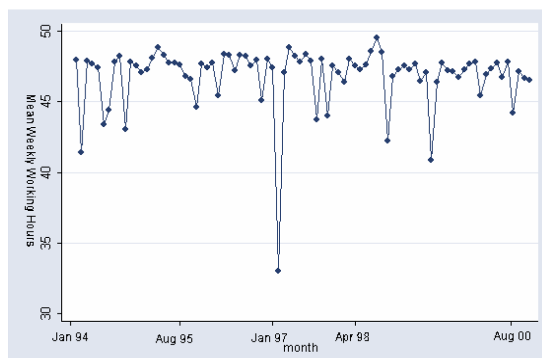


Figure 16 Real Estate

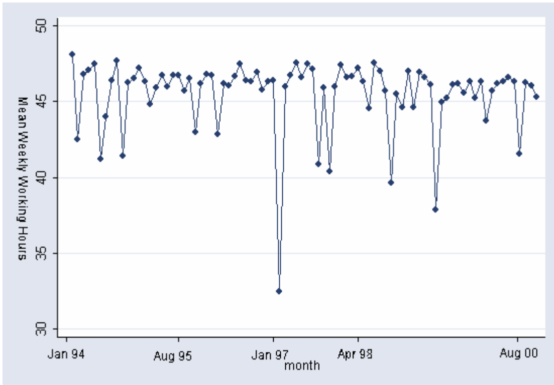


Figure 17 Advertising Services

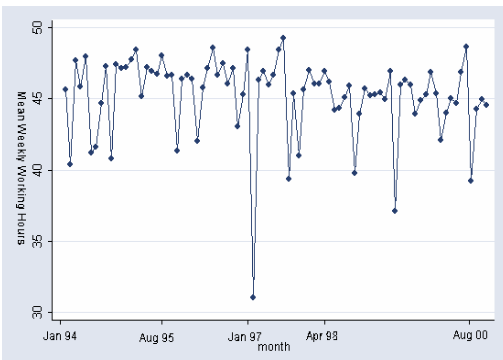


Figure 18 Commercial Designs

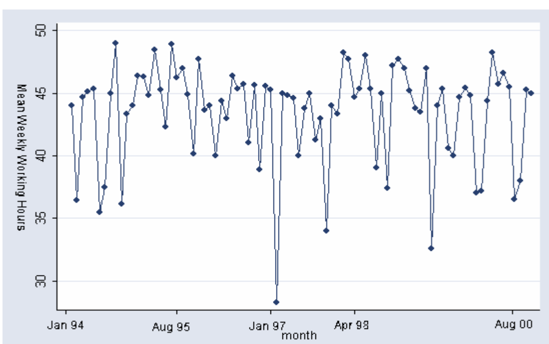


Figure 19 Merchandise Brokerage

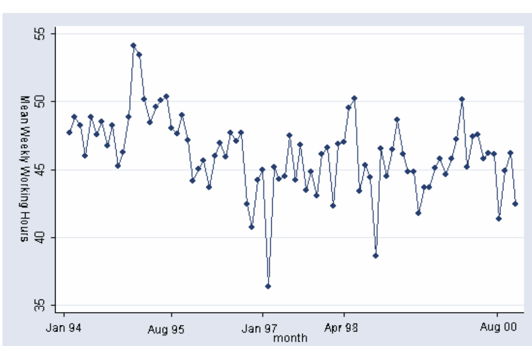


Figure 20 Rental and Leasing

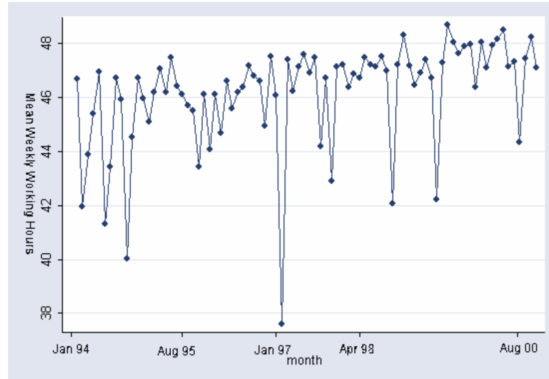


Figure 21 Other Business Services

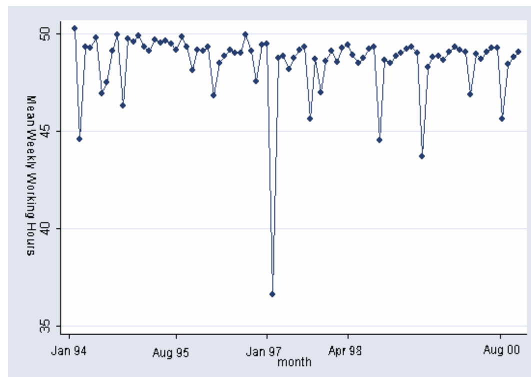


Figure 22 Personal Services

December 31 1998:

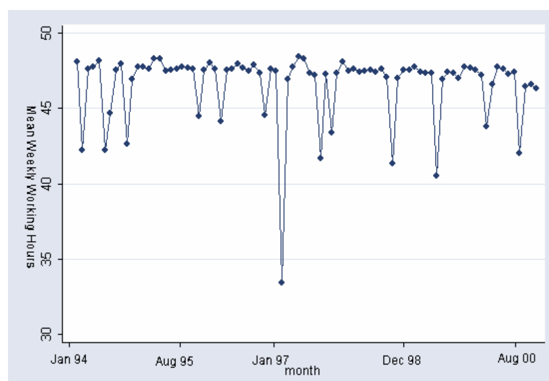


Figure 23 Wholesale Trade

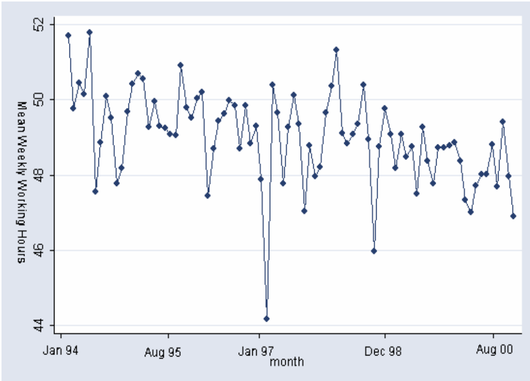


Figure 24 Hotels, Rooming House, Camps and Other Lodging Places

From Figure 10 to Figure 24, none of them shows that the weekly working hours decreased after the announcement date. Figure 20 and 24 both exhibit a somewhat trend of decrease in weekly hours of worked but it is hard to confirm that the decrease was caused by the law change. And the weekly working hours of Other Business Services in Figure 21 increased over time. Other figures, however, do not show anything particular happened to hours after the date of announcement. Nevertheless, it is really difficult to see if the law change has impacted the weekly hours of employees in these industries according to these graphs.

RESULTS

Table 1 has two columns, each compares Group A (industries that were covered in 1984, when the law first enacted) with all other industries but use a different cut-off point of time as the policy effective date. Since the new law stated a two-year transition period, it is reasonable to expect that the policy would have bigger effect after the end of 1998. However, the reported estimates have not been all as expected. The law has increased the weekly hours worked for people who worked in the newly covered industries according to the model in both columns. This, combines with a negative interaction term (RX*law), does not explain much of what might really have happened.

Table 1

Dependent Variable=Weekly Working Hours of Employees		
	1	2
RX97=1 if covered	-0.052	
	(0.019)**	
RX98=1 if covered		0.193
		(0.016)**
Law=1 if month is covered	-1.105	-0.542
	(0.015)**	(0.016)**
RX*law	0.637	
	(0.022)**	
RX*law		0.382
		(0.024)**
Gender=1 if male	1.174	1.172
	(0.012)**	(0.012)**
Marid=1 if married	-0.349	-0.346
	(0.012)**	(0.012)**
Aged=1 if age>40	-0.877	-0.908
	(0.013)**	(0.013)**
Edd>1 if education> vocational school	-0.107	-0.148
	(0.013)**	(0.013)**
Countyd=1 if lives in prosperous counties	0.108	0.111
	(0.011)**	(0.011)**
constant	47.330	46.907
	(0.044)**	(.043)**
R-squared	0.07	0.07
Observations	1846737	1846737
Month Dummies	Yes	Yes
Occupation Dummies	Yes	Yes
Absolute value of standard errors in parentheses		
* significant at 5%; ** significant at 1%		

Table 2 reports similar circumstances when I look at the industries that have announced by the CLA in March, April, and December 1998 respectively. All the people who worked in industries that were not covered in 1984 have reported positive responses in weekly hours after the CLA announcements. The diff-in-diff estimator again, reports negative estimates.

Table 2

Dependent Variable=Weekly Working Hours of Employees			
	1	2	3
RXmar=1 if covered	-1.973		
	(0.048)**		
Lawmar=1 if month is covered	-0.560		
	(0.014)**		
RXmar*lawmar	0.646		
	(0.071)**		
RXapr=1 if covered		-0.857	
		(0.055)**	
Lawapr=1 if month is covered		-0.601	
		(0.014)**	
RXapr*lawapr		0.837	
		(0.080)**	
RXdec=1 if covered			1.189
			(0.038)**
Lawdec=1 if month is covered			-0.606
			(0.015)**
RXdec*lawdec			0.453
			(0.070)**
Gend=1 if male	1.070	1.094	1.097
	(0.016)**	(0.016)**	(0.016)**
Marid=1 if married	-0.084	-0.091	-0.095
	(0.015)**	(0.015)**	(0.015)**
Aged=1 if age>40	-0.564	-0.563	-0.568
	(0.016)**	(0.016)**	(0.016)**
Edd=1 if education> vocational school	0.202	0.180	0.166
	(0.016)**	(0.017)**	(0.016)**
Countyd=1 if lives in prosperous counties	-0.139	-0.171	-0.148
	(0.014)**	(0.014)**	(0.014)**
Constant	46.836	46.875	46.854
	(0.054)**	(0.055)**	(0.054)**
R-squared	0.05	0.05	0.05
Observations	1080564	1072013	1092281
Month Dummies	Yes	Yes	Yes
Occupation Dummies	Yes	Yes	Yes
Absolute value of standard errors in parentheses			
* significant at 5%; ** significant at 1%			

In Table 3, I conduct the same experiment using the industry level data and try to see if the law changed the employment level, average monthly earnings, average monthly overtime hours, and average monthly overtime premiums under the same framework. However, I could not find any significant results. One might start to question that the law amendment might have created lots of ambiguity in its setting because it did not really point out which industries have to be covered after the new law kicked in. The LSL gave the power to the CLA and let them appoint industries when needed. Nonetheless, whether the industry is covered or not should have been clarified when that industry is being announced to be included.

Table 3

Dependent Variable	%of #Employees in a Month		Average Monthly Earning		Monthly Overtime Hours		Monthly Overtime Prem	
	1	2	3	4	5	6	7	8
RX97=1 if covered	0.009		-3,365.653		-1.440		-343.963	
	(0.06)		(1,948.145)		(0.394)**		(63.992)**	
RX98=1 if covered		0.011		-3,776.458		-1.598		-355.938
		(0.005)*		(1,515.659)*		(0.305)**		(49.513)**
Law97=1 if month is covered	-0.001		6,169.907		-0.189		70.645	
	(0.005)		(1.554.082)**		(0.314)		(51.048)	
Law98=1 if month is covered		-0.001		5,294.819		-0.010		110.395
		(0.006)		(1,709.894)**		(0.345)		(55.858)*
RX97*law97	0.003		-1,009.256		-0.739		-68.846	
	(0.008)		(2,577.153)		(0.521)		(84.653)	
RX98*law98		0.003		-580.692		-0.927		-95.783
		(0.009)		(2,835.538)		(0.571)		(92.630)
Constant	0.042	0.042	75,865.92	77,878.78	7.264	7.159	1,268.404	1,277.231
	(0.008)**	(0.007)**	(2,349.551)**	(2,238.777)**	(0.475)**	(0.451)**	(77.177)**	(73.135)**
R-squared	0.01	0.01	0.29	0.29	0.06	0.06	0.09	0.09
Observations	924	924	924	924	924	924	924	924
Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Notes: Average monthly earnings are measured in New Taiwan Dollars (USD: NTD ≈ 1:31)								
Absolute value of standard errors in parentheses								
* significant at 5%; ** significant at 1%								

This reveals some concerns about the model. The model requires the groups to be randomly chosen but the government never made it explicitly about how the industries in Group A have been chosen to be covered in 1984.[8] This might ruin the identification assumption of difference-in-difference model when comparing the industries with Group A. Furthermore, it is clear to see that most of the industries that were covered in 1984 were traditional industries. Taiwan might have experienced a significant sectoral shift in the 1990s, the amount of people who work in these traditional industries might have shrunk overtime.

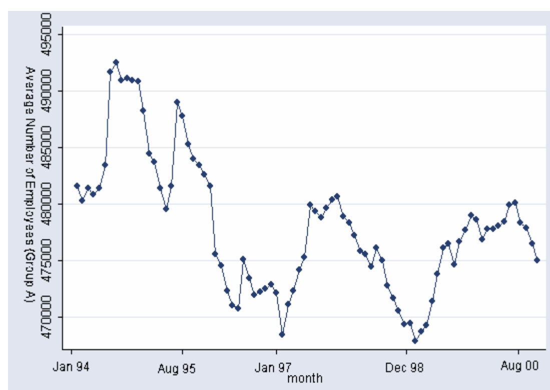


Figure 25 Average # of Employees in Group A

[8] See Legislative Discussion Record Report by Legislative Yuan. Group A includes Agriculture, Forestry, Fishing and Animal Husbandry, Mining and Quarrying, Manufacturing, Construction, Electricity, Gas and Water, Transportation, Storage and Communication, Radio and TV Broadcasting, and Publishing.

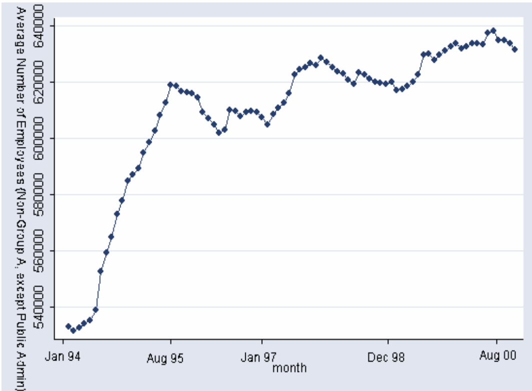


Figure 26 Average # of Employees in Other Industries[9]

Figure 25 shows the average number of employees of industries that were covered in 1984 has been declining while Figure 26 shows the number of people who work in all other industries has been growing over time.

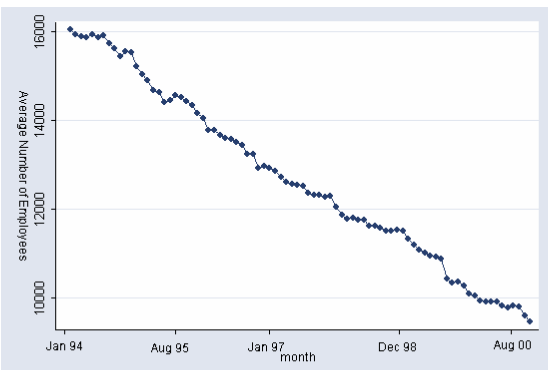
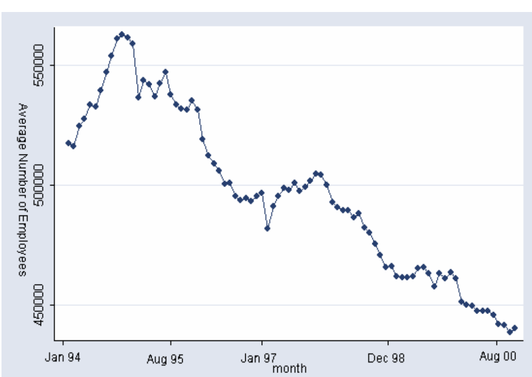


Figure 27 Average # of Employees in Mining and Quarrying



[9] EWHS does not provide the data in Public Administration. The graph is drawn based on industries that were not covered in 1984 but without Public Administration.

Figure 28 Average # of Employees in Construction

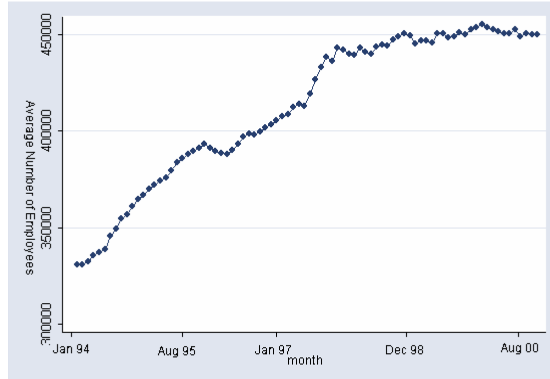
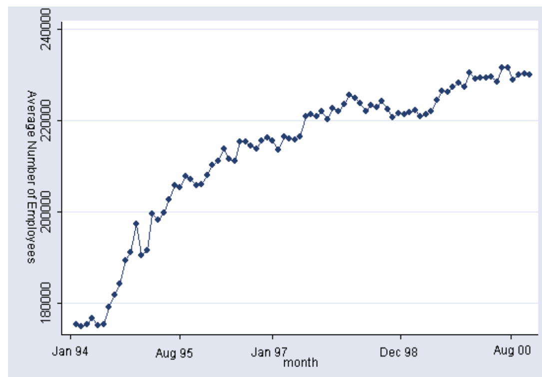


Figure 29 Average # of Employees in Finance, Insurance, and Real Estate Figure



30 Average # of Employees in Business Services

To further explore this, the figures above all show the fact that the economic activities has been shifting from traditional industries to white-collar industries. This confirms that the results from our model might not reflect what the law change in 1996 has done due to the demand for labor has been changing across industries.

It is also plausible that the coverage extension of the LSL might have not been binding. The bill was proposed by the Democratic Progressive Party.[10] In 1996, the DPP was really trying to push this bill and complete their promise to take care of the workers. In other words, the DPP was trying to appease more voters. The employers were the ones who were most likely against the coverage extension. However, if the employers sensed that the law was not creating any impact, the DPP could achieve the goal of not losing

[10] Out of 46 legislators who proposed the bill, three of them are neither in the Democratic Progressive Party (the opposition party) nor in the Kuomintang (the ruling party), 43 other legislators were all with DPP.

their votes. Naturally, the DPP would really be satisfied if they know law would have no real effect on the labor market. The vague setting of Article 3 left room for wider explanations of the coverage of any specific industry.[11] And the industries that were not covered before 1996 have been increasing over time due to the sectoral shift; it is also noteworthy that the unions of these newly industries were smaller and diffuse. Therefore the workers in these industries could be difficult to organize to reveal the low enforcement on the coverage extension. However, the DPP became a ruling party in 2000, and they passed the bill that decreased the standard workweek from 48 hours to 84 hours biweekly right after they come to power even under a huge pressure from the employers. Unlike the coverage extension, the law amendment of shortening the standard workweek in 2001 was comprehensive and the reason of promoting the lower standard workweek was less political then the case in 1996.The cost of enforcing the law might also affect the law effect. Past studies have pointed out that the cost of auditing the standard workweek is lower than auditing the coverage. The results from Wang (2005) reveal that shorter standard workweek in 2001 had affected the Taiwanese labor markets. Nevertheless, it is hard to notice if the coverage extension had any impact on the actual hours worked according to the graphs in Section 3. And due to the limitations of the difference-in-difference model, I also could not conclude anything from the results generated by the model.

CONCLUSION

This paper investigates the effects when the Legislative Yuan amended Article 3 in the Labor Standards Law in December 1996 in Taiwan. New Article 3 requires that every employer-employee relationship has to be covered by the LSL and it also regulates a transition period stating that all employer-employee relationship has to be covered by the law no later than the end of 1998. However, the article itself did not strictly point out which industries should be covered after the law change. The escape clause gave the Council of Labor Affairs a lot of administrative power to explain the coverage. Using industry level and individual level weekly hour data from 1994 to 2000, I examine the policy effect under a standard differences-in-differences framework. I cannot conclude if the law change has effects. The huge shift in the numbers of employees from the industries that were covered to the industries that were not covered in 1984 has ruined the identification assumption of the model. It is also plausible that the law amendment in 1996 has not had any real effect. The trend of individual weekly hours did not show any sign of change after the law was amended. And there is also no change in the trend of individual weekly hours when I compare the industries that were announced to be covered after a specific month by the CLA. Considering the political reason, the Democratic Progressive Party might have promoted the coverage extension to appease more voters. It definitely would not hurt to commit a lie, a lie to pass the law that should have covered more workers but never had real impact.

[11] The law did not specify the industries to be covered. The Council of Labor Affair decides the inclusion of industries.

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TOWARDS DEVELOPING AND SUSTAINING A CULTURE OF EVIDENCE-BASED ASSESSMENT FOR INSTITUTIONAL EFFECTIVENESS: AN ACTION RESEARCH IN PROGRESS

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ABSTRACT

The demand for accountability, transparency, assessment and continuous improvement for institutional effectiveness in higher education has never been higher. Institutional effectiveness is the degree to which an institution or an institutional unit is meeting its stated mission. Its effectiveness is not captured in what is taught and how, but rather in what students have learned. This study, an action research in progress, investigates how a culture of evidence-based assessment tightly linked to continuous improvement ***takes root*** in an institution and ***becomes*** a principal basis for increasing institutional effectiveness. This paper focuses on drawing actionable insights from industry and higher education. Ultimately, the study aims to capture and provide a thick description of the contextual factors and practices that support, facilitate and/or obstruct the mobilization, implementation and institutionalization of a culture of evidence-based assessment. The researchers are actively engaged in bringing about this change in their institutional unit while conducting research.

INTRODUCTION

It is time to examine how we can get the most out of our national investment in higher education. We have a responsibility to make sure our higher education system continues to meet our nation's needs for an educated and competitive workforce in the 21st century.

Sec. Margaret Spellings, U.S. Dept. of Education

The demand for accountability, transparency, assessment and continuous improvement for institutional effectiveness in higher education has never been higher (McKinney, 2011). Institutional effectiveness is the degree to which an institution or an institutional unit is meeting its stated mission. Its effectiveness is not captured in what is taught and how, but rather in what students have learned (GSU, 2008).

A 2006 study revealed that postsecondary education was not driven by hard evidence of its effectiveness (Dwyer et al, 2006). Consequently, one of the six broad recommendations of the Report of the Spellings Commission on the Future of Higher Education was the cultivation, throughout the higher education system, of a *robust culture of accountability and transparency*, aided by new systems of data measurement and a greater focus on student learning and the development of a more outcome-focused accreditation system (Ruben et al, 2008). Today, evidence of student achievement, student learning outcomes, continues to play an important role in the ongoing national dialogue regarding higher education accountability, quality and effectiveness (ACBSP, 2012).

Increased interest and scrutiny of the effectiveness and the rising demand for transparency and accountability of higher education can be attributed to several factors including (a) national interest to ensure our ability to meet our nation's needs for an educated and competitive workforce in the 21st century (Spellings, 2005 in Ruben et al, 2008; Harvard Magazine, 2012; Pearlman, 2006; Colvin, 2005) especially as concerns increase over a long-term erosion of competitiveness in a more challenging global economic era (Harvard Magazine, 2012) and as other nations such as China ascend to become leading hubs for tertiary education in the world (Grummon, 2010); (b) public concerns over the rising costs of college especially as the economy remains stagnant and as students are graduating without jobs and with a lot of debt (Grummon, 2010); and (c) demands from various stakeholders for evidence - valid and reliable measures of student learning - to inform decisions of institutions, state and federal agencies, students and families, and future employers (Dwyer et al, 2006).

This study investigates how a culture of evidence-based assessment tightly linked to continuous improvement ***takes root*** in an institution and ***becomes*** a principal basis for increasing institutional effectiveness (Millett et al, 2007; Millett et al, 2008). The focus of this paper, an action research in its initial stages, is on identifying actionable insights from industry and higher education.

Ultimately, the study aims to capture and provide a thick description of the contextual factors and practices that support, facilitate and/or obstruct the mobilization, implementation and institutionalization of a culture of evidence-based assessment. It aims to focus on four salient dimensions of student learning (Millett et al, 2007): (a) workplace readiness and general skills; (b) domain-specific knowledge and skills; (c) soft skills such as leadership, teamwork, communication, and creativity; and (d) student engagement with learning. It will draw insights from various accountability models and metrics (Pearlman, 2006) and from best practices in leading change in higher education and industry. The researchers are actively engaged in bringing about this change in their institutional unit while conducting research.

ACTIONABLE INSIGHTS FROM INDUSTRY

To better understand the challenge presented to those involved in institutionalizing a system of assessment, problem solving in industry provides interesting parallels. Specifically, in the late seventies, many companies moved from an opinion-based system of problem solving toward the use of data. The challenges faced by early problem solving practitioners are not dissimilar to those of academics attempting to bring data to the problem of effective assessment. From the early years of problem solving in manufacturing, below are three important actionable insights.

INSIGHT # 1 – KNOW YOUR PROBLEM!

*It is not enough to do your best; you first have to know **what** to do and **then** do your best. W. Edwards Deming*

Good problem solving is directed at eliminating the root cause. To this end an effective problem solving process starts with a clear definition of the problem and its root cause. The implications are clear: if one does not understand the problem a true solution would be serendipity.

Three observations from an industrial setting can be revealing for today's assessment champions. First, it was common in many industrial settings for hard problems to be substituted with problems that are easier to solve, but did not address the root cause. A number of factors may have contributed to this eventuality. A primary cause for many issues was a failure on the part of managers and problem solvers to recognize the systemic nature of problems. Often problem solvers did not see the interconnectedness of factors, the result was a divide and conquer. It was thought a number of small problems were much easier to address than one big one. A second issue – problems often did not get a proper level of scrutiny so as to really understand them. In many jobs this was precipitated by a perception that studying a problem could be interpreted as not working on the problem. If perchance, the boss came by and you were not seen to be doing something (research, reading and general study being seen as inactivity) you were at risk of being seen as not contributing and perhaps unnecessary. The result was that often a lot of people were "doing something" without really understanding why. A third reason why problems in industry were not clearly understood was an unhealthy deference paid to authority figures. With all due respect to organizational leaders and managers, it is seldom true the person in charge fully understands the situation and is able to render a meaningful dictate on cause and effect.

What can we, as faculty action-researchers, interested in academic assessment learn from this behavior? Two basic themes of W. Edwards Deming (1986) are *create constancy of purpose* and *make sure everyone knows what you mean when you say or do something important*. An extension of the idea of defining the problem is to define the elements of the problem and potential solutions. Assessment champions should spend time with measurement systems, understand calibration issues and ensure face validity. Additionally, reflect on how well the problem of improving academic effectiveness has been defined locally. Good basic research must be done to identify goals and learning objectives, and before you begin, make sure they match your specific concerns. Look for feedback from several sources – both within your discipline and outside. Likewise, use benchmarking data from other institutions. Do not reinvent the wheel; there is no shame in building on what others have already done. Some institutions have created detailed rubrics that can be a good starting point.

INSIGHT # 2 – STICK TO THE BASICS

Stick to the basics and keep to the process. Sophisticated tools are good, but significant gains can come from a basic problem solving approach and the recognition that the process is an on-going activity aimed at continual improvement. Deming would say one of the keys to improvement is to understand not only what the problem was, but also "by what method" does one learn and interrogate the system to solve the problem.

One of the authors observed that in the early years of problem solving in industry, problems were dealt with "willy-nilly." In many cases problems were approached without any observable method. Deming and others reckoned that a problem solving process provided a roadmap to a desired outcome. For many years Deming taught and demonstrated the *Plan-Do-Study-Act* problem solving cycle. While successfully employed in Japan, *P-D-S-A* did not find eager adopters in North America. Perhaps because it seemed too basic or perhaps the steps often made it look like people were not "doing something," the process often deteriorated into one of two common variations: *P-D-P-D* or *D-D-D-D*. In the latter case practitioners were often doing what their managers expected (see insight #1) in the hope of stumbling on a viable solution. Of course, what is missing from both is reflection on the result of what has been done.

If one is interested in continual improvement, a process is necessary and should provide an opportunity for reflections, feedback and suggest future actions. Many of the most successful processes used in problem solving today are well documented, easy to understand and have the ingredients specified. Six-sigma, for example, is a methodology that emphasizes effective measurement systems, a clear understanding of the root cause, and comprehends a systemic problem environment as well as variation. These elements are present in an easy-to-comprehend five-step process that demands objectives to be well conceived and connected to a higher purpose. Additionally, the process provides clarity and transparency on each person's role in the process (from bottom to top). What may be missing that Deming's *P-D-S-A* provides is a focus on reflection and not assigning blame to the process. For Deming the last two steps – study and act – should not be punitive, but instead focus on action needed for continual improvement.

An academic assessment process may not feel like the problem solving activity of a car plant or other industrial environment, but it has the basic elements. If a department employing an assessment activity wants to move from box checking to a mentality of learning and improving, such methods will surely be useful. Use the opportunity provided by the process to examine what has happened, compare it to objectives and reflect on the reasons both good and bad things happen.

INSIGHT # 3 - IF IT'S IMPORTANT, TREAT IT SO.

In business, if something is deemed important, it is given special treatment. This is so in the case of a particular product, process or organizational function. The treatment may be a function of leadership (does your department have a Vice President, director or merely a manager), the number of people working on the "special" project or even the budget provided to make important things happen. In addition, getting important things accomplished usually means rewards – both intrinsic and extrinsic.

Another observed example of special treatment afforded those things considered important include how they are discussed and managed in the organization. For example, the implementation of an important Information Technology upgrade may be reviewed by a high-level manager; with weekly or even daily updates provided to senior organization leaders. If the project is thought to be critical to the operation then meetings to discuss progress, identify and eliminate roadblocks and ways to collaborate to get the job done are arranged. Even if a project is not "mission critical," standing meetings to provide updates are likely. Typically, in standing meetings those things that are most important are discussed first.

In the case of academic assessment, moving discussions to a standing item on the monthly departmental meeting agenda creates a real impact on faculty thinking regarding the process. In real terms, more faculty members are present, checked in, and engaged, early in a meeting. The more faculty is involved, the more likely decisions regarding how assessment will be managed and used will be agreed to and fully implemented. This will help any institutional unit interested in making assessment more than a "box-checking" exercise. In terms of perceived importance of the activity, faculty will accept assessment as important when assessment takes a prominent place in departmental agenda and priorities. Items at the top of an agenda tend to get more discussion time and faculty in attendance are more attentive and eager to participate in understanding the issues, reflecting on its impact on them and internalizing the process.

ACTIONABLE INSIGHTS FROM HIGHER EDUCATION

Perusing through a rapidly growing amount of literature in learning outcomes and evidence-based practices, we identify five key actionable insights that will help us better understand our assessment context. They are as shown below:

Insight # 1 – Few faculty have expertise or have received formal training in learning assessment methods.

Assessment is the systematic collection, review, and <u>use</u> of information about student performance and educational programs undertaken for the purpose of improving student learning and development.
Palomba & Banta, 1999 in Kuh, 2011

While faculty are expected to assess student learning and use those results to make improvements in the classroom and in the educational environment, few faculty have expertise or have received formal training in learning assessment methods (Denecke et al, 2011). In a 2008 national survey of provosts and chief academic officers with 1518 schools responding, 61 % stated that expertise in assessment would be helpful (NILOA, 2009). Faculty needs to be informed about and develop expertise in evidence-based assessment.

Insight # 2 – A paradigm shift is taking hold in American higher education, from an *instruction* or *teaching paradigm* to a *learning paradigm.*

In its briefest form, the paradigm shift can be characterized in the following manner (Barr & Tagg, 1995): The deeply entrenched, dominant paradigm, referred to as the *Instruction* or *Teaching Paradigm*, that has governed our colleges is this: *A college is an institution that exists to provide instruction, to teach. The method and the product are the same. The means is the end.* The new paradigm, referred to as the *Learning Paradigm*, that is increasingly taking hold is this: *A college is an institution that exists to produce learning with every student by whatever means works best. The method and the product are separate. The end governs the means* (Barr & Tagg, 1995). The *Learning Paradigm* embraces the goal of promoting *education for understanding* – of students developing a sufficient grasp of concepts, principles, or skills so that they can bring them to bear on new problems and situations, deciding in which ways their present competencies can suffice and in which ways they may require new skills or knowledge (Barr & Tagg, 1995). Additionally, education for understanding involves the mastery of functional, knowledge-based intellectual frameworks rather than short-term memory retention of fractionated, contextual cues (Barr & Tagg, 1995).

Insight # 3 – Purpose of Assessment: There exists a tension between assessment for accountability and assessment for improvement.

Peter Ewell (2009), a senior scholar of the National Institute for Learning Outcomes Assessment, argues that adopting either ***assessment for accountability*** (which is primarily done for accreditation purposes) or ***assessment for improvement*** will influence institutional choices about what to assess and how to assess, how to organize assessment, and how to communicate assessment results. Ewell's (2009) contrast is illuminating: ***Assessment for Accountability*** requires the entity to demonstrate, with evidence, conformity with an established standard of process or outcome. *The associated incentive for that entity is to look as good as possible, regardless of the underlying performance.* ***Assessment for Improvement***, on the other hand, entails the opposite set of incentives. *Deficiencies in performance must be faithfully detected and reported so they can be acted upon and improved. Indeed, discovering deficiencies is one of the major objectives of assessment for improvement* (Ewell, 2009). He further asserts that when institutions are presented with an intervention that is claimed to embody both accountability and improvement, accountability always wins. It is important to note the findings of a 2009 study of the National Institute for Learning Outcomes Assessment (NILOA, 2009): (a) Accreditation remains the primary vehicle for driving the learning outcomes assessment process in American higher education; (b) Conducting assessment only because accreditation agencies *mandate* these practices is ***not healthy*** for institutions; and (c) Consequently, institutions must go beyond assessment only for accreditation accountability. Institutions should regularly conduct assessment activities with the intent to inform decisions for continuous improvement of teaching and learning. In sum, the focus of assessment must not be on *assessment for assessment's sake nor to merely look good* but, rather, on exploring what students are learning and how they are developing in a manner producing evidence that can lead to decisions to actually improve learning (American Association for Higher Education, 1991 in Bresciani, 2011).

Insight # 4 – Gaining faculty involvement and support remains a major challenge.

Faculty involvement, Hutchings (2010a; 2010b) asserts, is one of the most enduring themes of the higher education assessment movement. She further states that:

> *In suggesting that the faculty role needs to be increased and deepened, it is important not to forget or to minimize the good work that faculty have already done – and indeed to celebrate and build on that work. At the same time, it is important to understand why faculty engagement has been and continues to be a challenge. It is not, certainly, that professors do not care about their students (Hutchings, 2010b).*

In a 2008 national survey, 66% of provosts and chief academic officers from 1518 schools stated that gaining faculty involvement and support remains a major challenge and that faculty engagement is key to further progress in assessment (NILOA, 2009).

The study recommended that faculty members must be meaningfully engaged in systematically collecting data about student learning, carefully examining and discussing these results with colleagues, and using this information to improve student outcomes (NILOA, 2009).

Insight # 5 – Student engagement – individual effort and involvement – is a critical determinant of student learning and success.

*The impact that a faculty member can have on the student experience can be seen in and out of the classroom. We found that faculty behaviors and attitudes affect students profoundly, which suggests that faculty members may play the single-most important role in student learning. Because faculty play a critical component of the collegiate experience, colleges and universities need to find ways (perhaps new ways) to support and reward faculty in their teaching role.*Umbach & Wawrzynski

Student engagement plays a vital role in student learning and success (Pascarella & Terenzini, 2005 in Kuh, 2008; Kinzie, 2005a; Kinzie, 2005b). Consequently, they recommend that *because individual effort and involvement are critical determinants of college impact, institutions should focus on the ways they can shape their academic, interpersonal, and extracurricular offerings to encourage student engagement* (Pascarella & Terenzini, 2005 in Kuh, 2008). Effective educational practices include the following (Kuh, 2008; Kinzie, 2005a; Kinzie, 2005b; Jonson, 2010): student-faculty contact and interaction, prompt feedback, high expectations and level of academic challenge, active & collaborative learning, enriching educational experiences, respect for diverse learning styles and supportive campus environment.

NEXT STEPS IN A LONG JOURNEY

A small win is a concrete, complete, implemented outcome of moderate importance. By itself, one small win may seem unimportant. A series of wins at small but significant tasks, however, reveals a pattern that may attract allies, deter opponents, and lower resistance to subsequent proposals. Small wins are controllable opportunities that produce visible results Karl E. Weick, 1984

Culture can be characterized as strong or weak. In an institutional unit with a strong culture, there is high agreement shared among faculty and administrators regarding expectations and values whereas the level of agreement regarding values and expectations is low or highly variable in a weak culture (Pettigrew et al, 1992 in Stetler et al, 2009). Culture is even stronger when there is alignment between espoused values and observed action (Argyris & Schon, 1974): *When someone is asked how he would behave under certain circumstances, the answer he usually gives is his espoused theory of action for that situation. This is the theory of action to which he gives allegiance, and which, upon request, he communicates to others. However the theory that actually governs his actions is his theory-in-use, which may or may not be compatible with his espoused theory; furthermore, the individual may or may not be aware of incompatibility of the two theories* (Argyris & Schon, 1974)

Many challenges exist as we aim to move our institutional unit forward towards developing and sustaining a culture of evidence-based assessment for greater effectiveness. For example, it is apparent that our institutional unit needs to develop a better understanding of and expertise in the context, content, process and methods of assessment so that we can develop meaningful assessment programs with clearly defined objectives, universally-understood metrics, and processes that provide opportunities for open dialogue, reflection, and continual improvement. We also need to systemically address the need for complementary means and incentives including reward systems to enhance faculty as well as student engagement. Finally, we understand that this process is of vital importance and requires a long-term commitment, a constancy of purpose involving patience, perseverance, and the strategic application of the principle and power of small wins (Weick, 1984; Amabile & Kramer, 2011) to stimulate institutional inertia (Hersh & Keeling, 2012).

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ENHANCING THE UNDERGRADUATE ACCOUNTING CURRICULUM TO AUGMENT CORE COMPETENCIES

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ABSTRACT

The AICPA strongly suggests that accounting educators should constantly monitor existing course offerings for content and relevance. To assist in this goal, the AICPA provides a list of various "core competency" skills that are recommended for future accountants. The authors review some of these skills and discuss how they are incorporated into an accounting elective course at a private liberal arts institution. By incorporating a series of modules specifically designed to address various core competencies, students are able to obtain both knowledge and skills that will be useful in their future accounting careers. Based on data collected at the beginning and end of the semester, the class was successful in augmenting competencies relating to aspects of research and communication.

INTRODUCTION

With the ever-changing economic environment—from the years of double-digit portfolio returns to the current confusion caused by massive bankruptcies and economic chaos—academic accountants have tried to ensure that undergraduate accounting curricula not only teach standard accounting practices but also cover the contemporary issues that are surfacing in the accounting profession. As a result, accounting professors need to periodically reexamine their course offerings and content in order to address the contemporary accounting issues and economic factors students will need to understand in their future accounting careers.

The core competencies proffered by the American Institute of Certified Public Accountants (AICPA) provide a guide for developing accounting

[1] The categories and skills recognized for each are replicated in Table 1 below, and are further discussed and defined on the AICPA website (in the table, asterisked items denote competencies that are addressed in this paper).

Table 1: AICPA-Endorsed Core Competencies

Functional Competency	**Personal Competency**	**Broad Business Perspective Competency**
Decision Modeling	Professional Demeanor	*Strategic/Critical Thinking
*Risk Analysis	*Problem Solving/Decision Making	Industry/Sector Perspectives
*Measurement	Interaction	*International/Global Perspectives
*Reporting	Leadership	*Resource Management
*Research	*Communication	Legal/Regulatory Perspectives
	Project Management	Marketing/Client Focus
*Leverage Technology	Leverage Technology	Leverage Technology

[1] The core competency framework can be found at the AICPA website, at http://www.aicpa.org/interestareas/accountingeducation/resources/pages/corecompetency.aspx

curriculum. According to the AICPA website, these core competencies are "developed by educators for educators," and provide a set of skills that will be needed by all students who plan on being practicing accountants. Furthermore, the AICPA implores educators to develop a curriculum designed to enhance these crucial skills, as opposed to focusing solely on building knowledge. However, incorporating core competencies into a curriculum (while not sacrificing key knowledge) can be challenging.

INCORPORATING VARIOUS AICPA CORE COMPETENCIES INTO COURSE MODULES

The AICPA Core Competency Framework begins by including three areas of competency: functional, personal, and broad business perspective competencies

Incorporating AICPA core competencies into an accounting curriculum can be challenging because many courses have a lot of material to cover, and cannot afford to sacrifice time required to convey key knowledge. However, the approach taken by an ACBSP-accredited private liberal arts college in Pennsylvania allows students to not only receive important accounting knowledge but also to build on a number of the AICPA core competencies, specifically: Risk Analysis; Measurement; Reporting; Research; Leverage Technology; Problem Solving/Decision Making; Communication; Strategic/Critical Thinking; International/Global Perspectives; and Resource Management.

To achieve this goal, a modular accounting elective was introduced into the accounting program, entitled "Special Topics in Accounting." [2] The purpose of this course is two-fold: first, to expose students to other elements of accounting not covered in much depth in a traditional series of accounting courses (e.g., partnerships, estates and trusts, bankruptcy, contemporary accounting topics), and second, to augment various core competencies outlined by the AICPA. The remainder of this section will provide an overview of various modules incorporated into the course and how they were built to enhance various core competencies.

Fraud and Forensic Accounting Module

The risk analysis component of the AICPA's functional competency requirement implies that accounting students must consider the impact of fraud on the accuracy and quality of reported financial transactions. Additionally, in the wake of numerous incidents of fraudulent financial reporting perpetrated by financial executives, more fraud related questions are appearing on the Uniform CPA exam. Some states now encourage or mandate CPAs to include fraud and forensic accounting courses in their continuing professional education, and the Association of Certified Fraud Examiners actively promotes the inclusion of financial fraud classes in the undergraduate accounting curriculum so that students become more aware of and adept at forensic accounting and fraud auditing skills. Therefore, for students to be adequately prepared for careers in accounting, they must be educated in the basic elements of fraud prevention, detection, and investigation. This issue is of such importance that many researchers strongly recommend creating a standalone fraud and/or forensic accounting course (Ibex and Grippo 2008, Ramamoorti 2008, Kranacher et al. 2008, Curtis 2008).

While the authors' institution does offer an elective on fraud, not all students select this course. Therefore, to ensure that more students are exposed to some discussion of fraud, it is included as a module in the Special Topics course. While the material in Special Topics is not as extensive as the standalone fraud course, it can still be valuable, as Kranacher et al. (2008) suggests that students should receive an introduction to fraud and/or forensic accounting through either a standalone course or training module. The authors also recommend including a discussion on fraud perpetrated by various enterprises through misstating or omitting financial statement items.

One suggested approach is to have students learn about various cases of fraud (Larson 2006, Heitger and Heitger 2008). Peterson (2003) also recommends including "A segment on fraudulent financial transactions can concentrate on specific schemes used to defraud organizations, including the methods used to commit and conceal these frauds" (265). Therefore, the module on financial fraud focuses attention on inappropriate financial and reporting practices perpetrated by large international corporations as described in Financial Shenanigans, 3rd edition (Shilit and Perler 2010). The scenarios described in this book outlined revenue and expense recognition fraud, inadequate disclosure problems, and other practices that misled the investing public. Although students learn about the proper approaches to recognizing revenue and expenses and writing footnotes in their intermediate accounting courses, they rarely have the opportunity to study the economic and financial fallout that occurs when companies do not follow generally accepted accounting principles.

The readings associated with this module are designed to enhance the core competency of risk analysis (relating to fraud and forensic accounting), by exposing students to many different fictitious reporting schemes and describing how to spot them.

Lean Accounting Module

Another core competency is resource management. This idea is further explained on the AICPA website: "The ability to appreciate the importance of all resources (human, financial, physical, environmental, etc.) is critical for success. Individuals entering the accounting profession should be able to apply management and human resources development

[2] The accounting core curriculum at this institution requires one semester of financial accounting, one semester of managerial accounting, three semesters of intermediate financial accounting, auditing, advanced accounting, taxation, and two semesters of law. Each accounting major also selects two accounting electives from the following courses: advanced managerial accounting, advanced federal taxation, financial fraud, international accounting, or special topics in accounting.

theories to human resource issues and organizational problems."

To assist in this competency, Special Topics includes a module on "lean accounting." This is a contemporary accounting issue that is not typically addressed in a textbook or in a traditional accounting course. To summarize, lean accounting borrows ideas from lean manufacturing and human resources but applies the ideas to a company's accounting department to streamline the operations and reporting processes of businesses to enhance efficiencies. Interestingly enough, while concepts such as product and period costs, fixed and variable costs, and other categorizations are addressed in both financial and managerial accounting courses, lean accounting practices require accountants to suspend some of their traditional training in ratio analysis and focus more on cost analysis geared specifically to the entity's internal decision making processes.

With respect to lean accounting, students are required to read the novel Who's Counting (Solomon 2003). This novel teaches the fundamental concepts of lean accounting as well as a discussion on organizational behavior, conflict resolution, and political biases that occur in all organizations. [3] The transformation from a traditional manufacturing plant to a lean facility is not a smooth path and students see the difficulties financial professionals can face when asked to rethink traditional financial models. By reading this novel, students can develop greater competency in problem solving/decision making (as they read about what lean accounting can and cannot do and the potential difficulties in its implementation), a variety of accounting measurement tools, and resource management or allocation.

With respect to the core competencies, lean accounting assists in understanding resource management. Other core competencies that may be enhanced through the study of lean accounting include strategic/critical thinking, problem solving and decision making.

Economic Indicators Module

One of the core competencies addressed by the AICPA is "Strategic/Critical Thinking," which is partially defined as "the ability to link data, knowledge, and insight together from various disciplines to provide information for decision-making." In a presentation entitled "*Blurring the Boundaries of Business Disciplines: How Linking Business Principles Leads to Global Prosperity"* (Smith 2011) given at the Academy of Business Research, the presenter explained that while compartmentalizing business content may help students focus on the principles of a particular area of study, but impedes their ability to recognize the importance of the interplay of business disciplines in organizational decision-making. Excelling in a particular discipline (e.g., accounting) at the expense of integrating the precepts of related disciplines (e.g., economics) leads to biases and myopic understanding.

To enhance strategic/critical thinking by bringing together various disciplines, one recommendation is to include a module on economic indicators (Smith and Andre 2011). Economic indicators are items that can be helpful in predicting change in the value of—and thereby the reporting of—various investment instruments. This module introduces students to five of the most useful economic indicators (as outlined by Baumohl 2005)—the employment situation report, the purchasing managers index, weekly claims to unemployment, the consumer price index, and the producer price index—and how each is calculated and reported. Furthermore, students are taught how changes in these particular indicators impact the reporting values of stocks and bonds. To further enhance understanding, an assignment is incorporated that requires students to track these indicators and link what they find to stock and bond valuation changes (see Appendix 1).

Because students are shown how these indicators impact the expected value of various investments, problem solving and decision making with respect to investment decisions is enhanced. Finally, this discussion is linked back to accounting by discussing how the investment decisions ultimately made by management are reported in the financial statements.

This module addresses several core competencies. Strategic and critical thinking is enhanced by broadening the students' understanding of how macro and micro issues in the global economy impact the financial statements. Problem solving and decision making is also heightened by discussing how these indicators impact the expected value of various investment opportunities. Finally, reporting and measurement of these investments is also addressed.

[3] In general, the students really enjoyed the novel and shared comments such as: "I never thought anyone could write a good accounting story, but this was a pretty good book!" and "I was surprised at how interesting this book was. In one other class we talked a little about lean and it wasn't nearly this interesting."

XBRL Module

Some undergraduate business programs—including the authors' teaching institution—only require accounting students to take a management information systems class. To help enhance students' experience with technology and reporting, a module on XBRL (eXtensible Business Reporting Language) and its SEC requirements is included.

In 2009, the SEC mandated that filers begin providing their financial statements using XBRL (eXtensible Business Reporting Language) for the 500 largest filers, with smaller companies phasing in over time. Debreceny and Farewell (2010) describe XBRL as a "metadata representation language for the Internet" (379). The authors also recommend that students be exposed to the study of XBRL at relevant points in the accounting curriculum (380), and Taylor and Dzuranin (2010) also suggest that students should learn about the underlying mechanics of XBRL.

To accomplish this, the XBRL module draws heavily on material found directly at the www.xbrl.org website and information provided by a presentation at the American Accounting Association annual conference (Gray and White 2011), students learn about the usefulness of XBRL tagging and the timeline the SEC has set for public company compliance. Although actual tagging assignments are beyond the scope of this course, students became aware of both how technology can be leveraged in this important aspect of financial reporting and how public accounting firms must be prepared to address this client need.

International Financial Reporting Standards Module

One of the challenges currently facing accounting faculty is whether to teach accounting principles as defined by Generally Accepted Accounting Principles (GAAP), International Financial Reporting Standards (IFRS), or both. Certainly students need to fully understand GAAP accounting, but they also need to be prepared for a possible migration to IFRS. The authors' institution currently offers a senior-level accounting elective in international accounting; however, being an elective, not all students elect to take this course. Consequently, a brief module on IFRS is included in the Special Topics class.

Using *International Financial Reporting Standards: an Introduction* (Needles and Powers 2011) , students are exposed to the background of IFRS, the IFRS Framework and approach to financial statement presentation, and an overview of the key differences between GAAP and IFRS. Although this module could not replace the full-semester course in international accounting, it does make the students conversant in IFRS and aware of the topics that will likely become critical areas of understanding as they embark upon their professional careers. Furthermore, this module will assist with respect to enhancing knowledge in the core competency of international and global perspectives.

Accounting Research and Communication

With respect to research skills, the AICPA website states, "Many accounting profession functions depend on obtaining information from within and outside of an entity. Accordingly, the individual preparing to enter the accounting profession needs to have strong research skills to access relevant guidance or other information, understand it, and apply it." Irving (2011) suggests that integrating research and requiring students to read and discuss articles from accounting journals can enhance students' understanding of course topics, as well as deepen their appreciation for the relationship between accounting research and accounting practice (288). Burke et al. (2008) suggests including course activities that allow students to become familiar with research databases (e.g., ABI Inform or Business Source Premiere) as an important step in developing research aptitudes, followed by evaluating what they find and then present what they find.

Furthermore, the AICPA describes the importance of communication as follows: "Accounting professionals are called upon to communicate financial and non-financial information so that it is understood by individuals with diverse capabilities and interests. Individuals entering the accounting profession should have the skills necessary to give and exchange information within a meaningful context and with appropriate delivery. They should have the ability to listen, deliver powerful presentations and produce examples of effective business writing." Jones (2011) surveyed accounting employers and found that some of the most important written communication skills needed by new hires include effective organization, writing clearly and precisely, preparing concise and accurate documents, documenting work accurately, conscientiously editing documents, and effectively using email (254). Furthermore, Jones also found that in general, employers were only marginally satisfied with new hires' abilities to effectively communication (259).

Therefore, to enhance both research skills and communication, students are required to research contemporary accounting articles and provide brief written summaries. These summaries were to be written on articles pertaining to other modules in the course, specifically, fraud and forensic accounting, lean accounting, economic indicators, XBRL, and IFRS. To this end, students learn about and are encouraged to use online databases such as ABI Inform or EBSCOhost. By accessing databases of articles, students learn to discern the relevancy, strengths, and weaknesses of each source. Once they research and find appropriate articles, they are required to summarize what they find in a brief paper. They are instructed to summarize the article in their own words and to be concise yet provide enough explanation that the paper could be understood by a non-accountant. The goal of these papers is to hone students' research and written communication skills, and feedback is provided (see Appendix 2 for an overview of the expectations and feedback).

Additionally, at the end of the semester, each student also prepares a presentation for the class on one of these topics, explaining what they found and learned. Feedback is provided after the presentations from the instructor, with the goal of enhancing students' oral communication skills (see Appendix 3 for a copy of the feedback provided for the oral presentations).

Further complementing accounting research, the students also read portions of *Mastering Accounting Research for the CPA Exam* (Feller 2008). The purpose of this module is to expose students to the development of accounting pronouncements and introduced to the Codification. While the focus is on developing research skills used in answering questions on the CPA Exam, in the course of the module students are directed to professional websites sponsored by the AICPA, the FASB, and the PCAOB. Consequently, as a result of this module, students have developed a core competency in leveraging technology both for conducting technical accounting research and for developing a familiarity with the literature of the professional associations.

Finally, because much of today's business communication is facilitated by memos and e-mail, this course also incorporates an assignment using both forms of communication. At the beginning of the course students are asked to write a basic business memo to their professor regarding one of the topics in the class. After the assignment is submitted, a member of the college's English department is invited to the class and engages the class in both lecture and experiential exercises on writing business reports, memos, and emails. The presentation also addresses proper business tone, clarity and succinctness, the importance of proper usage of grammar and sentence structure, and ways to appropriately deliver disappointing news. Hearing this information from someone from the English department adds an element of cross-curricular education as well as an enhanced note of credibility.

After the guest lecture, students rewrite their business memo and submit it to the Special Topics professor via a business email. Both the memo and the email are critiqued and feedback is provided, with the goals of enhancing business communication (see Appendix 4).

SURVEY AND RESULTS

Overview of Instrument

In addition to the modules included in the course, we wanted to determine the extent to which students' skills improve with respect to the AICPA core competencies of communication of accounting information and conducting accounting research (items they might not have had an opportunity to develop in other accounting courses).

In order to gauge the students' perception of the extent that their research and communication skills were enhanced, they were given a survey to complete both at the beginning and the end of the semester. The survey was the same and the responses given by each student at the beginning and end of the semester were matched.

Most of the survey questions asked students to use a 7-point Likert scale to rate their degree of comfort or familiarity with various aspects of research and communication (with a score of one denoting "not familiar" or "not comfortable," and a score of seven denoting "very familiar" or "very comfortable."

With respect to demographics, fourteen students completed both the pretest and the posttest. All students were in their senior years with respect to obtaining undergraduate degrees in accounting. The average age was 25.2 (median 22 and standard deviation 7.5), and the average self-reported GPA was 3.46 (median 3.46, standard deviation 0.253). Five students were female and nine were male.

Results

For all of the questions that asked students to rate their familiarity or comfort with certain items at the beginning and end of the semester, due to the small sample size, nonparametric tests are appropriate. Because the survey is designed to compare a score at the beginning and end of the semester for the same individual, both the Wilcoxon Matched Pairs Signed Rank Test (hereafter the Wilcoxon test) and the Sign test were conducted. Both are used to test the null hypotheses that the median difference between two members of a pair is zero. The Wilcoxon test takes into account the magnitude of the differences and therefore is more powerful than the Sign test, but requires the distribution of difference scores about the median be symmetrical. The Sign test does not require symmetry. Therefore, this section will discuss results using the Wilcoxon test if symmetry exists; otherwise, the Sign test will be used. Two-tailed tests with a significance value of 0.05 were used.

To test perceived increase in oral communication skills, students were asked: "How comfortable are you giving a short (5 to 10 minutes) oral presentation on a financial issue?" The median increase between pretest and posttest scores was 1.50 (average 1.57, standard deviation 1.79), a significant increase (Wilcoxon p-value 0.009).[4] This would indicate that students do feel more comfortable with respect to their oral communication by the end of the course.

To test perceived increases in different written communication skills, students were asked three different questions. First, they were asked "How comfortable are you with writing a summary of a financial article?" The median increase was 0.50 (average 0.79 and standard deviation 1.42). The increase was weakly significant (Wilcoxon p-value 0.058). [5] The second question asked "How comfortable are you with writing a professional business memo?" The median increase was 1.00 (average 1.00 and standard deviation 1.30), which was significantly higher (Wilcoxon p-value 0.018). [6] Finally, students were asked "How comfortable are you with writing a professional business email?" The median increase was 1.00 (average 0.50 and standard deviation 0.85), which was not significant (Sign test p-value 0.109). [7]

It would appear that success in the class with respect to enhancing written communication is mixed—students almost experienced a significant increase with respect to writing a summary of an article, a significant increase with respect to writing a memo, and a non-significant increase in writing a professional email. However, it is possible that the lack of significant findings in writing a professional email could be explained by the already high pretest scores (average 6 out of 7).

To test perceived increase in research skills, two questions were asked. The first was: "How comfortable are you with using online databases to quickly and efficiently find articles written about a contemporary accounting topic?" The median increase was 1.00 (average 0.57 and standard deviation 1.34), which was not significant (Wilcoxon p-value 0.142).[8]

Based on these results, students' perception of being able to use online databases to find research publications was not increased. Upon closer examination, the data shows that of the fourteen students, one reported an overall *decrease* between pretest and posttest scores of two, and two additional students reported a *decrease* of one. It is possible that perhaps these students originally overestimated their ability to do research and during the course of the class, realized that conducting research is more difficult than originally suspected.

The second question was asked in a format that differed slightly from the other questions discussed in this section. The question posed was "Not including popular press magazines, I could probably name _______ academic or research oriented professional accounting publications." Instead of a Likert scale, students were asked to select from one of four choices: none, one to three, four to six, and more than six (responses were coded as zero, one, two, and three, respectively). The increase in response values between the pretest and the posttest was then used for analysis. Results show that the median increase was

[4] The average pretest score was 4.00 (median 4.00, standard deviation 1.92) and the average posttest score was 5.57 (median 6.00, standard deviation 0.65).

[5] The average pretest score was 5.57 (median 6.00, standard deviation 1.22) and the average posttest score was 6.36 (median 7.00, standard deviation 0.84).

[6] The average pretest score was 5.36 (median 5.00 and standard deviation 1.22) and the average posttest score was 6.36 (median 6.50 and standard deviation 0.74).

[7] The average pretest score was 6.00 (median 6.00 and standard deviation 1.04) and the average posttest score was 6.50 (median 7.00 and standard deviation 0.65).

[8] The average pretest score was 5.57 (median 6.00 and standard deviation 1.40) and the average posttest score was 6.14 (median 7.00 and standard deviation 1.41).

1.00 (average 0.79 and standard deviation 0.70), which was significant (Wilcoxon p-value 0.005).[9]

Overall, it appears that the Special Topics course was able to enhance various aspects of AICPA core competencies; specifically, oral communication skills of an accounting issue, writing a business memo, and familiarity with professional accounting publications (along with a weakly significant increase in summarizing a financial article).

CONCLUSIONS

Overall, the Special Topics course manages to include many of the key competencies outlined by the AICPA as being crucial for accountants. Ethics and fraud are explored through researching and presenting a case (as recommended by Heitger and Heitger 2008), and research, interaction, and communication skills are addressed through a series of modules and presentations. Students learn about lean accounting, XBRL, and economic indicators – subjects they had not explored before in accounting classes. Students also learn how to use both an EDGAR database and a research database (as recommended by Burke et al. 2008). Throughout the semester, the students exhibit significant improvements in communication skills as students gain more experience and received feedback.

Student feedback on the course has been very positive. Although the course is structured in a unique and unfamiliar way, students enjoyed the variety of topics covered and the opportunity to break out of the traditional content-driven focus of most accounting courses. One student commented, "The combination of group exercises and… the other activities in class provided a good change of pace and applied our learning in a new perspective." Another student said "the group activities helped reinforce the teachings of the class." In general, students felt the class was a "nice break from normal accounting classes", the information was different from regular accounting so it was "exciting to learn", and that the topics covered in class were seen applied at internship locations.

With the ever-expanding breadth of topics relevant to accounting, it seems almost impossible to fully prepare graduating accounting majors with the complete array of skills needed in the profession. However, with the implementation of modular topics such as those discussed above, accounting students are able to enhance their ethical understanding, research skills, information literacy, interaction skills, and communication proficiency. Additionally, this course can be dynamic, allowing professors to modify course content and topics for relevance and contemporary application while still holding to AICPA core competencies. Students who complete the required traditional accounting courses and the Special Topics course may be much better prepared to enter the accounting profession.

Some weaknesses with this instrument and the responses need to be mentioned. First, as with any survey, it is possible that the students did not give the survey enough attention or thought with respect to their responses. Second, it is worth noting that the survey questions asked students to rate their overall perceptions with respect to various skills, which may or may not translate to an actual evaluation of their performance. Third, it is possible that students may have experienced increases in their communication and research skills through activities in other classes; however, this was attempted to be alleviated by specifically asking the students to rate their skills with respect to accounting information. Fourth, the sample size is somewhat small and only covers one semester, so there may be circumstances unique to this particular class section, semester, or instructor that could impact the results in unforeseen ways.

Finally, this course also included other core competencies as outlined by the AICPA (e.g., risk analysis, measurement, problem solving and decision making, strategic and critical thinking). While the modules that were incorporated into this class were designed to specifically enhance these other core competencies, it is much more difficult to judge the extent that, for example, students' critical thinking ability has increased. Future research could be designed to study the extent that the modules created for this course enhance these other competencies as well.

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APPENDIX 1: ASSIGNMENT ACCOMPANYING THE ECONOMICS INDICATORS MODULE

Select two of the economic indicators we discussed in class and collect monthly readings over any two year period between 2000 and 2010. Create a **chart** showing each indicator's change over time. Then pick one stock index (S&P 500, DJIA, etc) and one bond index and **chart** their changes over the same period. **Graph** the readings from each economic indicator with the readings of the indices (total of two graphs). Write a 1-page summary explaining your findings. Aim for a "professional looking" portfolio: use of color, bolding, italics, grids, etc.

Example: **Chart** of PMI (or CPI or S&P 500, etc)

	2003	2004
Jan		
Feb		
Mar		
April		
Etc.		

Example: Graph of PMI scores, Stock Index, Bond Index

I …………PMI
I ***** S&P 500
I +++++ Bond Index
I
I
I
I____________________________________

Jan 03 Feb 03 Mar 03 etc

NOTE: You will need to create different scales on the y-axis for your graphs to make sense. Use of color or different symbols (as shown above) will help.

APPENDIX 2: OVERVIEW OF ARTICLE WRITING ASSIGNMENTS AND FEEDBACK

When selecting articles to summarize, keep the following guidelines in mind:

…Articles should be from a respected professional or academic journal – not from popular trade magazines like Business Week, Fortune, Time, etc
…You are to summarize the article in your own words. Avoid quotations.
…Your target reading audience is a "non-accountant" adult interested in the topic. Do not assume they understand technical accounting concepts or terms.
…Your summary should be long enough to convey the main ideas but short enough to be considered a "summary".
…You must attach your original article so I can read it along with your summary.
…Include in your summary the title and source of the article as well as a brief description of the author's background (establishes credibility).

Article Summary Matrix: 50 points

Quality of article selection (relevance, timeliness, source, etc)	1 2 3 4 5
Inclusion of full reference (source) and background of authors	1 2 3 4 5
Overall coverage of article's content and main points	1 2 3 4 5 6 7 8 9 10
Presentation of ideas in your own words to target audience	1 2 3 4 5 6 7 8 9 10
Professional appearance (use of fonts, underlines, bolding, etc)	1 2 3 4 5
Composition (sentence structure, punctuation, grammar, etc)	1 2 3 4 5 6 7 8 9 10
Submission deadline (beginning of class on date due) and Attachment of original article	1 2 3 4 5

TOTAL: ___________________________

APPENDIX 3: ORAL PRESENTATION FEEDBACK

Professional poise and appearance				
…..eye contact with the audience	1	2	3	
…..appropriate dress / grooming	1	2	3	
…..step away from the podium	1	2	3	
…..appropriate projection of voice and enunciation	1	2	3	
Professional speech and expression				
…..show interest in the topic	1	2	3	
…..explain background of issue (relevance, history, etc)	1	2	3	
…..avoid ums, ahs, likes, you-knows, and other slang	1	2	3	
…..talk about the slide rather than reading the slide	1	2	3	
…..speak with conviction and confidence	1	2	3	4
Content of PowerPoint slides				
…..bibliographic slide (title, author, journal, reference)	1	2	3	
…..clarity of wording and ideas	1	2	3	
…..organization of key points	1	2	3	4
…..main conclusions	1	2	3	
Visual appeal of PowerPoint slides				
…..amount of info on each slide (not too much, not too little)	1	2	3	
…..inclusion of graphics, pictures, graphs, icons, etc	1	2	3	
…..professional use of color, bolding, etc (no animation, please!!!)	1	2	3	

TOTAL POINTS: ___________________

APPENDIX 4: BUSINESS COMMUNICATION ASSIGNMENT

(Students do not know that they will be given the opportunity to revise their memos nor do they know that someone from the English Department will be teaching them how to write an effective business memo and email. The point of the assignment is to allow them to compare what they thought was an effective business memo to a revised version based on instruction from the English Department. They are graded only on the final version, but there is a separate grade for the memo and the email.

Part 1:
We have just concluded our discussion of International Financial Reporting Standards. Assume you are the Controller of a small privately held U.S. corporation. Write a memo to the CFO explaining why you think the company should, or should not, incorporate IFRS into its accounting reporting structure. Address advantages, disadvantages, costs, labor-hours, etc. Submit your hard copy to me by ________________________ (date).

Part 2:
You have now received my feedback on your business memo and you have participated in the special business writing workshop provided by ________________ of the English Department. Revise your original memo to comply with the writing standards taught to you in the workshop. Submit your revised memo to me via email by _____________________ (date).

Program of the 35th Annual Meeting

Northeastern Association of Business, Economics and Technology (NABET)

35th Annual Meeting

October 25th & 26th, 2012

Days Inn

240 South Pugh St.
State College, PA 16801
(814) 238 - 8454

NABET

Thursday October 25, 2012

Registration	Days Inn Foyer	**7:30 am - 5:00 pm**
Breakfast	Sylvan Room	**7:30 am - 9:00 am**

Welcome - Norman Sigmond, Board Chair **8:00 am - 8:15 am**

Dean Frear President

Session 1: Sylvan Room 8:15 am – 9:15 am

Online

Session Chair: Eric Blazer

Training, Technology and the Older Worker: Where is HRD

B.J. Holman Regent University

A Study to Determine the Effects of Social Media Usage on College Advising Efforts

Margaretha Hsu Shippensburg University

Teaching and Learning: Is Technology Correct

Loreen Powell	Bloomsburg University

Session 2: Sylvan Room 9:20 am – 10:20 am

Education

Session Chair: Loreen Powell

Put a Little Jing in the Classroom

Eric Blazer	Millersville University

To Hub or Not to Hub - Meeting With the Problems

Rani Selvanthan	West Chester University

Session 3: Willow Room 9:20 am – 10:20 am

Sustainability

Session Chair: Donald Wargo

Sustainability: Everybody's Heard about the Word

John Golden	Slippery Rock University
Rhonda Clark	Slippery Rock University

A Special Case of Sustainability- Golf Courses

Thomas Kubicz	University of Baltimore
Vince Luchsinger	University of Baltimore

Compassion and Corporate Social Responsibility

Daniel Singer Towson University

Michael Dewally Towson University

Session 4: Logan/Harris Room 9:20 am – 10:20 am

Ethics

Session Chair: David Jensen

Presentation

Replacing the Work Ethic With the Development Ethic

William Roth Kutztown University of PA

Workshop 30 minutes

Student led course assessment of MBA 595 Ethical Leadership and Sustainable Organization in the MBA Program of Point Park University, Pittsburgh PA

James Haley Point Park University

Dawn Parasolick Point Park University

Michael DeSantis Point Park University

Session 5: Holmes/Foster Room 9:20 am – 10:20 am

Management

Session Chair: Jonathan Kramer

Establishing a Public Information Officer Position in the Contemporary Fire Department

Robert Fleming Rowan University

Emotional Intelligence: Theory, Applications and Implications for Management

Gita Maharaja Duquesne University

Using Prospect Theory to Understand the Impact of Experts' Evaluation: Evidence from Cigar Ratings

Bryan McCannon Saint Bonaventure University

John Stevens Saint Bonaventure University

Coffee Break– Sylvan Room **10:20 am – 10:45 am**

Session 6: Sylvan Room 10:45 am – 11:45 am

Education

Session Chair: Bryan McCannon

Education

Applying Quality Management Tools to Student-learning Data

John Kachurick — Misericordia University

Corina Slaff — Misericordia University

Think Like a Lawyer: Applying Legal Analysis and Pedagogy to your Business Course

Donna Steslow — Kutztown University of PA

The New Science of Learning and Why Students Forget Their Lessons So Quickly

Donald Wargo — Temple University

Session 7: Willow Room 10:45 am – 11:45 am

Finance

Session Chair: Robert Fleming

REIT Exit Strategies

Zhilan Feng — Union Graduate College

Lisa Frank — Central Connecticut State University

Pairing the Study of Investments with the Study of Philanthropy

David Jensen — Bucknell University

Can You Really Get Wealthy Investing a Dollar a Day?

Jonathan Kramer — Kutztown University of PA

John Walker — Kutztown University of PA

Session 8: Logan/Harris Room 10:45 am – 11:45 am

Ent/Mgt

Session Chair: John Stevens

Designing Interdisciplinary Programs in Art Entrepreneurship within a College of Business at a Small Liberal Arts College

Brian Petula Keystone College

Striking a Balance: The Social Entrepreneur's Role in Tri-Sector Collaborative Initiatives

Chad Kimmel Shippensburg University of PA

David Sarcone Dickinson College

An Exploration of Conceptualizations of Social Entrepreneurship within the Context of Entrepreneurship

Alan Brumagim University of Scranton

Session 9: Holmes/Foster Room 10:45 am – 11:45 am

Management

Session Chair: Michele Langbein

Economic Theory and Simple Bargaining Experiments Across Different Participant Samples

Rod Raehsler Clarion University of PA

Deal-making in Pawn Stars: Testing Theories of Bargaining
Bryan McCannon Saint Bonaventure University

John Stevens Saint Bonaventure University

Models for Forecasting Local Employment Trends in Pennsylvania

Sandra McPherson Millersville University of PA

Lunch – Linden Room **12:00 pm – 1:00 pm**

Education

Session 10: Sylvan Room 1:15 pm – 2:15 pm

Session Chair: Brian Petula

Presentation

Social Media Powerhouse

Carolyn LaMacchia Bloomsburg University of PA

Carl Chimi Bloomsburg University of PA

Loreen Powell Bloomsburg University of PA

Workshop 30 Minutes

Innovative Approach: Teaching Ethics and Leadership at a Graduate Level Business School

Archish Maharaja Point Park University

James Haley Point Park University

Mohammed Sidky | Point Park University

Michele Langbein | Point Park University

Session 11: Willow Room 1:15 pm – 2:15 pm

Finance

Session Chair: Alan Brumagim

Understanding Gresham's Law: How the Euro Can Be Broken

Timothy Kearney | Misericordia University

The Global Financial Crisis Effect on Residential Industries in Ireland and Greece

Michael Gallagher | DeSales University

Wayne Buchanan | Defiance College

Securities Analysis: Dividends, Stock Buybacks, and the (k-g) Problem

Willam Carlson | Duquesne University

Conway Lackman | Duquesne University

Session 12: Logan/Harris Room 1:15 pm – 2:15 pm

Workshop/Panel Discussion 30 Minutes

Session Chair: Susanne Hartl

Incorporating Writing In A General Business Curriculum

Beth Buckman Drexel University

Chris Finnin Drexel University

Susan Epstein Drexel University

Presentation

A Note on the Challenges and Resistance to an Online Class of Business Statistics

Mohamed Albohali Indiana University of PA

Session 13: Holmes/Foster Room 1:15 pm – 2:15 pm

Entreprenuership

Session Chair: Robert Fleming

Models of Enterprise Growth: What's missing from current theory?

Stephen Markell Bloomsburg University of PA

Entrepreneurship and Social Network Analysis in the Music Industry: Adaptation to Emerging Technologies and Dynamic Corporations

Peter Goodrich Providence College

Business Development in the Former Soviet Union: Transforming Practices Cast in the Iron Curtain.

William Tracey Central Connecticut State University

Session 14: Sylvan Room 2:15 pm – 3:15 pm

Management/Ethics

Session Chair: Stephen Markell

Organizational Learning from Crisis in the Amusement Industry

Kathleen Wall — Central Connecticut State University

Diversity In American Management: How Culturally- based Heuristics Differ In Minority And Non-minority Managerial Decision Making

Susanne Hartl — Nyack College

Teaching Ethics and Global Business

Michele Langbein — Point Park University

Jason Simoni — Point Park University

Session 15: Willow Room 2:15 pm – 3:15 pm

Finance

Session Chair: Beth Buckman

What are the effects of increases in cigarette prices since Master Settlement Agreement (MSA)?

Zhen Ma — Misericordia University

The Impact of SEC investigations and accounting and auditing releases on firms' cost of equity capital

Curtis Nicholls Bucknell University

Pedagogical Enrichments in Cost Accounting Championing Student Comprehension of Essential Concepts: Engaging Productivity Software Models and ERP Information Systems

Robert Kachur Richard Stockton College of New Jersey

Warren Kleinsmith Richard Stockton College of New Jersey

Session 16: Logan/Harris Room 2:15 pm – 3:15 pm

Education

Session Chair: Timothy Kearney

A Reflective Practitioner Educating: Never Hold the Mayo

Doug Reed University of Pittsburgh Johnstown

An Empirical Analysis: The Impact of Prior-to-Exam Activities (Study, Exercise, or Meditation) on Student Performance

C. J. Rhoads Kutztown University of PA

Therese Healy Kutztown University of PA

A Comparative Study on International Healthcare Systems

Archish Maharaja Point Park University

Nisha Maharaja Carnegie Mellon University

Session 17: Holmes/Foster Room 2:15 pm – 3:15 pm

Session Chair: Jerry Belloit

Bringing the Real-World of Marketing to the Classroom Through Student-Generated Application Examples

Dr. John Zych University of Scranton

Cybersecurity Laws and Online Freedom beyond SOPA and PIPA

Kustim Wibowo Indiana University of PA

Video Games: Past, Present, Future

Timothy Wilson Umeå School of Business

Coffee Break– Sylvan Room 3:15 pm – 3:30 pm

Session 18: Sylvan Room 3:30 pm – 4:30 pm

Acc/Fin

Session Chair: Doug Reed

Enhancing the Professional Orientation of Today's Accounting Students

Stephen Willits Bucknell University

The Significance of Income from Hydraulic Fracturing to Publicly Traded Partnerships

Andrew Staley Bloomsburg University of PA

Gabriel Genovese Bloomsburg University of PA

Mark Law Bloomsburg University of PA

Gary Robson Bloomsburg University of PA

Controlling Rogue Risk in Financial Institutions

Daniel Singer Towson University

Michael Dewally Towson University

Session 19: Willow Room 3:30 pm – 4:30 pm

Education

Session Chair: Curtis Nicholls

Applying Business Process Improvement Concepts to Academic Advising

Michael Kosicek Indiana University of PA

Richard Sandbothe Indiana University of PA

Ramesh Soni Indiana University of PA

Twitter Effectiveness In Motivating Business Students

Melanie Anderson Slippery Rock University of PA

The Role of Mentoring in the Preparation of Fire Department Chief Officers

Robert Fleming Rowan University

Session 20: Logan/Harris Room 3:30 pm – 4:30 pm

Finance/Global Finance

Session Chair: Kathleen Wall

Revenue Recognition challenges under the International Convergence Project

Warren Kleinsmith Richard Stockton College of New Jersey

Is an ASEAN Monetary Union possible? Evidence Based on Business Cycles Symmetry

Francis Kemegue Framingham State University

Lori Anderson Framingham State University

Fahlino Sjuib Framingham State University

Hospital Costs and Profitability Related to the PPACA

Wiiliam Pratt Clarion University of PA

Jerry Belloit Clarion University of PA

Session 21: Sylvan Room 4:30 pm – 5:00 pm

Winner of NABET Best Faculty Paper Award

Executive Board Meeting	**5:15 – 6:00 pm**
NABET Social Hour I – Windsor Suite/Room X	**6:00 – 7:00 pm**
Dinner – Linden Room	**7:00 – 8:00 pm**
NABET Social Hour II – Windsor Suite/Room X	**8:00 pm**

Friday, October 26, 2012

Registration – Days Inn Foyer **7:30 am - 1:00 pm**

Breakfast - Sylvan Room **7:30 am - 9:00am**

Welcome - Norman Sigmond, Board Chair 7:45 am - 8:15am

Dean Frear President

NABET Annual Fall Business Meeting

All conference participants may attend

Norman Sigmond and Dean Frear

Special Session 8:15 am – 8:25 am

Sylvan Room

***Journal of the Northeastern Association of Business, Economics and Technology* (*JNABET*)**

John Walker Kutztown University

Session 22: Sylvan Room 8:30 am – 9:30 am

Session Chair: John Kruglinski

Your students May Not Know About How They Prefer to Learn, Their Psrsonliaty Traits, and their Value Systems! Should the Academcy Be Doing Something about This?

David Rudd	Lebanon Valley College

Being Critical of Teaching Critical Teaching Skills

Paul Sable	Kutztown University of PA

Strategies to Engage Students in Business Management Courses

David Bakuli	Westfield State College
Susanne Chuku	Westfield State College

Session 23: Willow Room 8:30 am – 9:30 am

Session Chair: Becky Smith

Towards Developing and Sustaining a Culture of Evidence-Based Assessment for Improved Institutional Effectiveness: Research in Progress

Uldarico Rex Dumdum Marywood University

Murray Pyle Marywood University

Different Teaching Approaches to Engage Marketing Students

John McGrath University of Pittsburgh Johnstown

Skip Glenn University of Pittsburgh Johnstown

Session 24: Logan/Harris Room 8:30 am – 9:30 am

Global Finance

Session Chair: Cindy Harris

The Direct Economic Impact Analysis of The Turkish Airlines Euroleague Final Four 2012 Istanbul Tournament

Serdar Ongan Istanbul University

Which Free Cash Flow is Value Relevant? An Empirical Investigation

Mostafa Maksy Kutztown University of PA

Gary Chen Northwestern University

The Impact of an undervalued Yuan on the US Trade Deficit with China: An Empirical Analysis

Farhad Saboori Albright College

Session 25: Holmes/Foster Room 8:30am – 9:30 am

Session Chair: Cori Myers

Collaborative Service Delivery in Regional Economic Development Efforts

Kevin Roth — Clarion University of PA

Fair Value Accounting

Patricia Galletta — College of Staten Island - CUNY

Improving Customer Communications in Small Construction Projects

Kathleen Hartzel — Duquesne University

Session 26: Sylvan Room 9:30 am – 10:30 am

Accounting

Session Chair : Patricia Galletta

Enhancing the Undergraduate Accounting Curriculum to Augment Core Competencies

Becky Smith — York College of PA

Sean Andre — York College of PA

A Non-Traditional Case Approach to Teaching Intermediate Financial Accounting

Robert Derstine Kutztown University of PA

Corporate Tax Reform in Pennsylvania

John Kruglinski Muhlenberg College

Session 27: Willow Room 9:30 am – 10:30 am

Finance

Session Chair: David Bakuli

Impact of the Global Financial Crisis in the ECOWAS Countries

Yaya Sissoko Indiana University of PA

Soloman Kone City University of New York

The Power of One: Effects of CEO Duality on Compensation Committee Quality and CEO Compensation

Cindy Harris Ursinus College

Carol Cirka Ursinus College

Eric Farris KPMG

Stock Options: Qualified and Non-Qualified

Mary Recor College of Staten Island- CUNY

Session 28: Logan/Harris Room 9:30 am – 10:30 am

Session Chair: Christopher Speicher

The Modernization Paradox: Neoliberal Efficiency Strategies and Socio-Economic Crisis

Mohammed Sidky Point Park University

Exploring Best Practices in 'Second Life' Virtual World Adoption

Uldarico Rex Dumdum Marywood University

Mark Choman Luzerne County Community College

Reviewing Strategies and Issues Concerning Retirement Planning

Carl Smith Mansfield University of PA

Coffee Break– Linden Room 10:30 am – 10:45 am

Session 29: Sylvan Room 10:45 am – 11:45 am

Session Chair: Robert Derstine

Great Valley Technology Alliance Revisited: Assessing the Effectiveness of a Local Business Plan Competition

Christopher Speicher | Marywood University
Murray Pyle | Marywood University

A Cross-Cultural Examination of Consumer Decision Making Models

Ross Steinman | Widener University

Benefits and the Goods Classes

James Talaga | LaSalle University

Session 30: Willow Room 10:45 am – 11:45 am

Session Chair: Mostafa Maksy

Service Rules: How to Get Better Service

Audrey Guskey | Duquesne University

Financial Literacy in America: What Role Should Business School Faculty and Business Professionals Play?

Frank Lordi | Widener University
Joseph Hargadon | Widener University
David Haman | Widener University

A Primer on Teaching the United Nations Convention on Contracts for the International Sale of Goods (CISG) in Undergraduate Legal Studies Classes

Aaron Pennington | York College of PA
Marcia Staff | University of North Texas

Session 32: Logan/Harris Room 10:45 am – 11:45 am

Session Chair: Farhad Saboori

Rival Models of Political Economy in Africa

Barbara Ponsford Clarion University of PA

William Hawkins U.S. House Foreign Affairs Subcommittee on Oversight

Private Truth But Public Lie? What Did Policy Do? An Empirical Study on the Taiwanese Overtime Policy Reform in 1996

Wei-Chung Wang Juniata College

Entrepreneurial Leader Centers:Models and Best Practices

James Rodriguez Kutztown University of PA

Roger Hibbs Kutztown University of PA

Lunch – Linden Room 12:00 pm – 1:00 pm
