Contents

Page

- 3 Introduction
- 4 Journal Information
- 5 Subscriptions and Cabell's Listing
- 6 Extracurricular Activities: The Impact on Business Students' Personal Growth and Employability

Chris Ward, The University of Findlay- Findlay, Ohio, USA Dan Yates, The University of Findlay- Findlay, Ohio, USA

- 11 Advancing Best Practices for Asynchronous Online Discussion David L. Baker, California State University, San Bernardino, CA, USA
- 22 Student Presentations in Business Courses: Does Technology Enhance Learning? Edward Nelling, Drexel University, Pennsylvania, USA
- 27 ADR Classroom Negotiation Case: The S & J Retail Acquisition Peter Geoffrey Bowen, Ph. D. Daniels College of Business. The University of Denver
- 32 Relating Course Content Value-Themes to Attitudinal Proxies: A Study of MBA Alumni Stuart Van Auken, Florida Gulf Coast University, Florida, USA Earl Chrysler, California State University, Chico, USA (Emeritus) Ludmilla Gricenko Wells, Florida Gulf Coast University, Florida, USA
- 37 A Proposed Framework for Entrepreneurial Learning Staci R. Lugar-Brettin, Indiana Institute of Technology - Fort Wayne, Indiana, U.S.A.
- 41 Performing Mentor

Sheng-Tao Fan, Southern Illinois University Carbondale, U.S.A.

- 45 Incorporating Product Life Cycle Impact Assessment Into Business Coursework Wendy B. Wilhelm, Western Washington University, Bellingham, Washington, USA
- 53 Obtaining Faculty Motivation and "Buy In" to a Major Program Change: A Case Study in Assessment

Elizabeth F. Purinton, Marist College - Poughkeepsie, NY, USA Elmore R. Alexander, Marist College - Poughkeepsie, NY, USA

- 58 A Comparison of Undergraduate versus Graduate Student Perceptions and Performance using Online Homework in Introduction to Operations Management Courses Lynn A. Fish, Canisius College, Buffalo, NY USA
- 67 Building a Model to Measure the Impact of an Online Homework Manager on Student Learning in Accounting Courses

Anita R. Morgan, Indiana University East - Richmond, Indiana, USA

74 Internationalization of the Undergraduate Business Program: Integrating International Students

Lee Thomas, D'Amore-McKim School of Business, Northeastern University, Boston, USA

Contents continued on next page

June 2013

Contents Continued

Page

Facilitating and Documenting Behavioral Improvements in Business Student Teamwork 83 Skills

Charles J. Hobson, Indiana University Northwest, Indiana, USA David Strupeck, Indiana University Northwest, Indiana, USA Andrea Griffin, Indiana University Northwest, Indiana, USA Jana Szostek, Indiana University Northwest, Indiana, USA Rajan Selladurai, Indiana University Northwest, Indiana, USA Anna S. Rominger, Indiana University Northwest, Indiana, USA

Running a Business: An Extremely Experiential Approach to Teaching Organizational 96 **Behavior**

Leonard J. Glick, D'Amore-McKim School of Business, Northeastern University -Boston, Massachusetts, USA

101 The Interactive, Progressive Case Study David O. Egleston, Lawrence Technological University, Southfield, Michigan, USA

Assessing Student Learning in International Business through a Foreign Internship Scenario 105 Exercise

David J. Jamison, South Carolina State University, South Carolina, USA

Manuscript Guidelines, Submission and Review Process 115

117 Manuscript Style Guide and Example

Introduction

Welcome to this issue of the Business Education Innovation Journal.

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

We invite you to read about innovations published and apply in your classroom. We also encourage you to develop your original creative ideas, prepare an article, and submit for review.

This particular issue includes a number of interesting classroom innovations in diverse areas.

Peter J. Billington Editor

Content Verification: The ideas presented in the journal articles are not tested nor verified for accuracy, quality, or value. The opinions and claims expressed in the articles are those of the authors and do not represent a position or opinion of the editor or staff of the Business Education Innovation Journal.

No responsibility is assumed by the Editor or Publisher for any injury and/or damage to persons or property as a matter of product liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material in this journal.

Copyright © 2013, by Elm Street Press. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than Elm Street Press must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers for commercial use, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: Editor, BEI Journal, 6660 Delmonico Drive, Suite D 232, Colorado Springs, CO 80919 Attn: Reprints, or via e-mail to editor@beijournal.com

Business Education Innovation Journal

www.beijournal.com

ISSN 1945-0915

Business Education Innovation Journal is an imprint of **ELM STREET** PRESS

Editor

Peter J. Billington Colorado State University - Pueblo, CO

editor@beijournal.com

Editorial Review Board

Dirk Barram George Fox University, Newberg, OR

James H. Browne Professor Emeritus, Colorado State University - Pueblo, CO

> Maryann Billington Action Leadership Group, Colorado Springs, CO

> > Jose Castillo Truman State University, Kirksville, MO

Jui-Kuei Chen Tamkang University-Dansui Campus, Taipei, Taiwan

> Steven I-Shuo Chen Trinity College Dublin, Ireland

Michael J. Fekula The Citadel, Charleston, SC

Lynn A. Fish Canisius College, Buffalo, NY

Kelly Flores City University of Seattle, WA

J. Brad Gilbreath Colorado State University - Pueblo, CO

Uma Gupta State University of New York (SUNY) at Buffalo State

J. Andrew Morris California State University - Channel Islands, CA

Kristie Ogilvie California State University at San Bernardino

Ramanieet Singh Institute of Management and Technology, Chandigarh, India

Jamie Slate Catawba College, Salisbury, NC

Alice Valerio De La Salle University-Dasmarinas, Philippines

Stuart H. Warnock Metropolitan State University of Denver, Denver, CO

Marsha Weber Minnesota State University Moorhead, Moorhead, MN

Susan K. Williams Northern Arizona University, Flagstaff, AZ

Business Manager, Graphics, Design, and Production Drew C. Billington

Submissions - submit@beijournal.com

Subscriptions - subscribe@beijournal.com

Add or remove from our mailing list - mailer@beijournal.com Write in "add" or "remove" in the topic line.

Webmaster - web@beijournal.com

Elm Street Press 6660 Delmonico Drive, Suite D 232, Colorado Springs, CO 80919-1899

Subscriptions

For subscriptions to Business Education Innovation Journal, please email: subscribe@beijournal.com.

Destination	Individual *	Institutional	Back Issues Individual	Back Issues Institutional
United States	\$25 \$50	\$50	\$15	\$30
Countries other than the U.S.	\$50	\$100	\$30	\$60

Subscription Rates:

* Published authors are entitled to a free issue of the Journal in which their article is published.

Business Education Innovation (BEI) Journal © 2010 by Elm Street Press (ISSN 1945-0915) BEI Journal is published two times per year or more, based on submission volume.

Authorization for use of derivative works or to photocopy items for internal, personal or any other use as well as requests for multiple reprints will be priced and granted by the publisher (<u>editor@beijournal.com</u>).

Use of information in the articles and journal are governed by U.S. national copyright laws. No claims for missing issues will be processed after two months following the month of publication of the issue. Send author inquiries to editor@beijournal.com.

Postmaster: Please send address changes to Elm Street Press, 6660 Delmonico Drive, Suite D232, Colorado Springs, CO 80919-1899.

Listings and Indexing

Business Education Innovation Journal is listed in the most recent on-line edition of *Cabell's Directory of Publishing Opportunities in Management.* www.cabells.com

Full text article access of the journal is available from EBSCO and the journal is indexed in EBSCO's databases.

BEI Journal is now fully open access of all issues. The most recent issue will be posted to our website (<u>www.beijournal.com</u>) approximately one month after publication of the paper version.

Extracurricular Activities: The Impact on Business Students' Personal Growth and Employability

Chris Ward, The University of Findlay- Findlay, Ohio, USA Dan Yates, The University of Findlay- Findlay, Ohio, USA

ABSTRACT

In today's job market, employers often have dozens of resumes to consider for each job opening. This is especially true for students seeking entry level positions right after graduation. The authors developed a survey to determine the types of extracurricular activities (including internships) that employers may consider valuable as well as the skills employers find desirable. We also wanted to know if these expectations differed by college major. The purpose of this paper is to focus primarily on extracurricular activities, including internships, and the impact on a student's marketability.

KEYWORDS: Extracurricular activities, internships, undergraduate students

INTRODUCTION

During campus visits with their son or daughter, parents often ask professors about internship opportunities and job placement. Parents and prospective students are also curious about the types of extracurricular activities they can take advantage of while in college which will help them develop, both personally and professionally. Students have numerous opportunities to engage in service projects, study abroad, leadership roles in clubs/organizations, or athletic teams as well as explore other interests they may have. In the 2008 report High-Impact Educational Practices: What they Are, Who Has Access to Them, and Why They Matter, George Kuh outlined a set of educational practices which he believes has impact on student engagement and success. They included first-year seminars and experiences, common intellectual experiences, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity and global learning, service learning and internships. While not all students may have the opportunity to participate in all of these high impact educational practices, communicating to the students the importance of seeking these out and working with both their academic adviser and offices across campus, can increase the likelihood of engaging in multiple practices. These practices, along with extra-curricular activities, deepen the student's learning and help the student to grow. The parents, student, adviser and university community all play an important role in providing, communicating, and promoting these practices and activities.

PRIOR RESEARCH

Many of these high impact practices and activities are well documented in the literature. Internships, for example, are considered to be important for providing connections between coursework and job expectations. O'Neill (2010) believed that internships can serve two purposes. An internship can help a student discover what they don't want to do but they can also "... can help them apply what they are learning in "real world" settings, gain more substantial professional experience, and begin to develop a network of people in fields that interest them" (p. 4). Gavigan (2010) supported this concept regarding internships and added, "It is a time to explore industries, build workplace skills, and gather information from professional in the field" (p. 15). Wheaton College in Massachusetts feels so strongly about providing students with connected summer experience that it "dedicates more than \$400,000 for student internships, research and travel each year" (Gabigan, 2010, p. 4). At York University in Canada, their graduate student internships are intended to achieve three goals: build research capacity, create new knowledge, and promote partnerships (Hynie, Jenson, Johnny, Wedlock, & Phillips, 2011). York University has a unique internship model that combines research with an internship through community collaboration. Students participated in this unique model because they wanted to "bridge the gap between academia and practice", develop long-term relationships with community partners, "broaden the network of organizations interested in frontline work" but also to explore opportunities for future employment with community partner (p. 243). This learning, they noted, was often not attainable through the typical academic curriculum. This combined research and internship model highlights two of the high-impact educational practices referred to earlier.

Although extracurricular activities have often been a hallmark of universities, very little is known regarding the significance these activities have for the student or if employers value participation in these activities. We took a very broad view of extracurricular activities as our definition includes part-time jobs (on and off campus), internships, athletics, study abroad, academic and professional clubs, volunteer activities, multicultural activities, the arts, student government, fraternities and sororities, and honorary organizations. Our definition is supported by Tchibozo (2007) who also considered both employment to sustain academic life (including part-time work), and leisure or social activities in his definition. In a study by Green, Graybeal & Madison (2011), they found that employers anecdotally described extracurricular activities as extremely important but survey data indicated they valued these activities as only "somewhat important" and "neutral". Another survey done by Tchibozo (2007) did find a statistically significant relationship between extra-curricular activities and a student's transition process into the labor force. The nature of the extra-curricular experience such as "...the degree of involvement in and they type, length and context of the extracurricular activity.." (p. 54) were mitigating factors. Martinez (2006) supported this by stating "If you are the ambitious type, seeking leadership positions in these groups can be a great way to put yourself ahead of the competition when you're applying for internships and other jobs" (p. 16). She further suggested students to 'Get Involved' by joining clubs, professional organizations and considering a study abroad. Finally, Tchibozo (2007) concluded by stating "These results emphasize the strategic potential of extra-curricular activity for students and graduates wishing improved transition to the labor market. Of course, extra-curricular activity is not only a matter of career development. It surely has much to do with personal development" (p. 55).

METHODOLOGY AND RESULTS

This pilot study consisted of seven questions asked of recruiters who specifically reviewed resumes of undergraduate students applying for internships or entry level positions. The questions related to the importance that extracurricular activities detailed on a resume had on whether the recruiter decided to interview a student for an internship or entry level position. The recruiters represented a broad range of companies including Fortune 500 firms as well as small and medium sized firms. All of the companies surveyed currently recruit at a small Midwestern university. The survey was distributed at a local Society of Human Resource Management meeting as well as emailed by the Career Services Internship Coordinator to specific individuals. The total number of surveys returned was 28.

As shown in Figure 1, employers rated internship/coop (21 out of 27), part-time jobs related to their major and community service the highest, closely followed by leadership in clubs and athletics. The other category included referrals, willingness to relocate, etc. The researchers found it interesting that none of the recruiters selected a study abroad as an important extracurricular activity. One respondent from the survey commented "I would add that in the industry I'm in, being involved in extracurricular activities is crucial in standing out from the crowd. In my opinion, anyone with half a brain can go to school and get decent grades if all they have to do is study. In the real world, it isn't that easy. We want people who know how to juggle several different tasks at one time and still perform at a high level. That is so important to see in an entry level candidate".

Figure 2 shows the examples the recruiters expected the candidate to discuss or demonstrate during an interview. This shows clear and high expectations by recruiters for students to discuss or demonstrate teamwork, communication skills, interpersonal skills, leadership skills along with being goal oriented. Some of the other skills listed included the ability to fit the culture of the company (very likely related to having knowledge of the company) along with a having some knowledge of the position. While garnering a few less points, social and time management skills were expected by a majority of the recruiters.





Figure 2: Examples expected to be discussed or demonstrated by candidate during interview



When asked the types of activities the recruiter expected the candidate to demonstrate or discuss relating to a specific knowledge or skill, the recruiters clearly preferred projects, leadership roles in a club or project and ongoing volunteer activities (Figure 3). The other category included examples of teamwork and internship/coop work.



Figure 3: Preferred type of activities used by the candidate to demonstrate knowledge or skills

The recruiters hired for multiple majors including accounting, business management, finance, human resource management, marketing and operations/logistics. Our final question of the survey asked the respondents the minimum GPA accepted by their company. While almost 54% of the respondents indicated a minimum GPA of 3.0, close to 41% did not state a minimum GPA.

Barr and McNeilly's (2002) research supported our findings as they reported that leadership and teamwork skills along with the ability to communicate were important to employers and these skills may not be attainable in a classroom setting so recruiters look to extracurricular activities as an indicator of these skills. However, in a previous study done by Pasewark, Strawser and Wilkerson (1989), the authors found "...only modest support for the assertion that previous internship experience increases a student's chances of achieving success in the interviewing process" (p. 37). The authors did note limitations in their study such as the type of employers interviewed and their sample consisted primarily of accounting students. Our survey indicates a potential shift in the importance of business internships to employers.

IMPLICATIONS

Hynie, et al (2011) summed it up nicely by stating this about their student research internships "We have increased students' knowledge, skills, and opportunities for employment; we positively influenced the community's capacity for conducting and applying research; and we expanded the range of ways in which the university can partner with the community, benefitting students, communities, universities, and society as a whole" (p. 247). Beard & Morton (1999) outlined six predictors of internship success. They are academic preparation, the student being proactive and having a positive attitude, quality internship supervisors who mentor and provide constructive feedback, company policies and procedures, and monetary compensation. We clearly support these predictors and believe in creating meaningful relationships with employers in order to provide the best experience for the student and the company.

As we endeavor to engage the students in the classroom, the importance of real world assignments, projects and cases becomes increasingly important. Hersh (2007) revealed in his article 'Terms of Engagement', "The campus culture itself is a teacher in that its collective and cumulative effects, by chance or by design, are what make the

ultimate difference in the kinds of outcomes we most value" (p. 31). These outcomes should mirror the type of tasks expected in the workplace as well as the dispositions, such as leadership and teamwork, which are valued by employers. Ackerman, et al (2003) also suggested that instead of assignments focusing on case studies or analysis of past events, students should be expected to center their research and analysis on future events including the development of "multiple possible outcomes and their required contingencies" and "recognizing and evaluating new possibilities" (p. 54). Many universities have already embraced the concept of experiential and service learning by working with clients in the community on 'real world' problems to bring the types of skills to the classroom. These examples are both inspirational and a challenge for academia to consider as we consider that what happens in (and out) of the classroom helps to define the institution, and consequently, the students.

This pilot provided us a glimpse into the importance of providing students with multiple extracurricular activities which enhance the curriculum as well as a framework to possibly develop a co-curricular transcript that could track, document, and communicate the types of activities employers' value.

REFERENCES

- Ackerman, D.S., Gross, B.L., & Perner, L. (2003). Instructor, Student and Employer Perceptions on Preparing Marketing Students for Changing Business Landscapes. *Journal of Marketing Education*, 25(1), 46-56.
- Alpert, F., Heaney, J., & Kuhn, K. (2009). Internships in marketing: Goals, structures and assessment Student, company and academic perspectives. Australasian Marketing Journal, 17, 36-45.
- Barr, T. F., & McNeilly, K. M. (2002). The Value of Students' Classroom Experiences from the Eyes of the Recruiter: Information, Implications, and Recommendations for Marketing Educators. *Journal of Marketing Education*. 24(2), 168-173.
- Beard, V.K., & Morton, L. (1999). Effects of internship predictors on successful field experience. *Journalism and Mass Communication Educator*, 53(4), 42-53.
- Gavigan, L. (Fall 2010). Connecting the Classroom with Real-World Experiences through Summer Internships. AAC&U Peer Review, 15-19.
- Green, B.P., Graybeal, P., & Madison, R.L. (2011). An Exploratory Study of the Effect of Professional Internships on Students' Perception of the Importance of Employment Traits. *Journal of Education for Business*, 86, 100-110.
- Hersh, R. H. (Summer 2007). Terms of Engagement. AAC&U Peer Review, 30-31.
- Hynie, M, Jenson, K., Johnny, M., Wedlock, J., & Phipps, D. (2011). Student interships bridge research to real world problems. *Education* + *Training*, 53(2/3), 237-248.
- Martinez, A. (March/April 2006). Becoming a Well-Rounded Person. Careers and Colleges, 14-16.
- Muldoon, R. (2009). Recognizing the enhancement of graduate attributes and employability through part-time work while at university. Active Learning in Higher Education, 10(3), 237-252.
- O'Neill, N. (Fall 2010). Internships as a High-Impact Practice: Some Reflections on Quality. AAC&U Peer Review, 4-8.
- Pasewark, W.R., Strawser, J., & Wilkerson, J. Jr. (1989). An Empirical examination of the effect of previous internship on interviewing success. *Journal of Accounting Education*, 7(1), 25-39.
- Tchibozo, G. (2007). Extra-Curricular Activity and the Transition from Higher Education to Work: A Survey of Graduates in the United Kingdom. *Higher Education Quarterly*, 61(1), 37-56.
- The authors wish to acknowledge the Director of Internships and Experiential Learning for helping us with data gathering and as well as the graduate assistant who complied and analyzed the data.
- **Dr. Chris Ward** is an Associate Professor of Business at The University of Findlay. She brings her expertise from two Fortune 500 companies into the classroom teaching marketing, leadership, and research courses. Professor Ward holds the following degrees: University of Sarasota, EdD, Organizational Leadership; The University of Findlay, MBA and Bachelor of Science in Business Administration. She is also a Six Sigma Black Belt, 2008 and 2010 Ohio Partnership for Excellence Examiner, NxLevel Certified Instructor, and Six Disciplines Coach. Her areas of research include student engagement, active learning, undergraduate research, general education, small business marketing, and personal branding.
- **Dr. Yates** is an associate professor of business at The University of Findlay. His teaching interests include entrepreneurship, personal finance, leadership, organization development, and business strategy. Yates holds a PhD degree in Management from Northcentral University. He also has a MBA from University of Dayton, a Master of Organization Development degree from Bowling Green State University, and a BS in Accounting from Tiffin University. He completed the NxLevel Certification Course for Instructor Certification for teaching business plans at the Innovation Center (Ohio University). He has 30 years industrial and governmental experience.

Advancing Best Practices for Asynchronous Online Discussion

David L. Baker, California State University, San Bernardino, CA, USA

ABSTRACT

Asynchronous online discussion (AOD) research is rapidly evolving. This article utilizes Berge's (1995) theoretical framework to examine the instrumental roles instructors play in AOD learning experiences and the patterns of practice. These roles divide into four dimensions: pedagogical, social, managerial, and technical. The article reviews available literature synthesizing essential findings and developing recommendations for each dimension. It aims to advance best practices for AOD, including in online business courses. It does not address online synchronous discussions although many of the suggestions certainly have applicability in those forums also. The article concludes with a summary of AOD best practices, offers research recommendations, and discloses the review's limitations.

Keywords: Online discussions, asynchronous distance learning, computer mediated discourse

INTRODUCTION

Instrumental Roles for AOD

Quality AOD presents a variety of pedagogical, social, managerial, and technical challenges (Berge, 1995). The challenges are characterized as distinct supporting roles that instructors play in AOD (Baker, 2011a). Pedagogically, online instructors function as computer mediated facilitators in planning and organizing AOD. Socially, teachers assume responsibility for designing meaningful exchanges that can productively transpire online. Managerially, instructors enforce boundaries, oversee the discussion flow, and assess performance. Technically, they familiarize students with the supporting software while addressing glitches until the class achieves satisfactory competency. These instrumental roles are connected and overlapping as illustrated in Figure 1.

Figure 1: Theoretical Framework for the Instrumental Roles of AOD Instructors.



Source: Berge (1995).

We begin the discussion of best practices for AOD by considering the current demand for online education. This leads to a snapshot of the availability of online education in Master of Business Administration (MBA) programs.

Next, AOD benefits are reviewed and a series of suggestions for best practices are organized by Berge's (1995) four dimensions. The analysis contributes pertinent literature to support the recommendations and to guide instructors to supplemental resources. It concludes by suggesting a research agenda to improve AOD as a beneficial learning experience and disclosing the review's limitations.

Online Education is Growing

"Online education is established, growing, and here to stay" (Mayadas, Bourne, & Bacsich, 2009, p. 49). More than 6.7 million students took an online course in the United States (U.S.) during fall 2011 (Allen & Seaman, 2013). This equates to a jump of 572,000 students compared to 2010, or a 9.3% increase. Thirty-two percent of students in higher education take one or more classes online. Further, practically all higher education enrollees will take an online class during their collegiate studies. Online education for business courses is firmly anchored also. BestBiz Schools (2013) lists 98 online MBA programs accredited by the Association to Advance Collegiate Schools of Business.

Asynchronous Online Discussion

AOD benefits distance learning. It serves as a learning activity that supports student understanding of concepts (Brookfield & Preskill, 2005). It allows students to share, compare, analyze, criticize, supplement, and apply information from others to issues raised (Clyde & Delohery, 2005). It promotes group construction of knowledge while fostering individual assimilation and retention (De Wever, Van Keer, Schellens, & Valcke, 2010).

AOD complements and reinforces overall course learning experiences. These forums are versatile teaching tools (Caulfield, 2011) and available in most learning management systems (e.g., Blackboard, Desire2Learn, Moodle, etc.). They act as a constructivist learning feature smoothing the way for students to assemble knowledge from shared experiences. This type of collaboration simulates the work of some business teams as well as sharpens skills for customer service. As an active process, learning is dependent on experiences and contexts that are relevant to the learner. Student to student and student to instructor interactions through AOD create personal relevancy (Xin & Feenberg, 2006).

Participating in AOD allows an avenue to practice writing (Caulfield, 2011). It gives time to mull over and finalize a response with fewer spelling and grammar errors (Hull & Saxon, 2009). This enhances the likelihood for deep learning (Caulfield, 2011). Improving written expression while thrashing out course content assists students to refine their writing for contentious business issues. An additional benefit is that the collective knowledge from the exchanges is retained for future access and reflection (Clyde & Delohery, 2005). Learning management systems provide effective recordation, archival, and retrieval features. For example, these systems record grades, archive student assignments and exams, and supply quick retrieval of student deliverables for teacher-student discussions.

AOD supports students to be more self-directed regarding their learning. They can conduct extra research of personal interest to support a point they intend to make in a discussion. Moreover, they can probe the experiences of others while sharing the lessons they have learned. Imparted insights may be formative going forward.

Berge's (1995) framework organizes suggestions to advance best practices in AOD. The next section addresses the pedagogical role. Subsequent sections will discuss social, managerial, and technical roles as well.

PEDAGOGICAL ROLE

Planning and Organizing AOD

Instructors must determine the strategic purpose for including AOD (Baker, 2011b). Usually, the rationale behind AOD links to student-centered efforts to enrich content learning. This approach lends itself to demonstrating evidence of learning (Caulfield, 2011). Next, teachers must choose tactically how each AOD session propels learning outcomes forward (Baker, 2011a). They must plan and organize the macro-level placement of each AOD session (Baker, 2011b). Similarly, instructors must determine the desired volume of student exchanges. Variations by topic may be made easily.

AOD questions should undergird course teaching goals while pressing forward specific learning outcomes. Berge (2008) suggests that questions cover concepts and principles. They should be challenging, content based, and open ended. They should be constructed to appraise understanding even as they kindle critical thinking (Baker, 2011a).

AOD facilitates identifying and questioning assumptions while examining values and behaviors. This is supportive of the critical thinking required for managerial creativity (Fekula, 2011).

Introducing AOD

The pedagogical path to push learning outcomes unfolds through the course syllabus (Habanek, 2005). It should disclose the AOD expectations. It also needs to divulge to what extent the final course grade will be comprised of AOD activity. The AOD purpose drives the value given in computing the course grade. Commonly, instructors allocate a weight of 10-20% depending on the extent and complexity of AOD (Baker, 2011b). The syllabus also should cover how AOD postings will be evaluated and whether a grading rubric will be used in assessing student work (Black, 2005; Gilbert & Dabbagh, 2005). It ought to make clear the consequences for missed postings.

Groups Simplify AOD Interaction and Assessment

AOD raises bothersome online navigational issues (Baker, 2011b). Both the participants and the instructor may crash into a crushing mass of verbiage. The sheer number of entries may overload the discussion (Ross, Kukulska-Hulme, Chappel, & Joyce, 2004). This hampers the learning experiences (Chen & Hung, 2002) and becomes a workload burden as teachers sort out individual student contributions for evaluation (Baker, 2011b).

AOD demands detailed design and direction (Al-Shalchi, 2009; Wolff & Dosdall, 2010). Forming groups simplifies AOD. Relatively small groups of five or six are easier to manage "while injecting sufficient diversity to keep topics interesting and dialogue lively" (Baker, 2011b, p. 403). Students have fewer discussants with which to interact. Teachers may more readily follow comments and give guidance. However, the benefits of using groups to simplify AOD interaction may be undercut by a large class size (See Orellana, 2006, for research pertaining to optimal class size).

Small groups allow students to participate with a smaller audience. This coaxes some students into discussions who otherwise are reluctant to chat about the assigned readings or how their experiences relate to course topics. Further, small groups spotlight the disengaged quickly for instructor intervention.

Setting Boundaries

We already have introduced the need for macro-level planning for each AOD session. Now we turn to the microlevel need for setting discussion boundaries. Common benefits from AOD forums include the freedom to participate at the student's convenience (Caulfield, 2011). Nonetheless, micro-level AOD boundaries prod the course ahead (Baker, 2011b). In other words, while students may jump ahead, every AOD session needs a definite start and ending to move the course along.

With the starting and ending boundaries set, guideposts within AOD sessions support the ebb and flow of a discussion. Comment classifications provide internal AOD session support by explaining expectations. For example, "substantive" and "responsive" comments call for detailed description to establish them as benchmarks (Baker, 2011b). Teachers may define a "substantive comment" through quantitative and qualitative descriptors. The descriptors tell students what the critical elements of a particular grade level comment are. Similarly, a "responsive comment" also may be defined. Quantitative standards for responsive comments are usually lower than the minimums for substantive comments. (Assessing student performance, including the use of a rubric, will be addressed under the managerial role.) The social aspects of the instructor's AOD role are reviewed next.

SOCIAL ROLE

Creating a Comfortable Learning Environment

A huge amount of learning takes place in a social context (Berge, 2002). It involves interaction with others which affects the learning process positively (Abedin, Daneshgur, & D'Ambra, 2010). Students feeling a strong sense of community are more apt to succeed in an asynchronous environment.

Fear of group ridicule often hinders participation (Berge, 1995). Accordingly, teachers must develop studentcentered, friendly strategies to enhance wellbeing to minimize learning distractions. Virtual classes empower socialization and student connections (Al-Shalchi, 2009). Occasionally, these connections grow closer than those in traditional classrooms (Maurino, 2006). Online students who feel socially comfortable, rather than isolated, exhibit higher order skills in analysis and synthesis (Baker, 2010; Engstrom, Santo, & Yost, 2008). Some find online discussion forums as an uncertain and somewhat risky environment (Shiue, Chiu, & Chang, 2010). The instructor's social role in AOD revolves around how to conquer this insecurity while facilitating productive student interactions with the course content (Wang, 2008). This usually involves setting a friendly, professional tone, encouraging online exchanges, asking questions and clarifying responses, and recognizing contributions. Upbeat, enthusiastic communications help set the tone. AOD should aid students in collaborating, solving problems, and resolving disagreements. These are transferable professional skills called upon constantly in business. This group learning encourages community while generating personal wellbeing in a virtual class.

An introductory session in the discussion forum helps build group community (Robinson & Hullinger, 2008). It also helps identify interaction deficiencies early in the course for special training or counseling (Clyde & Delohery, 2005). For example, a digital photo with a self introduction around some common points of interest (e.g., name, status in the educational program, position title, job duties, etc.) could fuel the initial course discussion.

Promoting Cohesiveness

Cohesion within AOD groups supports mutual success (Shieu et al., 2010). Cohesion results from linking individuals to each other and to the group as a whole. Ideally, students bond through the discussions in successive student postings (Young & Bruce, 2011). Individual motivation arises from their need to achieve certain quantitative and qualitative levels of substantive and responsive comments. This creates interdependence which further cultivates cohesion within the entire group as members strive for success (Baker, 2011a). Learning to pilot one's way to success in an interdependent environment helps develop collaboration skills needed for professional careers.

Earlier, under the pedagogical role, we discussed the value of organizing AOD sessions in groups. Now, under the social role, we need to examine other reasons for smaller rather than larger groups. Small groups make it tough for participants to socially loaf. "Social loafing" refers to the tendency to hold back, curtailing one's contribution to group work (Karau & Williams, 1993). Research confirms that social loafing will corrode group cohesion if not addressed (Ridings, Grefen, & Arinze, 2006; Shieu et al., 2010). "Free riding" is frequently associated with social loafing. It involves a student side-stepping an equitable share of group activity while retaining the same benefits of those fully participating (Albanese & Van Fleet, 1985). AOD grading standards can penalize poor participation.

Preserving Presence

The responsibility for keeping AOD chugging along throughout the course belongs to the instructor (Keengwe & Kidd, 2010). Consequently, teachers need to be present visibly and actively in AOD sessions (Caulfield, 2011; Young 2006). Unmonitored exchanges can lose purpose and degenerate into personality attacks, totally missing the point of the discussion. Poor course evaluations will likely follow where this negative trajectory leads to student frustrations (Baker, 2011b).

Attentive instructors can overcome the inertia of lethargic discussions. They can employ techniques to inject vibrancy into exchanges. Keengwe and Kidd (2010) recommend reinforcing contributions through positive acknowledgment. Instructors may add depth to the conversations by beefing-up student commentaries with supplemental statements (Xin & Feenberg, 2006). They can commend a student for an insightful assertion. Alternatively, they can coax the aloof group member into the conversation. By example, students witness action that may assist them in facilitating successful business interactions.

Continuous Communication about Student Assessment

Continuous communication about student assessment is an extension of preserving presence. Nurturing an open, frequently used, two-way communication channel about student assessment requires priority (Keengwe & Kidd, 2010; Perreault, Waldman, & Zhao, 2002; Young, 2006). Instructors need to model effective communication skills to help students polish their own judgments about professional communication needs (Young, 2006). Good student habits formed through following the instructor's lead in AOD assessments can underscore the value of responsiveness in dealing with customers. Quickly replying to e-mails concerning AOD, as well as any other student communications, maintains resilient student relationships.

Appraisal critique must be timely, understandable, comprehensive, evenhanded, and instructive but polite (Eliason & Holmes, 2010). Baker (Baker, 2011b) recommends the use of several communication routes available through most learning management systems (e.g., Blackboard, Desire2Learn, Moodle, etc.): (1) Disseminate general

feedback efficiently through the announcement feature, (2) Record assessments promptly to preempt questions while exemplifying responsiveness, and (3) Use individual e-mails for direct instructor to student communications involving individual kudos, admonishments, or personal tutoring.

Guiding Netiquette

Guiding "netiquette," or online politeness and professionalism, is essential to maintaining a productive environment for AOD (Scheuermann & Taylor, 1997). "Disruptive and impolite behaviors . . . can occur at anytime," (Mintu-Wimsatt, Kernek, & Lozada, 2010, p. 264). Although unsettling to some, differing opinions which focus on analysis of ideas are constructive and spur critical thinking (Levi, 2007). Personal attacks are damaging and can permanently hurt group cohesiveness (Caulfield, 2011).

Unprofessional AOD comments must be checked. It is the instructor's duty to ensure a safe, polite, and constructive learning environment. Research documents better online participation where netiquette is maintained (Schallert et al., 2009). Mintu-Wimsatt et al. (2010) have developed and popularized guidelines for inclusion in syllabi: (1) Steer clear of controlling conversations, offensive words, and personal criticisms, (2) Use error-free spelling and correct grammar, (3) Encourage alternative viewpoints when stating your opinion, (4) Impart insights while remaining open to other perspectives, (5) Remind students of the institution's code of conduct, and (6) Review carefully any communications before posting or sending.

The availability of distance learning supports heterogeneous enrollees. AOD does reduce nonverbal cues. Thus, the instructor's social role surrounding AOD must contribute to the development of cultural competency. "Culture" in learning relates to "different expectations, worldviews, assumptions, emotions, and comfort zones" (Hai-Jew, 2008, p. 96). Cultural competency is a vital business skill. An awareness of cultural competency in AOD is even more critical in preparing students for international and diversity-serving businesses.

The literature recommending culturally relevant pedagogy suggests that AOD should show sensitivity to the diversity of participants (Brown-Jeffy & Cooper, 2011, Hewling, 2005; Young, 2010). Berge (1995) recommends that instructors avoid humor or sarcasm which may slip off-base easily. Next, we delve into the managerial role associated with AOD.

MANAGERIAL ROLE

Enforcing Boundaries

Unmanaged AOD sessions tempt time-consuming trouble (Baker, 2011b). Under the pedagogical role we discussed setting AOD parameters. Here we discuss the importance of enforcing the boundaries established for AOD. When exceptions are granted, others consider taking liberties too. Conscientious assessment of AOD occupies significant instructor time. Introducing exceptions only makes performance evaluation more problematic. The operational norm should be timely postings. This prepares students for the performance realities of private enterprise.

Employing "Icebreakers"

Designing AOD may call for some group level leadership (Baker, 2011b). This likelihood creates an opportunity to simulate some leadership responsibilities in preparation for business management. From a management perspective, it is helpful to assign a rotating "icebreaker" within each group. The icebreaker takes responsibility for initiating discussion. This diplomatically addresses the occasional reticence to post comments early in an AOD session. The icebreaker role can rotate with each AOD session. Clear deadlines for the icebreaker as well as other discussants form specific targets to hit for full credit consideration.

Assessing Performance

Instructors often develop some mechanism for assessment of AOD (Dennick, Wilkinson, & Purcell, 2009). An assessment criterion, or rubric, improves the discussion quality by illustrating to students what is important (Black, 2005; Gilbert & Dabbagh, 2005). It specifies expectations and partitions an assessment into its constituent parts (Solan & Linardopoulos, 2011). It aids in accounting for the disparity in contributions when grading performance (Clyde & Delohery, 2005; Rau, 2009). A rubric needs to translate different performance levels into grades. It should be included in the course syllabus to inform students of AOD standards. Common rubric components for AOD may include quantitative measures and qualitative standards. Typically, grammar, timeliness, netiquette, research, and connection to other postings are included (Baker, 2011b). Solid examples of online discussion rubrics are readily

available (Solan & Linardopoulos, 2011).

Some instructors document AOD assessments promptly (Baker, 2011b). Deferring documentation in the short-run usually leads to consuming far more time in the long-run. Comprehensive assessment documentation as an AOD concludes minimizes subsequent effort. The currency of the appraisal may translate into more useful student feedback. This communicates concern for student success and reinforces the instructor's close connection to the students.

Handling Dysfunction

Top priority must be given to dealing with dawdlers and difficult personalities (Baker, 2011b). Students not performing in AOD sessions require immediate attention. AOD student scores force poor performers to consider their course status. Weak performers should be contacted for possible assistance. Ultimately, after repeated and reasonable help, they may need to be invited to withdraw from the course (Baker, 2011b). Otherwise, unengaged group members can drag down the discourse for everyone.

Instructors must maintain high caliber AOD sessions while minimizing distracting conflicts. Facilitating student success also may necessitate reassigning difficult personalities. "Nip problems in the bud if behavioral issues bog learning down and provide cover for poor work" (Baker, 2011b, p. 409). Groups may be reorganized as warranted to maintain student wellbeing and productivity. Vigilant remedial action preserves a comfortable learning environment.

TECHNICAL ROLE

Establishing Transparency

Technical transparency is an essential goal for designers of AOD sessions (Berge, 1995). Here, the term "technical" relates to the learning management systems (e.g., Moodle or Blackboard) and the associated components that maintain digital platforms for an online course (Berge & Giles, 2006). Transparency refers to the relative ability of a novice user to see how to participate effectively in a particular computer-mediated environment.

In their technical role, teachers must ensure transparency starts before the course does. All technical system requirements needed to interface with the supporting learning system must be identified. This enables a prospective student to determine if he/she has the requisite hardware and software. It minimizes snafus before an online course commences. Many universities address this issue through standardized data on a system support website. Students should be routed to the university's technical standards or campus computer lab prior to initiating AOD sessions. Instructors need constant technical training and access to support staff to ensure that they serve students satisfactorily. Only in this way can they be sufficiently competent with their learning management system to grasp transparency needs from a student perspective (Gibson & Dunning, 2012).

Instructors tackle technical transparency by constructing every element of an AOD from a student-centered standpoint. The "student-centered" perspective requires understanding that students have differing technical competencies, learning styles, and backgrounds (Perreault et al., 2002). Hence, the transparency objective must assure that the least technically sophisticated students can successfully participate in the AOD. Nothing is more frustrating to students than not being able to access and to navigate online discussion forums (Caulfield, 2011). Every technical issue associated with AOD demands an easy to grasp end-user (the student) solution. This approach allows the learner to concentrate on discussion participation rather than spending time and energy struggling with the technology (Berge, 1999, 2008).

Aiding Learning Curve

Teaching does not produce instantaneous results. Similarly, facilitating AOD entails granting students the time to learn the technological aspects of AOD (Berge, 1995; Bonk, Kirkley, Hara, & Dennen, 2001). As experience accumulates, difficulties subside (Perreault et al., 2002). Many instructors include time for course members to undergo the AOD learning curve before qualitative grading of substantive participation. For instance, suppose an instructor designed six AOD forums. The teacher could add a seventh discussion at the beginning of the course. This could be an ungraded, or more leniently graded, introductory session. The session could incorporate the technical elements that will be encountered in future discussions. This strategy permits students the time to explore and become familiar with the different dimensions of the AOD forums. It pulls them through the technical learning curve and supports their AOD success.

Supporting Technology

Instructors need to assume that AOD forums require orientation, detailed instruction, and periodic trouble-shooting. Although technical issues may pose relatively minor problems for business students, AOD forums are not uniformly intuitive. Moreover, some students are less likely to explore capabilities through trial and error. The teacher should always shoulder the responsibility for orienting students to course learning experiences, including AOD. While some acclimation will be derived from the pedagogical decisions and managerial strategies treated earlier, students need process guidance for AOD to achieve optimal performance. An instructor's technical tidbits typically would be covered in the syllabus with problematic areas revisited through posted announcements.

Detailed instructions must be available, as needed, to maximize student success with learning experiences (Wang, 2008). First, technical instructions may be offered through video tutorials from the learning management system supporting the AOD. For example, the Blackboard learning management system offers several video tutorials. It uses screen shots with audios that also accommodate some interaction as the viewer learns. Currently, Blackboard, version 9.1 (Blackboard, 2012), lists five discussion tutorials that could help students with AOD: Creating a Discussion Board Post, Creating a New Discussion Board Thread, Replying to a Discussion Board Thread, Organizing Discussion Board Posts, and Viewing Discussion Board Grades. Second, detailed instructions may be supplied in written format. Learning management systems that include an online discussion feature usually have a "student manual" available. A good practice is to make available both the video tutorials as well as the written instructions to participants. This assists students with disabilities while offering alternative training modes for those with differing learning styles and for others that prefer one training mode over another.

Students need access to technical trouble-shooting assistance for online discussions. Their needs may be triaged and routed accordingly. Some campuses have immediate 24-7 "help desks" where students may call for general assistance. Sometimes specific aid with online discussions may fall outside of the expertise of the duty staff. During campus hours, many campuses have more specialized assistance devoted to whatever particular learning management systems are employed.

Students sometimes direct technical issues to instructors (Liu, Bonk, Magjuka, Lee, & Su, 2005). This happens because they are unaware of the different types of help available or are unfamiliar with what they need. The technical workload may be minimized by embedding the AOD assistance into the course. For example, a "Help" button can be added to the course menu for links to video tutorials and written instructions. Direct in-person or telephone assistance can be more efficiently routed by including contact information with brief descriptions of the aid available.

Preparing for Contingencies

Technology can breakdown. Learning management systems and associated hardware and software may go on the blink. Power outages occur. Internet connections may be disrupted. As a consequence, students may fail to meet AOD time requirements through no fault of their own.

Instructors should be prepared for how they will respond to technical trouble (Caulfield, 2011). A critical task for AOD facilitators involves the preparation of technology plans for contingencies (Berge, 2008). Instructors should anticipate what types of technical issues may arise. Back-up plans can be developed and rolled-out as required. The failsafe solution for many compatibility concerns and technical issues is referral to the university equipped and managed computer labs. But many online students, located across the country or around the world, may not have access to such facilities. They may need to be directed to public libraries or Internet cafés. In the next section, recommendations for future AOD research are offered.

RECOMMENDATIONS FOR FUTURE AOD RESEARCH

Several possible directions for future research emerge from this review. This section discusses the more promising avenues of inquiry. They are organized by the instrumental roles (Berge, 1995) that teachers encounter in AOD.

Pedagogical Research

The strategic purpose for including AOD should be communicated in course design (Caulfield, 2011). Research on why instructors include AOD, how well their intended purposes are fulfilled, and what students take away from this

type of learning experience is needed. Strategically and tactically we need AOD benchmarks to strive for while we seek to improve online course quality.

Care in introducing AOD is important. Students tend to be more accepting (or at least less resistant) to learning experiences meticulously introduced with a clear rationale. Research from the learner's perspective could contribute to finding better ways to introduce AOD.

Best practice for AOD recommends detailed design and organization (Al-Shalchi, 2009; Wolff & Dosdall, 2010). The inclusion of groups as a course design component simplifies AOD interaction and assessment (Baker, 2011b). This avoids the potential chaos from an AOD among the entire class (Ross et al., 2004; Chen & Hung, 2002). But we need to learn about the range of other strategies. How satisfied are instructors and students with the results from alternative strategies? Assuming groups make sense for AOD, what are the most effective ways to form groups and nurture their success? The notion of setting group discussion parameters closely relates to the pedagogical issues regarding design and organization. We need more inquiry into the variety of methods for setting parameters with critical analysis of respective benefits.

Best practice AOD research requires further consideration of optimal class size (Orellana, 2006). An obvious tension exists. On the one hand, administrators seek cost effective access through distance learning by pushing class sizes higher. On the other hand, even well-designed AOD pedagogy breaks down under the weight of heavier enrollments. Too many students diminish the quality of student-teacher interactions as time constraints associated with volume crush instructor effectiveness. Thus, AOD pedagogical research must consider optimal class size.

Earlier, we discussed the need to design AOD from a student centered perspective (Berge, 1999, 2008; Caulfield, 2011; Perreault et al., 2002). To reach the next level of AOD best practice requires a more thorough understanding of that student perspective. We need to match our well intentioned efforts with robust examination of student feedback. What are we trying to accomplish by installing AOD into a particular course? How and why are we trying? But most important, exactly what are the results of our efforts? Based on outcomes, how should redesign proceed?

Social Research

AOD instructors face some of the biggest challenges in their social role while they attempt to create a comfortable learning environment. Our discussion of the social role recommends that AOD discussions demonstrate cultural sensitivity and inclusiveness. Additionally, it summarizes a growing literature to guide netiquette. Operationalizing such recommendations to improve practice calls for both more empirical and theoretical research that includes the perspectives of diverse students. What elements of netiquette assist the diverse participants to feel "comfortable" in AOD? How does this comfort translate into improved student learning outcomes? Research findings should support business programs to plan more deliberately for cultural competence in distance learning courses, including in AOD sessions.

Cohesion within AOD groups supports mutual success (Shieu et al., 2010). Cohesion in AOD is damaged by social loafing (Ridings et al., 2006; Shieu et al., 2010) and free riding (Albanese & Van Fleet, 1985). Other than penalizing social loafing and free riding through student assessment, studies should supply positive techniques to entice engagement.

Previously, recommendations underscored the dual need for instructors to preserve presence in AOD while remaining in continuous communication about student assessment. While advancing best practice for AOD encourages a full court press in both areas, are there other means that students would find useful and what avenues do they prefer? More study of student reactions and preferences pertaining to the instructor's presence in AOD could provide essential feedback to inform future practice.

Managerial Research

Many business instructors find the managerial role the least challenging to master in AOD. Their foundational knowledge of management techniques and human behavior grounds them readily. Nevertheless, the AOD environment poses subtle issues that would benefit from further investigation. For example, comparisons of differing approaches to assessing AOD performance could be useful. How important is a grading rubric to students (Black, 2005; Gilbert & Dabbagh, 2005)? Do online students readily understand the instructor's AOD expectations

and how their work will be assessed from a well-constructed rubric? What metrics leverage students to perform better and develop critical business skills more readily? In promoting optimal AOD performance, how do the insights into personality styles (contributor, collaborator, communicator, and challenger) relate to the different stages of team development (forming, conforming, storming, and performing) (Parker, 1990)? What can research on the sources of team conflict (Topchik, 2007) tell up about resolving AOD group dysfunction evenhandedly? Managerially, the conventional strategies for running AOD forums should encourage constructive scrutiny from all quarters. Instructors need to know how to orchestrate the process better, how to inspire higher level conversations, how to communicate AOD assessments the most effectively, and how to evaluate student training needs for AOD achievement. More research must inform instructors from the student level of analysis about the strategies that will support their learning from AOD the most consistently (Nasser-Abu Alhija & Fresko, 2009).

Technical Research

Under the teacher's technical role, instructors could profit from operational research on emerging trends. Research and training need to educate instructors of concerns and techniques for supporting and interacting with the panoply of mobile devices flooding the market. Likewise, the challenges and opportunities of weaving video into AOD forums should be investigated. It is fair to say that instructors need a continuously updated perspective on the latest and greatest in technology available to support AOD.

We previously discussed granting students the time to learn the technological aspects of AOD (Berge, 1995; Bonk et al., 2001). Instructors share similar needs in working through their own technical learning curve (Kuruvillia, Norton, Chalasani, & Gee, 2012). AOD instructors require technical research that is teacher-centric to help them shorten their personal learning curves. Some of this should focus on the technical resources that universities should provide to support AOD. After all, business instructors, as well as most online instructors, do not have a doctorate in educational technology. Many are struggling to find the ways and means to offer robust AOD that meets or exceeds what is possible in a traditional classroom. But their first priority is the content they teach.

CONCLUSION

Online education has a growing presence among business educational programs. We must recognize that interests in improving AOD, while significant, are but a small subset of a myriad of issues in distance learning. This article uses Berge's (1995) theoretical framework to examine four instrumental roles instructors play in facilitating AOD, including in online business courses. It contributes review and discussion of these connected and overlapping roles as summarized in Table 1. The effort aims to advance best practices for AOD. Where appropriate, it also relates observations linking the benefits of AOD to business students. Finally, the article suggests an ambitious research agenda to advance best practices for AOD.

Table 1: Instrumental Roles of AOD Instructors: Summary of Best Practices

Pedagogical	Social	Managerial	Technical
Planning and organizing	Creating comfort	Enforcing boundaries	Establishing transparency
Introducing AOD	Promoting cohesiveness	Employing icebreakers	Aiding learning curve
Using groups	Preserving presence	Assessing performance	Supporting technology
Setting boundaries	Guiding netiquette	Handling dysfunction	Preparing for contingencies

This review has limitations. Online education evolves extremely quickly. Developing recommendations for best practices for AOD is like hitting a bulls-eye on an instant message streaking across cyberspace. In this dynamic environment, an exemplar of best practices is subject to lightening-like transformation. Despite careful, valid, and reliable effort, subjective bias among AOD instructors and researchers may occasionally slip through. Plus, there also are those interested in AOD best practices who gravitate toward some other theoretical lens than the one used here. Even if some have no quarrel with Berge's (1995) approach, differing AOD attributes may be classified under different dimensions based on the experiences and preferences of instructors. Nevertheless, this project organizes and provides major suggestions for AOD consideration.

AOD, along with distance learning generally, is here to stay. Going forward we need to focus on how to improve the AOD facilitator's instrumental roles continuously. Teachers are encouraged to monitor actively all of their roles in AOD. We need to see that our business managers of tomorrow are receiving the best deliverable AOD today.

References

- Abedin, B., Daneshgur, F., & D'Ambra, J. (2010). Underlying Factors of Sense of Community in Asynchronous Computer Supported Collaborative Learning Environments. *MERLOT Journal of Online Learning and Teaching*, V. 6, No. 3, pp. 585-596.
- Albanese, R, & Van Fleet, D. D. (1985). Rational Behavior in Groups: The Free-riding Tendency. Academy of Management Review, V. 10, No. 2, pp. 244-255.

Allen, I. E., & Seaman, J. (2013). Changing Course: Ten Years of Tracking Online Education in the United States. The Babson Surveying Research Group and Quahog Research Group, LLC. Retrieved January 23, 2013, from

www.onlinelearningsurvey.com/reports/changingcourse.pdf

- Al-Shalchi, O. (2009). The Effectiveness and Development of Online Discussion. *MERLOT Journal of Online Learning and Teaching*, V. 5, No. 1, pp. 104-108.
- Baker, C. (2010). The Impact of Instructor Immediacy and Presence for Online Affective Learning, Cognition, and Motivation. *The Journal of Educators Online*, V. 7, No. 1, pp. 1-30.

Baker, D. L. (2011a). Improving Pedagogy for Online Discussions. Business Education Innovation Journal, V. 3, No. 2, pp. 26-29.

Baker, D. L. (2011b). Designing and Orchestrating Online Discussions. *MERLOT Journal of Online Learning and Teaching*, V. 7, No. 3, pp. 401-411.

Berge, Z. L. (2002). Active, Interactive, and Reflective E-learning. The Quarterly Review of Distance Education, V. 3, No. 2, pp. 181-190.

- Berge, Z. L. (2008). Changing Instructor's Roles in Virtual Worlds. The Quarterly Review of Distance Education, V. 9, No. 4, pp. 407-414.
- Berge, Z. I., & Giles, L. (2006). Implementing and Sustaining E-learning in the Workplace. International Journal of Web-based Learning and Teaching Techniques, V. 3, No. 3, pp. 64-75.

BestBiz Schools (2013). Retrieved January 23, 2013, from http://www.bestbizschools.com/search-aacsb-accredited-schools/onlineMBAs.html

Black, A. (2005). The Use of Asynchronous Discussion: Creating a Text of Talk. *Contemporary Issues in Technology and Teacher Education*, V. 5, No. 1, pp. 5-25.

Blackboard. (2012). On Demand Learning Center. Blackboard Learn, Release 9.1. Retrieved July 5, 2012, from ondemand.blackboard.com/

- Bonk, C. J., Kirkley, J. R., Hara, N., & Dennen, N. (2001). Finding the Instructor in Post-secondary Online Learning: Pedagogical, Social, Managerial, and Technological Locations. In Stephenson, J. (Ed.), *Teaching and learning online: Pedagogies for new technologies* (pp. 76-97). London: Kogan Page.
- Brookfield, S. D., & Preskill, S. (2005). Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms (2nd ed.). San Francisco, CA: Jossey Bass.
- Brown-Jeffy, S., & Cooper, J. E. (2011). Toward a Conceptual Framework of Culturally Relevant Pedagogy: An Overview of the Conceptual and Theoretical Literature. *Teacher Education Quarterly*, V. 38, No. 1, pp. 65-84.
- Caulfield, J. (2011). How to Design and Teach a Hybrid Course. Sterling, VA: Stylus Publishing.
- Chen, D., & Hung. D. (2002). Personalized Knowledge Representations: The Missing Half of Online Discussions. *British Journal of Educational Technology*, V. 33, No. 3, pp. 279-290.

Clyde, W., & Delohery, A. (2005). Using Technology in Teaching. New Haven, CT: Yale University Press.

- Dennick, R., Wilkinson, S., & Purcell, N. (2009). Online E-Assessment: AMEE Guide No. 39. Medical Teacher, V. 31, No. 3, pp. 192-206
- De Wever, B., Van Keer, H., Schellens, T., & Valcke, M. (2010). Role as a Structuring Tool in Online Discussion Groups: The Differential Impact of Different Roles on Social Knowledge Construction. *Computers in Human Behavior*, V. 26, No. 4, pp. 516-523.
- Eliason, S. K., & Holmes, C. L. (2010). Reflective Practice and Inquiry in Professional Development for Online Teaching. MERLOT Journal of Online Learning and Teaching, V. 6, No. 2, pp. 454-465.
- Engstrom, M., Santo, S., & Yost, R. (2008). Knowledge Building in an Online Cohort. *The Quarterly Review of Distance Education*, V. 9. No. 2, pp. 151-167.
- Fekula, M. J. (2011). Managerial Creativity, Critical Thinking, and Emotive Intelligence: Convergence in Course Design. Business Education Innovation Journal, V. 3, No. 2, pp. 92-102.
- Gibson, P. A., & Dunning, P. T. (2012). Creating Quality Online Course Design through a Peer-reviewed Assessment. Journal of Public Affairs Education, V. 18, No. 1, pp. 209-228.
- Gilbert, P. K., & Dabbagh, N. (2005). How to Structure Online Discussion for Meaningful Discourse: A Case Study. British Journal of Educational Technology, V. 36, No. 1, pp. 5-18.
- Habanek, D. V. (2005). An Examination of the Integrity of the Syllabus. College Teaching, V. 53, No. 2, pp. 62-64.
- Hai-Jew, S. (2008). Culturally Targeted Online Course Redesigns for English Composition and Research Writing: A Case Study. MERLOT Journal of Online Learning and Teaching, V. 4, No.1, pp. 94-108.
- Hewling, A. (2005). Culture in the Online Class: Using Message Analysis to Look Beyond Nationally-based Frames of Reference. Journal of Computer-Mediated Communications, V. 11, No. 1, pp. 337-356.
- Hull, D. M., & Saxon, T. F. (2009). Negotiations of Meaning and Co-construction of Knowledge: An Experimental Analysis of Asynchronous Online Instruction. *Computers in Education*, V. 52, No. 3, pp. 624-639.
- Karau, S. J., & Williams, K. D., (1993). Social Loafing: A Meta-analytic Review and Theoretical Integration. Journal of Personality and Social Psychology, V. 65, No. 4, pp. 681-706.
- Keengwe, J., & Kidd, T. T. (2010). Towards Best Practice in Online Learning and Teaching in Higher Education. *MERLOT Journal of Online Learning and Teaching*, V. 6, No. 2, pp. 533-541.
- Kuruvilla, A., Norton, S., Chalasani, S., & Gee, M. (2012). Best Practices in Initiating Online Programs at Public Institutions. *Business Education Innovation Journal*, V. 4, No. 2., pp. 121-127.

Levi, D. (2007). Group Dynamics for Teams (2nd ed.). Los Angeles, CA: Sage.

Liu, X., Bonk, C. J., Magjuka, R. J., Lee, S., & Su, B. (2005). Exploring Four Dimensions of Online Instructor Roles: A Program Level Case Study. *Journal of Asynchronous Learning Networks*, V. 9, No. 4, pp. 29-48.

Maurino, P. (2006). Participation and Online Interaction: F2F vs. Online. Academic Exchange Quarterly, V. 10, No. 4, pp. 257-266.

Mayadas, F. A., Bourne, J., & Bacsich, P. (2009). Online education today. *Journal of Asynchronous Learning Networks*, V. 13, No. 2, pp. 49-56. Mintu-Wimsatt, A., Kernek, C., & Lozada, H. R. (2010). Netiquette: Make it Part of Your Syllabus. *MERLOT Journal of Online Learning and*

Teaching, V. 6, No. 1, pp. 264-267.

Nasser-Abu Alhija, F., & Fresko, B. (2009). Student Evaluation of Instruction: What can be Learned from Students' Written Comments? Studies in Educational Evaluation, V. 35, No. 1, pp. 37-44. Orellana, A. (2006). Class Size and Interaction in Online Courses. *The Quarterly Review of Distance Education*, V. 7, No. 3, pp. 229-248. Parker, G. M. (1990). *Team Players and Teamwork*. San Francisco: Jossey-Bass.

Perreault, H., Waldman, L., Zhao, M. A. J. (2002). Overcoming Barriers to Successful Delivery of Distance-learning Courses. Journal of Education for Business, V. 77, No. 6, pp. 313-318.

Rau, H. E. (2009). Online Discussion and Communities of Practice. Business Education Innovation Journal, V. 1, No. 2, pp. 92-96.

Ridings, C., Gefen, D., & Arinze, B. (2006). Psychological Barriers: Lurker and Poster Motivation Behavior in Online Communities. Communication of the Association for Information Systems, V. 18, No. 1, pp. 329-354.

Robinson, C. C., & Hullinger, H. (2008). New Benchmarks in Higher Education: Student Engagement in Online Learning. *Journal of Education for Business*, V. 84, No. 2, pp. 101-108.

Ross, S. M., Kukulsha-Hulme, A., Chappel, H., & Joyce, B. (2004). Taking E-moderating Skills to the Next Level: Reflecting on the Design of Conferencing Environments. *Journal of Asynchronous Learning Networks*, V. 8, No. 2, pp. 115-138.

Schallert, D., Chiang, Y., Park, Y., Jordan, M., Lee, H. L., Cheng, A., Chu, H., Lee, S., Kim, T., & Song, K. (2009). Being Polite while Fulfilling Different Discourse Functions in Online Discussions. *Computers and Education*, V. 53, No. 3, pp. 713-725.

Scheuermann, L., & Taylor, G. (1997). Netiquette. Internet Research: Electronic Networking Applications and Policy, V. 7, No. 4, pp. 269-273.

Shiue, Y., Chiu, C., & Chang, C. (2010). Exploring and Mitigating Social Loafing in Online Communities. *Computers in Human Behavior*, V. 26, No. 4, pp. 768-777.

Smith, G., & Ferguson, D. (2002). Teaching Over the Web versus in the Classroom: Differences in the Instructor Experience. International Journal of Instructional Media, V. 29, No. 1, pp. 61-67.

Solan, A. M., & Linardopoulos, N. (2011). Development, Implementation, and Evaluation of a Grading Rubric for Online Discussions. *MERLOT Journal of Online Learning and Teaching*, V. 7, No. 4, pp. 1-14.

Topchik, G. S. (2007). The First Time Manager's Guide to Team-building. New York: AMACOM.

- Wang, O. (2008). Student-facilitators' Role in Moderating Online Discussions. British Journal of Educational Technology, V. 39, No. 5, pp. 859-874.
- Wolff, B. G., & Dosdall, M. R. (2010). Weighing the Risks of Excessive Participation in Asynchronous Online Discussions Against the Benefits of Robust Participation. *MERLOT Journal of Online Learning and Teaching*, V. 6, No. 1, pp. 55-61.

Xin, C., & Feenberg, A. (2006). Pedagogy in Cyberspace: The Dynamics of Online Discourse. *Journal of Distance Education*, V. 21, No. 2, pp. 1-25.

Young, E. (2010). Challenges to Conceptualizing and Actualizing Culturally Relevant Pedagogy: How Viable is the Theory in Classroom Practice? *Journal of Teacher Education*, V. 61, No. 3, pp. 248-260.

Young, S. (2006). Student Views of Effective Online Teaching in Higher Education. *The American Journal of Distance Education*, V. 20, No. 2, pp. 65-77.

- Young, S., & Bruce, M. A. (2011). Classroom Community and Student Engagement in Online Courses. MERLOT Journal of Online Learning and Teaching, V. 7, No. 2, pp. 219-230.
- David L. Baker, Ph.D., is a professor of public administration in the College of Business and Public Administration, California State University, San Bernardino, USA.

Student Presentations in Business Courses: Does Technology Enhance Learning?

Edward Nelling, Drexel University, Pennsylvania, USA

ABSTRACT

Students in an upper-level undergraduate finance elective presented similar material using two methods: one was a traditional presentation in class, and the other was recorded online. Both presentations were intended to be interactive, viewed by other students, and then followed by questions and answers. The students were then surveyed to compare their learning experience using the two formats. Compared to the traditional in-class presentations, the students felt that the online presentations: required the same amount of preparation; were associated with more comfort while speaking; yielded better questions and answers afterward; and resulted in a somewhat better learning experience. Instructors may find that online presentations effectively address constraints such as limited class time and student attention.

Keywords: online presentations, technology and learning

INTRODUCTION

Many business courses involve presentations by students. The presentations are often associated with cases or term projects, and are usually done during a regular class period. This traditional method of delivery has its advantages: it helps students develop their composure and effective oral communications skills; it requires them to "think on their feet" and respond spontaneously to questions from others; and it mirrors the situations they will often face in the workplace after graduation. However, the traditional method can present challenges to instructors. Class time is often a scarce resource, and instructors may be reluctant to dedicate one or more class periods to student presentations. If class enrollment is large, instructors may find that other students lose interest or have difficulty remembering key points after several groups of students make presentations. Some students are quite nervous about public speaking, and some international students may feel they are at a disadvantage when giving a presentation in a second language.

One possible solution to addressing some of the drawbacks of live presentations is to use technology. Websites provide the ability to record presentations online at no charge. The websites then host the recording, and the resulting media files can be downloaded. The presentation can then be viewed by other students, either on the host website or on a university server. Other technology can be used to provide a forum for follow-up questions and answers.

Recorded presentations address many of the problems associated with the traditional approach. Although students do not need to prepare a detailed script, they may give more thought to what they will say, if they know it will be recorded for repeated future observation. If students are nervous about speaking, or even if they are confident but make a mistake, they can record a number of versions of their presentation and submit the one they feel is best. Since the presentations can be viewed asynchronously, the use of presentations can supplement class content, instead of substituting for it. Even as a pure substitute, recorded presentations can be effective. Consider the occasion when an instructor cannot be present for class, due to the need to travel to a conference. Instructors typically cancel the class, or find another faculty member or teaching assistant to substitute for them. In these instances, a recorded presentation, accompanied by effective online discussion, may be a better alternative. Similar challenges can arise when classes meet only once a week and need to be cancelled due to a holiday or major university event.

In addition to addressing problems with in-class presentations, recorded presentations are legitimate in their own right. Many companies currently use videoconferencing, webinars, and other means of communication that are enhanced by technology. The globalization of most industries provides another impetus for using online communication. The traditional business presentation in front of a live audience is certainly not obsolete, but alternatives exist and are becoming increasingly popular. The ability to deliver an effective presentation in a virtual setting is a skill that current undergraduates need to develop (Adobe Education, 2011). Consider the following

results of a global executive survey on digital communications skills conducted by the Economist Intelligence Unit (2008):

"When asked to compare different communications technologies, 52% of survey respondents state that online collaboration tools would make the greatest contribution in terms of improving educational quality over the next five years—the top response—while 48% point to the dynamic delivery of content and software that supports individually paced learning. Sophisticated learningmanagement systems and enhanced video and presentation tools are among other innovations that respondents say are likely to have a profound effect on the academic experience."

The remainder of this paper will describe the course setting in which the online presentations were used, and the technology associated with the recording and follow-up questions and answers. I will then present the results of a subsequent survey that asked the students to reflect on the experience and lessons learned.

COURSE SETTING

The online presentations were recorded as a requirement in an upper-level finance elective. My university operates on a ten-week academic term. The course was the second in a two-course sequence focused on equity valuation and the recommendation of stocks for a student-managed investment fund. Students were selected for this course on the basis of their grades and work experience (most students at my university are in a cooperative education program, and have twelve to eighteen months of work experience prior to taking the course). There were fifteen students enrolled in the Winter term of 2012, with an average GPA of approximately 3.6. Thirteen of the students were seniors, and two were juniors. The students were bright and highly motivated. Whether the results of this exercise may apply to a broader student population is an open question.

Students enrolled in the two-course sequence were assigned to industry teams, and each team was required to recommend stocks for inclusion in the portfolio. The other students in the class then voted either "yes" or "no" on the recommendation, and the stock was added to the portfolio only if it received "yes" votes from a majority of the students in the class. As a result, the presentations need to be clear and convincing to be effective. In the first course in the sequence, the industry teams each gave a Powerpoint presentation during the last class of the term. The presentations ran for approximately fifteen minutes in class, and were immediately following by a ten-minute question-and-answer session. There were three teams of four students each, and one team of three students.

The second course in the sequence required two stock recommendations. One was a recorded online presentation during the fifth week of the term, and the other was a traditional live presentation during the tenth week. Prior to this course, none of the students had previous experience with recorded presentations for their university courses. For both formats, all students were required to participate in their team's presentation.

TECHNOLOGY

The presentations were recorded using technology at the website screencastle.com. This website allows a user to record their entire computer screen, accompanied by audio narration. The site then hosts the presentation on its server and provides a link for subsequent viewing. In February 2012, the site claimed that files would be hosted for an indefinite period of time. In addition, users could download the media file (in .flv format) if they wanted to post the presentation elsewhere. Other websites, such as sliderocket.com and screencastomatic.com, offer similar services.

The recording technology was relatively straightforward to use. I required all teams to submit a one-minute sample recording three days before the online presentations were due. The purpose of the sample recording was to ensure a basic familiarity with the process and minimize last-minute technology issues. This proved to be effective, as some teams recorded presentations with poor audio quality, which was presumably due to using the built-in microphone on their computer. Some of these work quite well, but the use of an external USB microphone, even an inexpensive one, is advisable. In any event, test recordings are strongly encouraged.

The follow-up questions and answers were conducted using threaded discussions. (All courses at my university are accompanied by an online course management software platform from Blackboard, and the ability to conduct

threaded discussions is available.) Each student was required to ask one question of one presentation. The limitation of just one question was imposed to prevent enthusiastic students from asking a number of questions of all of the presentations, thereby preventing other students from posing their own unique questions. It also allowed me to "force" (in a gentle way) participation by all students, which is very difficult in a traditional class due to time constraints. The students had one week to view the other groups' presentations, review the associated reports, ask questions, and then vote on the recommendation.

SURVEY OF STUDENT LEARNING EXPERIENCE

Approximately three weeks after completing the online recording and voting on the stock recommendations, I surveyed the students to assess their learning experience. I asked them to compare the recorded presentations with traditional in-class presentations on a number of dimensions. The survey questions and student responses are presented below. Due to the small sample size, I did not conduct formal statistical tests for significance. The results are consistent with the findings of Arend (2009) and Meyer (2003).

Exhibit 1 – Survey of fifteen students involving comparison of online and live presentations. The number in parentheses indicates the percentage of students who chose that response.

1. Compared to the traditional live presentation, the <u>amount of preparation</u> I had to do for the online recommendation was

	(13%) Less	(80%) About the same	(7%) More			
2.	2. Compared to the traditional live presentation, my comfort level while I was speaking while recording was					
	(0%) Less	(40%) About the same	(60%) More			
3.	After completing our recording,	I viewed the online presentation				
	(40%) By myself	(73%) With my group	(0%) I did not view it			
	Note: percentages sum to more	than 100 since students could choose	more than one response.			
4.	Compared to the traditional live other groups' online recommend	e presentation, the <u>amount of insight</u> dations was	t or knowledge I gained while viewing			
	(33%) Less	(27%) About the same	(40%) More			
5.	I viewed other groups' online re	ecommendations				
	(27%) Only once	(13%) More than once in their entirety	(60%) I viewed selected portions more than once			
6.	Compared to the traditional live	presentation, the <u>quality of the quest</u>	tions asked was			
	(7%) Less	(47%) About the same	(40%) More			
	Note: percentages sum to less th	nan 100 since one student did not resp	oond.			

7. Compared to the traditional live presentation, the <u>quality of the responses</u> to questions was

(20%) Less (33%) About the same (47%) More

8. Compared to the traditional live presentation, I feel the <u>overall learning experience</u> from the online recommendation was

(0%) Much worse	(13%) Somewhat	(40%) About the	(40%) Somewhat	(7%) Much better
	worse	same	better	

Survey open-ended discussion questions and brief summary of responses:

1. Do you feel that instructors should use online presentations for stock recommendations in this course in the future? Why or why not? What advice would you give to students as they were preparing an online recommendation?

Most students felt that instructors should use online presentations, but they should keep the live presentations and use both formats. Some felt that the live presentations should be followed by an online question-and-answer session. The main points of advice for students were to familiarize oneself with the technology in advance, prepare for your recording carefully (and perhaps even write a script), and to speak slowly and clearly during the recording.

2. What do you feel are the advantages and disadvantages of using online presentations in general (not just for stock recommendations)?

Advantages included:

- Being able to pause the presentation and replay selected parts while viewing. The viewer could do their own analysis of the company during the presentation, by reading the report, reviewing the DCF model, or seeking additional information online.
- Learning a new technology and having a deliverable that could be shared with prospective employers or others.
- Greater comfort level and more time to respond thoughtfully to questions.
- More flexibility regarding when the presentation is delivered (recorded).

Disadvantages included:

- It could be boring viewing a recorded presentation due to the lack of a visible human element.
- Students could shirk their responsibility by viewing little or none of the presentations and posting a question based on the report.
- Being able to think on one's feet while responding to questions is a valuable skill, and the asynchronous approach (using threaded discussions) to questions and answers does not help develop this.
- The recording process was more relaxed than a live presentation, which might result in a lower energy level by the speaker.
- Online presentations do not permit the speaker to use gestures and body language to help convey their point.

INSTRUCTOR'S PERSPECTIVE

As the instructor, I was very pleased with the results from the online presentations. The students did a professional job. The resulting presentation is something they can share with prospective employers. Our college can use the presentations to engage alumni and prospective students. The students were a little slow at first to post the follow-up questions and answers, but did an excellent job after receiving a friendly reminder.

I would use the technology again. I recommend that instructors consider it carefully for advanced courses with smaller enrollments. I would prefer to have the students complete at least one other group exercise in the course, prior to learning the technology and nuances of online presentations. Adopting it in a large course, especially a required one, may not be effective. I don't think that any dedicated technical support is required for the students; although some of my students experienced a minor challenge or two in completing the recording, none came to me or any of our computer support personnel with questions.

This was my first experience with online presentations by students. Admittedly, the content and structure of the exercise (a narrated presentation by a team of students presenting "static" content on the screen) was identical to what has been done in class. Future applications might encourage students to develop more "dynamic" presentations as the nature of digital communications skills evolves.

CONCLUSIONS

This paper has presented the results of an exercise involving the online recording and posting of student presentations in an upper-level undergraduate finance elective. Students were required to give presentations in two formats. The first was a traditional presentation in class, followed immediately by a question-and-answer session with their classmates. The second involved recording a presentation online, which was then viewed by other students; the associated question-and-answer session was conducted using an online threaded discussion.

Students were surveyed to compare their experience with the two formats. They felt that the online presentations required the same amount of preparation as the traditional format. Students were more comfortable speaking during the online presentation, and believed that the questions and answers after the presentation were better in the online setting. They also felt that the aggregate learning experience in the online presentation was somewhat better than in the traditional format.

Several caveats are in order. The sample size was a single class of fifteen students, organized into four groups of three to four students each. These students were bright and highly motivated. Implementing this approach across a broader student population or in larger classes may present additional challenges.

Despite the challenges and limitations, instructors should consider using online presentations in their courses. Recent advances in technology, demographic trends, and changes in the global business environment have increased the need for students to use a variety of media to communicate and interact effectively. A well developed set of digital communications skills will help transform the business students of today into the business leaders of the future.

REFERENCES

Adobe Education White Paper, 2011. "The Silent Transformation: Evolution and Impact of Digital Communication Skills Development in Post-Secondary Education," (http://wwwimages.adobe.com/www.adobe.com/content/dam/Adobe/en/education/pdfs/higher-education-silenttransformation-white-paper-ue-r4.pdf).

Arend, B., 2009. "Encouraging Critical Thinking in Online Threaded Discussions," The Journal of Educators Online, Volume 6, Number 1, pp. 1-23.

- Economist Intelligence Unit, 2008. The Future of Higher Education: How Technology Will Shape Learning. <u>http://www.nmc.org/pdf/Future-of-Higher-Ed-(NMC).pdf</u>.
- Meyer, K., 2003. "Face-To-Face Versus Threaded Discussions: The Role Of Time And Higher-Order Thinking," Journal of Asynchronous Learning Networks, Volume 7, Issue, pp. 55-65.

Edward Nelling, Ph.D., is a professor of finance in the LeBow College of Business at Drexel University, Philadelphia, PA.

ADR¹ Classroom Negotiation Case: The S & J Retail Acquisition

©Peter Geoffrey Bowen, Ph. D. 2012-2013 Daniels College of Business. The University of Denver

KEY WORDS: Conflict, disputes, ADR, management, acquisitions, negotiation, interaction, simulation, ZOPA, BATNA, hostile, cases, agreement, employees, role-playing, bicycles, students.

ABSTRACT

This is a case which allows students to simulate merger negotiations between two small retail businesses. It was created for a course taught to undergraduates and graduates at Daniels College of Business on alternative dispute resolution $(ADR)^2$. The facts are fictitious, but derive from the study of various existing small businesses. The case follows a brief critique of published cases and their (at times) classroom limitations.

THE NEGOTIATION SIMULATION STRATEGY

An enhancement to teaching business to undergraduate and graduate students is to add cases to the curriculum. Students are then required to fashion solutions based on a set of facts which (hopefully) follow the concepts being taught in a course. Cases generally derive from academic research of companies where there have been operational or other problems, therefore creating issues for students to analyze and solve.

There are, however, limitations on the effectiveness of standard published cases for classroom use. First, some cases have more extraneous content than necessary, which reduces their illustrative value for the concepts of a course. Secondly, buy-in and therefore role-playing by students usually doesn't exist: students are essentially outsiders to the company studied, and though they may be fictitious "consultants" they have only a third party view of the selected facts. Finally there is the age-old question of whether a professor should allow (or expect) student teams to do additional research (i. e., what did the company actually do?) or live strictly within the facts presented in the case. With classroom competitions, additional research can reduce a level playing field among competitors. So though cases certainly provide a good venue for interactive student involvement, under certain classroom circumstances they are not perfect. This became problematic when I started teaching business dispute resolution (ADR). Standard cases simply didn't fit the way I wanted to teach ADR.

There are three basic methodologies which are used in the alternative dispute resolution (ADR) process: negotiation, mediation and arbitration. (A distant fourth, of course, is the use of courts of law.) Though negotiation is generally the first methodology to resolve disputes, especially intra-company, negotiation is a common form of business operation, whether it be negotiating a product cost with a supplier or negotiating a merger. And negotiation is a common human activity that is done for almost every need—such as negotiating to purchase a car, a raise, or simply negotiating on who buys the next round of beers. Based on my frustration with published cases, I took the next step and started creating case *simulations* where the students would actually role play and therefore become both intellectually and emotionally involved in negotiated solutions. And after some experimentation I found it easier for students to learn negotiation in a simulation which does <u>not</u> derive from a dispute; the result is this case which is the second case published from the course³.

What is a simulation and how does it differ from the use of a regular published case? A simulation generally derives from a fictitious set of facts, written to exactly fit certain subjects or concepts taught in a course. It is structured so students play assigned (stage) roles as though they were the actual participants in the case. Result? An interactive delivery of education, which, because the students are actually involved, gives them a better understanding of negotiation, than a third party relationship with the facts in a case (or for that matter listening to a lecture).

 $^{^{1}}$ ADR = Alternative Dispute Resolution

² A description of the course was published in the BEI Journal, Volume 4, Number 2, December 2012, at pages 32-34.

³ The first is called the "B & W Ventures Case" and was published in 2012 as Chapter 8 in a book entitled "Contemporary Challenges in Corporate Governance" (Oxford, UK: Rossi-Smith Academic Publishing)

The obvious first question is where does one get realistic and therefore usable facts for a simulation? The only answer which I can offer is I write a "short story" using my knowledge of companies I have researched over the years, or companies I have been associated with, either as an executive, ADR judge, or consultant to. So I weave the facts and issues of real companies into the simulations I write, which makes the issues believable for students, yet allows me to exactly fit the interactive character of the simulations into the concept I am teaching.

Another issue with effective classroom simulations is creating student teams. There are two parts to this. The first is assigning the "right" student to each of the roles. Though by the time we start simulations, I generally know most students personalities and capabilities, I find the assignment process requires considerable care. For example, assigning a student who is very quiet or an introvert (or who has English language problems) to the role of chief negotiator generally won't work (though it did in one instance).

A third issue is when a professor assigns student roles for a simulation, different class sizes can be a serious headache: my simulations require a numerically specified group of role players. What, therefore, does one do with a large class that won't divide into equal teams or a class with too few students for the proposed simulation, or a small class with an odd number of students? Obviously, the effectiveness of a simulation can be fouled by randomly adding or subtracting students. There is no perfect solution to this problem (goes with the territory), but for the simulations I write, I create additional peripheral roles which can be used/not used for irregular numbers of students. And if I have a particularly large class, I simply break students into teams and they do the simulations in parallel in separate parts of the classroom (or conference room I reserve); I then add or subtract the peripheral roles as necessary. For a very small class, I have been able to adjust or write a simulation for that sized class, which was the original purpose for this case: I had too few students one quarter for the negotiation part of the B & W case, so this case replaced it. The students liked it, the learning result was good, and I now use it in addition to the B & W case, though I have somewhat expanded the facts and players in this case since its first iteration.

THE CASE

[Student teams: minimum of six, maximum of eight]

The case in this simulation is a small company merger/acquisition case. Though one normally thinks mergers and acquisitions (M & A) relate to large public companies, there is continuous M & A activity among small private or public companies⁴. The economic advantages of small company alliances, today, are important and may be crucial to survival in periods of economic (or even social) stress. In addition, because of a notable fascination of many of my students about small business (a Colorado iteration?), I have found that to use small companies in simulations excites students.

A characteristic of negotiation between or among small enterprises is it may be less structured than would be the case for larger companies. Executives or owners of competing companies may know each other and may even be social friends on weekends, but gregarious competitors during the work-week. And they may know a lot about the other company. Negotiations may thus start in a friendly manner—as at a golf club—but when financial expectations enter the negotiations they can become as hostile as those of large public companies.

That's an important lesson: when M & R negotiations between small or family companies become hostile, that will generally disrupt fruitful negotiations. Examples of hostile M & A negotiations in metropolitan Denver include the merger of two natural foods retailers. Both were small, essentially regional public companies and though the merger started with personal contact and friendly negotiation between the chief executive of one company and one of the founders of the other, negotiations later became very hostile. (The merger did happen, however⁵.) In another case, a lawsuit was filed by the company being acquired against the acquirer, requesting a temporary restraining order and a permanent cease and desist order. Though that lawsuit never went forward, it was very effective to end the negotiations⁶. So it is important for both sides to strategize ZOPA and BATNA⁷ before negotiations start. And though it is possible to add a mediator under some circumstances, there may be sufficient emotion among family or small companies, which makes mediating M & A negotiations particularly hard for a mediator.

⁴ often commented on by the Denver Business Journal

⁵ Result: Combined company is now Whole Foods Market

⁶ Company names redacted at request of one of the CEOs.

⁷ In ADR lingo: ZOPA= zone of possible agreement and BATNA= best alternative to a negotiated agreement.

This simulation/case was designed to allow teams of students to negotiate an acquisition or merger (or possibly a reverse acquisition) of two small but relatively successful retail companies. Each of the companies in this simulation are fictitious, but if one looks at tenants inhabiting proximate non-mall shopping centers, one often sees businesses which are very similar to the stores in this simulation, hopefully competing vigorously with each other.

A particular characteristic of this case follows the fact that lawyers representing small companies or their executives often give business advice as well as legal advice⁸. Though that makes business consultants croak, the lawyers in this case are encouraged to provide both kinds of advice to enhance their role playing in the simulation.

Principle Negotiators⁹:

Henry J. Mulligan, CEO and primary owner of S & J Velo Enterprises, LLC,

Peter H. Dufford, CEO and primary owner of B & W Bicycle Ventures, LLC [Note: other owners of S & J are a small group of friends of Mr. Mulligan. B & W is a family company which includes Dufford's children who work in the B & W stores.]¹⁰

Aids to Mulligan and Dufford:

Bob Langley, CFO for S & J

Jim Mitchell, CFO for B & W.

[It should be noted that these two CFOs know each other very well as they have competed at various bicycle races for 10 years, and both have been a little loose with each other bragging about the "great" financials of their respective companies.]

Investor for S & J:

Joan Connolly, wealthy and financially prudent world class bicycle racer.

[S & J has brought this new investor-partner to the negotiations since it is primarily her money that will be used for the acquisition; she therefore may have forceful financial input on the negotiations.]¹¹

Dufford's Eldest Son:

Jack Dufford, who expects to take over the business when his father retires and is therefore VERY hostile to the proposed merger/acquisition [see also footnote 10]

Lawyers:

James Kerr, Esq., General Counsel for S & J

George Warren, Esq., General Counsel for B & W

[Each side has brought along their lawyers to advise them on ZOPA, BATNA, the legal structure of the merger and to write up the agreement if one is reached. It should be noted, however, that these two lawyers have been cross-wise in more than one courtroom and they are not friendly to each other.]

Facts:

(1) S & J Velo Enterprises, LLC is the owner and operator of 7 retail bicycle shops in metropolitan Denver. They primarily sell Trey bicycles and have an exclusive agreement with the factory that they will be the only dealer in metropolitan Denver as long as they sell a minimum of 2,000 Trey bicycles a year. The retail price of Trey bicycles ranges from \$ 1,500 to upwards of \$7,000, with most bicycles selling in the range of \$2,000 which is their average unit sale. S & J has met the 2,000 requirement each year but barely. And they have had to advertise significantly to

⁸ Interview with R. Gregory Stutz, Esq., c. 2005

⁹All characters are obviously ficticious

¹⁰ This information allows me to add 1-2 players if need be.

¹¹ Connolly and Jack Dufford are "swing" characters: when smaller teams are needed because of class size, either or both may be deleted without diminishing the educational effectiveness of the negotiations.

sell the more expensive bikes, which has hurt their bottom line. Each of their stores has a bicycle service facility which on the average brings in \$100,000 gross per store per year. There has been considerable conflict among the managers of the stores and central management because each store has been given a minimum retail bike and parts sales requirement which the managers think is unreasonable. But S & J has been in business for many years, so its repeat customer base is quite good.

(2) B & W Bicycle Ventures, LLC is a smaller bicycle vendor with 4 stores, but the stores are particularly well located, and therefore have been more profitable on a per store basis than the S & J. B & W also has a manufacturer's exclusive on a more moderately priced brand of bicycle, called the Novum. Those bicycles retail for between \$350 and \$3,000, with the preponderance of models at about \$800, their average unit sale. They also have a minimum to keep the exclusive which is sale of 2500 units per year which they meet easily. In 2011 they sold 3,100 bikes. B & W also has service facilities in each store which has been very profitable, partly because the Novum bicycles require more service than the Trey brand, and because Novum offers an attractive warrantee on its bicycles so the service gross per store runs around \$210,000.

Operating, fixed and inventory costs have historically run about 50% of gross for each company.

Both stores are locally owned and have virulently competed against each other for nearly 30 years. But it is also evident that each company has limited the ability of the other to grow, because they divide nearly all the bicycle business in metropolitan Denver.

The Negotiations:

S & J has decided that the only way it can grow is to *merge with or acquire* B & W. So it has opened negotiations with Dufford. Dufford, however, has little interest in merging or being acquired, as his business is quite profitable and he enjoys being in the retail bicycle business. And he knows that if S & J takes over his business he's out. So at the start of negotiations, based on his CFO's analysis of NOI, Dufford has put a <u>very high price</u> for his business and his initial attitude is "take it or leave it".

The first activity is for the CFO aids to generate the related and confidential financial information for each business, based on the information given above, to allow each CEO to determine a preliminary negotiating posture. (So bring your calculators to class.) And a determination of BATNA and ZOPA by each side is important. [This analysis is done by the separating company teams in opposite parts of the classroom.]

Then the negotiations begin: Following are <u>some</u> of the criteria for negotiations and an agreement, if one can be reached. (1) how much money S & J will have to invest in the acquisition; (2) how the acquisition will to be financed and if so who will personally sign. Among the alternatives: J & S may consider using Joan Connolly, the outside investor, to finance its proposed acquisition of B & W, or it may consider asking Dufford to do an owner carry-back. [And note--there may be many other creative financial alternatives.] (3) Whether the respective manufacturers will allow a single (merged) company to have an exclusive on both bike brands (which you will have to "learn"); (4) the resulting mixture of bikes at each store; (5) whether the repair facilities in each store overlap. (6) How the stores will be managed if they are joined; (7) the management position of Dufford (and Jack Dufford) if the acquisition is agreed to; (8) the security (or lack of it) for store managers and employees. Dufford is very rigid that none of his staff (particularly his children) will be supplanted if the acquisition occurs. *But admits he has a few more employees than he really needs*. (9) Whether all stores will stay open or whether some will close after the acquisition. (10) Other relevant, innovative facts or solutions, generated by students which will help—or even hinder the negotiations, as long as they are reasonable. So within limits, facts can be added by the teams.

Of course, there is another possible twist to the negotiation: that B & W will try a reverse friendly or hostile acquisition to acquire J & S. Dufford, because of his profitable business, has <u>significant</u> extra cash on hand. Dufford is also aware that there are several private investors in J & S who would be happy to be bought out.

Written Agreement: At the end of negotiations lawyers for the parties will jointly write up a <u>brief</u> agreement (or statement that no agreement can be reached) which describes what has been/not been agreed to and answers all the questions and financial issues noted above. They will be graded on creativity, clarity and relevance.

Time for the negotiation simulation: 1:40 (of a 2 hour class) after which a de-brief by teams and the graders¹² will occur.

FINANCIALS, S & J CASE

[Note: this is for the published version only. Student teams must independently generate their financials]

S & J:

2,000 bicycles @ \$2,000 =	\$4,000,	,000
Maintenance & repair shop =	700	<u>,000</u>
Gross income	\$4,700,	,000
50% overhead/inventory costs	<u>(2,350</u>	<u>(000)</u>
	NOI	\$2,350,000 divided by 7 = \$335,000/store

B & W:

3100 bicycles (2011) @ \$800 =	\$2,480,000
Maintenance & repair shop =	840,000
Gross income	\$3,320,000
50% overhead/inventory costs	(1,660,000)
-	NOI \$1,660,000 divided by 4 = \$415,000/store

¹² I use MBA students to both coach and individually grade student team members. They generally offer excellent remarks during the de-brief.

Relating Course Content Value-Themes to Attitudinal Proxies: A Study of MBA Alumni

Stuart Van Auken, Florida Gulf Coast University, Florida, USA Earl Chrysler, California State University, Chico, USA (Emeritus) Ludmilla Gricenko Wells, Florida Gulf Coast University, Florida, USA

ABSTRACT

This study presents an exemplar framework for assessing course content value in MBA program reviews. It utilizes MBA alumni to reveal perceptions of course content value and three proxies for MBA program attitude (expectations, ROI, and recommendations). By relating course content value-themes via a principal components analysis to attitudinal proxies, the course content drivers of program attitude can be revealed. Not only is MBA program satisfaction illuminated, but the key essence of a MBA program's value may be revealed. This framework may have utility for other MBA administrators and faculty pursuing program reviews.

Keywords: MBA relevancy, course value, alumni, attitudinal proxies and program satisfaction.

INTRODUCTION

The issue of MBA program relevancy has been met with stinging criticism regarding the capabilities that MBA programs claim to represent (Eberhardt, et al., 1997; Fisher, 2007; GMAC, 2006; Mintzberg, 2004; Porter & McKibbin, 1998; Rynes & Trank, 1999). Numerous studies have also addressed improvements in relevancy (e.g., see Bennis & O'Toole, 2005; Dierdorff & Rubin, 2006; Pfeffer & Fong, 2002; Rubin & Dierdorff, 2009). In these types of studies, extensive weight has been given to the preferences of both the primary and ultimate consumer of the MBA diploma (i.e., students and recruiters, as well as practicing managers). It has also been claimed that students are not always right (Rynes, et al., 2003) and that a reliance on student preferences may make a program more attractive, yet less relevant when actual manager requests are considered (Rubin & Dierdorff, 2009). However, the latter may report on what is fashionable and what is in vogue and practicing managers may be exposed to samples of MBAs that are distanced from their respective programs. As a result, deficiencies may or may not be attributable to a program and what is observed may be idiosyncratic to the individual regardless of MBA program distance.

Within the debate over stakeholders, one group that has been underrepresented is MBA alumni, especially those not distanced by time from their degree (e.g., those two to five years beyond graduation). They evidence great utility because they are in an apt position to reflect on relevancy within an actual work environment. Further, their reflections are most likely to be based on a program's current faculty composition and structure. To illustrate, this key stakeholder group has provided perspectives from survey data that reveal the skills, knowledge, and teaching methods that have explained a MBA program's return on investment (ROI) (Van Auken, et al., 2005) and studies of MBA survey data have also provided insights into skill versus knowledge gaps, thus helping to resolve the dilemma between the two (Van Auken, et al., 2010). Such alumni monitoring allows faculty and administrators to consider the views of both their product and customer in the contemplation of MBA program enhancements. Overall, there is a myriad of perceptual approaches available to assess MBA alumni, yet there is one area that appears to be overlooked in programmatic reviews and this encompasses the perception of MBAs of core-course content value.

At the heart of course content value is the subject of relevancy. If a course is viewed as having lesser content value it can be subject to learning enhancements and/or new modes of presentation or course framing. Course content value can also be related to proxies of MBA program attitude, thus revealing the type of course content that drives or influences MBA program attitude. This study thus seeks to illustrate the utility of course content value-assessments in programmatic reviews, especially their relationships to proxies for MBA program attitude.

More specifically, this study will report on a survey of 95 MBA alumni who are at least two-to five-years removed from the receipt of their MBA degree. It will describe the sample in more detail, report on the survey instrument utilized and analyze course content value in two ways: mean score analysis and through assessments of the

relationship between course content value and MBA program expectations, ROI, and the provision of a program recommendation. It will conclude by providing the implications of study results, limitations of the study, and final observations. While the study results will be unique to a particular program, the study framework serves as an exemplar for others to follow and serves to reveal the utility of the assessed relationships.

SAMPLE CHARACTERISTICS

The program assessed in this study is AACSB-I accredited (see AACSB, 2012 for eligibility requirements) and manifests admission criteria that favor managerial experience. The program is located within a large urban area, thus fostering a significant part-time student population.

Alumni who were two- to five-years beyond graduation were viewed as the target of choice due to programmatic recall. Of the alumni contacted via a mail survey, 95 provided viable responses. Of these, the average number of years of professional work experience upon entering the program equaled 8.4. Further, 79.0% of the respondents had all or some managerial responsibilities during the first year of receiving their MBA degree. Finally, 69.6% of the respondents were self-classified as being male and 66.0% were revealed as having been part-time students. Overall, the sample reflects a realistic base that offers the opportunity to assess core-course content value.

SURVEY INSTRUMENT

The survey assessed nine MBA core courses as to course content value. A six-point scale was utilized where a code of one denoted Very Weak Content-Value and a code of six portrayed Very Strong Course Content-Value. Assessments of MBA program attitude were attained through the use of three proxies. The first variable asked for one's extent of agreement to the following statement: "My MBA program fulfilled my expectations." The second variable asked for a respondent's extent of agreement to this statement: "When I compare my total program expenses to the quality of my MBA education, I rate the value of my return on investment as high." The final attitudinal surrogate asked for the extent of agreement to the following: "I am very inclined to recommend the

MBA to a close friend." These proxy variables were measured using seven-point Likert scales with a code of one indicating Very Strongly Disagree and a code of seven Very Strongly Agree. All of these proxies were derived from a prior study on undergraduate program satisfaction (Newsline, 1998) and may serve as surrogates for MBA program attitude.

STUDY RESULTS

Individual Course Content Value

The nine courses assessed as to course content value and their mean scores plus standard deviations appear in Table 1.

Courses	Mean	Standard
	Scores*	Deviations
Statistics for Decision Making	3.92	1.12
Operations Management	4.07	1.27
Financial Reporting and Analysis	4.51	1.16
Management and Organizational	4.34	1.09
Science		
Economics of the Firm	4.03	1.02
Financial Management	4.51	1.08
Marketing Management	4.10	1.30
Computer Information Systems	3.75	1.20
Environments of Business	4.18	1.24

Table 1: Mean Scores and Standard Deviations of MBA Core Course as to Course Content-Value

*Course content value was assessed on a six-point scale where 1 equaled Very Weak Content-Value and 6 equaled Very Strong Content-Value.

As can be seen, the course content mean scores ranged from 3.75 for Computer Information Systems to 4.51 for both Financial Reporting and Analysis and Financial Management. While the course content value-scores truncate on the positive side of the six-point scale and room for content value-enhancement is in evidence, the data may be explained by part-time versus full-time student differences, as the former were likely to be fully employed while pursuing the degree and thus may observe more course content utility. The results of this assessment revealed no statistically significant differences in independent sample t tests. The only variable to approach significances (P < .06) was Statistics for Decision Making with the part-time student exhibiting the higher mean evolution (4.11).

Overall, the results suggest little discrimination between courses. In turn, this may suggest a lack of a targeted focus or programmatic theme that could result in differential values. However, homogeneous response patterns suggest that courses may be valued as to content for different reasons. That is, a course could be valued positively due to its real world relevancy or applicability and/or due to its ability to foster analytical or critical thinking, etc. which would be devoid of immediate relevant impact. Therefore, to reveal insights into the relative value of course content value, additional probing is necessary.

Additional Insights

To achieve additional insights, there is a possibility that course content value-themes exist that evidence differential value. In other words, there may be course content themes that explain attitude toward the MBA program. These themes may be assessed through a principal components analysis which produces factor-based course themes that are independent of other themes. In turn, the resulting themes may be related to proxies of MBA program attitude. If there is a pattern of statistically significant relationships, a thematic driver of MBA program satisfaction is in evidence. Such a pattern in turn requires an explanation. For example, does a theme relate to one's employment? Does a theme reflect everyday use of the content, etc.? Indeed, course content value themes and their relationship to attitudinal proxies have never been investigated. This study will thus proceed with such an analysis.

Relating Courses to Attitudinal Proxies

Since the nine core courses identified in Table 1 have themes, a principal components analysis with varimax rotation was run on course content value data. The results produced three factors that explained 60.1% the variance in the data. These results are presented in Table 2.

		Factors	
Courses	1	2	3
Financial Management	.88		
Financial Reporting	.79		
and Analysis			
Economics of the Firm	.73		
Marketing		.79	
Management			
Management and		.75	
Organization Science			
Environments of		.55	
Business			
Statistics for Decision			.80
Making			
Operations			.75
Management			
Cronbach Alpha	.84	.62	.55
Values			

Table 2: Results of a Principal Components Analysis with Varimax-Rotation on MBA Core Course Content Value

By reviewing the table, it can be seen that the first factor personifies Finance as it is the "glue" that is holding the indicated courses in a factor pattern. The factor loadings in turn show the correlations between the three courses' content value and this underlying factor. Factor two in turn evidences a managerial theme of Management and Marketing, while factor three personifies a quantitative theme consisting of Statistics and Operations Management. All of the factors possess strong face validity and the Cronbach alpha value for factor one easily exceeds Nunnally's

(1978) .7 criterion. The second factor produced an alpha which exceeds .6 while the third factor produced an alpha of .55. Both are thus acceptable for exploratory research of this nature (Robinson, et al., 1991). At this juncture, the factor scores on each of the three delineated factors were correlated with each of the three attitudinal proxies.¹³ The results of this analysis are presented in Table 3.

		Course Content Area Factors	
	1	2	3
Attitudinal Proxies	Finance	Management and Marketing	Statistics and Operations Management
My MBA program fulfilled my expectations	.11	.24**	.16
When I compare my total program expenses to the quality of my MBA education, I rate the value of my return on investment as high	.05	.16*	.08
I am very inclined to recommend the MBA to a close friend	.17*	.17*	.10

 TABLE 3: Varimax-Rotated Principal Components Analysis Results Correlated with Attitudinal Proxies

*P < .05, one-tail

** P < .01, one-tail

As can be seen, the results of a one-tail test of correlational significance, have revealed a strong relationship between the managerial factor and the meeting of MBA program expectations (P < .01) as well as program ROI (p < .05). Finally, two of the factors (financial as well as managerial themes) correlated (P < .05) with one's propensity to recommend the MBA program. Overall, none of the course content value of factor three (the quantitative theme) was significantly correlated with any of the three attitudinal proxies. Basically, the statistically significant correlations that were identified suggest that course content value can influence MBA program attitude.

Study Implications

The study has revealed the key theme that drives the extent of MBA expectation fulfillment: Management and Marketing course content. This result may readily reflect the extent of business experience that members of this MBA program brought with them upon MBA program entry (8.4 years) and the fact that 79.0% of the respondents had a position with managerial responsibilities during the first year following their MBA graduation. In essence, Management and Marketing course content areas appear to play into the experience of MBA graduates; thus adding to their relevancy and perception of ROI. Additionally, these course content areas may be used by alumni with greater frequency and thus are valued more when related to attitudinal proxies. Moreover, the word-of-mouth recommendations generated by the MBA program relate to the course content-value in not only Management and Marketing courses, but also Finance.

The weakest area in terms of course content value-relationships to attitudinal proxies is factor three (Statistics and Operations Management). This may not be surprising as these courses may be taught abstractly, yet managerial themes may serve to enliven them. Further, the course content in these areas may not be used with a regular frequency despite their analytically-valued properties.

Overall, these results suggest additional study on theme value. Is the managerial theme more valued in influencing attitudinal proxies due to the extent that this course content area is utilized by alumni? Studies of course content

¹³ The mean course content value score for all courses in each factor were also assessed as to factor differences. The application of a paired sample test revealed no statistically significant differences.

value and their relationship to alumni use may thus have value. Regardless, a confirmation of a theme or theme's relationship to attitudinal proxies in future studies would suggest the incorporation of the revealed theme(s) in the development of elective courses, as well as components of themes in courses that contain content value that do not relate to program attitude.

Possible Limitation

The study manifests a focus that allows recall among MBA alumni and is representative of a program's current structure and status. However, it falls short in that those that have been alumni for an extended time may have more experience and thus a better perspective on course content value. Yet this consideration may be tempered by their ability to recall actual course content over an extended time and due to changes in an MBA program's composition which essentially makes their observations moot. Overall, studies of more current alumni should manifest a higher pay-off and should enlist a higher level of alumni response.

CONCLUSION

The study has developed an exemplar framework that demonstrates the utility of course content value-assessments among MBA alumni. While the initial assessments of course content value in Table 1 may not have been as revealing, the study has shown how the relationship of course content value-factors to attitudinal proxies may further enliven such an analysis. Basically, assessments of the drivers of program satisfaction can be revealed and explanations for their utility can be sought. Hopefully, this study can serve as an example for MBA reviews that address the drivers or influencers on program attitude, while also encouraging studies of the extent that course content is actually used by MBA alumni and determining its influence on attitudinal proxies. On balance, MBA program development and program marketing can be molded and influenced by the insights of MBA alumni.

REFERENCES

Association to Advance Collegiate Schools of Business (2012), Eligibility Procedures and

Accreditation Standards for Business Administration, http://www.aacsb.edu.

Bennis, W.G. & O'Toole, J. (2005). How business Schools lost their way. Harvard Business Review, May, pp 96-104

Dierdorff, E.C. & Rubin, R.S. (2006). *Toward a Comprehensive Empirical Model of Managerial Competencies*. Technical report presented to the MER Institute of the Graduate Management Admission Council, McLean, VA.

Eberhardt, B.J., McGee, P., & Moser, S. (1997). Business concerns regarding MBA education: Effects on recruiting, *Journal of Education for Business*, V. 72, No. 5, pp 293-296.

Fisher, A. (2007). The trouble with MBAs. Fortune, V. 155, pp 49-50.

Graduate Management Admission Council (GMAC). MBA Alumni Perspectives Survey: Comprehensive data report.

Mintzberg, H. (2004). Managers not MBAs. A Hard Look at the Soft Practice of Managing and Management Development. London: Prentice Hall.

Newsline (1998). Undergraduate program satisfaction: Further Findings, AACSB, Spring, 22-25.

Nunnally, J.C. (1978), Psychometric Theory, 2nd ed., New York: McGraw-Hill.

Pfeffer, J. & Fong. C.T. (2002). The end of business schools. Less success than meets the eye. Academy of Management Learning & Education Vo. 1, No. 1, pp 78-95

Porter, L. & McKibbin, L. (1988). Management Education and Development: Drift or Thrust into the 21st Century. New York, McGraw-Hill.

Robinson, J.P., P.R. Shaver, and L.S. Wrightsman (1991), "Criteria for scale selection and evaluation," in *Measures of Personality and Social Psychological Attitudes*, J.P. Robinson, P.R. Shaver, and L.S. Wrightsman, eds., San Diego, CA. Academic Press.

Rubin, R.S. & Dierdorff, E.C. (2009). How relevant is the MBA? Assessing the alignment of required curricula and required managerial competencies, *Academy of Management Learning & Education*, V. 8, No. 2, pp 208-224.

Rynes, S.L. & Trank, C. Q. (1999). Behavioral science in the business school curriculum. Teaching in a changing institutional environment. Academy of Management Review, V. 24, No. 4, pp 808-824.

Rynes, S.L., Trank, C.Q., & Lawson, A.M. & Ilies, R. (2003). Behavioral coursework in business education: Growing evidence of a legitimacy crisis. *Academy of Management Learning & Education*, V. 2, No. 3, pp 269-283.

Van Auken, S., Wells, L.G. & Chrysler, E. (2005). The relative value for skills knowledge and teaching methods in explaining Master of Business Administration (MBA) program return on investment, *Journal of Education for Business*, V. 86, No. 6, pp 41-45.

_____, Chrysler, E. & Wells, L.G. (2010). Utilizing a gap analysis to assess the skill versus knowledge dilemma in MBA education (abstract), *Proceedings of the Academy of Business Disciplines*, Armstrong, G.F. (ed.).
A Proposed Framework for Entrepreneurial Learning

Staci R. Lugar-Brettin, Indiana Institute of Technology - Fort Wayne, Indiana, U.S.A.

ABSTRACT

According to Forbes.com, entrepreneurship education challenges traditional methods of university instruction. Business schools excel at teaching conceptual foundations and theoretical frameworks for solving problems that are identifiable; however, entrepreneurial opportunities largely exist within unknown solutions or undiscovered opportunities (Furr, 2011). Therefore, business schools should rethink entrepreneurship education by modeling start-ups that are focused on uncovering market opportunities. This requires a focus on understanding entrepreneurship and innovation processes rather than stressing the problem-solution process prevalent in business education. This article proposes course learning objectives that business educators may utilize to increase process-based learning prevalent in innovative firms. All learning objectives can be operationalized by discipline.

Keywords: innovativeness, exploratory market learning, capacity to innovate, opportunity identification, competitive advantage, radical innovation

WHY THE HURLEY & HULT MODEL IS A STARTING POINT IN ENTREPRENEURIAL LEARNING

The entrepreneurial dream is frequently believed to emerge from one big idea by a start-up into a household name. The reality can be much different, however; entrepreneurs can become sidelined in several ways. Creating new ideas without exploratory market learning could fail to include key knowledge of customers, competitors, and channel partners (Lichtenthaler, 2009). Pursuing opportunities that do not explore untapped technologies and markets could limit firms' ability to develop a competitive advantage (Vitale, Giglierano, & Miles, 2004). Making product decisions without anticipating future market shifts can limit firms' ability to champion innovation (Tellis, Prabhu, & Chandy, 2009).

Extant literature in the areas of market learning, entrepreneurship, and market-driven innovation provided a starting point for creating a framework that business educators across disciplines can use to create entrepreneurial learning in the classroom. Hurley and Hult (1998) identified a model of model of market-driven innovation by which a firm's culture of innovativeness combined with a capacity to innovate could result in a competitive advantage.

Figure 1: Market-driven innovation process



Based on the Hurley & Hult model, research provides a way to contextualize market-driven innovation in the classroom. First, research supports that a culture of innovativeness fosters exploratory market learning, which suggests that activities based on exploratory market learning would provide a way to operationalize one process of innovative cultures. Second, a capacity to innovate is believed to produce opportunity identification in both existing markets and untapped opportunities. This proposes that activities designed with the goal of learning about, and experimenting with, opportunity identification could provide students with the opportunity to learn about entrepreneurship. Third, a competitive advantage has been reported to be linked to radical innovation. This implies that educators who design activities through which student can explore radical innovation through firm-level examples will provide a glimpse of the entrepreneurial mindset.

Figure 2: Market-driven innovation process and characteristics



A CULTURE OF INNOVATIVENESS FOSTERS EXPLORATORY MARKET LEARNING

Exploratory market learning emphasizes the acquisition of external market intelligence for opportunity recognition (Lichtenthaler). Firms that practice this type of learning are open to new ideas and strongly support innovation (Hurley & Hult), and value the "ability to recognize opportunities" in order to "pursue new ventures" (Lumpkin & Lichtenstein, 2005, p 451). Exploratory market learning was found to be a statistically significant predictor of radically innovative, entrepreneurial firms (Lugar-Brettin & Wiese, 2011). Erdil, Erdil, and Keskin (2004) reported that a market-focused learning capability has been found to result in higher degrees of innovation. The following is a list of characteristics of exploratory learner firms (Lichtenthaler) and suggested course learning outcomes that could be used to create cross-disciplinary learning activities in the classroom.

Exploratory learner firms excel at:	Suggested market-focused learning course objectives so that at the successful completion of this course students should be able to:
Detecting and analyzing emerging technological	List some ways firms detect and analyze emerging
trends and market shifts	technological trends and market shifts
Seeking out new external market technologies	Explain how firms scan for external market technologies
Acquiring and utilizing market knowledge in	Identify methods of acquiring and utilizing market
decision making	knowledge in decision making
Creating processes for knowledge management	Describe various processes firms develop to manage
and institutional memory	institutional and market knowledge
Applying existing knowledge to new applications	Apply market knowledge to technological trends and market
	shifts to identify market opportunities

Table 1	: Exploratory	market learning	characteristics and	l suggested	course learning objectives
---------	---------------	-----------------	---------------------	-------------	----------------------------

A CAPACITY TO INNOVATE PRODUCES OPPORTUNITY IDENTIFICATION

<u>Opportunity identification</u> is a process by which entrepreneurs utilize market intelligence to recognize and assess ideas. Exploratory identification is "the search for technology and market information that is new to the organization," whereas identification based on exploitation is defined as "information search within a well-defined and limited product/market solution space closely related to the firm's previous experience" (Atuahene-Gima & Murray, 2007, pp 2-3). Exploration utilizes market intelligence to anticipate future needs of customers, which tends to be associated with a higher risk required to uncover untapped market opportunities. Exploitation focuses on current market needs and is more likely to present less risk in its context of a limited market space. Firms with a culture of innovativeness are open to opportunities identified through exploration and exploitation, though radical innovators tend to prefer exploration because of the profitability associated with "the ability to evaluate and utilize outside knowledge and exploit new market opportunities" to "new commercial ends" (Cohen & Levinthal, 1990, pp 128-129). The following is a list of characteristics of opportunity-focused firms with suggested course learning outcomes that could be used to create cross-disciplinary activities in the classroom (Vitale & al.).

Table 2: Opportunity-focused	firm characteristics and	d suggested course	learning objectives
11 V		88	8 9

Opportunity-focused firms:	Suggested opportunity-focused learning course objectives so that at the successful completion of this course students should be able to:
Regularly collect and update information on customers' decision making processes (exploitation)	Identify strategies for collecting and updating information on customers' decision making processes
Acquire knowledge of competitors strengths, weaknesses, and strategies (exploitation)	Describe ways to acquire and analyze competitors' strengths, weaknesses, and strategies
Identify strategies of channel partners (exploitation)	Identify strategies of channel partners
Systematically publish market information throughout firm (exploitation)	Describe ways firms can systematically use market information to strengthen firm competitiveness
Utilize customer, competitor, and channel data to design and implement market plans (exploitation)	Design a market plan to address existing knowledge of customers, competitors, and channel partners
Understand that every aspect of firm-level strategy and execution is a market signal (exploration)	Analyze the importance of firm-level strategy as a market signal
Actively seek new markets to target (exploration)	Identify ways firms can actively seek new markets to target
Focus on new product development (exploration)	Identify the processes associated with new product development
Seek to gain first-mover advantage in markets	Explain how entrepreneurial firms have achieved first-mover
(exploration)	advantage in markets
Regularly increase customer value at all levels of	Develop a list of ways companies can increase customer
market channel (exploration)	value at all levels of a market channel
Focus on not missing opportunities, even if failure occurs (exploration)	Quantify the risk of missing a market opportunity using a market innovator firm

COMPETITIVE ADVANTAGE CAN BE ACHIEVED THROUGH RADICAL INNOVATION

<u>Radical innovation</u> is strongly associated with a competitive advantage (Hurley & Hult). Radical innovation emerges from radically innovative thinking, defined as the ability to generate new ideas, product, services, or processes. Radically innovative thinking can produce advances that "significantly alter the consumption patterns of a market" (Zhou, Yim, & Tse, 2005, p 43). This type of thinking is best modeled by firms that are willing to cannibalize current profits for future opportunities, actively uncover market opportunities, and nurture a strong tolerance for risk (Tellis, Prabhu, & Chandy). Radically innovative firms emphasize new product development, timing and position of market entry, and operational efficiencies (Manu, 1992 and Siguaw, Simpson, & Enz, 2006). The following is a list of characteristics of radically innovative firms with suggested course learning outcomes that could be used to create cross-disciplinary activities in the classroom (Tellis & al.).

Table 3: Radica	l innovator firm	characteristics and	suggested cour	se learning objectives

Radically innovative firms:	Suggested radical innovation learning course objectives so
	that at the successful completion of this course students
	should be able to:
Introduce products that are significantly different	Identify firms that have introduced products that are
from those in the current market	significantly different from current market offerings
Are willing to pursue new products that require	Explain how firms have made the decision to introduce new
cannibalization of existing product offerings and	products that require cannibalization of existing product
short-term profits	offerings and short-term profits
Emphasize future market opportunities	Describe the characteristics of a future market focus in
	innovative firms
Prefer investments that results in higher returns,	Analyze scenarios where firms have opted to pursue higher-
even at the risk of higher losses	risk, higher-return opportunities despite the potential for
	failure or loss
Strategically support champions of innovation at	Create a profile of firms that support product champions
every level of the organization	

CONCLUSION

A framework for entrepreneurial learning requires three considerations. First, it is important to acknowledge the urgency of creating process-based learning in the classroom as a foundation for entrepreneurship education. Second, extant literature models the importance of entrepreneurship and risk-taking in the market-driven process of innovation. This model provides one way to approach creating a list of best practices associated with firm-level innovative, capacity to innovate, and competitive advantage. Third, educators can begin to translate the best practices of entrepreneurship scholars into course learning objectives. From these suggested course learning objectives, educators can begin to design discipline-specific methods by which to accomplish the learning objectives.

REFERENCES

- Atuahene-Gima, K., and Murray, J. Y. (2007). Exploratory and exploitative learning in new product development: A social capital perspective on new technology ventures in China. *Journal of International Marketing*, V. 15, N. 2, pp 1-29.
- Cohen, W., and Levinthal, D. (1990). Absorptive Capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, N. 35, pp 128-152.
- Erdil, S., Erdil, O., and Keskin, H. (2004). The relationships between market orientation, firm innovativeness, and innovation performance. Retrieved January 18, 2011, from: http://02be6c1.netsolhost.com/docs/jgbat/v1n1/v1n1p4.pdf

Furr, N. (2011). Why Business Schools Struggle to Teach Entrepreneurship. Downloaded on March 18, 2013, from

http://www.forbes.com/sites/nathanfurr/2011/07/08/why-business-schools-struggle-to-teach-entrepreneurship/

Hurley, R. F. and Hult, G. T. M. (1998). *Innovation, market orientation, and organizational learning: An integration and empirical examination*. Journal of Marketing, N. 62, pp 42-54.

Lichtenthaler, U. (2009). Absorptive capacity, environmental turbulence, and the complementarity of organizational learning processes. *Academy* of Management Journal, N. 52, pp 822-846.

Lugar-Brettin, S. and Wiese, M. D. (2011). The market oriented innovator's dilemma. Business Journal for Entrepreneurs, N. 4, pp 22-51.

Lumpkin, G. T., and Lichtenstein, B. B. (2005). The role of organizational learning in the opportunity-recognition process. *Entrepreneurship Theory and Practice*, V. 29, N. 4, pp 451-472.

Manu, F. A. (1992). Innovation orientation, environment and performance: A comparison of U.S. and European markets. *Journal of International Business Studies*, V. 23, N. 2, pp 333-359.

Siguaw, J. A., Simpson, P. M., and Enz, C. A. (2006). Conceptualizing innovation orientation: A framework for study and integration of innovation research. *The Journal of Product Innovation Management*, N. 23, pp 556-574.

Tellis, G. J., Prabhu, J. C., and Chandy, R. K. (2009). Radical innovation across nations: The preeminence of corporate culture. *Journal of Marketing*, N. 73, pp 3-23.

Vitale, R., Giglierano, J., & Miles, M. P. (2004). An exploratory study of self- administered quick-audits as a management diagnostic to assess marketing and entrepreneurial orientations in established and start-up firms. Retrieved January 2, 2009, from www.ewu.edu/groups/cbpacea/2004Abstracts/AnExploratoryStudyofSelf-administrated

Zhou, K. Z., Yim, C. K., and Tse, D. K. (2005). The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of Marketing*, N. 69, pp 42-60.

Staci R. Lugar-Brettin, D.B.A., is assistant professor of marketing and management at Indiana Institute of Technology, Fort Wayne, Indiana, U.S.A. Her research interests include entrepreneurship, innovative education, and market-driven innovation.

Performing Mentor

Sheng-Tao Fan, Southern Illinois University Carbondale, U.S.A.

ABSTRACT

I apply arts-based methods and performative pedagogy to Taiwanese business education by providing innovative course design. I present one workshop proposal for the university EMBA program. This workshop is entitled, "Performing Mentor" and is based on two theoretical foundations: Elyse Lamm Pineau's curriculum: Performing Historical Figures at Southern Illinois University Carbondale in the United States. Pineau is arguably the mother of Critical Performative Pedagogy; an application of Jing-Jyi Wu's Performing Autobiographical Stories. Wu is the Honorary Professor and Endowed Chair in Creativity for the National Chengchi University in Taiwan. The goal of this workshop is to enhance leadership and to develop collaboration for EMBA participants.

Keywords: arts-based methods, performance, EMBA, leadership, collaboration

INTRODUCTION

Arts-based methods have been used for management and leadership education for the complex and dynamic of contemporary business contexts (Sutherland, 2013, p. 25). These methods include musical arts, literary arts, storytelling, movement art/dance, visual arts, and performing arts (Nissley, 2002, p. 31-44). I identify three forms of applying performing arts into business education. First, performance functions as course material. For example, using Shakespeare's works to teach business management (Augustine and Adelman, 1999). Second, performance activates course design. In Leberman and Martin's work – "student comments, 2 weeks and 6 months postcourse, highlight key learning and suggest that there is merit in using dramaturgy as a method of design for management courses" (2005, p. 319). Dramaturgy is a theatre term, referring to the ways to shape a story to be performed. Third, performance becomes a training tool to facilitate participants' competencies, such as using interactive drama to teach decision making (Holtom, Mickel, and Boggs, 2003) and negotiation (Kiffin-Petersen and Fells, 2011). In this article, I offer an innovative workshop that applies performance both into course design and as training tool to develop collaboration and leadership for EMBA participants.

WORKSHOP DESIGN: PERFORMING MENTOR

Workshop Snapshot

This workshop lasts one and a half days, about ten working hours. Each participant student chooses one mentor. This mentor is broadly defined. For example, it may be their school teacher, their instructor in college or university, their supervisor at work, their spiritual leader, or even a child. They should not choose to perform a teacher from the EMBA program to prevent a conflict of interests. Each participant gets the opportunity of playing both the performer and the audience. When they are performers, they do a five to ten minute solo performance; when they are the audience, they provide feedback to their fellow students. The process consists of several phases, including writing their life stories, researching the mentor they choose to perform, composing scripts, rehearsing their performance, and performing in front of the group. Throughout the process, the facilitator of this workshop will provide instructions, assistance, coaching, feedback, and suggestions either on a one-on-one basis or in the group setting, depending on each student's needs. Through this performance-based training and activities, students learn leadership and collaboration, based on their mentor or role model.

Workshop Description

This workshop is grounded in Dr. Elyse Lamm Pineau's Performing Historical Figures, a seminar for graduate students in the Department of Speech Communication at Southern Illinois University Carbondale, U.S.A. and Dr. Jing-Jyi Wu's Performing Autobiographical Stories, an EMBA course at National Chengchi University, Taiwan. This workshop prepares EMBA participant students to collaborate with their own mentors as well as to experience self-motivated, self-empowered, and self-inspired leadership by performing as their own mentors.

Workshop Notions

This workshop is based on Pineau's and Wu's pedagogical praxis such as participant student-centered approaches, a balance between reflection on participants' experience and call for action, and dialogical approaches. The dialogues occur among participant students, the mentors who students choose to perform, and the audience. This workshop draws on three principles of performance – balance, imagination, and collaboration. Participant students might feel balanced between body and mind, self (individual) and others (team), and theory and practice. Participant students will learn to be more aware of their body conditions. They will also learn from the performance-making processes and experience collaboration among performers, mentors, and the audience.

Workshop Objectives

The workshop has several objectives. Participant students learn collaboration by performing as their mentors. They collaborate with their own mentor while doing research on them. They work together with the other team members to share their life stories within a small group during a workshop session. They cooperate together with the audience when they perform as their mentors in a large group at the end of the session. In addition, participant students learn leadership skills by performing as their mentors. This helps them to understand their own leadership style by finding similarities and differences between themselves and their mentors. Participant students learn leadership abilities by sharing their own life stories with sincerity, failure, success, and glory in the form of performance.

Workshop Process

This workshop involves different activities in which each participant will gradually attend five separate phases. The first phase is an assignment where a student is required to finish a writing portion, and this is when the student is able to express him/herself through the art of writing. Before the workshop, participant students turn in an assignment with their two page life stories that include three critical events. These life experiences must be actual, where they are taken throughout their lives and may still be present today. However, they can imagine themselves living in the future, so that they can have a scenario to play out in the later phases. Participant students will be reminded that this assignment is not about what is right or wrong and they can feel free to write about any of their life stories. Students are required to present their life stories to the public, so they are free to come up with anything they feel comfortable sharing.

Moving on to the other stage before entering the workshop, the students are also obligated to get through the research phase. This is when the student chooses a mentor who can provide support, challenges, inspiration, and advice for him or her. This mentor is suggested to be a person outside of the participant students' EMBA program. Students should bring an object that can be related to the mentors they have chosen. These objects do not have to be physical in nature. For example, they can be quotes, pictures, or even a song that illustrates the charisma of their mentor. The whole idea of this process is to ready and prepare the student for essentially performing as the mentor they had selected.

The next phase will be held during a one and a half day workshop. It begins with a two-hour session for participants to share their life stories within a small group. During this time, they also share the objects they had picked to relate themselves to their mentors. This is followed by a five-hour session when an individual develops a script based on their previous exercises. They then begin to rehearse for their forthcoming solo performance as both themselves and their mentors. The last activity on the second day of the workshop is when the students start to perform the pieces they have created. It lasts about three hours. Each participant does his or her performance for about five to ten minutes in front of a larger group, and at the end of the enactment, the person will hear feedback from the other group members.

The purpose of using a performance-based methodology in this workshop is not to teach how to act out a performance, but to use performance as an approach to enhance leadership attributes and encourage collaboration among team members. There are no required storylines. Each performance can take on various forms such as a short play, mime, or poetry reading, depending on the individual. This implies that the facilitator needs to approach each performer differently in every case. To illustrate this, the facilitator supports a participant student by making the quote (object) meaningful and symbolic in order to draw out the emotions held within the performer. This allows the student to show authenticity through performance. Another task of a facilitator is to provide immediate feedback during rehearsal. The facilitator should also ask participant students to do something they are familiar with and make sure they are not focusing on the skills involved with performance. This approach is inspired by my conversation with the performer Violet Juno, during her residency as visiting artist at Southern Illinois University Carbondale.

Two articles will be distributed to each participant student before they attend the workshop. These readings are "Enacting the 'True Self': Towards a Theory of Embodied Authentic Leadership," co-authored by Donna Ladkin from the Centre for Executive Learning and Leadership, Cranfield School of Management, Cranfield University, U.K. and Steven S. Taylor from Worcester Polytechnic Institute, Department of Management, U.S.A. The second article is "Performing Master Han" written by Nathan Stucky (2005), the department chair of Speech Commination at Southern Illinois University, Carbondale. The first article draws on the essences of acting theory to create an authentic dramatic performance such as an emotional memory; the magic "if" —a way to ignite imagination and physical action. The first reading proposes three key elements of how embodied authentic leadership is created: "self-exposure, relating, and making leaderly choices" (Ladkin and Taylor, 2010, p. 64). This article uses the language of business management and organizational studies to articulate performance concepts in ways which those EMBA participant students might feel understandable. The second article portrays a situation in which a middle-age White American university professor struggles with a performance of his elder Taiwanese Tai Chi teacher. I think the Taiwanese participant students could relate with this article throughout the process of performing their own mentors.

THEORETICL FOUNDATIONS

Pineau's Performing Historical Figures

Performing Historical Figures is the graduate seminar that is designed and led by Elyse Lamm Pineau since 2010 fall. Excerpted from Pineau's syllabus, this semester-long seminar provides "close examination of and critical response to select performances of historical figures." Participants learn by exploring:

The dialogic relationship between biographical and auto/biographical personae, with emphasis on intertextuality and intersubjectivity ... including: biographical/historical research, script composition, embodied rehearsal, scholarship representation and public enactment.

This dialogic relationship brings collaboration. Collaboration begins when "it is the free flowing exchange of ideas without ego or resentment. It is the moment when ONE idea becomes a group's rather than an individual's" (Roznowski and Domer, 2009, p. 12). In Performing Historical Figures, collaboration appears when the singular self of a performer becomes the fluid selves in performance, which Heddon defines as "autobiographical doubling" – "at least, two subjects on view: the subject spoken and the speaking subject" (2009, p. 128). During this performance, the performers sometimes plays the roles of themselves and sometimes play the roles of their figures.

In addition, the performance process of Performing Historical Figures develops the performers' competencies of collaboration. Biographical/historical research allows the performers to learn from their historical figures. Script composition and embodied rehearsal allow the performers to create knowledge. Public enactment allows the performers to connect and touch the audience by showing their authenticity. I apply these elements of performance process into the structure of my workshop design.

Wu's Performing Autobiographical Stories

To design a workshop for the EMBA program in management education, I refer to Jing-Jyi Wu's Performing Autobiographical Stories. This syllabus is posted on the website of the Graduate Institute of Technology and Innovation Management, National Chengchi University. Wu's course comprises three stages: preparation, sharing, and performance. The preparation stage requests two assignments. Individual Life Chronology asks participants to prepare a chart with three columns entitled: years, turning periods, and critical life events. Participants are reminded that they are free to list an event that they feel is important but cannot relate to their lives at the time they turn in the assignments. They can also incorporate a predicted future in the chart. The other assignment is Leadership and Life Story. Participants are asked to reflect on their real leadership experiences. According to Wu's prompt, participants could draw from the first time they encountered an official or unofficial leadership experience, the first leadership experience at work, the first successful and failure leadership experience respectively at work, and the leadership experience during schooling. For both these assignments, participants are notified that life stories submitted in their assignments will be published, therefore they could choose to hand in two versions: one for public publication and one for their teacher's consideration.

During the sharing stage, participants will attend a four day summer course entitled Leadership and Team, held away from the National Chengchi University and maybe be at a resort hotel or retreat center. Participants will share their life stories that they handed in during the previous stage in a small group. A two hour session of Time to Storytelling

- Leadership and Life Story comprises this stage of the workshop. During the performance phrase, participants will perform their own life stories. The performance will be open to the public.

Three implications of Pineau's and Wu's curriculum form the basis for my workshop design. First, they are both participant student centered. Teachers are not powerful authorities who only give instructions but are facilitators who set up a safe and experiential learning space for participant students to engage. Second, they both balance reflections and actions. They both support participants drawing upon their personal experiences and life stories to be used as creative materials presented in a performance. Third, both Pineau's and Wu's approaches are dialogical. By reflection and research, participants either collaborate with the historical figures they choose or "have conversations" with themselves – themselves in the present, in the past, or even in the future.

CONCLUSION

This innovative workshop deign, entitled "Performing Mentor" applies arts-based methods and performative pedagogy into business education. It is based on Pineau's curriculum: Performing Historical Figures and Wu's Performing Autobiographical Stories. It comprises biographical/historical research, script composition, embodied rehearsal, and public enactment. Through the dialogic process between the performers, the mentors they choose to perform, and the audience, the EMBA participants learn how to lead themselves and collaborate with others.

REFERENCES

- Augustine, N. and Adelman, K. (1999). *Shakespeare in Charge: The Bard's Guide to Leading and Succeeding on the Business Stage*. New York: Hyperion-Talk-Miramax.
- Heddon, D. (2009). To Absent Friends: Ethics in the Field of Auto/biography. In Haedicke, S., Heddon, D., Oz, A., and Westlake, E. (Eds.), *Political Performances: Theory and Practice* (pp 111-136). Amsterdam: Rodopi.
- Holtom, B., Mickel, A., and Boggs, J. (2003). Teaching Brief: Using Interactive Drama to Teach the Complexities of Decision Making. *Decision Sciences Journal of Innovative Education*. V. 1, No. 2, pp 295-301.
- Kiffin-Petersen, S. and Fells, R. (2011). Thespian Exercise: An Innovative Approach to Teaching Negotiation Using Interactive Drama. *Business Education Innovation Journal*. V. 3, No. 1, pp 50-55.
- Ladkin, D. and Taylor, S. (2010). Enacting the "True Self": Towards a Theory of Embodied Authentic Leadership. *The Leadership Quarterly*. V. 21, No. 1, pp 64-74.
- Leberman, S. and Martin, A. (2005). Applying Dramaturgy to Management Course Design. *Journal of Management Education*. V. 29, No. 2, pp 319-332.
- Nissley, N. (2002). Arts-Based Learning in Management Education. In Wankel, C. and Defillippi, R. (Eds.), *Rethinking Management Education for the 21st Century* (pp 27-62). New York: Information Age Publishing.
- Roznowski, R. and Domer, K. (2009). Collaboration in Theatre: A Practical Guide for Designers and Directors. New York, NY: Palgrave Macmillan.
- Stucky, N. (2005). Performing Master Han. Cultural Studies ↔ Critical Methodologies. V. 5, No. 1, pp 52-64.
- Sutherland, I. (2013). Arts-Based Methods in Leadership Development: Affording Aesthetic Workspaces, Reflexivity, and Memories with Momentum. *Management Learning*. V. 44, No.1, pp 25-43.
- Sheng-Tao Fan, is a practitioner of corporate training and a Ph.D. candidate of Performance Studies in Department of Speech Communication at Southern Illinois University Carbondale in the U.S., where his research concerns performance in personal healing and arts-based methodology.

The ideas of this article originated out of the chapter four of my dissertation at Southern Illinois University Carbondale, supervised by Elyse Pineau.

Incorporating Product Life Cycle Impact Assessment Into Business Coursework

Wendy B. Wilhelm, Western Washington University, Bellingham, Washington, USA

ABSTRACT

The demand for corporate environmental stewardship is only going to increase as the sustainability movement gains mainstream acceptance. Life Cycle Assessment (LCA) is an important methodological tool for the systematic and quantitative evaluation of the environmental aspects of a product system through all stages of its life cycle. An increasing number of firms have adopted LCA as a key strategy tool in product development and supply chain/logistics decisions. These trends have direct implications for business education. Our students need to be trained in the most up-to-date methods for assessing the environmental impact of the products and services they will be working with upon graduation. This paper introduces one LCA approach – Okala single-factor LCA – and describes how it is currently being taught in a sustainable marketing course, while also demonstrating its potential for inclusion as a teaching module in any business course.

Keywords: life cycle analysis, sustainability, new product development, teaching innovations

"Consumers are increasingly interested in the world behind the product they buy. Life cycle thinking implies that everyone in the whole chain of a product's life cycle, from cradle to grave, has a responsibility and a role to play, taking into account all the relevant external effects. The impacts of all life cycle stages need to be considered comprehensively when taking informed decisions on production and consumption patterns, policies and management strategies." Klaus Toepfer, Executive Director, UNEP

INTRODUCTION

Life Cycle Assessment (LCA) is a methodological tool for the systematic and quantitative evaluation of the environmental aspects of a product system through all stages of its life cycle. A LCA of a product includes all the production processes and services associated with the product through its life cycle, from the extraction of raw materials through production of the materials which are used in the manufacture of the product, over the use of the product, to its recycling and/or ultimate disposal of some of its constituents. Transportation, storage, retail, and other activities between the life cycle stages are included where relevant. This life cycle of a product is hence identical to the complete supply-chain of the product plus its use and end-of-life treatment.

In an LCA, for each single process step, the use of resources, raw materials, parts and products, energy carriers, electricity, etc. are documented as "Inputs." Emissions to air, water and land as well as waste and by-products are recorded on the output side ("Outputs") (Figure 1). The total sum of inputs from, and outputs to nature is the basis for a later analysis and potential assessment of the environmental effects related to the product or process (Figure 2). Including the whole life cycle helps ensure that no environmental burdens are shifted to other life stages by reducing the chance that improvements in one part of the life cycle (e.g. production) lead to even higher impacts in other parts of the same life cycle (e.g. product use), and vice versa.

Sample questions LCA studies can be designed to answer include:

- Eco-design: Is it likely that a product will have a lower environmental impact if we use steel instead of plastic? Does the use of recycled materials significantly decrease impact?;
- Process Improvement: What are the dominant causes for the environmental impact in the production, use and disposal stages? How can we reduce them?;
- Product Claims: Would we qualify for an eco-label? Can we use environmental claims in our marketing communications?;
- Strategy Development: How is our product performing relative to competitors? How can we develop a
 positioning strategy based on our product's significantly lower environmental impact?;
- Life Cycle Costing (LCC): Can we reduce product-related costs by changing to more eco-efficient processes or product components (e.g., use of recycled materials, improving energy efficiency)?





Figure 2: Product System from a Life-Cycle Perspective (http://lca.jrc.ec.europa.eu/lcainfohub/introduction.vm)



Using LCA to address these questions can help firms identify opportunities for innovation and hone sustainability investments in the areas of highest financial success. Corporate sustainability initiatives have grown in number and scope in recent years, and sustainability is now widely accepted as a core business issue rather than a passing fad (MITSloan, 2012). Consumers, government regulators, environmental interest groups, investors and other stakeholders are demanding greater transparency and traceability of sustainability performance across the supply chain and pressuring companies for enhanced quantification of a product's environmental impacts. Significantly, The United Nations Environment Programme (UNEP) and the Society for Environmental Toxicology and Chemistry (SETAC) recently launched an International Life Cycle Partnership, known as the Life Cycle Initiative, to enable firms to put life cycle thinking into effective practice (http://lcinitiative.unep.fr/). The Initiative responds to the call by governments around the world for a Life Cycle economy in the Malmo Declaration (2000; http://www.unep.org/ourplanet/imgversn/112/malmo.html). It also contributes to the 10-Year Framework of Programs to promote sustainable consumption and production patterns, as requested at the World Summit on Sustainable Development in Johannesburg (2002; http://www.un.org/jsummit/index.html). Examples of firms who have adopted some form of LCA include Walmart's "Sustainability Product Index" which requires suppliers to provide more transparency regarding their environmental impacts, Patagonia's "Footprint Chronicles" which quantify the environmental impact at each manufacturing and distribution stage of a product's life cycle, and Nike's Considered line of products that aims for an incremental decrease in each product's ecological footprint using LCA to quantify that decrease. Other examples can be found on the UNEP's Life Cycle Initiative website (http://lcinitiative.unep.fr/.)

These trends have direct implications for business education. Students need to be trained in the most up-to-date methods for assessing the environmental impact of the products and services they will be working with upon graduation. The demand for corporate environmental stewardship is only going to increase as the sustainability movement gains mainstream acceptance. The objective of this paper is to introduce and describe one LCA approach – single-factor LCA - and describe how it is currently being taught in a sustainable marketing course, while also demonstrating its potential for inclusion as a teaching module in any marketing or business course. The first section provides an overview of LCA as one environmental assessment tool among many. The next section of the paper describes an LCA teaching module currently being used in an undergraduate and MBA marketing elective, *Marketing Strategies for Sustainability*. The paper concludes with discussion of the pedagogical challenges associated with teaching LCA, how one might incorporate a LCA module into a variety of marketing or business courses, and a consideration of the future of LCA as a business tool.

OVERVIEW OF LCA AND LCA DATA PROCESS

Environmental Impact Assessment Methods

There are a number of assessment methods currently in use that can be usefully characterized along two dimensions: (1) the level of objectivity of the impact scores, with more objective measures producing quantitative impacts and repeatable results, and (2) the comprehensiveness of the impact scores, i.e., how many impact types (e.g., climate change) and life cycle phases (e.g., use, disposal) are included in the calculations. LCA is the most comprehensive and objective method currently in use and is the only environmental impact assessment method that is guided by the ISO 14040 series standards. The LCA methodology described here has developed over the past two decades, predominantly in Europe and also the USA, and is now firmly established as a product development tool in many Fortune 500 companies (UNEP/SETAC, 2011).

There are two approaches to undertaking a product LCA: single-figure or multi-figure LCA. The single-figure LCA combines the multiple impact categories (e.g., fossil fuel depletion) into a single score using calculation steps (normalization and weighting) allowed by ISO standards. Single-score LCA is considerably easier for management to use and is a fast method for modeling the environmental impacts of products, but its use entails some assumptions regarding the relative importance (weighting) of each of the impact categories. As such, single-figure scores should not be used for public claims about environmental performance.

Okala is a particular single-figure LCA developed in conjunction with *the U.S. Environmental Protection agency Design for the Environmental Program* (Dfe; <u>http://www.epa.gov/dfe/</u>). Okala was chosen for use in the present study because it is a well-established methodology in many industrial/product design courses in the U.S., and because it is recognized and promoted by the *Industrial Designers Society of America* (IDSA: <u>http://www.idsa.org/</u>).

Okala uses an LCA method called TRACI (Tool for Reduction and Assessment of Chemical and other Environmental Impacts) developed by the EPA using North American environmental data in order to come up with inventory data and specific impact category metrics for various polymers and elastomers, metals, energy and transportation, production processes, disposal options, etc. The ten impact categories included in the *Okala Impact Factors 2009* database include: acidification, ecotoxicity, fossil fuel depletion, climate change, human cancer, human respiratory, ozone layer depletion, photochemical smog and water eutrophication. The latest (2009) *Okala Design Manual* can be accessed at: <u>http://www.idsa.org/okala-ecodesign-guide</u>.

Stages of Single-Figure LCA

The LCA process begins with the establishment of *system boundaries*, i.e., a decision about what is and is not going to be evaluated in the product system. For example, when looking at a coffee machine, a decision as to whether to include the actual coffee in the LCA needs to be made. Figure 3 presents a simplified process tree for the life cycle of a coffee machine from which one can determine the desired system boundaries. Next, *product lifetime*, the number of total hours that the product will be used in its lifetime (wear-out life) is determined. This data should be available internally, within the firm; for calculating the lifetime of a competitor's product, realistic estimates must be made (e.g., from *Consumers' Reports* data). The *functional unit* to be used in calculations also needs to be decided upon in order to allow comparison of disparate products in terms of impacts per unit of delivered service (e.g., impacts per item, impacts per 1,000 hours of use).





The actual LCA data progression can be seen in Figure 4. The *bill-of-materials* is multiplied by the *inventory data* for each material, process, energy use, etc. during each phase of the product's life cycle to come up with emissions, resource depletion and land-use scores. The *characterization* stage converts the inventory scores into environmental impacts. *Normalization* scales impacts according to the estimated impacts of the average person in the U.S., while *weighting* scales impact categories according to priorities of significance (normalization and weighting are data stages that provide a single-figure impact score). The end result is an Okala Impact Factor for each of the bill of materials items. Figure 5 presents an excerpt from an impact factor table for metals; a complete list of the *2009 Okala Impact Factors* is available for purchase on the Okala website. An example of how this LCA process could be used to calculate the impact of two different canoes can be seen in Figure 6.

Figure 4: LCA Data Process for Single-Figure LCA (adapted from Okala, 2009)

	2	3	4	5
Bill-of-materials	Inventory	Characterization	Normalization	Weighting
Materials, processes, energy used, transport, end-of- life	Emissions, resource depletion, and land-use	Environmental impacts: global warming, carcinogens, ecotoxicity etc.	Scales impacts according to average impacts of a person in a continental area	Scales impacts according to their significance
Length of list depend on the product	Can be hundreds of chemicals per material	Typically 8-12 categories, via scientific, peer reviewed formulae	North American or European normalization available.	

Figure 5: Excerpt from 2009 Okala Impact Factors Table for Metals (p. 51)

Metal	Okala Impact Factor
Aluminum, primary (from bauxite, virgin)	130 millipoints/lb
Aluminum, secondary (from 100% recycled old scrap)	17 millipoints/lb
Steel, primary (low alloy steel, virgin)	25 millipoints/lb
Steel, secondary (low alloy steel, recycled)	9.3 millipoints/lb
Copper, primary (human health & carcinogenicity)	320 millipoints/lb
Gold, primary (human health & carcinogenicity)	180000 millipoints/lb
Magnesium (often mined from ocean floor)	480 millipoints/lb

TEACHING LCA

Overview/Learning Objectives

The LCA module is the subject of a four-hour (two class) session in a *Marketing Strategies for Sustainability* course devoted to providing undergraduate marketing and MBA students with skills for developing and marketing a sustainable product. The course itself covers key concepts and tools related to marketing mix decisions such as design-for-environment, pricing based on full cost accounting, greening of the supply chain, and life cycle impact assessment. Marketing strategy development is discussed within the context of a "triple bottom line" approach that places equal emphasis on the objectives of economic stewardship (valuing financial continuity over profit), environmental/ecological stewardship (maintenance and renewal of natural capital), and social stewardship (equitable distribution of resources, human and community well-being). The LCA module introduces students to a methodological tool for the systematic and quantitative evaluation of the environmental aspects of a product system through all stages of its life cycle, including use and disposal, as noted above. The *Okala Design Guide*, required reading for the course, includes all of the data necessary for performing a simple LCA for a product. Upon completion of the module, students have acquired the necessary skills to calculate and compare the environmental impacts of two or more products.

Figure 6: Example of the LCA Process Calculating the Environmental Impact of a Canoe (student sample)

We compared the impacts of two canoes. One canoe is made from primary (virgin) polyethylene and the other is similar but is made from secondary (recycled) polyethylene.

Step 1: Define lifetime, functional unit and system boundary

Both canoes deliver the same	e amount of services		
Canoe A		Canoe B	
System boundary	Excludes transporting during use	System boundary	Excludes transporting during use
Functional unit	Impact/hour	Functional unit	Impacts/hour
Lifetime A hours	80 hours/year x 10 years = 800	Lifetime B hours	80 hours/year x 10 years = 800

Step 2: Make bill-of-materials

Canoe A			Canoe B		
Materials	primary HDPE nylon steel	33lb 0.7 lb 0.3 lb	Materials	secondary HDPE nylon steel	33lb 0.7 lb 0.3 lb
Manufacturing	rotation mold HDPE extrude Nylon deep draw steel	33 lb 0.7 lb 0.3 lb	Manufacturing	rotation mold HDPE extrude Nylon deep draw steel	33 lb 0.7 lb 0.3 lb
Transport	truck	20.4 ton-mi	Transport	truck	20.4 ton-mi
Disposal	landfill		Disposal	landfill	

Step 3: Calculate estimated impacts

Canoe A				Canoe B			
Input	Amount X	Okala Factor =	Impacts (millipoints)	Input A	mount X C	Dkala Factor =	Impacts (millipoints)
HDPE (prim)	33 lb	12/lb	396	HDPE (sec)	33 lb	8/lb	263
roto-mold HDPE	33 lb	14/lb	462	roto-mold HDPE	33 lb	14/lb	462
nylon 6	0.7 lb	56/lb	39.2	nylon 6	0.7 lb	56/lb	39.2
ext. nylon	0.7 lb	2.9/lb	2	ext. nylon	0.7 lb	2.9/lb	2
steel (prim)	0.3 lb	25/lb	7.5	steel (prim)	0.3 lb	25/lb	7.5
draw steel	0.3 lb	11/lb	3.3	draw steel	0.3 lb	11/lb	3.3
truck 28t	20.4 t-mi	1.9/lb	38.8	truck 28t	20.4 t-mi	1.9/lb	38.8
landf. HDPE	33 lb	8.4/lb	277.2	landf. HDPE	33 lb	8.4/lb	277.2
landf. nylon	0.7 lb	12/lb (estimate)	8.4	landf. nylon	0.7 lb	12/lb (estimate)	8.4
landf. steel	0.3 lb	8.5/lb	2.6	landf. steel	0.3 lb	8.5/lb	2.6
	Total im	pacts/life canoe	A: 1237.0		Total im	pacts/life canoe l	B: 1104.0

LCA Teaching Module

The first hour of the class period is spent demonstrating how to calculate a simple LCA for Canoe A using the Okala tool (students are required to bring the Guide to class). The canoe is made from primary (virgin) polyethylene, nylon 6 and primary steel, with an assumed life of 800 hours (80 hours/year X 10 years = 800 hours). Manufacturing is in East Asia and the finished product is transported to North America by 747 jet. The disposal method is landfill (the LCA excludes transporting during use). During the second hour, students work individually to calculate the LCA for canoe B that is made from recycled polyethylene, secondary steel, and nylon 66 glass-filled. Mode of transport is container ship and the canoe is down-cycled into park benches at end-of-life. Discussion of the total impacts/life of canoe A versus B, and how the environmental impact of canoe B could be further reduced (e.g., double the functional lifetime) conclude the first two-hour session.

A written LCA assignment is given at the end of the first half of the LCA module, with the following instructions: "Do some research to determine the material composition and weight of a simple product of your choice. Develop a baseline LCA for the product based on current materials/transport; then develop a new design with reduced impact, changing at least three of the product characteristics (materials, manufacturing process, transport, disposal). Chart the LCA results for the new design next to the baseline LCA chart and make sure and include a bar chart for each as done in the Okala Guide. Write-up your LCA analysis. Make assumptions where necessary."

During the second two-hour LCA class session, each student presents their comparative LCA analysis in class and brainstorm as a group as to how to further reduce the impact of that product. Students are also encouraged to post their analyses to their sustainability blog (another course requirement) and invite response from their peers. The last component of the LCA module introduces students to one of the leading commercial vendors of LCA software, *Simapro* (<u>http://www.simapro.com/</u>) by presenting the company's demo, available for download on their website.

CONCLUSIONS

Pedagogical Challenges

The most difficult aspect of teaching LCA is obtaining data on the material composition of a product, a problem that would not be present if one was working in a company that produced its own products. Students are instructed to select products with few materials/components for the written assignment to simplify the bill-of-materials stage of LCA, although consideration is being given to providing students with a list of products (and their raw materials) from which they can choose. Commercial LCA software such as SimaPro is currently too expensive; what is needed is the development of free or reduced cost educational versions of LCA programs such as exist for statistical software (e.g. SPSS). Second, single-factor LCA such as Okala is designed to be used for "quick and dirty" calculations to make rough comparisons between products, and students must be made aware of this fact. This does not invalidate its use; on the contrary, ease of use and the ability to compare different product concepts is one of the advantages of single-factor LCA. Last, most single-factor LCA tools do not include social factors in their calculations (e.g. use of sweatshop labor) due to the inherent difficulty of quantifying those impacts on community/social well-being. These limitations aside, students report that the LCA is one of their "favorite" parts of the course because it provides at least one useful metric for sustainability decision-making.

Incorporating a LCA Module into other Courses

The LCA teaching module discussed in this paper is relevant to management, entrepreneurship, operations/supply chain, marketing strategy, and retailing courses since it pertains to the entire product life cycle and advocates a new business model that incorporates "life cycle thinking." Adopting such thinking has become increasingly important since sustainability has become a core business issue and LCA has won mainstream acceptance. The teaching exercises as presented allow faculty to tailor the information to their particular needs; for example, one could choose to include just the first two-hour LCA session with the in-class exercise.

Future of LCA

As noted earlier, life cycle assessment emerged in the late 1980s in Europe as government regulations forced firms to consider the full environmental impact of their product with the aim of <u>quantifying</u> these impacts in order to determine how to reduce them. This approach is now being adopted on a larger scale by U.S. companies because of a number of internal and external market forces. Briefly, some of the many drivers include: (1) potential cost savings, (2) growing resource scarcity (energy, raw materials), (3) a vocal consumer movement, (4), a search for competitive advantage, (5) regulatory trends (e.g., take back legislation, emissions standards, renewable energy

mandates, legislation restricting toxic ingredients) and (6) the sustainability reporting movement (e.g., The Global Reporting Initiative or GRI). While traditionally seen as an ad-hoc activity, there is a clear trend away from this approach as more organizations tend to view LCA as a continuously maintained Environmental Life Cycle Management Information System (ELMIS). Using ELMIS, Environmental Product Declarations (EPDs) have become a major application area in many countries; thousands of products now have such declarations (e.g., Sweden's EPD.org at <u>http://www.environdec.com</u>). A product's EPD typically consists of a list of impact categories and their indicators for that product (e.g., the global warming category is expressed as CO₂ equivalents).

While the use of LCA as part of firms' product and supply chain strategies is growing, there are still limitations associated with this approach that need to be addressed. First, the requirements for an accurate life cycle environmental impact assessment demand enormous amounts of data; even the single-figure LCA approach discussed in this paper (Figure 4) is quite data intensive. Many firms can neither afford to purchase expensive commercial LCA software programs (e.g., Simapro), nor collect this type of product information themselves; further, some types of LCA data require expert knowledge (e.g. CO₂ emissions associated with product use). Second, present LCA approaches consider only known and quantifiable environmental effects and do not address social impacts (e.g., workforce safety or community relationships) or future changes in technology and demand. Last, the complexity and lack of standardization of the LCA output make it difficult to use in marketing communications (e.g. to substantiate environmental claims). The single-figure LCA method developed by Okala and the EPA was created to address several of these limitations by requiring less firm-level data, providing impact factors that can be applied directly to a product's materials/process inventory, and including standardization/normalization steps to facilitate product comparisons; work is currently underway to publish an updated (2013) edition of the Okala Impact Factors that promises to overcome some of the other limitations of current LCA tools.

In conclusion, and regardless of current methodological shortcomings, these trends demonstrate that life cycle thinking is here to stay. It behooves us, therefore, as business educators, to ensure that our students are familiar with product life cycle assessment so that they can be advocates for its inclusion in business decision-making at their future places of employment

REFERENCES

Anonymous (2012). Sustainability Nears a Tipping Point. *MITSloan Management Review Research Report*. Winter, pp 27-35. *Okala Design Guide (2009)*. Industrial Designers Society of America. Accessed at: <u>http://www.idsa.org/okala-ecodesign-guide</u> SETAC (2011). *Global Guidance Principles for Life Cycle Assessment Databases*.

Accessed at: http://c.ymcdn.com/sites/www.setac.org/resource/resmgr/publications_and_resources/global-guidance-principles-u.pdf. UNEP/SETAC (2011). *Life Cycle Management*. Accessed at:

Obtaining Faculty Motivation and "Buy In" to a Major Program Change: A Case Study in Assessment

Elizabeth F. Purinton, Marist College - Poughkeepsie, NY, USA Elmore R. Alexander, Marist College - Poughkeepsie, NY, USA

ABSTRACT: While a holistic program is vital to assessment of learning, it is very challenging to implement without the commitment of the faculty. This is a case study of one School of Management at a Mid Atlantic college and how the Dean and the Assessment Committee were able to achieve faculty input into a new program and attain full attendance at all-day events. Theory from organizational behavior is used and examples and suggestions are given.

Keywords: Assessment, Faculty Motivation, Leadership, Learning

INTRODUCTION

Assessment of Learning (AOL) is now a focus of both AACSB and the various regional accreditation bodies. Books and seminars abound. Everyone believes that it is important to build the commitment of the faculty, but how do you do it? This is a case study of one business school at a Mid-Atlantic college and how the dean and the assessment committee were able to develop and implement a five-year assessment program with full faculty participation. The steps taken, primarily by the dean and the assessment steward, will be described. Suggestions will be presented. Finally, what was learned by the school and its future direction will be outlined. These actions are not viewed in a vacuum. Rather two theories from the leadership literature are advanced as a mean of organizing the approach that was used.

THE PROBLEM

Between the school's initial accreditation and reaccreditation, AACSB standards for assessment changed dramatically. AOL and continuous improvement replaced quality assurance as the focus of the process. During the 2007-2008 academic year, the goal was to create a five-year comprehensive assessment plan, using direct and indirect measures, encompassing all five school programs. As with any holistic program, maximum commitment from the faculty was desired. Previously, there had been resistance influenced by: three deans in six years, an impression among some faculty that assessment would be used to evaluate them, and a general feeling of an overload of work. Getting faculty to commit to additional work would be a tremendous challenge.

With the arrival of a new dean, the creation of a new assessment committee, the experience of an insightful consultant, and the introduction of some creative incentives, the assessment program was reenergized. The initial change took about 18 months, and the complete implementation of the program has taken several years. At this point, however, the school has a comprehensive assessment program for all of its programs and assessment has become second nature to the faculty.

THE THEORY

There are challenges to be met when attempting organizational change in an educational institution. Some of these are common to most organizations and some are specific to educational institutions. The overriding question one faces when implementing a comprehensive assessment program is how to motivate faculty participation, let alone commitment, to the process. The concept of assessment cuts against the grain of almost every faculty member—education faculties being the possible exception. Faculty members cry "academic freedom" when anyone tries to tell them what to teach much less to tell them whether or not they are being effective in the process. Faculty members cry "unfunded mandate" when additional responsibilities are added to their traditional expectations of teaching, research and scholarship. And if it is possible to bypass these two arguments, the faculty must endure the lengthy meetings required to develop rubrics, agree on measurement instruments, discuss the results of assessment, and develop substantive changes in pedagogy and content to assure continuous improvement. The argument of "get through it just this once and we'll be done with it" cannot even apply because assessment is a "never ending story."

Two management theories are particularly useful in looking at this motivation challenge. The first is the Path-Goal leadership model (House, 1971). Path-Goal theory suggests that a leader can motivate a subordinate in two ways:

- 1. By increasing the benefits that subordinates experience for meeting goals
- 2. By making the paths to those goals and benefits easier by:
 - a. Clarifying paths to goal achievement and
 - b. Eliminating roadblocks and barriers.

The experience with increasing benefits for goal accomplishment is extensive. Academia usually rewards good teaching and exemplary scholarship. This is seldom the case with service. For example, in a survey of over 100 marketing department chairs, half of the respondents did not even bother to answer the question regarding techniques to improve participation in service (Honeycutt, Thelen and Ford, 2010). This can be applied to effective assessment behavior as well. As will be demonstrated later, the rewards do not necessarily need to be enormous to accomplish the desired effects. As a matter of fact, recognition may be more rewarding and easier than one thinks. On the other hand, "clarifying paths" and "eliminating barriers" is not what a typical academician thinks from the standpoint of developing motivation. Several strategies in this area are suggested by Path-Goal Theory:

- 1. Convincing individuals that putting in the effort will result in goal achievement,
- 2. Showing individuals how to accomplish goal achievement, and
- 3. Being supportive in the face of tedious and stressful tasks.

The second theory is organizational learning. Organizational learning is the process by which permanent change in the institution occurs. It is the embodiment of the organizational change effort. The four stages of organizational learning are: Intuiting, interpreting, integrating and institutionalizing (Crossan, Lane and White, 1999). The individual intuits, recognizing patterns from previous situations, but is rarely aware of the process. Interpretation can take place at the individual or organizational level often through discussions about the topic at hand. Integrating takes place in work groups and is where a great deal of assessment literature concentrates. If the actions in integration are successful and became embedded in the organization, institutionalization has taken place. Each of these stages suggests action by the administrator that would yield the ultimate goal of any assessment program—institutionalization.

Baker and Budds (2005) describe a policy of engagement in market-leading firms including alignment of goals and priorities. At a college of business, those objectives would be AACSB reassessment, continuous improvement, and faculty's own curiosity in the quality of their pedagogy. While engagement might be described as how one department reaches out to other executives to set common goals, this is true in an educational setting as well. Reaching out to other schools and administration at the school helps to better align goals and focus energy on achieving assessment of learning.

While pursuing engagement, an organization "positions itself as more insightful, responsive, and multifaceted" (Baker and Budds, 2005). This is how we reach out to others to set common goals, establish expected and ensure alignment.

In summary, the learning organization approach would result in the following activities:

- 1. Alignment of individual faculty interests with those of the school (an assessment imperative)
- 2. Development of a learning paradigm that can guide both assessment within the school but also become a learning example for other schools at the college
- 3. Collection of a series of concrete results that can both guide future action as well as reinforce past actions
- 4. Challenge faculty collaboration and develop common approaches and understanding of the assessment process.

If we combine the conclusions that would result from both the Path-Goal Theory and Organizational Learning Theory, we would obtain the following eight recommendations for motivating faculty involvement:

- 1. Reward participation in assessment
- 2. Convince individuals that they can accomplish assessment
- 3. Show individuals how to do assessment
- 4. Be supportive in the face of a tedious and stressful task
- 5. Intuit the values and processes of assessment
- 6. Interpret the assessment process
- 7. Integrate assessment across campus with normal and regular processes
- 8. Institutionalize assessment within the organization

THE EXPERIENCE

Academic year 2007 provided a confluence of circumstances resulting in the "perfect storm." Within a short time frame, the college hired a new dean of the business school, the college faced reaccreditation from Middle States (the regional accrediting body), and AACSB updated reaccreditation requirement with greater emphasis on Assurance of Learning including formalization of the process. At the same time, the previous efforts at assessing learning had been deeply frustrating. Three deans in 6 years gave mixed support to the process. There were few role models for small schools. Faculty members were unmotivated, unimpressed, and generally skeptical about assessment. (One Assessment Team member began every team meeting with "Why are we doing this?")

The College required course-embedded assessment which involved every business, accounting, and economics course that was required of each business school student. Rather than contributing to the assessment effort, this non-integrated, laborious task fatigued faculty, produced little or no useful information, and resulted in a reputation for assessment as being onerous, intrusive, potentially damaging to academic freedom, and of questionable worth. Further, it produced voluminous quantities of data that wasted paper and storage space and resulted in little useful analysis.

One of the first goals of the new dean and Assessment Team were to achieve permission of the College administration to terminate course-embedded assessment. In order to do this, an integrated, logical and productive assessment plan was required as a replacement.

1) The Message

The dean gave a clean, consistent, and ceaseless message which was "AOL is important to the business school, critical to AACSB accreditation, of increasing importance to the college, and vital to excellence in education." To reinforce the statement, he sent multiple faculty members to multiple AACSB Assessment Seminars.

Additionally, an assessment consultant was brought in to evaluate current efforts. She was able to point out which tasks were on track, which areas needed more development, and how much emphasis should be placed on indirect assessment. One of the most worthwhile results of her visit, however, was the reassurance that assessment was "doable. "While development of a program seemed insurmountable at times, it had been accomplished at small schools and was merely a few tasks away, not years' worth of work.

2) The Team

The dean appointed one faculty member to lead the Assessment Team and to be the visible spokesperson for the effort. A "faculty champion" was described by DeMoranville (2010) as a full-time faculty member with teaching, researching, and service responsibilities who will speak enthusiastically about assessment "to anyone, anywhere, anytime" (p. 25). This faculty champion chose the title of Assessment Steward to denote the role of shepherd, not administrator or drone.

The first Assessment Team was handpicked to provide members from each discipline. Later, the team was formalized, became part of the regular structure of the School of Management, consisted of voted-in members, and had its name changed to "Committee."

One of the major tasks of the Assessment Team was to develop a preliminary five-year assessment cycle. Because few examples for small schools existed, there was a mental barrier to creating a plan. The notion of creating a plan took on an intimidating tenor. To overcome this, the Assessment Steward created an Excel spreadsheet that mapped out the learning objectives over the programs. The schedule assessed two learning objectives in each program each year. By providing a beginning template some of the intimidation was overcome. The original purpose, to provide the faculty with something to "fix" rather than have to create, was met.

3) The Faculty

The curriculum committees were first charged with revisiting the learning objectives of each program. Before this process, the undergraduate program in business had fifteen "program objectives" and 88 "learning objectives" many of which did not map onto the program objectives. The committees were then given the task of "refining" the preliminary 5 year plan. By using curriculum committees for timelines, this not only gained input from the faculty but increased the level of commitment to keeping to the timeline.

The timeline led to the deadline for developing the first rubric for the first round of assessment. The faculty, as a whole, was instructed in rubrics, their purpose and their development. The phrase "primary trait analysis" which had drawn cringes and sighs years earlier was now met with scientific curiosity when couched as "rubric" or "instrument." The curriculum committees took on the development of rubrics, often segmenting themselves by discipline. They could rely on their experience in instrument development from their own academic research.

4) Making Assessment Doable and Fun

The dean, Steward, and the Team designed a one-day mandatory event called Assessment Day. This became an annual event taking place at the end of the end of the spring semester. The three preliminary goals of Assessment Day were to build full faculty participation, to conduct assessment of a specific set of objectives (initially, the plan was to assess each objective twice every five years), and to provide an opportunity for "loop closing" activities. Assessment day was announced months in advance and reminders were given at each faculty meeting. The day's events included two meals and door prizes.

To counter the previous onerous-ness of assessment, a conscious effort was made by the Assessment Steward to build a more lighthearted mood. Several informal programs were put in place. These included Assessment Bugs, Sticky Messages and a whimsical approach to Assessment Day invitations. Assessment Bugs fashioned from pompoms, chenille pipe cleaners, and "googly" eyes appeared on the office doors of those faculty who had completed their latest assessment task. Each bug sported a ribbon with the words "Catch the Assessment Bug!" Anyone not aware of the assessment efforts of the school was met with a hallway of pink, purple, orange and neon green insects decorating doors and mailboxes.

Sticky Messages began as an exercise at an AACSB Assessment Conference. These were short messages publicizing the value of assessment. Some examples of messages are "2+2=5 Assessment Anyone?" and "Show Me Your Rubric!" In this utilization, they would appear in expected (above copy machine) and unexpected (inside bathroom stall) places. Some of these messages are included in the Appendix.

Multiple invitations (and reminders) of Assessment Day were sent. Instead of emphasizing the work to be accomplished, the publicized schedule revolved around meals, snacks, door prizes and dress code ("informal", neckties not allowed, sandals and flip flops encouraged but toenail polish mandatory, etc.). As the faculty had recently been introduced to grits as a breakfast food, the serving of grits (remarkably well prepared for a northern school dining service) was widely and loudly proclaimed.

CONCLUSIONS

In her article on Assessment Investment, DeMoranville (2010) suggests five key factors to encourage faculty participation, if not enthusiasm: a supportive administration, a faculty champion, an evolving development process, a well-defined structure, and an emphasis on excellent communication

With acknowledgment of DeMoranville and the experiences of this school, lessons learned include (but are not limited to):

- 1. Delegate to motivate (use of curriculum committees, etc.)
- 2. Make it fun when you can (bugs & grits & sticky messages)
- 3. Reinforce the importance of assessment of learning to AACSB accreditation and quality of teaching
- 4. Reinforce that assessment is not evaluation
- 5. Involve everyone! "We're all in this together" builds camaraderie. Remember that you may never gain full acceptance by the faculty. As Thomas Kuhn described in his *Revolution of Scientific Thought*, you will never get full acceptance of a new paradigm until all of the dissenters are dead.

In conclusion, implementation of an assessment process does not have to be an onerous and frustrating experience for faculty members. Using a perspective grounded in the literature on management leadership and organizational learning, strategies can be developed that will garner faculty commitment. As with most challenges of organizational change, the key is working together and staying focused.

References

Baker, Julie, Phillips and Niall Budds (2005). Execute the Learning Agenda. Marketing Management V. 14, No. 5, pp. 36-41.

Crossan, M. M., Lane, H. W. and R. E. White. (1999). An Organizational Learning Framework: From Institution to Institution. Academy of Management Review. Vol. 24, No. 3, pp.522-537.

DeMoranville, Carol W. (2010). Making Sense of Assessment . BizEd. March/April. pp. 22-30.

House, R.J. (1971). A Path-Goal Theory of Leader Effectiveness. Administrative Science Quarterly, V.16, pp.321-339.

Honeycutt, Earl D., Shawn T. Thelen, and John B. Ford. (2010). Evaluating and Motivating Faculty Performance: Challenges for Marketing Chairs. *Marketing Education Review Vol.* 20, No. 3, pp.203-14.

Kuhn, Thomas (1962). The Structure of Scientific Revolutions. 1st ed. Chicago, IL: University of Chicago.

- Elizabeth F. Purinton, Ph. D. (Ph. D. University of Rhode Island) is an Associate Professor and chair of the Department of Organization and the Environment at Marist College in Poughkeepsie, New York. Dr. Purinton is a fellow of the AMA-Sheth Foundation Doctoral Consortium. Dr. Purinton's research programs include consumer behavior of jewelry, marketing channel partnership survival and mature marketing relationships, and web site design. Dr. Purinton's research is published in the Academy of Marketing Science Review, Journal of Electronic Commerce in Organizations, the Journal of Business Research, the Journal of Business and Behavioral Sciences, the Journal of Business to Business Marketing, and several conference proceedings.
- Elmore R. Alexander, Ph.D. (Ph.D.—University of Georgia) is a professor and dean of the School of Management at Marist College in Poughkeepsie, NY. Previously, he held faculty and administrative positions at Philadelphia University, Johns Hopkins University, American University and the University of Memphis. Dr. Alexander's research interests include various aspects of organizational communication and verbal and sexual harassment in the workplace. His research has been published in such journals as *Journal of Conflict Resolution, Journal of Management, Management Communication Quarterly, Journal of Information Technology Management,* and *Personnel Psychology*.

Appendix A: Sticky Messages

Our assessment measures up

If you don't want a mess you must assess

Show me your rubric

AACSB-the few, the proud, the assessed

2+2=5 Assessment Anyone?

Dear Professor Smith, I want tow thank you for teaching me good (I get an A remember) and fro recommending me for that grate job. I dont know Y I didnt get it.

Assessment Anyone?

A Comparison of Undergraduate versus Graduate Student Perceptions and Performance using Online Homework in Introduction to Operations Management Courses

Lynn A. Fish, Canisius College, Buffalo, NY USA

ABSTRACT

In general, undergraduate and graduate student perceptions of online homework methods in an introduction to operations management courses indicate that student perceptions of online homework are similar and students value homework as a learning tool. Contrasting with more optimistic perception studies, only slightly more than half (undergraduates 51.22% and graduates 59.65%) prefer online homework to more traditional homework methods. The survey results indicate that the graduate students are slightly more amenable to online homework than undergraduates. However, while both groups value homework, performance was not equal as graduate students performed significantly better on online homework than undergraduates. With the continued proliferation of technology such as online homework into the classroom, educators and administrators need to work with students to improve student's perceptions and capabilities in the online environment.

Keywords: student perceptions, online homework

LITERATURE REVIEW

As education continues to add evolving technology into the delivery methods, instructors need to evaluate the relevance of the various activities used to assess student performance, particularly as more courses and programs transition to the online environment. The techniques, whether homework, announced or unannounced quizzes, frequent exams or few exams, discussion boards, case studies or other activities used in any class should motivate and enhance student learning. Students need to perceive these techniques as having learning value in order to motivate them to perform at their best. Traditional education in terms of face-to-face instructional delivery using paper-and-pencil assessments continues to be modified and include more 'virtual' elements. 'Virtual' elements exist in online programs, hybrid (or low residency) programs, online courses (100% online), hybrid courses (substantial portion online and substantial portion face-to-face), and blended courses (campus-based courses that use online components). A recent study by the Babson Survey Research Group noted that over 6.1 million students took at least one online course during the fall 2010 term, an increase of 560,000 students over the previous year (Allen and Seaman, 2011). Much research remains to be evaluated in the online arena and the value of course-support materials (Biktimirov and Klassen, 2008). With respect to hybrid courses, which are the more common method with online materials used to supplement traditional face-to-face teaching, a lack of research on best practices exists (Baugher, Varnelli and Weisbord, 2003).

In the face-to-face environment, instructors view homework as improving student's abilities, knowledge and material retention; however, this is not always the case. Educators assign homework because they believe that by doing homework, students engage in the activity and that it can assist students to study (Rayburn and Rayburn, 1999). For homework to assist students to improve, teachers need to understand student's views about their homework and homework behaviors (Hong, Wan and Peng, 2011). For elementary and secondary students, student performance increases when homework is assigned and graded homework increases performance more than ungraded homework (Paschal, Walberg, and Weinstein, 1984). Similarly, student performance improved in accounting courses for those who completed the homework versus those that did not (Rayburn and Rayburn, 1999). In an introductory biology course, student performance improved due to homework - regardless of whether the homework was assigned before or after the material was presented (Lefort and Eiger, 2003). In a first year financial accounting course, students who exerted more effort on assignments during the semester performed better on the exam (Eskey and Faley, 1988). However, other researchers did not find a positive relationship between student performance and homework. For instance, in an introductory operations management class, required homework is not significantly related to performance on a multiple choice exam (Peters, Kethley & Bullington, 2002). Similarly, in a college algebra class, no relationship exists between homework and performance, but homework increases longterm retention (Johnson, 1989). In an intermediate algebra class, no relationship between collected homework and

performance was noted; however, above-average students' performance improved due to the required homework (Weems, 1998). Thus, the debate regarding the value of homework to student performance continues to be mixed.

While empirical research supports the view that online ancillary materials can enhance student performance, results for online homework are mixed (Smolira, 2008). In a fifth-grade math study, a Web-based homework system, which provided hints and step-by-step scaffolding, demonstrated that students learned significantly more through the computer system than traditional homework (Mendicino, Razzaq and Heffernan, 2009). In an introductory finance course, a positive relationship between student performance and access to online homework solutions exists (Biktimirov and Klassen, 2008). While in a chemistry class, student performance was significantly better with online homework versus a control group (Arasasingham et al., 2005). A follow-up study to evaluate multiple instructors yielded similar results and showed that online homework influenced exam performance, even when adjusted for students' level of preparation (Arasasingham et al., 2011).

While these positive effects should be noted, other empirical studies found no significant differences between classes that used online homework and those that used text-based homework in the traditional written format in the sciences (Cole and Todd, 2003) or in physics (Bonham, Beichner and Deardorff, 2001; Bonham, Deardorff, and Beichner, 2003). Others noted weak correlations between online homework and student performance on examinations (Fisher and Holme, 2000; Chamala et al., 2006). In yet another study, student performance in online statistics and economics courses produced inferior learning outcomes relative to the traditional environment (Anstine and Skidmore, 2005). Researchers did not detect any significant differences in predicting student success for several Web-based homework systems for teaching undergraduate business statistics (Palocsay and Stevens, 2008). Students using online computer-generated math homework did not perform better on examinations; however, students' success rate in the overall course grade appears to be better than the traditional homework group (Kodippili and Senaratne, 2008). In a comparative study between four instructors using the same online homework system, only one instructor noted student improvements in exam performance through online homework while three others did not detect any significant gain (Dufresne et al., 2002). Today's instructors lack information regarding the suitability of online instruction as it relates to learning objectives (Bejerano, 2008). In short, there is still a lack of consensus regarding the effectiveness of online homework which highlights the need for further investigation (Arasasingham et al., 2011).

Online homework offers several benefits to students and instructors over the traditional paper-and-pencil methods, including:

- Students receive immediate feedback which can increase student performance (Kulik & Kulik, 1986).
- Algorithmic (versus static) problems can reduce the possibility of student's copying from one another (Smolira, 2008).
- Students can repeat units multiple times with virtually an unlimited pool of questions to work with (Arasasingham et al., 2011).
- Early feedback on student learning is provided that allows instructors to change instructional methodologies or clarify concepts during instruction (Arasasingham et al., 2011).
- The instructor spends less time grading homework.
- Each student receives a new and different set of problems on each topic, changes them each time the student logs in again, makes the students think and encourages them to really understand the material (Arasasingham et al., 2011).

Some researchers note the particular positive effect of using online homework, with algorithmic versus static problems, to thwart cheating (Smolira, 2008). However, faculty and students approach the topic of academic integrity cautiously. In general, since the threat of being caught is low and the rewards outweigh the consequences, the general perception of both undergraduate and graduate students is the students in an online environment may be more inclined to cheat than in a face-to-face classroom (Fish & Snodgrass, 2013). Similarly, a survey of criminal justice students revealed that students feel cheating is more common in online courses (80%) than face-to-face (60%), but most students – regardless of the environment, indicated never cheating (Lanier, 2006). When pressed further, 40% of online students admitted assisting others with exams, and many excellent students felt they had to cheat to be competitive with others who they felt were cheating in the online environment (Lanier, 2006). Females, married, students with higher gpa's, and older students are less likely to cheat (Lanier, 2006). Performance studies that test the likelihood of cheating or not in either media would be difficult to test in a classroom setting. With respect to homework, instructors often cite the belief that students merely copy one another in completing their

homework. The requirement for each student to complete their own homework is implied through the use of computer-managed homework systems. However, this requirement does not completely diminish the likelihood of cheating in the online environment as students may still assist one another or even allow another student access to his or her account to complete the homework. Unfortunately, if a student wants to cheat, he or she will find a way to do so. Algorithmic problems help, but do not completely eliminate, this issue.

With respect to online homework, researchers are just beginning to explore new technology's effect in the educational setting and individual differences. Although 62% of academic leaders believe that learning outcomes of online education are the same or superior to those in traditional face-to-face education (Allen & Seaman, 2006), critics argue that due to intrinsic differences, online education does not replicate the learning that occurs in the traditional classroom (Bejerano, 2008). Correctly or incorrectly, educators assume that whenever information technology is implemented in a classroom, it contributes to student learning (Peng, 2009). However, the successful implementation of instructional technology in the class to assist in student learning may depend upon student motivation (Raman, Ryan and Olfman, 2005). Educational settings can include student performance differences with respect to many facets such as the number of times students may retry problems, availability of instruction manuals and ungraded problems, seeking mastery versus limited attempts, static versus algorithmic problems, unlimited versus limited completion time, and printing abilities. For instance, some researchers question the number of times to re-try homework as some feel it may lead to students not studying as hard since they know they can rework their mistakes. That is, using multiple tries for online homework encourages a 'guess-and-check' strategy instead of careful reasoning to solve a problem (Pascarella, 2004). Similarly, a researcher using an online homework system in an operations management class found allowing just 2 versus 4 attempts at online homework was preferred as more attempts actually decreased student success (Yourstone, Kraye and Albaum, 2010). Individual differences, such as intrinsic motivation, and computer efficacy (or an individual's confidence in ability to use the computer) are crucial factors in determining the success of an educational system, but perceived interactivity of the system is not a factor (Peng, 2009). In fact, some students increase their homework effort not in an effort to learn but merely to use the shortcuts to accomplish the task (Peng, 2009). Academic maturity is a significant factor in student success when comparing face-to-face with distance education as freshman perform significantly worse than upperclassman (Urtel, 2009). With respect to ethnicity (white, black or Hispanic), there is no significant difference for blacks or Hispanics; however, whites tend to do better in face-to-face. Gender is not a significant factor in student performance either (Urtel, 2009).

Other researchers study student and instructor perceptions regarding online homework (Smolina, 2008). Student perceptions in introductory finance courses indicate that both undergraduates and graduates thought online homework was valuable and contributed to their learning (Smolina, 2008). Student responses indicate that homework assisted in exam preparation, decreased cramming for exams, increased time spent studying for the class, increased understanding of material, and benefitted them through immediate feedback (Smolina, 2008). Graduate students reported a higher satisfaction level than undergraduates. Similarly, oncology students noted benefits associated with online submission of assignments instead of traditional methods (postal or directly handing in) (Bridge and Appleyard, 2008); however, students distrusted the online system's receipt of material. Students credited the system with helping them learn and understand chemistry material (Arasasingham et al., 2011); however, students noted that lectures and textbooks need to be closely aligned and integrated with homework, avoid 'picky' answering schemes, confusing wording, and multiple times to complete homework to achieve mastery was onerous. The perception of any technology by the end user is the key determinant of its benefits and continued use (Smolira, 2008). Student perceptions will impact upon the continued growth of online course compared to traditional courses. In a similar study to the one conducted here, undergraduate student perceptual differences with respect to homework methods (traditional, modified traditional and online) reveal no significant difference between methods as students value homework (Fish, 2012); however, only slightly more than half prefer online homework over more traditional homework methods. Watters and Robertson (2009) reported 75% of undergraduate and graduate students found an online accounting course was as effective, and possibly more effective, than a traditional course. In an accounting course, individual intrinsic motivation and computer efficacy are important factors in determining student's effort and perception (Peng, 2009). For example, with respect to the instant feedback parameter, students who received feedback are more satisfied and their perception of learning is greater (Lindquist and Olsen, 2007) while unmotivated students are more likely to use the instant feedback mechanism to reduce their cognitive burden (Peng, 2009).

From an instructor perspective, positive aspects of online homework include keeping the class on task and on track, and students could work at their own pace on different practice problems (Arasasingham et al., 2011). In some computer-systems, the instructors can track individual student progress and pinpoint exactly where student difficulties lie (Mendicino, Razzaq and Heffernan, 2009). However, other instructors may find online instruction too time-intensive, relationally unrewarding due to the continual e-monitoring throughout the course, and feel a loss of the relational interactions with students (Bejerano, 2008). In general, if course instructors enthusiastically embrace the online approach and integrate assignments with course material, then the students embraced it as well (Arasasingham et al., 2011).

Students perceptions regarding their own abilities significantly impacts upon their effort to do homework (Peng, 2009). Weaker academic students exert more effort in doing homework if they believe the system is interactive; however, it appears to provide a 'shortcut' for less motivated students to complete the required homework (Peng, 2009). Educators cannot use a 'one-size fits all' approach with respect to online homework systems as not all students benefit equally from online homework system (Peng, 2009). From a student perspective, students appreciate online homework most when it is easy to use, carefully planned and integrated seamlessly with course material, and supported by the instructors (Arasasingham et al., 2011).

METHOD

Study participants included 45 undergraduate students in 2 sections during the fall semester and 57 graduate (MBA) students in 2 sections during the spring semester of an introduction to operations management course taught by the same instructor at an AACSB-accredited, liberal arts university. The online components in all 4 sections consisted of Angel as a course management tool, a software solver that accompanies the textbook, and a computer-managed homework system. Angel was used in all courses for grade posting, emailing, announcements, and backup copies of documents used. *The intent of this research is not to evaluate the performance of the computer-managed homework system and corresponding textbook used in the course, but rather to evaluate student perceptions and performance when using it versus their in-class performance.* Therefore, other than to note that the specific package and textbook are very popular in the operations management arena, the specific one used is not noted.

In the fall 2011 semester, due to increasing time demands upon the instructor and the pressure from others to incorporate more technology into the classroom environment, the instructor used a computer-managed homework system for homework instead of traditional homework for 2 undergraduate sections of an Introduction to Operations Management course. The instructor taught each class in a traditional, face-to-face environment, 27 males and 18 females that were juniors and seniors (average age roughly 20 years old) in college took the course. As a prerequisite to the course, all students are required to take a one semester Introduction to Information Technology course. The school also provides a 'Readiness for Online Website'; however, students are not required to partake in the course. Homework was assigned to correspond to quizzes and represented 8% of the student's final grade. Similar to the traditional homework, each of the 9 assignments included 2 to 4 textbook problems, potentially with sub-parts, that specifically corresponded to material covered the prior week, and due prior to a quiz covering that material. The computer-managed homework system problems were 100% quantitative and corresponded directly to the book problems. (Note the instructor has the ability to add customized quantitative and qualitative questions; however, this was not done for any of the assignments.) The instructor posted suggested problems that consisted of prior homework solutions to Angel for additional student support. The computer-managed homework system was set so that students had three tries on each problem, problems were algorithmic not static, students were given an unlimited time to complete the homework by the required due date (which corresponded to an upcoming quiz and recently taught materials), could not print out the homework to work off line, and similar suggested problems (that consisted of prior homework solutions) were posted to Angel for additional student support. Student evaluation also consisted of corresponding quizzes (23%) that followed homework due dates, and three exams (23% each).

In the subsequent spring 2012 semester, the instructor used the computer-managed homework system for homework for 2 graduate (MBA) sections of Introduction to Operations Management course. One section consisted of 30 students in a One-Year MBA program, while the other course included 27 part-time evening MBA students. In total, 40 males and 17 females participated at the graduate level where the average age was 26. Similar to the undergraduate business students, as a pre-requisite to the course, all students are required to take a one semester Introduction to Information Technology course, and the 'Readiness for Online Website' is available but not required. Homework assignments corresponded to quizzes and represented 10% of the student's final grade. Each of

the 9 assignments included 2 to 4 textbook problems, potentially with sub-parts, that specifically corresponded to material covered the prior week, and due prior to a quiz covering that material. The computer-managed homework problems were 100% quantitative and corresponded directly to the book problems. (Note the instructor has the ability to add customized quantitative and qualitative questions; however, this was not done for any of the assignments.) The instructor posted suggested problems that consisted of prior homework solutions to Angel for additional student support. The computer-managed homework was set exactly as the previous semester for undergraduate courses: students had three tries on each problem, problems were algorithmic not static, students were given an unlimited time to complete the homework by the required due date (which corresponded to an upcoming quiz and recently taught materials), could not print out the homework to work off line, and similar suggested problems (that consisted of prior homework solutions) were posted to Angel for additional student support. Student evaluation also consisted of corresponding quizzes (30% with 2 quizzes dropped) that followed homework due dates, and two exams (30% each).

RESULTS

On the last day of the semester, all classes voluntarily completed a traditional pen-and-pencil survey consisting of questions specific to the course. The information was compiled by graduate assistants in the department and forwarded to the instructor. While students were not required to complete each question, 39 (87%) undergraduate and 56 (98%) graduate students completed the survey. Students were invited to make additional comments on various course aspects including their experience with the computer-managed homework system and suggested problems. Their unabridged comments can be found in the Appendix.

As shown in Table 1, survey questions specifically addressed the student's overall experience with the computermanaged homework system (on a 5 point scale), preference for homework (computer-managed homework system, traditional graded homework, pass/fail homework or no homework), the student's experience with the computermanaged homework system (no problems, minor or major problems), relationship to the tools covered in class, number of homework problems and whether the number of problems should change, whether students would attempt the problems if they did not count toward a grade, and posted suggested problems usage and number of problems. With respect to their overall experience (5 point scale with 5 as outstanding) with the computer managed homework system, the average undergraduate response was 3.43, while the graduate response was 3.96. The majority of undergraduates (51.22%) and graduates (59.65%) favored continued use of the computer-managed homework system. Roughly a third of the undergraduates favored a pass/fail homework option (31,71%) over graded homework (17.07%). More graduate students favored graded homework (21.05%) than the pass/fail homework option (17.54%). Interestingly, only 1 graduate out of the 102 (.01%) students who participated in the online homework favored no homework. Roughly half of the undergraduates (50.00%) and graduates (50.68%) found the computer-managed homework system easy to use. More undergraduates (13.89%) than graduates (1.96%) reported major problems with the program. Most undergraduates (84.62%) and graduates (88.89%) felt that the problems covered on the computer-managed homework system helped them to learn the tools taught in class. Both undergraduates (92.31%) and graduates (98.21%) felt that the number of problems given was acceptable and should not change (undergraduates 89.19%; graduates 88.68%). Students were divided with respect to whether they would attempt the problems if they were not included in their final grade; however, most undergraduates (57.89%) and graduates (53.57%) said they would not attempt them. As for the additional suggested posted problems, the majority of undergraduates (65.79%) used them while most graduates (60.71%) did not. Most students believe the number of suggested problems should not change (undergraduates 74.29%; graduates, 90.74%).

The average homework grades were significantly different between undergraduates and graduates (p=.000). Homework grades for the undergraduates averaged 75.44% ($\sigma = 23.33$) with a low of 18.2%, while the average homework grade for graduates was 96.81% ($\sigma = 5.24$) with a low of 75%. While only 11.11% (5) of the undergraduates achieved perfect scores, over 45.61% (26) of the graduates achieved perfect homework averages.

Table 1. Survey Questions Results

Question	Undergra	duates	Graduates	
	#	%	#	%
Rate your overall experience with computer-managed 1	2	5.71	1	1.89
homework system (1=poor, 5=outstanding) 2	3	8.57	1	1.89
3	12	34.29	9	16.98
4	14	40.00	30	56.60
5	4	11.43	12	22.64
Would you prefer:				
Computer-managed homework system	21	51.22	34	59.65
Graded homework	7	17.07	12	21.05
Homework Pass/Fail(points added to exam scores)	13	31.71	10	17.54
No homework	0	0	1	1.75
Comment on the following: I found the computer-managed				
homework system: Easy to use (no problems with use)	18	50.00	26	50.98
Minor problems but I overcame them.	13	36.11	24	47.06
Major problems which impacted upon my grade	5	13.89	1	1.96
No comment	0	0	0	0
Did these problems help you to learn the tools taught in class?				
	33	84.62	48	88.89
Yes	1	2.56	2	3.70
No	5	12.82	4	7.41
Undecided				
The number of homework problems given was:				
Acceptable	36	92.31	55	98.21
Undecided	3	7.69	0	0
Unacceptable	0	0	1	1.79
The number of problems should: Increase	2	5.41	4	7.55
No Change	33	89.19	47	88.68
Decrease	2	5.41	2	3.77
Would you still attempt the problems if they were listed as				
suggested problems and they did not count toward your				
grade? Yes	8	21.05	14	25
No	22	57.89	30	53.57
Undecided	8	21.05	12	21.43
Posted Suggested Problems:				
Regarding the suggested problems on Angel:				
Did you use them?	25	65.79	22	39.29
Yes	13	34.21	34	60.71
No				
The number of suggested problems should: Increase	7	20	4	7.41
Decrease	2	5.71	1	1.85
No change	26	74.29	49	90.74

DISCUSSION

As technology continues to be integrated into the traditional classroom, instructional methods need to be assessed as to their teaching value. Best practices in hybrid and blended courses are lacking (Baugher, Varnelli, and Weisbord, 2003). This paper delves into undergraduate and graduate student perceptions regarding online homework. In general, both undergraduates and graduates favor the continued use of the online homework. The two populations are very similar in their responses to the survey questions, with a slightly more positive result for the graduate students' perceptions (3.96 out of 5 points) than undergraduates (3.43 out of 5 points). This is in keeping with previous studies where graduates reported a higher satisfaction level than undergraduates (Smolina, 2008). Both populations favor online homework over more traditional methods; although, only slightly above half of the students favor online. Roughly 85% or more of both groups indicate that the homework positively relates to their classroom.

learning. In fact, most students indicate that they would not attempt homework if the problems were just 'suggested problems'. Thus, in keeping with other researchers (Bridge & Appleyard, 2008; Smolira, 2008; Arasasingham et al., 2011; Fish, 2012), results indicate that students perceive the learning value of online homework. Perhaps, for this course, students perceived the value in doing homework, particularly its impact on their exam scores, and are aware of the relationship between the two. More than half of the undergraduates (51.22%) and graduates (59.65%) favor using the computer-managed homework system over more traditional methods. However, this also means that just slightly less than half do not prefer the online homework (undergraduates 48.78%; graduates 40.35%). The bottom-line is that an online homework system was not overwhelmingly preferred to other homework methods, similar to a previous study focused on just undergraduates (Fish, 2012). While roughly half of the students (50% undergraduates and 50.98% graduates) found the computer-managed homework system to be easy to use, slightly more than half reported minor (36.11% and 47.06%) or major (13.89% and 1.96%, respectively) issues.

Students reacted positively to the computer-managed homework system settings (three attempts on each problem, algorithmic not static problems, an unlimited time to complete the homework by the required due date, inability to print the homework to work off line, number of problems (2 - 4 problems requiring roughly 45 minutes to an hour) and similar posted suggested problems with solutions. The instructor matched the online homework settings for the given textbook. Similar to other studies, online rounding and data entry difficulties were noted (Smolira, 2008; Arasasingham et al., 2011). Other student complaints regarding alignment of homework, lectures and the textbook, or confusing wording, or too many attempts being allowed (Arasasingham et al., 2011) did not surface over the semester. One of the features of the computer-managed homework system allows students to contact the instructor through email with any particular questions that they may have. This feature was never used by any of the undergraduate students over the course of the semester, but the instructor was contacted twice by graduates. Perhaps this can be attributed to posted suggested problems, which the majority consulted.

Student perceptions for the introduction to operations management course are similar to student perceptions in the introduction to finance course (Smolira, 2008), as both sets of students saw online homework as valuable. A few points need to be made regarding differences in online delivery. Both the finance and operations courses online homework sets included algorithmic versus static problems, an unlimited time to complete the homework, a schedule corresponding to course delivery, and posted ungraded problems. Differences between the online homework setups include printouts, 5 tries (versus 3) with a mastery focus, and book solutions being provided for the finance course (and not the operations management course). Regardless of these differences, the student's perceptions are similar: homework is valuable! Note, in the case of this study, students completed the homework as course requirements which may have biased their view. A comparison study between students' performance when homework is required versus when it may not be may yield different perceptions and performance results.

In general, undergraduate and graduate perceptions of online homework are similar. The survey results indicate that the older graduate students are slightly more amenable to online homework than undergraduates, which is in keeping with previous research (Smolira, 2008). This is in keeping with other studies (Urtel, 2008) that indicate online education is more favorable to the more disciplined, mature students. Interestingly, the performance for both populations is significantly different. Graduates students performed significantly better on homework than undergraduates. So while both populations indicate that homework has value, they did not perform equally - in spite of the multiple attempts that were allotted. While the two populations did not have the same set of problems, the books and problems chosen were in keeping with their educational level. Perhaps, graduates students realize the quantitative value toward their final grade versus undergraduates or they may just be more mature and disciplined.

As some researcher noted (Smolira, 2008; Peng, 2009), student and instructor technology perceptions are key to its continued use and growth. While other studies overwhelmingly indicate students' perceptions are favorable to online homework (Bridge & Appleyard, 2008; Smolira, 2008; Arasasingham et al., 2011), these results are not as clear as roughly half of the students favor online - while the other half does not. Students do not benefit equally from an online homework system (Peng, 2009) and these results clearly demonstrate that graduates performed significantly better on homework than undergraduates. In this study, only slightly more than half (undergraduates 51.22% and graduates 59.65%) prefer online homework to the more traditional homework methods. These results are also somewhat in contrast to Watters and Robertson (2009) that indicates that 75% of students found online instruction to be more effective than traditional. Perhaps the students in this study do not have significant experience with online homework or were not adequately prepared for the online environment. While certainly more technological than previous generations, students may still be adjusting to new instructional methods. As noted in the literature review,

there is still a lack of consensus regarding the effectiveness of online homework which highlights the need for further investigation (Arasasingham et al., 2011). Assuming today's undergraduate and graduate populations are capable of moving onto 'online' experiences without proper training is a mistake. Students need training as many of the assessment methods (such as homework) while similar, are different than what the student may be accustomed to. Student perceptions are a critical factor to consider and should not be taken lightly. Book publishers need to include tutorials to assist students with their perceptions and performance, and make improvements to the currently available online homework programs. As technology is integrated into the classroom experience, instructors and administrators need to work with students to overcome the barriers to continued proliferation of online methods.

REFERENCES

- Allen, I.E. and Seaman, J. (2011). Going the Distance: Online Education in the United States. Babson Survey Research Group and Quahog Research Group, LLC.
- Anstine, J., and Skidmore, M. (2005). A small sample study of traditional and online courses with sample selection adjustment. *Journal of Economic Education*, 36, 107-128.
- Arasasingham, R.D., Martorell, I. and McIntire, T.M. (2011). Online Homework and Student Achievement in a Large Enrollment Introductory Science Course. Journal of College Science Teaching, 40(6):70-79.
- Arasasingham, R.D., Taagepera, M., Potter, F., Martorell, I., and Lonjers, S. (2005). Assessing the effect of web-based learning tools on student understanding of stoichiometry using knowledge space theory. *Journal of Chemical Education*, 82(8): 1251-1262.

Bacdayan, P. (2004). Comparison of Management Faculty Perspectives on Quizzing and Its Alternatives. September/October 2004, 4-9.

- Baugher, D., Varanelli, a., and Weisbord, E. (2003). Student hits in an internet-supported course: How can instructors use them and what do they mean? *Decision Sciences Journal of Innovative Education*, 1,159-170.
- Bejerano, A.R. (2008). Raising the Question #11 The Genesis and Evolution of Online Degree Programs: Who Are They For and What Have We Lost Along the Way? *Communication Education*, 57(3), 408-414.
- Biltimirov, E.N. and Klassen, K. (2008). Relationship between the use of online support materials and performance in the introductory finance class. *Journal of Education for Business*, 8, 153-158.

Bonham, S. Beichner, R. and Deardorff, D. (2001). Online homework: Does it make a difference? Physics Teacher, 29(5): 293-297.

- Bonham, S., Deardorff, D. and Beichner, R. (2003). Comparison of student performance using web and paper-based homework in college-level physics. *Journal of Research in Science Teaching*, 40(10): 1050-1071.
- Bridge, P. and Appleyard, R. (2008). A comparison of electronic and paper-based assignment submission and feedback. *British Journal of Educational Technology*, 39(4): 644-650.
- Chamala, R.R., Ciochina, R., Grossman, R.B., Finkel, R.A., Kannan, S., Ramachandran, P. (2006). EPOCH: An organic chemistry homework program that offers response-specific feedback to students. *Journal of Chemical Education*, 83(1):164-169.
- Cole, R.S. and Todd, J.B. (2003). Effects of web-based multimedia homework with immediate rich feedback on student learning in general chemistry. *Journal of Chemical Education*, 80(11): 1338-1343.
- Eskew, R.K., and Faley, R.H. (1988). Some determinants of student performance in the first college-level financial accounting course. *Accounting Review*, 63, 137-147.
- Fish, L.A. and Snodgrass, C.R. (2013). A Preliminary Study of Business Student Perceptions of Online versus Face-to-Face Education. Proceedings of the Business Research Consortium of Western New York, Canisius College, Buffalo, NY, April 13, 2013.
- Fish, L.A. (2012). A Comparison of Student Perceptions of Traditional versus Online Homework in an Introductory Operations Management Course. 2012 Business Research Consortium of Western New York, SUNY Oswego, April 21, 2012.
- Fisher, L., and Holme, T. (2000). Using web-based databases in large-lecture chemistry courses. Chemical Educator, 5(5): 269-276.
- Johnson, C.W. (1989). The association between testing strategies and performance in college algebra, attitudes toward mathematics, and attrition rate. *Social Science and Mathematics*, 89, 468 477.
- Hong, E., Wan, M., and Peng, Y. (2011). Discrepancies Between Students and Teachers Perceptions on Homework. *Journal of Advanced Academics*, 22, 280-308.
- Kodippili, A. and Senaratne, D. (2008). Is computer-generated interactive mathematics homework more effective than traditional instructorgraded homework? *British Journal of Educational Technology*, 39(5): 928-932.
- Kulik, C.C. and Kuli, J.A. (1986). Effectiveness of computer-based education in colleges. AEDS Journal, 19(Winter/Spring), 81-108.
- Lanier, M. (2006). Academic Integrity and Distance Learning. Journal of Criminal Justice Education, Sep 2006, 17(2), 244-21.
- Lefcort, H. and Eiger, S.M. (2003). Preparatory versus practice homework. Journal of College Science Teaching, 33 (1):16-18.
- Lindquist, T.M. and Olsen, L.M. (2007). How much help, is too much help? An experimental investigation of the use of check figures and completed solutions in teaching intermediate accounting. *Journal of Accounting Education*, 25(3), 103-117.
- Mendicino, M., Razzaq, L. and Heffernan, N.T. (2009). A Comparison of Traditional Homework to Computer-Supported Homework. Journal of Research on Technology in Education, 41(3), 331-359.
- Palocsay, S.W. and Stevens, S.P. (2008). A study of the effectiveness of web-based homework in teaching undergraduate business statistics. *Decision Sciences Journal of Innovative Education*, 6, 213-232.
- Pascal, R., Walberg, H.J. and Weinstein, T. (1984). The effect of homework on learning: A quantitative synthesis. *The Journal of Educational Research*, 78, 97-104.
- Peng, J.C. (2009). Using an Online Homework System to Submit Accounting Homework: Role of Cognitive Need, Computer Efficacy, and Perception. *Journal of Education for Business*, May/June 2009, 263-268.
- Peters, M., Kethley, B. and Bullington, K. (2002). The relationship between homework and performance in introductory operations management courses. *Journal of Education for Business*, 77, 355-366.
- Raman, M., Ryan, t. and Olfman, L. (2005). Designing knowledge management systems for teaching and learning with Wiki technology. *Journal* of *Information Systems Education*, 16, 311-321.
- Rayburn, L. G. and Rayburn, J.M. (1999). Impact of course length and homework assignments on student performance. *Journal of Education for Business*, 74, 325-331.

- Smolira, J.C. (2008). Student Perceptions of Online Homework in Introductory Finance Courses. Journal of Education for Business, November/December 2008, 90-94.
- Urtel, M. (2009). Assessing academic performance between traditional and distance education course formats. Educational Technology & Society, 22(1), 322-330.
- Watters, M.P. and Robertson, P.J. (2009). Online Delivery of Accounting Courses: Student Perceptions. Academy of Educational Leadership Journal, 13(3): 54.
- Yourstone, S.A., Kraye, H.S., and Albaum, G. (2010). Online Quantitative-Based Assignments Are more attempts better for learning? *Decision Sciences Journal of Innovative Education*, 8(2): 347-351.

Appendix: Unedited Student Responses

Undergraduate Fall 2011

I found the computer-managed homework system:

Minor problems but I overcame them.

Comments:

- I wish there was better prompts if problems were answered wrong.
- Sometimes it rounded things oddly.

Major problems which impacted upon my grade

Comments:

• Decimals were hardly rounding was a major issue and it does not really help solve problems.

Any additional comments on the computer-managed homework system or suggested problems?

- I like the online homework.
- Difficult to adjust too.
- Every class this semester seemed to have some online components along with textbook. The total costs were outrageous.
- I liked the computer-managed homework system. It is nothing you can change but I don't like how it corrects the problem if you get it wrong but doesn't give you any insight on how to do it.
- The questions were not specific, making it difficult to answer.
- Computer-managed homework system was not ideal. Rather have hw to hand in to professor so she could correct and make comments.
- Easy to forget to do.
- The suggested problems help me understand concepts I didn't fully understand in class but they weren't always indicative of what would be on the quizzes like you suggested they'd be.
- Sometimes the program didn't get the right answer, and the formulas didn't always match.
- Would much prefer if professor graded homework to the computer-managed homework system.

Graduate Spring 2012

Any additional comments on the computer-managed homework system or suggested problems?

- Only issue is that it seems many students 'work together'
- Sometimes the flass player would crash while I was in the middle of doing a problem and I would have to redo the work.
- Sometimes used slightly different formulas and charts that were slightly different from our notes.
- Some of the problems assigned on the computer-managed homework system used very different methods from what we learned in class would have been more helpful if the assigned problems used same methods.
- It was very helpful to have the answers for the suggested problems. If I didn't have the answers, I probably wouldn't look at them.
- I thought that the suggested problems were easier to understand, interpret and study from as opposed to the computer-managed homework system. I found that they were more beneficial when studying for exams.
- Homework problems should mirror quiz problems more.
- I found there were issues at times with the system. Could not save completed problems easily.
- Questioning was different from problems solved in class (sometimes) so the first run was often just to find out what was wanted!
- Its explanations of solutions were sometimes unclear.
- Sometimes the computer-managed homework system differed from how we did problems in class.
- Have quizzes better reflect homework problems.

Building a Model to Measure the Impact of an Online Homework Manager on Student Learning in Accounting Courses

Anita R. Morgan, Indiana University East - Richmond, Indiana, USA

ABSTRACT

Many publishing companies provide online homework management systems that can be packaged with a textbook, but is the online homework manager a useful tool for students? Do online homework management systems really help students learn accounting concepts or do they simply help faculty manage the grading of homework? This paper provides a model with which accounting educators can measure the factors that motivate students to utilize an online homework management system and to measure its effectiveness.

Keywords: online homework manager, accounting, need for cognition, computer self-efficacy, UTAUT

INTRODUCTION

Research suggests that homework is an essential tool for learning accounting [Peters, Kethley, & Bullington, 2002; Rayburn & Rayburn, 1999]. Eskew and Faley [1988] find that student effort has the greatest impact on student performance on exams. Students who exert more effort on homework assignments perform better on exams. Completion of homework helps to build students' cognitive abilities [Davidson & Baldwin, 2005], a skill that is highlighted in the Accounting Education Change Commission recommendations [1999]. In its report, the Commission suggests that motivated students are more likely to engage in activities which challenge and build their cognitive abilities.

Efforts to use technology to engage students and to help them learn content are increasing. While there are numerous technologies possible for students, this paper develops a model to measure the impact of online homework management systems on student performance. Online homework management systems provide students the opportunity to practice working problems while receiving immediate feedback and online support via videos, problem demonstrations, and other multimedia aids. Instructors may structure the course so that students may resubmit homework problems, giving them the opportunity to keep trying until they get it right.

Because the use of online homework management systems is relatively new, little research has been done on its effectiveness. In a study of beginning accounting students, Peng [2009] examines how a student's intrinsic motivation to learn the concepts (Need for Cognition), perception of the interactivity of the online homework manager, and computer efficacy impact the student's usage of the homework management system. This paper expands the work of Peng to include additional theories and factors that may impact student use of the online homework management system. Additionally, the model developed will measure the impact of student usage of an online homework management system on student performance. The literature review section of the paper will provide the foundation of the combined theories. The model development section will describe the model. Lastly, the suggestions for future research section will provide suggestions for research that may test the model.

LITERATURE REVIEW

The purpose of this paper is to develop a model which can be used to measure the impact of online homework management systems on student performance in accounting courses. The model combines the Unified Theory of Acceptance and Use of Technology [Venkatesh, Morris, Davis & Davis, 2003], Computer Self-Efficacy [Compeau & Higgins, 1995], and Need for Cognition [Cacioppo & Petty, 1982; Cacioppo, Petty, Feinstein, & Jarvis, 1996; Cacioppo, Petty, & Kao, 1984] as a way to explain student usage of online homework management systems and the impact of that usage on student performance.

Unified Theory of Acceptance and Use of Technology

Venkatesh et al. [2003] combined eight models to develop the unified theory of acceptance and use of technology [UTAUT]. The eight models are: (a) the theory of reasoned action; (b) the technology acceptance model; (c) the motivational model; (d) the theory of planned behavior; (e) the combined technology acceptance model and theory

of planned behavior; (f) the model of PC utilization; (g) the innovation diffusion theory; and (h) the social cognitive theory.

According to the theory of reasoned action [Fishbein & Ajzen, 1975], behavior is determined by intentions and subjective norms. Intentions are determined by one's attitudes about performing the behavior, one's subjective norms, and one's perceived behavioral control.

A number of variables impact the decision to accept and use technology. The technology acceptance model [Davis, 1989] provides a basis for the use of the theory of reasoned action to predict whether a person will use technology by further defining the beliefs and evaluation variables in the theory of reasoned action model. According to the technology acceptance model, if one thinks that a technology will be useful and easy to use, he or she will use it.

The motivational model adds enjoyment as a variable in the technology acceptance model. While a person's intention to use technology has been shown to be dependent upon his or her perceived usefulness of the technology, enjoyment from the use of the technology is also an important factor that impacts behavioral intent [Davis, Bagozzi & Warshaw, 1992].

The theory of planned behavior is an extension of the theory of reasoned action, which states that behavior is determined by intentions and subjective norms. Attitudes toward a behavior, subjective norms, and perceived behavioral control can be used to predict intention to perform a behavior [Ajzen, 1991]. Additionally, the intent to perform a behavior and perceived behavioral control are good predictors of the behavior. Perceived behavioral control is the person's perception of his or her ability to choose whether or not to perform the behavior and the availability of resources required to be successful in the behavior. In other words, if a person wants to do something, feels a social pressure to do it, and thinks that he or she is able to do it, he or she will be more likely to actually do it. In a study comparing the technology acceptance model and theory of planned behavior, Taylor and Todd [1995b] suggest that combining the two models results in a model that can predict behavioral intention.

The model of PC utilization adds previous experience with technology, expectations about the consequences of use, and facilitating conditions to the technology acceptance model. The intention to use a personal computer [PC] is influenced by the person's attitudes about PCs, the social norms regarding the use of PCs in the workplace, the person's PC use habits, the expected consequences of PC use, and the facilitating conditions in the environment [Triandis, 1977; Thompson et al., 1991]. In addition to the perceived usefulness, ease of use, and social norms, a person's previous experience using technology, whether he thinks the technology will help him in his job, and whether he expects to have the support he needs also impact his decision to accept the new technology.

The innovation diffusion theory provides an explanation as to how new innovations are accepted within society. Five characteristics of an innovation will persuade individuals to adopt it: (a) relative advantage; (b) compatibility; (c) complexity; (d) trialability; and (e) observability [Rogers, 2003; Moore & Benbasat, 1991]. People will accept new technology if it is better than the available technology. If the new technology is compatible with existing values, needs, social norms, and past experiences, people are more likely to accept it. If people perceive that the technology is easy to use and they can try it before committing to using it, they are more likely to accept it. Lastly, the more observable the results of the use of the technology, the more likely people are to adopt it.

The social cognitive theory states that people learn behaviors by observing, modeling, and through motivation [Bandura, 1986; Compeau & Higgins, 1995]. The UTAUT model [figure 1 below] proposes four determinants of behavioral intention, or the intent to use technology: (a) performance expectancy; (b) effort expectancy; (c) social influence; and (d) facilitating conditions. Additionally, gender, age, experience, and voluntariness of use are expected to impact one's intent to use technology. Behavioral intention is expected to have a positive correlation to use behavior; if one intends to use technology, they will use it.

Figure 1: Unified Theory of Acceptance and Use of Technology Model



Performance expectancy

Performance expectancy is the extent to which one expects the use of the technology to improve his/her performance [Venkatesh et al., 2003]. The relationship between performance expectancy and the behavioral intention to use the OHM is expected to be positive; if one expects the OHM to improve his performance in the class, his intent to use it will be higher. Gender and age are expected to impact one's performance expectancy. Men are expected to have higher performance expectancy than women, and young people are expected to have higher performance expectancy than older people.

Effort expectancy

Effort expectancy is defined as the degree of ease associated with the technology [Venkatesh et al., 2003]. The relationship between effort expectancy and behavioral intention is expected to be negative. The easier one expects use of the technology to be (lower effort expectancy), the greater the intent to use it. Gender, age and experience are expected to impact effort expectancy. Younger people and men are proposed to have lower effort expectancy. Those with previous experience using the technology are proposed to have lower effort expectancy.

Social influence

Social influence is the extent to which one perceives others think he or she should use technology [Venkatesh et al., 2003]. Social influence is expected to have a positive relationship with behavioral intention; the more one perceives others think he or she should use the technology, the higher the intent to use it. Gender, age, experience, and voluntariness of use are expected to impact social influence. Based on previous research, social influence has a greater impact on older women [Miller, 1976; Morris & Venkatesh, 2000; Venkatesh et al., 2003].

Facilitating conditions

Facilitating conditions are defined as the perceived support for the use of the new technology. People who perceive that they will be able to receive assistance in the use of the new technology are more likely to use it (have higher behavioral intention). Thus, the expected relationship between facilitating conditions and behavioral intention is a

positive one. Age and experience are expected to impact facilitating conditions. Younger people and people with experience using the technology are expected to have higher expectations of support (facilitating conditions).

Computer Self-Efficacy

Computer self-efficacy is one's perception of his/her ability to use computers [Compeau & Higgins, 1995]. The more skill one perceives himself to have in the use of computers, the more confident he is in trying new technologies. Therefore, computer self-efficacy has an impact on one's perceived ease of use and affects one's attitude about computers [Ballou & Huguenard, 2008]. When one has a positive attitude about computers and feels more confident in his/her use of them, he or she will have a stronger intent to use them. In a study of students in a computer class, Ballou and Huguenard find that a student's perception of his/her computer experience has a positive impact on his/her homework performance. Therefore, computer self-efficacy is expected to have a positive relationship with behavioral intention.

Need for Cognition

Psychologists define the intrinsic motivation to engage in cognitive activities as the need for cognition, or NFC [Cacioppo & Petty, 1982; Cacioppo, Petty, Feinstein, & Jarvis, 1996; Cacioppo, Petty, & Kao, 1984]. Students with a high NFC have greater intrinsic motivation to engage in learning activities and will therefore engage in activities such as completion of homework. Students with low NFC are less motivated to engage in learning activities; therefore, they will be more likely to take the path of least resistance, spending the minimal amount of effort on homework.

Online homework management systems provide opportunities for students to receive immediate feedback while attempting exercises and problems. Many such systems provide sample problems for students along with step-by-step instructions on the completion of a problem. Online homework management systems provide a wide variety of exercises and problems for students to work, ranging from easy to difficult. If allowed to select the types of exercises and problems to complete, students with low NFC are more likely to work only the easy ones as they are less cognitively challenging, while students with high NFC are more likely to select the more difficult exercises and problems [Peng, 2009]. Students with a low NFC score are expected to spend less time and work fewer complex problems in the OHM. Therefore, the expected relationship between NFC and the intent to use the OHM is expected to be positive; students with high NFC are expected be motivated to engage in the learning activities and will therefore report a lower intent to use the OHM.

However, if students with low NFC perceive that the OHM will make the homework easier (as measured by Effort Expectancy), they will demonstrate a higher intent to use the OHM. Additionally, student with low NFC and low Effort Expectancy will be less likely to adapt their learning strategies throughout the course [Dickhauser & Reinhard, 2006, 2009, 2010]. Therefore, the use of the OHM by students with low NFC and Effort Expectancy is less likely to fluctuate throughout the course.

Some researchers have found a link between the need for cognition (NFC) and performance expectancy [Dickhauser & Reinhard, 2006, 2009, 2010]. Students with a high NFC develop performance expectancies based on self-concept related to a specific task, while students with low NFC develop performance expectancies based on a more general self-concept. Therefore, there is an expected relationship between NFC and Performance Expectancy. Students with a low NFC tend to exaggerate their likely performance, which could negatively impact their intent to use the OHM. Additionally, students with low NFC are less likely to adapt their study habits in order to enhance their performance. Therefore, the use of the OHM by students with low NFC and high Performance Expectancy is less likely to fluctuate throughout the course.

MODEL DEVELOPMENT

The proposed model combines the previously-discussed theories and models to explain the factors that motivate a student to use an online homework management system. Further, the model suggests a link between the use of the online homework management system and student learning.

The Unified Theory of Acceptance and Use of Technology (UTAUT) suggests that if one perceives that a certain technology will help him to perform better, will be easy to use, and there is some peer pressure to use it, he will have a greater intent to use it. A greater intent to use the technology will result in greater actual usage of the technology.

The model developed in this paper adapts the use of the UTAUT to the use of technology in the classroom (specifically, the use of an online homework management system). In this case, performance expectancy is the student's perception of how the use of the OHM will help him to learn the concepts and earn a better grade in the course.

Figure 2: Proposed Model



The UTAUT is expanded to include some factors found to contribute to performance and effort expectancy. Students with a high self-efficacy for the class and high NFC will be more likely to expect to perform well in the class [Performance Expectancy]. Students with high self-efficacy perceive that they will be able to learn the course concepts; therefore, they are expected to have a higher intent to use the OHM. Students who have a greater need for cognition are expected to demonstrate a greater intention to use the OHM.

Students who think that they will be able to get the assistance needed to use the OHM (Facilitating Conditions) will expect the OHM will be easier to use. Additionally, students who perceive that they can learn new technologies (high Computer Self-Efficacy) will expect to minimize their effort by using the OHM. Therefore, students with low effort expectancy are expected to demonstrate a greater intention to use the OHM.

Students with greater intention to use the OHM will be more likely to use the OHM, while students demonstrating a lower intention to use the OHM are less likely to actually use it. In a study of student use of Second Life, Du [2011] finds that the lack of intention to use Second Life is a barrier to a student using it. Further, students with greater behavioral intention will most likely use the system in more effective ways. Use might be measured as time on task, the type of exercises and problems attempted, the percentage of problems attempted to total problems available, or some combination of these measures.

Performance outcomes might be measured as exam scores, the performance on a comprehensive problem, the difference between pre- and post-test scores, the final grade in the course, etc. Students who work more accounting exercises and problems are more likely to master the concepts accounting [Peters, Kethley, & Bullington, 2002; Rayburn & Rayburn, 1999]. Working diligently on course assignments in information technology-related courses increases both knowledge of the course concepts and computer self-efficacy [Karsten & Roth, 1998; Kruck & Lending, 2003]. Therefore, there is an expected positive relationship between use of the OHM and performance. According to Bandura [1986, 1997], students' self-efficacy beliefs develop as they evaluate their previous performance. If a student receives a satisfactory grade on an assignment, his/her self-efficacy in regards to the task assigned is strengthened, and they will be more likely to engage in similar assignments in the future. Therefore, it is expected that students who earned a satisfactory grade and perceive that they learned the materials will demonstrate a greater intent to use the OHM in the future.

SUGGESTIONS FOR FUTURE RESEARCH

This paper develops a model by which to measure the impact of an online homework management system on student performance outcomes. The model can be used to measure the degree to which performance expectancy, effort expectancy, and social influence impact a student's intention to use an OHM. Additionally, the model measures the impact of the use of the OHM on student performance. Some possible research questions are:

- 1. Do Self-Efficacy and NFC affect a student's Performance Expectancy?
- 2. Do Performance Expectancy, Effort Expectancy, and Social Influence impact one's intention to use an OHM?
- 3. Does the Intention to use an OHM positively affect the use of the OHM?
- 4. Does the use of an OHM impact a student's performance?

If the relationships in the model are significant, guidelines for best uses of an OHM can be developed. For example, if a student demonstrates low NFC and low self-efficacy for the course, the instructor can intervene to help build the student's confidence in the class, which could motivate the student to make better use of the OHM and therefore perform better in the course.

REFERENCES

Accounting Education Change Commission. [1999]. Accounting Education Change Commission: Its History and Impact. *Accounting Education Series*, 15. Retrieved from http://aaahq.org/AECC/history/cover.htm on January 15, 2012.

Ajzen, I. [1991]. The theory of planned behavior. Organizational Behavior and Human Decision

Processes, 50[2], 179-211.

Ballou, D. & Huguenard, B. [2008]. The impact of students' perceived computer experience on behavior and performance in an introductory information systems course. *Journal of Information Systems Education*. 19[1], 87-97.

Bandura, A. [1986]. Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Cacioppo, J. & Petty, R. [1982]. The need for cognition. Journal of Personality and Social Psychology, 42[1], 116-131.

------ Petty, R., Feinstein, J. & Jarvis, W. [1996]. Dispositional differences in cognitive motivation: The life and times of individuals varying in need for cognition. *Psychology Bulletin*, *119*, 197-253.

------ Petty, R., & Kao, C. [1984]. The efficient assessment of need for cognition. Journal of Personality Assessment, 48, 306-307.

Compeau, D. R. & Higgins, C. A. [1995]. Computer self-efficacy: development of a measure and

initial test. MIS Quarterly, 19[2], 189-211.

Davidson, R., & Baldwin, B. [2005]. Cognitive skills objectives in intermediate accounting textbooks: Evidence from end-of-chapter material. *Journal of Accounting Education*, 23, 79-95.

Davis, F. D. [1989]. Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, *13[3]*, 319–339. ------, Bagozzi, R. P. & Warshaw, P. R. [1992]. Extrinsic and intrinsic motivation to use

computers in the workplace. Journal of Applied Social Psychology, 22[14], 1111-1132.

Dickhauser, O. & Reinhard, M. [2006]. Factors underlying expectancies of success and achievement: The influential roles of need for cognition and general or specific self-concepts. *Journal of Personality and Social Psychology*, *90*[3], 490-500.

[2009]. How need for cognition affects the formation of performance expectancies at school. *Social Psychology of Education*, *12*, 385-395.

[2010]. How students build their performance expectancies: The importance of need for cognition. European Journal of Psychology of Education, 25[3], 399-409.

Du, Y. [2011]. A measurement model of students' behavioral intentions to use Second Life virtual environment. *Journal of Education for Library* and Information Science. 52[1], 41-53.

Eskew, R. & Faley, R. [1988]. Some determinants of student performance in the first college-level financial accounting course. *The Accounting Review*, 63[1], 137-147.

Fishbein, M. & Ajzen, I. [1975]. Belief, attitude, intention and behavior: an introduction to theory and research. Reading, MA: Addison-Wesley. Miller, J. B. [1976]. Toward a new psychology of women. Boston: Beacon Press.

Moore, G. C. & Benbasat, I. [1991]. Development of an instrument to measure the perceptions of

adopting an information technology innovation. Information Systems Research, 2[3], 192-222.

Morris, M. G. & Venkatesh, V. [2000]. Age differences in technology adoption decisions: Implications for a changing workforce. *Personnel Psychology*, *5*[2], 375–403.

Peng, J. [2009]. Using an online homework system to submit accounting homework: Role of cognitive need, computer efficacy, and perception. Journal of Education for Business, [May/June], 263-268.

Peters, M., Kethley, B., & K. Bullington. [2002]. The relationship between homework and performance in an introductory operations management course. *Journal of Education for Business*, 77[6], 340-344.

Rayburn, L. & Rayburn, J. [1999]. Impact of course length and homework assignments on student performance. Journal of Education for Business, [July/August], 325-331.

Rogers, E. M. [2003]. Diffusion of innovations [5th ed.]. New York: Free Press.

Taylor, S. & Todd, P. A. [1995a]. Assessing IT Usage: the role of prior experience. MIS Quarterly, 19[2], 561-570.

Taylor, S. & Todd, P. A. [1995b]. Understanding information technology usage: a test of competing models. *Information Systems Research*, *6*[4], 144–176.

Thompson, R. L., Higgins, C. A. & Howell, J. M. [1991]. Personal computing: toward a conceptual model of utilization. *MIS Quarterly*, 15[1], 124–143.
Trafimow, D. & Fishbein, M. [1994]. The moderating effect of behavior type on the subjective norm-behavior relationship. *The Journal of Social Psychology*. 134[6], 755.

Triandis, H. C. [1977]. Interpersonal behavior. Monterey, Canada: Brooke/Cole.
Venkatesh, V. & Davis, F. D. [2000]. A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 45[2], 186–204.

---, Morris, M. G., Davis, G. B. & Davis, F. D. [2003]. User acceptance of information ---technology: toward a unified view. MIS Quarterly, 27[3], 425-478.

Internationalization of the Undergraduate Business Program: Integrating International Students

Lee Thomas, D'Amore-McKim School of Business, Northeastern University, Boston, USA

ABSTRACT

As we live in an increasingly integrated and competitive global world, global student mobility has greatly affected the student population in the U.S. From academic year 2007-2008 through 2011-2012, according to statistics provided by the Institute of International Education (IIE), the international student population in U.S. institutions is up by 28%. In 2011-2012, 47% of these students were enrolled in business programs, 30% at the undergraduate level and 17% in graduate programs. This number has now surpassed the number of students enrolled in engineering (38%). As efforts are focused to internationalize the curricula on many campuses, the D'Amore-McKim undergraduate business program has devoted deliberate attention to the task of integrating this international group of students more effectively into the entire student population. This is in part a response to the explicit need for "comprehensive internationalization" (Hudzik & Stohl, 2012). In order for all students to benefit from the global worldviews students from other countries bring to our internationalization efforts, the School recognizes that it must provide sustained acculturation support during the freshman experience to assist the students in confidently contributing to and interacting in academic classes and extracurricular activities. This paper describes the steps that have been taken at Northeastern University to further this process.

Keywords: international students, course, curriculum, business, globalization, internationalization

INTRODUCTION

Our vision is to be a university that expands the meaning and impact of our engagement in the world using our knowledge and resources as positive forces for change in both our local communities and our global society.

Northeastern University, The Academic Plan, 2007

This mission statement affirms that globalization is a fact in the landscape of today's world and as such requires attention as to how the university prioritizes its interactions in a more interdependent world. It will affect partnerships with other institutions, all teaching, study abroad opportunities, international students, faculty exchanges, international research agendas, the required co-op (internship) program, on campus services such as food and housing, outreach to the local and global communities, in short, every activity of the institution is in some way touched by the global acknowledgement in this statement. Most universities in the United States today incorporate in some written document that they are committed to a global cause. It appears in the rhetoric of presidents, provosts, regents, and all major officers of institutions. This is serious talk, and it has moral and ethical implications for the actions schools take in teaching, service, and research, the three greatest imperatives of a university. All require a focus on globalization and internationalization.

The literature on internationalization and globalization with reference to higher education has evolved over the past years in relevant and interesting ways. These terms are often used interchangeably by many in campus discussions with regard to various goals and approaches to bringing some international component to either the institution as a whole or to the curriculum. Recently, experts in the field of international education have drawn on the work of Altbach (2006) and Knight (2003) for a quite useful differentiation of the terms. Altbach defines *globalization* as "…the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable in the contemporary world…" and Knight defines *internationalization* as a "… process of integrating an international, intercultural, or global dimension in the purpose, functions, or delivery of postsecondary education…" (as cited in Rumbley, Altbach, and Reisberg, (2012, p. 4). It is this construct of internationalization that is used in this paper.

So, when the D'Amore-McKim School of Business conceptualizes comprehensive internationalization of its undergraduate curriculum it is incumbent upon those teaching to deliver content in its courses that integrates a focus on the international and intercultural dimensions of the content taught. This can be achieved in any number of ways. The content of a course such as BUSN 1101 Sustaining Business in the New Economy, a required first semester freshman course, can draw on numerous case studies, viewpoints, business problems, intercultural communication problems, and so forth in delivering content that reflects the global world we live in rather than focusing solely on the U.S. This, or any other course, for that matter, is enhanced by the interaction of U.S. students and international students. Together they can bring the world into focus with the participation of international students contributing their knowledge of their countries, cultures, and languages, or so schools assume. One of several reasons why schools actively recruit international students is to assist in achieving some goal of internationalization on their campuses. But, unfortunately, at many schools, this is not what happens. For several reasons, international students are not integrated fully into the conversation, the group work, or the campus community. Can this problem be mitigated?

Currently, the undergraduate program at the D'Amore-McKim School of Business at Northeastern University serves 3,600 students, 30% of whom are international, that is, not from the U.S. The administrators and faculty see the curriculum and student outcomes within a vision statement that acknowledges both local and global society. The administration seeks to achieve what is best captured in Hudzik's working definition of "comprehensive internationalization":

Comprehensive internationalization is commitment and action to infuse international, global, and comparative content and perspective throughout the teaching, research and service missions of higher education. It shapes institutional ethos and values, and touches the entire higher education enterprise Comprehensive internationalization not only impacts all of campus life, but the institution's external frames of reference, partnerships and relationships.

(Hudzik, 2011, as cited in Hudzik and Stohl, 2012, p. 66)

Moving from a vision statement to the implementation of a curriculum that realizes the stated goals is for any institution a process requiring strong administrative vision, guidance, and support as well as faculty buy-in. The area of comprehensive internationalization this paper addresses is that of the business curriculum, but it also involves a need created through student mobility, incoming international students to the American based program. The School administration wanted to assess and articulate problems that seemed to exist for these students and implement a plan to best meet their cultural adjustment needs. There were no known models of U.S. business schools providing targeted intervention for international students to prepare them culturally and linguistically in their adjustment to university life. Moreover, students at the D'Amore-McKim School of Business had the additional pressure on them to begin the process to obtain co-op positions by the end of their sophomore year.

In the spring of 2012, the School made a somewhat unconventional move and hired a linguist who also had experience with international students and administrative experience in international programs. The plan was for this individual to contribute to its business curriculum to move the program further toward internationalization by responding both to its vision and to an unprecedented growth in its international student population. In the fall of 2012, international students made up approximately 30% of the undergraduate student body. This figure represented a rapid growth of international students over the previous 5 years, and there were noticeable problems emerging in the integration of these students in the classroom and in the university community. Language barriers and important cultural differences were becoming increasingly apparent in a segregation of the American students and the international students, a problem that today is a national problem at many universities in the United States.

THE ORAL PROFICIENCY PROBLEM

Faculty were voicing concerns about the ability of the international students' linguistic comprehensibility in class as well as the reluctance of many to participate in class discussions at all. The linguist defined what the faculty was observing as two problems. First, a considerable number of students had some serious fossilized articulation problems as the result of having learned English from teachers who spoke English as a second language and themselves had not been given the opportunity to master the sound system of English. Many Asian students fell into

this category. The second, and perhaps more challenging finding was the great cultural gap delineating primarily students from collectivist societies such as China, the Middle East, and to some extent Latin America, from American students and other Western international students raised in more individualistic cultures. Two separate interventions seemed appropriate to mediate this situation.

The oral language proficiency problem was especially acute in the Chinese student population, but it was not limited to this one group of students. The current Chinese students in the U.S. are a part of the initial wave of first generation undergraduate students from China. That is, in the last century, China sent primarily graduate students to the U.S. and not in great numbers as can be tracked in IIE's statistics on international students in the U.S. As a part of China's relatively recent economic policy changes and the emergence of a population with growing affluence, families have began sending record numbers of students for undergraduate education to the U.S. Most of these students studied English in schools in China with methods that did not introduce them to adequate input of oral English spoken by either native speakers of the language or others speaking English as an additional language with a mastery of the English sound system. The students' teachers lived in a China that did not support overseas language study. This problem has led to a generation of Chinese students whose pronunciation habits consistently and in rulegoverned ways obscure meaning in their verbal interactions with other English speakers. Because the sound system they use developed over years of instruction, the pronunciation habits in their speaking patterns are now what is called fossilized, that is, they will remain permanently. (Selinker, 1972; Selinker & Lakshamanan, 1992) If a speaker is just learning a second language, pronunciation can more easily be addressed and changed, but this is not the case when the pronunciation is fossilized. So, putting students with fossilized oral proficiency problems in an English as a Second Language (ESL) class will probably not be effective in changing pronunciation problems; much deeper, more targeted language assistance is necessary. This is best found with those specialized in Speech-Language Pathology and Audiology training. They are extensively trained, simply explained, to change the articulation of anyone who for some reason, a lisp, a stroke, etc. cannot move the mouth and other articulatory processes in a way that produces the desired sound. There are today a number of speech therapists specialized in what is called Accent Modification, changing the way a person speaks a second language (or dialect). (Barb, 2005) Luckily, Northeastern University employs professors and trains graduate students in this specialty.

The D'Amore-McKim School of Business hired a specialist in Accent Modification for the spring and fall semesters of 2012 and offered its own program for its students who had serious pronunciation problems. Students met in the evenings, outside of class time with this instructor for oral language assistance. Given the positive feedback from students and the clear need for this intervention, the Department of Speech-Language Pathology and Audiology at the university began its own sustained program for Accent Modification in its clinic in spring of 2013. Now, all undergraduate business students receive expert pronunciation assistance through this department on campus. Presently, the first problem, identified above by the linguist, oral proficiency, is now being addressed by experts in the field of pronunciation.

THE CULTURAL PROBLEM

The second major problem apparent in the Business School and on campus was one of cultural distance between students coming from collectivist societies and those raised in individualistic cultures. This problem was identified through what the linguist characterized as intercultural miscomunication between the international students and their American peers and university personnel. The expectations around the process, purpose, goals, and assessment in U.S. higher education and the roles people were expected to play within it were vastly different among a growing number of students and the school personnel. It needs to be noted that in addition to the academic business courses the business school requires, students must also apply for and work in one or two usually 6-month paid co-op positions in order to graduate. Students work with co-op advisors who assist them in this step of their education. This process requires the ability to apply for and interview for jobs with major corporations and businesses primarily in the Boston area. Success here entails the need to communicate in a method rewarded by individualistic societies. It takes an appropriate level of assertiveness in verbal and body language, that is, qualities that come fairly naturally to people from individualistic societies but are almost non-existent in the behavior instilled in collectivist cultures. This insight proved to be consistent with what faculty and staff were observing in students from collectivist societies such as China, the Middle East, and Asia in general. These students saw themselves as far more passive recipients of education and the job search which did not match the expectations of professors or their academic advisors and their co-op advising team. Students expected to succeed academically through memorizing information from their texts and classes, and then later simply be assigned to a co-op. They did not have much experience with critical thinking

skills needed in their classes, and they did not expect to go through the rigorous application and interview process for their co-op employment.

As traditionally passive recipients of education, many students, especially Chinese students, demonstrated attitudes that reflected their past experiences in education. Learning large bits of information and presenting it on high stakes tests had led to academic success for them in the past. They had heard of plagiarism and the unsavory consequences that are brought to bear on individuals who are guilty of this crime, but it was clear that the concept of owning words or ideas was alien to their worldview. The ability of this group of students to sit in silence when confronted with a yes/no question (e.g. Did you agree with the author?) was frankly stunning and unsettling for an American. Faculty lamented the fact that critical thinking skills were not strengths of these students. And finally, consistent complaints poured in about the struggle in using team and group projects in class with international students and American students working equally as team members. In later months, the feelings of some American students were voiced publicly in the campus newspaper in an opinion piece by an American student writing about a "Culture of Exclusion". He wrote

Northeastern has a culture problem. As we get into the heat of the semester, midterms, final projects and the dreaded group assignment are creeping into collective consciousness. At the same time, the ugliest part of Northeastern shows up on the fringes of our conversations. Just beneath the surface, but well-known to all of us. Inevitably, many of us will end up in professor-assigned groups to work on a major project with do-or-die implications for our course grades. Inevitably, some of us will end up in groups with foreign students. Then comes the complaining, the generalizations. "He doesn't do anything." "I don't know how she got in, she can't even speak English." "I'm doing all the work." The complaints go on. In these small, rare instances of forced cultural mixing, we fail.

Dobbs, 2012

Notice in this discourse the use of "we" as representing an undefined but assumed group of Americans. This usage also implies that this group is the student body of the university, with international students being in a different category, the author does not see them as part of the "we" "...getting [sic] into the heat of the semester...". Recall that the business school's undergraduate population was 30% international. The writer demonstrates exquisitely through his language the "us" "them" mentality that divided the student population distinctly between Americans and international students. This divisive mentality is a problem that requires attention and active intervention in achieving a truly international campus with all students identifying themselves as "us", meaning Northeastern students and global citizens with global responsibilities. In order to achieve such a population, students must acquire intercultural competence or what a number of internationalization educators express as empathy for others and Deardoff describes as "...knowledge of others; knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others' values, beliefs, and behaviors; and relativizing one's self..." (Deardoff, 2006, p. 247)

Given the existing problems outlined above, the descriptive power of the work of Hofstede's (1980) model of cultural differences organized around their relationship to the value of individualism was used in demonstrating to the business school's administration the cultural problems that existed on the campus. It proved to be quite valuable in understanding and explaining why many students and their faculty and university support network were experiencing such dissatisfaction with communication between Americans and many international students. Hofstede's premises from his seminal cultural argument were used to explain the discordant worldviews on the campus (for an exhaustive review of Hofstede's and subsequent work, see Oyserman, Coon, & Kemmelmeir, 2002).

In general, individualistic cultures, such as the American culture, have high regard for individual rights, personal freedom, self-fulfillment and the creation of a unique self, created through individual accomplishments. Collectivist cultures represent a stark contrast in values regarding the role of self. In a collectivist society, the major theme "…is the assumption that groups bind and mutually obligate individuals." (Oyserman et al., 2002, p. 5). One might consider these two worldviews at the opposite points on a continuum, one focuses on the individual good and the other on the good of the group. Oyserman et al contend that individualism is seen a good trait in the eyes of Americans, indeed, it is "… a quintessentially American thing." (p.1) In a poll of social scientists on how an individualist and a collectivist would respond in certain situations, they

...defined collectivism as a syndrome of attitudes and behaviors embodied in (a) consideration of implications of one's own decisions and/or actions for other people, (b) sharing of material resources, (c) sharing of nonmaterial resources, (f) sharing outcomes, and (g) feeling involved in others' lives. Individualism is, on the other hand, the absence of the above.

(Hui & Triandis, 1986, as cited in Hui & Yee, 1994, p. 410)

Note in this definition especially points (b) and (c) with regard to problems students from collectivist societies have with plagiarism. If these assertions are correct, then using the ideas or words of someone else in a paper or elsewhere is appropriate for anyone coming from a collectivist culture. In fact, it would be the norm. Therefore, the construct of plagiarism lies within a cultural framework, not a language one, and it is difficult to imagine that students can master ways of presenting written material that is not plagiarized simply by taking a writing class. The ownership of ideas is a deeply seeded cultural norm in academic life in individualistic cultures, and it is not shared by collectivist societies. So, students from such societies must first understand on a cultural level the individual ownership of ideas and words before they can benefit from citation work in a writing class. In most English as a Second Language programs (ESL), students, in general, first face learning citation and summarizing skills in ESL without explicit discussion of the difference between the individualistic vs. collectivist cultural norms regarding ownership of ideas and words. The American Constitution is a good example of the individualistic beliefs of the U.S. culture in that it specifically protects the rights of individuals.

An understanding of the individual-collectivist dynamics at work when students are assigned to do a group project in American classrooms is useful, and it provides a partial response to the author of the campus newspaper piece, "Culture of Exclusion". Students from collectivist societies are, through their culture, brought up to be excellent at teamwork. The good of the group is a major goal to their worldview. That is not the case for Americans who value individual achievement. Americans need to be explicitly trained to work effectively in teams, it does not come naturally to them. So, Mr. Dobbs' statement about group work creates an interesting paradox that can best be understood considering how Americans typically go about group work and how collectivists do so. Americans tend to quickly designate a leader for the group and from there individuals are assigned specific tasks. Collectivists tend to move together in reaching a consensus of the problem and then how they should best proceed. Deference may be shown to an older or more experienced colleague in the group. Tasks will be worked on either together or assigned to individuals with an underlying consideration that harmony is achieved in such delegation.

Within the individual-collectivist framework, one can also begin to make sense of some of the miscommunication that was central to many problems observed in the business school environment. Cultural beliefs are embodied in a set of assumptions about how one exists in the world, and it is not intellectually or psychologically available to an individual until that person comes into contact with other human beings who behave differently. Messages are filtered through one's own cultural perspective and one may well misinterpret an intended message due to these perspectives. Intercultural communication is often distorted when the receiver does not share the norms and values of the sender of the message. In brief, one interprets messages and reacts to them according to what is believed to be true about the world, the assumptions that have been imbued in people since birth. Bordieu, Passeron, & Martin (1994, cited in Lauring, 2011) argue that "…cultural distance reduces understanding in the communicative encounter, the disturbance of communication may be more than just a matter of misunderstanding…". (p. 236) This type of miscommunication does not occur at the word, phrase, or sentence level; it entails the intent, or goal, of the communicative act. For example, consider the following interaction between two students in a group assignment setting:

Bob: So, I guess that's all we can get done tonight. Let's meet again tomorrow at 8:00 in the library. Does that work for you? Shenji: Is that good for you? Bob: Sure, I'll see you then. Shenji: It might be difficult. Bob: I know, I'm really busy, too.

Here, Bob is communicating in the manner members of individualistic societies interact; they are direct, they take words at their face value, and they do not readily understand understatement or read between the lines. Notice his

first question should, for him, lead to a yes/no response, but it doesn't. Shenji responds as a member of a collectivist culture, and he tries to communicate to Bob that he can't meet at 8:00 tomorrow, but he is very indirect in his response because he doesn't want to hurt Bob's feelings or cause him to lose face. So, he responds to a yes/no question with a question. He is honoring their relationship, something Americans don't understand or value at this level. So, Bob is probably slightly confused, but he assumes that they're on for 8:00 the next night. Shenji once more tries to tell Bob he can't come then, but he simply cannot bring himself to use the word "no". So, after two tries, Shenji's communicative intent is still misunderstood by Bob. Bob will show up at 8:00 the next evening and Shenji will not be there. This is a concrete linguistic example of the Bordieu et al. argument. Such a theory about intercultural communication can begin to unravel some of the observations students, faculty, and advisors shared during the initial assessment of what was occurring in their classes and offices, especially with the School's large international undergraduate student population.

A COURSE IN CULTURE

One way to address intercultural communication problems is to bring to the level of conscious awareness the cultural assumptions of the culture with which one is attempting to interact and juxtapose those with one's own cultural assumptions. That is, begin a journey asking the questions "Why do these people act the way they do? What are their culturally defined expectations in the situations in which I interact with them? Where did these cultural assumptions come from?" Working on finding answers to these questions about the American culture also lends itself beautifully to student self-reflection that sheds light on their own cultures and underlying assumptions about the world. It is on this premise that the more one understands about a target culture, the more one will understand the intended messages and cultural expectations and begin the sojourn toward true biculturalism allowing for success in the new culture. Toward this end, a course was designed to assist international students in the business program during their first semester of transition into the American culture.

A syllabus was designed using BUSN 1201: Living and Working in the U.S. with the explicit goals of helping international students understand the American cultural assumptions and worldview and gain the cultural competencies to interact effectively in their new surroundings. (See Appendix I) Noting that not all Americans (or members of any culture for that matter) think, act, or feel the same way, and the U.S. is more diverse than it ever has been, a determination had to be made regarding which group of Americans would be used as the most influential to the cultural psyche of Americans. With acknowledgment to the great diversity in the U.S. in 2012, the course designer chose to begin the exploration into culture with the European Americans who first settled on the eastern coast of what is now the United States. This is consistent with work reviewed in Oyserman et al on individualism and collectivism. They trace individualistic traits of Americans back to European Protestantism and the civic emancipation thinking of the Enlightenment period in European and American history as well as the Puritans, a market economy, and the "rugged individualism" described by Alex de Tocqueville (p. 3-4).

The course was designed around themes that identify the American culture as well as communication styles that differ greatly between individualist and collectivist societies. In addition, students were required to join a club and participate in a number of activities and events that took place on the campus. The School of Business traditionally holds a number of events, two of which were required, "Making a Great First Impression" which covered appropriate dress for the job search and then on the job, and an "Etiquette Dinner". Students found the "Etiquette Dinner" to be very important and useful. This event is a formal sit-down dinner where students, in formal dress, learn from an etiquette coach everything from coat checking, the bar (no alcohol), tipping, how to use Western utensils and which ones for what, etc. This was by far the most popular event for the students; they gained confidence in their ability to go to a dinner in future job related situations. Other course activities required students to explore historical sights in Boston, especially as related to the founding of the country. Many pedagogical techniques and methods were used in the class in gaining and sharing knowledge and the understanding of culture in general and then the American culture. Lecturing was kept to a minimum, but it was necessary at times. When material necessitated lecture, students focused on learning about note-taking and basic study skills. They also learned that it was their responsibility when absent to get class notes from another student, and they role played meeting a fellow student in a class specifically for this purpose. Discussion groups, presentations, debates, and roleplays were often used. It was important to learn about sports given the importance they play in small talk in business settings. Students interviewed American students to learn their views on various subjects. Above all students were encouraged to think critically about the topics covered, and every class began with the opportunity to ask questions about some behavior observed on campus or in the city that someone either didn't understand or just wanted to use

to add a concrete example demonstrating what was being learned. These were the "Aha" moments; I get it. Students kept a journal recording all of their activities and a number of additional assignments. They also had video taped presentations in their portfolio of work. (See Appendix I for a more detailed description of topics covered.)

Just as American students take either a course or a pre-departure orientation before a study abroad program that focuses on the culture of the country where they are destined to study, international students can benefit from a similar course. In many ways, it is even more important for international students. These students are young, arriving as freshman, and many only 18 years old. They are not here for a short-term study-abroad experience, they are here for four to five years and plan to earn their degrees from an American institution. So, much can be said for a semester long credit-bearing course in culture and communication. Incoming international students cannot begin to learn and digest enough about the university and the culture they are entering in a two-day or week-long orientation program offered the week before they begin classes as freshmen at American universities. In this course, lasting a full semester, their orientation continued in a supportive environment that could be tailored to their acculturation and intellectual needs.

At this point in time it is too early to reliably measure definitive outcomes of the two interventions described in this paper. Anecdotally, faculty complaints are fewer, and co-op opportunities are increasingly being attained by international students. A more long-term goal of the undergraduate program will be to establish its own assessment tool to measure intercultural competencies of all students, including Americans, considering factors such as study abroad, foreign language acquisition, international co-op, and other variables affecting student outcomes tied to its global mission statement.

CONCLUSION

The D'Amore-McKim School of Business is advancing its mission of internationalization and globalization in all facets of its programs. It engages in international partnerships and research initiatives, study abroad, faculty led short-term overseas experiences, and several different speaker series of internationally recognized individuals covering global activities and topics. The faculty continues to internationalize the experiences students have in their classrooms. It is clear that to be effective in its global mission, new curricular ideas will continue to be implemented. The course described here focuses on incoming international students and how to assist them in understanding the culture they have entered. It is only one facet of the overall freshman experience. They are concurrently enrolled in the freshman course BUSN 1101 Sustaining Business in the New Economy that is required of all freshmen. In this course, they have the opportunity to enter into active discussion with their American peers on topics that are inherently global. Here American freshmen have their international partners to help them gain first hand knowledge of the cultures, worldviews, and ideas that international students bring to the table. Students can create the type of global encounters that they will have in their careers in international businesses requiring intercultural interactions and negotiations. At the same time, faculty members are increasingly including more international perspective in the traditional business courses of finance, accounting, marketing, etc.

The ultimate internationalization of the curriculum and the campus is to have one community of students who consider themselves all as global citizens working toward sustaining the interconnected world they live in. The stakes are high for this generation given the increasing global challenges they will face during their lifetimes and in their careers. It is imperative that schools remain nimble and proactive in the preparation of students to think and act both locally and globally.

References

- Barb, C. (2005). Suprasegmentals and Comprehensibility: A Comparative Study in Accent Modification. (Unpublished doctoral dissertation). Wichita State University, Witchita, Kansas.
- Deardorff, D. (2006). The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States. *Journal of Studies in International Education*. 10(3), pp 241-266.

Dobbs, T. (October 25, 2012). Column: A Culture of Exclusion at NU. Huntington News.

Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage.

Hudzik, J. and Stohl, M. (2012). Comprehensive and Strategic Internationalization of U.S. Higher Education. In *The Sage Handbook of International Higher Education*. Deardoff, D., de Wit, H., Heyl, J., Adams, T. (eds). pp. 61-80. Los Angeles, CA: Sage.

Hui, C. and Yee, C. (1994). The Shortened Individualism-Collectivism Scale: Its Relationship To Demographic and Work-Related Variables. *Journal of Research Personality*. V. 28, pp 409-424.

Institute of International Education. (2007-2012). Open Doors: Report On International Educational Exchange. Institute of International Education. International Higher Education. 33(Fall), 2-3.

Lauring, J. (2011) International Organizational Communication: The Social Organizing of Interaction in International Encounters. *Journal of Business Communication*. V. 48, No. 3, pp 231-255.

Oyserman, D., Coon, H, and Kemmelmeier, M. (2002). Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analysis. *Psychological Bulletin.* V. 128, No. 1, pp 3-72.

Redden, E. (2012, October 16). "I'm not Racist, but". Inside Higher Ed. Retrieved from:

http://www.insidehighered.com/news/2012/10/16/tensions-simmer-between-american-and-international-students.

Rumbley, L., Altbach, P., and Reisberg, L. (2012). Internationalization Within the Higher Education Context. In *The Sage Handbook of International Higher Education*. Deardoff, D., de Wit, H., Heyl, J., Adams, T. (eds). pp 3-26. Los Angeles, CA: Sage.

Selinker, L. (1972). Interlanguage. IRAL, 10, No. 3, pp 209-321.

Selinker, L. & Lakshamanan, U. (1992). Language Transfer and Fossilization: The "Multiple Effects Principle". In Language Transfer and Language Learning. Gass, S. & Selinker, L. (eds). pp 197-216. Amsterdam: John Benjamins.

Storti, C. (2004). Americans at Work: A Guide to the Can-Do People. Yarmouth, Maine: Intercultural Press, Inc.

Lee Thomas, Ph.D., is a linguist in the D'Amore-McKim School of Business at Northeastern University, Boston. She is *Emerita* Associate Professor of Linguistics and Director of International Programs and Services at the University of Nevada, Reno. She has worked extensively internationally in Japan, India, Zambia, Saudi Arabia, and Slovakia.

APPENDIX I.

The topics included in the course, as per the syllabus follow:

The U.S. University System

Grading, Credit System, Roles of Students/Professors/Others Academic Integrity, Plagiarism Signaling and Body Language 101

Direct vs. Indirect Communication Styles

High and Low Context Cultures: Communication Styles Styles for the Workplace

Why Did Europeans Come to the Americas?

Religion and Government The Environment of the New Immigrants

The Environment of the New Immigrants

Early Settlements, The Puritans Current topic: Sports in the U.S.: Focus Basketball

Ideas of the Enlightenment

Philosophy of Human Rights, Scientific Discovery, Deductive Reasoning Critical Thinking, Evidence, Debating

Equality for All

The Constitution, Slavery, The Civil Rights Movement The Feminist Movement, Gay Rights, Gender Roles

How Americans See Others

Success American Style: You are What You've Done Teamwork, Efficiency, Concrete Results, Contracts, Working with Americans

Individualism in U.S. Culture

The Path of the Child, Schooling, Loyalties In-Group vs. Out-Group in Individualist vs. Collectivist Societies

Immigration in the U.S. Today

Demographics of Ethnic Diversity Voices of Immigrants

Concept of Time in the U.S.

Obsession with Efficiency, Value of Time, Time and Money

Power in the Workplace

Bosses and Subordinates in Communication, Negotiating

Materials for this course were taken from a wide variety of sources: films, primary readings of the Enlightenment, voices of slaves and immigrants, newspaper and journal articles, and exercises on intercultural awareness. We used one textbook by Craig Storti, *Americans at Work: A Guide to the Can-Do People*, (2004). While the topics in the text are highly relevant, the text itself is already dated given the fast pace at which the demographics in the United States have changed in just the last 9 years. For this reason, it was augmented greatly through the materials mentioned.

Facilitating and Documenting Behavioral Improvements in Business Student Teamwork Skills

Charles J. Hobson, Indiana University Northwest, Indiana, USA David Strupeck, Indiana University Northwest, Indiana, USA Andrea Griffin, Indiana University Northwest, Indiana, USA Jana Szostek, Indiana University Northwest, Indiana, USA Rajan Selladurai, Indiana University Northwest, Indiana, USA Anna S. Rominger, Indiana University Northwest, Indiana, USA

ABSTRACT

A comprehensive framework for teaching teamwork and documenting improvements in behavioral skills was evaluated using 247 undergraduate business students enrolled at an urban regional campus of a Midwestern state university. Major components of the framework included: (1) video-taping of student teams at the beginning and end of the course, (2) assessment of individual student performance on 15 positive and 10 negative teamwork behaviors, (3) instructor-led coaching sessions with each student, (4) informational modules on teamwork and team processes, and (5) multiple opportunities to practice teamwork skills. Major results revealed: (1) a statistically significant increase in overall teamwork scores of 25.59%, (2) statistically significant improvements in nine of the fifteen positive teamwork behaviors, (3) no demographic differences in overall teamwork improvement as a function of sex, age, race/ethnicity, or major and (4) very positive student responses to an end-of-course survey concerning teamwork knowledge, self-confidence, and attitudes.

Keywords: teamwork skills, teaching teamwork, teamwork education.

INTRODUCTION

The pervasive use of teams by U.S. businesses has been well documented (Cannon-Bowers & Bowers, 2011; Nielsen, Sundstrom, & Halfhill, 2005; Thompson, 2011). In fact, Robbins and Judge (2014) asserted that teams are utilized virtually everywhere at this point and firms that do not employ teams in some manner are rare.

Given the widespread reliance on teams, it is not surprising that organizations have called upon higher education to place more emphasis on the development of student teamwork skills. A Conference Board report in 2008 found that prospective employers rated teamwork as second only in importance to communication skills for graduates of fouryear colleges. In a 2009 survey of businesses in the United States, conducted for the Association of American Colleges and Universities, fully 71% of the responding employers wanted schools to increase their emphasis on the development of student teamwork and collaboration skills. More recently, an article in the Chronicle of Higher Education (Selingo, September 12, 2012) confirmed numerous and continuing employer complaints about poor teamwork skills among new college graduates.

U.S. collegiate schools of business have attempted to respond to these market demands from employers. This has typically been accomplished by expanding the use of teamwork assignments throughout the curriculum (Chen, Donahue, & Klimoski, 2004; Halfhill & Nielsen, 2007; Holtham, Melville, & Sodhi, 2006; Hughes & Jones, 2011; Page & Donelan, 2003; Sashittal, Jassawalla, & Markulis, 2011).

Problems with Business School Approach to Teamwork

While the emphasis on teamwork has clearly increased in recent years, several serious problems have been identified in the ways in which business schools address the development and assessment of student teamwork capabilities (Bolton, 1999; Hansen, 2006; Hobson, Strupeck, Griffin, Szostek, Selladurai, & Rominger, in press; Vik, 2001). When considering these problems, it is important to note that most researchers agree that teamwork consists of a set of behavioral skills (Cannon-Bowers & Bowers, 2011; Hughes & Jones; Thompson, 2011). Consequently, both developmental and assessment efforts should be focused on specific teamwork behaviors. Unfortunately, this has not been the case. Bolton (1999), Hansen (2006), and Vik (2001) offered particularly damning criticism of collegiate business schools. These researchers contend that the majority of business faculty who use teams do not provide any instruction on teamwork or make any effort to assess student performance in this area. They simply place students in teams and expect them to work together on class projects. Major reasons cited by the authors for this laissez faire approach include: (1) lack of preparation time, (2) lack of class time after covering course content, (3) unfamiliarity with the teamwork literature and teambuilding techniques, (4) uncertainty about how to address these topics, (5) mistaken assumptions that students can be successful in teams without assistance, and (6) not having given these issues much consideration. Thus, it appears that formal coverage of teamwork is one of several content areas addressed. This coverage could include a chapter in the OB text book, one or more class lectures, and experiential teamwork exercises. However, as noted by Chen, Donahue, and Klimoski (2004), while some educational institutions have a curriculum focus on developing basic knowledge of teamwork, actual skills and competencies in teamwork are "rarely developed" (p. 28). In addition several researchers (Buckenmyer, 2000; Connerley & Mael, 2001; Holmer, 2001) have noted that the limited and inadequate teamwork instruction that most students receive often results in disengagement and cynical views of the value of teams.

Hobson, Strupeck, Griffin, Szostek, Selladurai, & Rominger (in press) identified and discussed major problems with how business schools typically assess student teamwork. These included: (1) the complete absence of any type of assessment (Bolton, 1999; Hansen, 2006; Vik, 2001), (2) reliance on paper and pencil tests of knowledge (Hughes & Jones, 2011), (3) the use of poor grading schemes, such as using the grade on a team project for everyone, regardless of contribution level (Sheppard, 1995), (4) the failure to directly observe student behaviors/skills while working in teams (Meister, 1985; Baker & Salas, 1992), and (5) the lack of a behaviorally specific assessment framework, which precludes providing students with meaningful feedback and coaching on their teamwork skills.

The challenges facing business schools with teamwork education are indeed substantial, both in terms of skill development and assessment. However, solutions and the elements of an effective approach can be identified. They will be discussed in the next section.

Solutions and Elements of an Effective Approach

Based upon a review of the literature on education/learning in general and teamwork education in particular, elements can be identified that facilitate student learning of teamwork skills and address the problems that have plagued business schools in this area. These essential elements consist of: (1) the acquisition of knowledge concerning teamwork behavioral skills, (2) opportunities to practice teamwork behavioral skills, (3) initial and repeated behavioral measurement of student teamwork skills as evidenced in group activities, and (4) frequent behavioral feedback about teamwork skills performance.

Essential Element One--Acquisition of Teamwork Skills Knowledge

Anderson's (1983, 1995) ACT theory posits that learning of complex behavioral skills (e.g., teamwork) progresses through three distinct stages. The first involves the acquisition of factual or declarative knowledge about the skill being learned. Thus, a necessary first step in effective teamwork education should be the presentation of information, via lectures and/or reading, about essential teamwork behavioral skills.

Chen et al. (2004) reported on a comprehensive effort to develop and evaluate an entire course devoted to teamwork in the psychology department of a large mid-Atlantic coast university. They addressed student declarative knowledge of five teamwork related skill domains (conflict resolution, collaborative problem solving, communication, goal setting and performance management, and planning and task coordination, Stevens & Campion, 1994) through the use of assigned readings and lectures/discussion sessions. Other authors have also argued that basic skills instruction is a necessary precursor to the development of student teamwork behavioral skills (Bain, 2004; Bolton, 1999; Fink, 2003; Hughes & Jones, 2011).

Essential Element Two--Opportunities to Practice Teamwork Behavioral Skills

The second stage in Anderson's theory involves the integration of declarative knowledge with proceduralized knowledge, concerning how to actually perform the target behavior. Success in this stage requires opportunities to

practice how to exhibit the target behavior. With extensive practice, one can achieve Anderson's third stage, in which the behavior becomes more automatic and easy to exhibit.

Based upon Anderson's framework, a second critical element in effective teamwork education involves providing ample opportunities to practice the fundamental behavioral skills. Without such opportunities, student learning would be limited to the acquisition of declarative knowledge only.

Chen et al. (2004) specifically addressed this second important element by requiring that students in the teamwork class participate in 1-2 hours per week (over a 16 week semester) of in-class group activities, as well as three outside team exercises. Bolton (1999) and Hughes & Jones (2011) also emphasized the critical value of practice opportunities for students in developing teamwork skills, but only after receiving basic skills instruction.

Essential Element Three—Behavioral Based Assessment

The third essential element in effective teamwork education consists of a behavior-based assessment framework that utilizes the observation of student performance to identify strengths and weakness, as well as measure progress. Wiggins (1998) described a general evaluation methodology that offers a promising framework for use with teamwork. It is called "educative assessment" and involves the direct observation and evaluation of student behavior in team activities by the instructor. Baker and Salas (1992) also underscored the importance of direct observation as a critical principle for measuring teamwork behaviors. Ideally, observational assessments should be conducted on multiple occasions to facilitate skills improvement and document progress.

Within the field of industrial/organizational psychology, the managerial selection/promotion tool known as the leaderless group discussion (LGD) can be easily adapted as an "educative assessment" for use with teamwork skills in college courses. The LGD entails presenting a problem to a small group of people (4-7) seated around a table and asking them to develop a solution, within a designated period of time. No single individual was designated as the leader among the participants, hence the "leaderless" group discussion. Typically, evaluators videotape the interaction and then review it to assess the teamwork performance of each individual.

Currently many mid-size and large U.S. organizations employ the LGD as an integral component of their managerial assessment centers (Arthur & Day, 2011). Researchers have also utilized LGD's within assessment centers to evaluate the managerial skills of business students (Bartels, Bommer, & Rubin, 2000; Riggio, Mayes, & Schleicher, 2003). Chen et al. utilized three LGD's to evaluate student teamwork skills in a semester-long course, in five behavioral domains, as discussed above. Finally, Hobson et al. (in press) successfully used LGD's as a basis for initial measurement of student performance on 15 positive and 10 negative teamwork behaviors.

Essential Element Four—Behavioral Feedback and Coaching

The Wiggins (1998) model of "educative assessment" works best when combined with frequent behaviorally-based feedback and coaching from instructors to individual students, concerning their strengths, areas for improvement, and observed progress. Instructors are uniquely positioned to provide students with the feedback they need to develop and master teamwork skills. Without such feedback, it is difficult, if not impossible, for students to clearly know what they are doing well and what improvements are needed.

Bolton (1999) reported using "teaching by wandering around" (TBWA) in a coaching mode to provide students with behavioral feedback while they were working on teamwork exercises in class. In the Chen et al. (2004) study, instructors provided feedback to students while reviewing videotaped team exercises with them. Bain (2004), Fink (2003), and Hughes & Jones (2011) all argued for the active involvement of instructors as coaches, in providing students with feedback necessary to improve teamwork skills.

Purpose

Based upon the above four essential elements, a semester-long course was carefully designed to optimally teach teamwork behavioral skills to undergraduate business students. The purpose of this paper is to conduct a rigorous evaluation of the course's impact on student learning of these important skills.

METHOD

Sample

The sample consisted of 247 undergraduate students enrolled in a senior level teamwork course offered in an Association to Advance Collegiate Schools of Business (AACSB) accredited business school at an urban regional commuter campus of a large Midwestern state university. The campus enrollment is 6,000, and the business school has 500 students in two majors—management and accounting. Data were collected when the teamwork course was offered during a three-year period, from 2009-2011.

Teamwork Course and Formation of Teams

The teamwork course was a requirement for all business majors and highly recommended for business minors. The two pre-requisites were organizational behavior and introductory psychology. The syllabus for the course indicated that there would be video-taping of student teams at the beginning and near the end of the semester. Given the time requirements for the team video-taping and subsequent individual coaching sessions (a total of 10 class periods over a 16-week semester), enrollment in each class was capped at 30. This allowed for six teams of size five.

During the second class meeting, teams were formed by asking students to "count off by sixes," first by the females and then by the males (to insure gender heterogeneity on each team). These preliminary teams were reviewed for the presence of friends or teammates from previous classes. If friends or previous teammates were present in a particular team, appropriate substitutions/replacements were made with individuals from other teams. The objective was to have a set of six teams, in which members did have close prior familiarity with each other.

Once team formation was finalized, members were asked to exchange contact information. Teams were then scheduled for their initial leaderless group discussion (LGD) video-taping during one of the following two class meeting times. Students were simply instructed to attend the scheduled taping and expect to work together on a team exercise.

LGD Exercise

The LGD exercise was conducted in a classroom, hard-wired with video and sound equipment. Team members were seated in a semi-circle. Students were then briefed on the exercise and the need for written output from the team at the end of the session. Exercise topics dealt with general teamwork issues: (1) formulate a rank-ordered list of the seven most frequently encountered obstacles to effective teamwork and two solutions for each obstacle, at the beginning of the semester and (2) specific recommendations for a company interested in using self-managed teams, concerning hiring and training new employees, at the end of the semester. Students were asked to introduce themselves at the beginning of each taping. Using a format developed by Bartels et al. (2000), teamwork sessions ran for exactly 20 minutes. Written output was collected from participants at the end of their session.

The campus Instructional Media Department video-taped each LGD and produced a DVD containing all six of the 20-minute team sessions for a given class. Technicians were able to provide a split-screen image, consisting of a close-up of the person speaking in the upper half and a panoramic view of the entire team in the bottom half. A copy of the class DVD was eventually provided to every student.

Assessment of Teamwork Skills

The teamwork assessment tool utilized in this study was originally developed by Hobson and Kesic (2002) for use in managerial training and development. Identification of specific behaviors for inclusion in the instrument was guided by the work of Benne and Sheats (1948) and later Thompson (2001). These researchers identified essential teamwork skills in two major categories: task management and interpersonal. Based upon the definitions they offered, a set of 15 specific positive behaviors were identified, along with a set of 10 negative or counter-productive behaviors.

The resultant Teamwork Evaluation Form is provided in Figure 1.

Figure 1: Teamwork Evaluation Form

Directions: Use the 0-4 (Never-Always) scale below to evaluate the target person on the specific behaviors listed.

0-4 Evaluation Scale

0 - Never

- 1 Rarely
- 2 Occasionally
- 3 Frequently
- 4 Always

	Positive Behaviors	Negative Behaviors			
0-4 Rating		0-4 Rating			
1.	listened attentively (eye contact, comprehends) when teammate was talking	1.	failed to offer verbal input to team discussion		
2.	piggy-backed on teammate idea	2.	interrupted teammate who was talking		
3.	gave positive feedback to teammate (that's a good idea)	3.	gave personalized, derogatory criticism to teammate		
4.	politely asked for input from a quiet teammate	4.	brought-up topic that was completely unrelated to the team discussion		
5.	offered task-related input during team discussion	5.	started a side conversation while teammate was talking		
6.	took notes on team discussion	6.	dominated discussion by failing to allow others to talk		
7.	attempted to achieve win-win resolutions to conflict	7.	refused to compromise		
8.	kept team focused and "on-track"	8.	insisted that his/her idea was the only correct one		
9.	sought clarification by asking questions or paraphrasing	9.	inappropriately tries to create humorous		
10.	called teammates by their first name	10	nessimistic negative and/or		
11.	summarized areas of team agreement and disagreement	10.	complaining		
12.	constructively criticized teammate ideas, not the person				
13.	appropriately used humor to help team stay relaxed				
14.	answered teammate question				
15.	expressed empathy for teammate feelings.				

After observing an individual's interaction in a team exercise, a rater is directed to use a 0-4 Evaluation Scale, similar to that used originally by Bass (1954), from Never to Always, in assessing the frequency of occurrence of

each of the 25 specific behaviors. For example, if a particular individual never piggybacked on teammate ideas, his/her score for that behavior would be 0, while constant active listening to teammates would warrant a score of 4. An overall score for each student can be calculated by summing the item scores for the 15 positive behaviors and then subtracting the sum of the item scores for the 10 negative behaviors. The range for overall scores is from -40 (0's for all of the positive behaviors and 4's for all of the negative behaviors) to 60 (4's for all 15 of the positives and 0's for all of the negatives), for a total of 100 points. Videotapes of student teams were reviewed by the instructor, an industrial/organizational psychologist with considerable research, training, and consulting experience with teams. Based upon individual performance in the videotaped exercise, the instructor completed a Teamwork Evaluation Form for each student.

Student Training and LGD-Related Assignments

After completion of the video-taping for the first LGD, students were introduced to the Teamwork Evaluation Form, provided in Figure 1 above. The 15 positive and 10 negative behaviors were individually discussed and illustrated with actual examples. The 0-4 evaluation scale was then presented, along with team interaction scenarios to demonstrate appropriate use of the scale.

Two student projects were required for each of the two LGD's-- a self-assessment and a peer-assessment. The selfassessment project required students to observe and evaluate their own teamwork performance in the videotaped LGD, using the Teamwork Evaluation Form described above. After completing this form, students were asked to: (1) identify 3-5 specific behavioral strengths and provide written supporting documentation (frequency counts of the occurrence and specific examples) from the video-tape, (2) identify 3-5 specific behavioral areas for improvement and provide written supporting documentation (frequency counts and specific examples), and (3) formulate a detailed written plan to address each identified area for improvement.

Students were also assigned to coach an individual from another team (not a friend or previous teammate) and complete the second LDG-related project. It required them to observe and evaluate the person they were assigned to coach, using the Teamwork Evaluation Form, and complete the same three steps required in the self-assessment discussed above.

A week after receiving the LGD videos, coaching/feedback sessions were scheduled with the instructor, the student to be coached, and the assigned peer coach. Fifteen minutes were allocated for each session, with more time available, if needed. All three individuals were expected to have completed the teamwork assessments described above and have written copies available for review and discussion.

Sessions were conducted using the following format. First, the individual being coached was asked to share his/her 3-5 prominent behavioral strengths and supporting documentation. Second, the peer coach was asked to share his/her 3-5 prominent strengths for the individual, along with documentation. Third, the instructor shared his evaluation of prominent strengths and noted areas of agreement and disagreement among the three raters, with a reconciliation of major differences in scores. The same 3-step format was then used to discuss a student's specific behavioral areas for improvement. These could be negative behaviors with high scores and/or positive behaviors with low scores.

Coaching sessions were scheduled after both the first and second LGD's. During a student's second coaching session, near the end of the semester, a brief discussion was held, concerning progress exhibited from LGD I to LGD II in the targeted areas for improvement.

Teamwork Course Topics and Assignments after LGD I

After completion of LGD I and the first set of coaching sessions, the following topics were addressed in class and in the custom-developed course handout packet, with experiential exercises to demonstrate and reinforce key concepts, conducted both in class and in field locations.: (1) The Importance of Teams and Teamwork in Business, (2) The Process of Forming and Building Teams, (3) The Major Determinants of Team Performance, (4) The Importance of Team Norms and Sanctions, (5) Team Decision Making, (6) Developing Team Work Plans, (7) Assessing Team Performance and Diagnosing/Addressing Problems, and (8) Giving and Receiving Teammate Feedback.

In addition to completing a self and coaching assessment after each LGD, other course assignments included: (1) Two Team Building Activities, (2) A Norms and Sanctions Exercise, (3) A Team Work Plan Development Exercise, (4) A Team Service-Learning Project with a Regional Nonprofit, (5) A Team Presentation on a Company using Self-Managed Work Teams, (6) A Team Competition Exercise with an Unexpected Obstacle, (7) A Team Review of a Film Exhibiting High Quality Teamwork, (8) A Team Interaction Critique, Action Plan, and Presentation, and (9) A Teammate Feedback Exercise.

Data Collection and Analysis

For purposes of this study, the following data were collected and computer entered: (1) Teamwork Evaluation Forms completed by the instructor for each student based upon their performance in LGD I, (2) instructor-completed Teamwork Evaluation Forms for all students after LGD II, and (3) demographic information for each student, including sex, age, race/ethnicity, and major.

At approximately the halfway point in the data collection period, a decision was made to include a perceptual/attitudinal student survey at the end of the course. It consisted of 21 items, using a 5-point Likert response scale from "strongly disagree" to "strongly agree." Students were asked to respond to each item as a result of having participated in the LGD video-taping and coaching. For example, Item 1 was: "I have improved my teamwork skills." A complete list of the 21 items is provided in Table 3. Responses to the student survey were collected anonymously at the end of the semester, along with standard course evaluations.

SPSS was utilized to conduct four major analyses. First, basic descriptive statistics were calculated for all variables in the dataset, including overall scores on the Teamwork Evaluation Form (the sum of the positive items minus the sum of the negative items) completed by the instructor for all students after both LGD I and LGD II. Second, a repeated measures ANOVA was conducted, comparing overall scores for LGD I and LGD II, including follow-up within-subjects t-tests, comparing means on the 15 positive items and 10 ratings negative items for instructor ratings of student performance in LGD I and LGD II. The third analysis consisted of an exploratory 2 X 3 X 4 X 2 (sex X age X ethnicity X major) factorial ANOCOVA on overall scores in LGD II, using overall scores in LGD I as the covariate. Finally, the fourth analysis involved calculating means for the 21 Likert items on the end-of-class student survey.

RESULTS

Sample Description

A total of 247 undergraduate students participated in this study. The demographic composition of the sample, in terms of sex, race/ethnicity, age, and major consisted of:

Sex	Female:	142 (57.5%)	
	Male:	105 (42.5%)	
Age	19-22:	91 (38.7%)	
	23-27:	81 (32.8%)	
	28-57:	67 (28.5%)	
Race/		African-American:	41 (16.6%)
Ethnicit	y	Caucasian:	159 (64.4%)
	-	Hispanic-American:	32 (13.0%)
		Other:	15 (6.0%)
<u>Major</u>		Management:	172 (69.7%)
•		Accounting:	63 (25.5%)
		Double:	7 (2.8%)
		Other:	5 (2.0%)

Repeated Measures ANOVA

Results for the repeated measures ANOVA on mean overall scores (sum of the 15 positive items minus the sum of the 10 negative items) for LGD I and LGD II indicated that the two means, 23.64 and 29.69 respectively, were significantly different. The calculated F-value was 159.97 (df=1,236), with a probability of < .001, and a computed effect size (eta squared) of .40. The difference in the two means of 6.05 represented a 25.59% increase from LGD I to LGD II.

Results for the follow-up within-subjects t-tests, comparing mean performance in LGD I with that in LGD II on the 15 positive behaviors are summarized in Table 1. Statistically significant increases in mean scores were found for

nine of the 15 positive behaviors (items 1, 2, 3, 4, 5, 6, 9, 10, and 11), while associated effect sizes (r²pbi) ranged from a low of .03 (item 9) to a high of .51 (item 10). No mean differences were found for the remaining six items (7, 8, 12, 13, 14, and 15).

Table 1: Mean ¹ Differences of	15 Positive Bo	ehaviors for Time 1	and Time 2 (n=235)
---	----------------	---------------------	--------------------

15 Positive Behaviors		Time 1 Mean	Time 2 Mean	t Value	df	Sig.	r²pbi
1.	listened attentively (eye contact, comprehenders) when teammate was talking	3.25	3.44	5.41	234	<.001	.11
2.	piggy-backed on teammate idea	1.78	2.35	6.54	234	<.001	.15
3.	gave positive feedback to teammate (that's a good idea)	2.27	2.86	8.56	234	<.001	.24
4.	politely asked for input from a quiet teammate	.46	1.07	6.32	234	<.001	.15
5.	offered task-related input during team discussion	3.04	3.35	7.20	234	<.001	.18
6.	took notes on team discussion	1.91	3.23	11.75	234	<.001	.37
7.	attempted to achieve win-win resolutions to conflict	.15	.25	1.87	234	.063	—
8.	kept team focused and "on-track"	2.11	2.01	-1.08	234	.282	—
9.	sought clarification by asking questions or paraphrasing	2.80	3.00	2.89	234	.004	.03
10.	called teammates by their first names	.55	2.19	15.73	234	<.001	.51
11.	summarized areas of team agreement and disagreement	.74	1.12	3.66	234	<.001	.05
12.	constructively criticized teammate ideas, not the person	.94	1.08	1.51	234	.132	_
13.	appropriately used humor to help the team stay related	.83	.85	.26	234	.797	—
14.	answered teammate question	3.07	3.17	1.38	234	.171	—
15.	expressed empathy for teammate feelings	.24	.23	20	234	.840	

¹ Measurement Scale: 0 = Never, 1 = Rarely, 2 = Occasionally, 3 = Frequently, 4 = Always

Percentage increases in the means for the nine statistically significant items were:

Items	Percentage Increases	Items	Percentage Increases
1	5.85%	6	69.11%
2	32.02%	9	7.14%
3	25.99%	10	298.18%
4	132.61%	11	51.35%
5	10.20%		

These increases ranged from a low of 5.85% (item 1) to a high of 298.18% (item 10).

Within-subject t-test results for the ten negative behaviors are reported in Table 2. Statistically significant improvements (decreases in the rated frequency of negative behaviors) were found for two of the ten (items 2 or 4), with small associated effect sizes of .05 and .02, respectively. Percentage reductions in mean values from LGD I to LGD II were 64.70% for item 2 and 71.43% for item 4. It should be noted that the means for four of the 10 negative behaviors (items 6, 7, 8, and 10) were zero for both LGD I and LGD II.

		Time	Time	t	10	G .	
10 N	Jegative Rehaviors	l Mean	2 Mean	Value	df	Sig.	r²pbi
1.	failed to offer verbal input to team discussion	.06	.09	.85	234	.395	
2.	interrupted teammate who was talking	.17	.06	-3.43	234	.001	.05
3.	gave personalized, derogatory criticism to teammate	.01	.01	.30	234	.764	_
4.	brought-up topic that was completely unrelated to the team discussion	.07	.02	-2.38	234	.018	.02
5.	started a side conversation while teammate was talking	.06	.04	-1.07	234	.286	—
6.	dominated discussion by failing to allow others to talk	.00	.00	_	—	_	—
7.	refused to compromise	.00	.00	_	_	_	—
8.	insisted that his/her idea was the only correct one	.00	.00	_	_		_
9.	inappropriately tried to create humorous situations	.05	.03	67	234	.506	
10.	pessimistic, negative, and/or complaining	.00	.00	_	_	_	_

Table 2: Mean¹ Differences on 10 Negative Behaviors for Time 1 and Time 2 (n=235)

¹ Measurement Scale: 0 = Never, 1 = Rarely, 2 = Occasionally, 3 = Frequently, 4 = Always

Demographic Differences

Demographic differences in overall scores for LGD II, controlling for overall scores for LGD I, were evaluated using an exploratory 2 X 3 X 4 X 2 (sex X age X race/ethnicity X major) factorial ANOCOVA, with overall scores for LGD I used as the covariate. For purposes of this analysis, subjects with double majors (7) and other majors (5) were excluded in order to focus on potential differences between the two majors only and reduce the number of cells in the full factorial with frequencies of zero, due to the low numbers of double and other majors. Results indicated that there were no statistically significant differences for: (1) the four main effects, (2) the six possible 2-way interactions, (3) the four possible 3-way interactions, or (4) the one 4-way interaction. These findings indicated that students benefitted from the teamwork class, without regard to their demographic characteristics.

End-of-Class Student Surveys

A total of 86 end-of-class student surveys were collected and analyzed. Means for the 21 items are displayed in Table 3. Excluding the negatively-worded item 17 (The LGD videotaping was stressful for me.), values ranged from a low of 4.12 to a high of 4.71, with an overall mean of 4.49. These findings strongly suggest that students perceived the LGD videotaping and coaching to be very helpful in improving their understanding of teamwork, their skill levels, and their attitudes and confidence. The mean for item 17 of 2.50 suggested that most students did not perceive the LGD taping to be stressful.

Table 3: Student Survey Item Means

(n=86)

Items	Means
As a result of participating in the LGD videotaping and coaching in Z442	
1. I have improved my teamwork skills.	4.58
2. I have more confidence in my teamwork skills.	4.58
3. I have become more effective in teamwork activities.	4.58
4. I have a better understanding of my strengths in teamwork.	4.70
5. I have a better understanding of my areas for improvement in teamwork.	4.71
6. I have a better understanding of how to improve my teamwork skills.	4.63
7. I have improved my coaching skills.	4.37
8. I have more confidence in my coaching skills.	4.38
9. Assessing my partner's performance in the LGD helped me learn more about teamwork.	4.52
10. Accurately assessing my partner's performance in the LGD was challenging.	4.12
11. I have a better understanding of how teams function.	4.44
12. I can help teams function more effectively.	4.45
13. I feel more optimistic about working in teams.	4.34
14. I feel more confident working in teams.	4.47
15. I have a more positive attitude about working in teams.	4.33
16. I am better prepared to perform well in a future LGD.	4.60
17. The LGD videotaping was stressful for me.	2.50
18. I understand better how important supporting observations are when assessing someone's performance.	4.45
19. I better understand the importance of getting everyone involved on a team.	4.57
20. The LGD experience will help me to better prevent teamwork problems in the future.	4.48
21. The LGD experience will help me to better solve teamwork problems when they arise.	4.48

CONCLUSIONS

Based upon the results obtained in this study, the following four conclusions can be reasonably drawn. First, the findings demonstrate that a collegiate business school teamwork course can be successfully designed to improve student behavioral skills, as reflected in the statistically significant mean increase in overall teamwork scores of 25.59%. Using four essential elements (knowledge acquisition, opportunities to practice teamwork skills, behavioral assessment, and behavioral feedback/coaching) the course effectively incorporated the stages in Anderson's (1983, 1995) ACT theory concerning the learning of complex behavioral skills, like teamwork. This approach also fully addressed the criticisms discussed in the Introduction of how business schools teach and assess student teamwork. Given the documented role and widespread use of teams in the work world, business schools will likely need to include an entire course on teamwork in the curriculum, as opposed to relegating it to partial coverage in multiple classes.

It is important to note that the course framework developed in this study is easily transferrable to other instructors, without the need for substantial additional resources. The only special requirement involves the video-taping of

student LGD's. While best accomplished in a studio setting, it can also be more simply done with a quality camcorder on a tripod and students seated in a semi-circle.

Second, within-subjects t-tests on the 15 positive teamwork behaviors indicated statistically significant improvements in nine of them. Seven of these behaviors had effect sizes above .10, in descending order: (a) using teammate names-.51, (b) taking notes-.37, (c) giving positive feedback-.24, (d) offering task-related input-.18, (e) piggy-backing and asking for input from quiet teammates, both at .15 and (f) listening attentively-.11. The base rates for the 10 negative teamwork behaviors were extremely low in both LGD's—for four items the mean frequencies were 0.00 for LGD I and LGD II. Statistically significant improvements were found for two behaviors, but the corresponding effect sizes were very small: interrupting teammates-.05 and bringing up unrelated topics-.02.

The information provided by the within-subjects t-tests can be useful in modifying course content to more effectively address teamwork behaviors that do not evidence improvement from LGD I to LGD II. For example, item eight in the list of 15 positive behaviors is "kept team focused and on track." There was a slight decrease in the mean frequency from LGD I (2.11) to LGD II (2.01). Clearly this topic needs more emphasis in the course content and in the individual student coaching sessions.

Third, means on the 21 item end-of-class survey were consistently positive. Using a 5-point response format from Strongly Disagree to Strongly Agree, students reported: (a) having improved their teamwork skills-4.58, (b) having a better understanding of their teamwork strengths-4.70, areas for improvement-4.71, and how to make the needed improvements-4.63, (c) having a better understanding of how teams function-4.44 and how to enhance team performance-4.45, and (d) having a more positive attitude about working in teams-4.33, being more confident-4.47, and being more optimistic-4.34. Thus, in addition to facilitating improvements in teamwork behaviors, the course also resulted in positive changes in perceptions and attitudes about teams—important educational outcomes, as asserted by Chen et al. (2004).

The impact of the videotaped LDG's in enhancing student awareness of their teamwork behaviors and facilitating improvements is powerful. In one memorable instance, a student interrupted teammates in LGD I over 25 times. She had been unaware of this behavior until viewing her videotaped performance. Consequently, reducing or eliminating this damaging habit was an important goal in the coaching process. To her considerable credit, there were no instances of interrupting teammates in LGD II!

Fourth and finally, results of the ANOCOVA indicated that there were no demographic differences (as a function of sex, age, race/ethnicity, and major) in student overall teamwork performance in the second LGD, controlling for overall scores in the first LGD. Thus, while the sample was demographically heterogeneous, student teamwork improvements were quite homogeneous.

Limitations

When interpreting the findings of this study, the following three potential limitations should be carefully considered. First, characteristics of the LGD exercises used to assess student skills differed in important ways from the team interaction environments commonly found in work organizations. Specifically: (a) the task performed by student teams dealt with non-controversial topics that limited opportunities for conflict to develop, (b) the LGD tasks had no future impact on students beyond the course and thus could have reduced their interest and motivation to participate, (c) LGD sessions were limited to 20 minutes, while work team meetings can last substantially longer, and (d) students knew that the LGD was being videotaped and this could have inhibited interaction, especially the exhibition of negative behaviors.

A second potential limitation is that student ratings were made by only one instructor, precluding an opportunity to assess the measurement scale's inter-rater reliability. Finally, pending additional research, the generalizability of the findings are potentially limited by the unique characteristics of the student sample, the instructor, the educational institution, and the country in which the study was conducted.

Future Research

There are six areas in which future research on teamwork education using the framework developed in this article would be useful. First, the reliability and validity of the teamwork assessment tool should be investigated. Reliability could be estimated using either a test-retest format in which instructors rate the same LGD videos at two points in time or inter-rater reliability, with two instructors rating student LGD performance. Validity could be

assessed by correlating overall scores with job performance ratings in team-based organizations or established personality measures of teamwork orientation.

Second, the generalizability of the obtained results should be evaluated, employing other instructors, students, institution, and perhaps countries. Third, longitudinal research is needed to assess the degree to which documented improvements in teamwork skills are sustained over time. Fourth, it would be useful to determine whether the newly acquired teamwork skills extend to performance in other teams, beyond those assigned in the course. Fifth, larger scale research is needed to assess the relative importance of the major components of the teamwork class (i.e., videotaped LGD, instructor-led coaching, informational modules, multiple opportunities to practice teamwork skills) in improving student skill levels.

Sixth, the utility of the teamwork skills assessment approach used in this study as a way to document educational outcomes for accrediting bodies, employers, and other important stakeholders should be explored. Finally, given the vital importance of teamwork in U.S. businesses, research on how to optimally adapt the university-based learning methodology to organizational settings would be helpful.

REFERENCES

Anderson, J.R. (1983) The Architecture of Cognition. Cambridge, MA: Harvard University Press.

- Anderson, J.R. (1995) Learning and Memory: An Integrated Approach. New York: Wiley.
- Arthur, W. & Day, E.A. (2011) Assessment Centers. In S. Zedock (Ed.), APA Handbook of Industrial and Organizational Psychology, Volume 2, Building and Developing the Organization. Washington DC: American Psychological Association.
- Bain, K. (2004). What the Best College Teachers Do. Cambridge, MA: Harvard University Press.
- Baker, D.P. & Salas, E. (1992) "Principles for Measuring Teamwork Skills," *Human Factors*, Vol. 34(4), p. 469-475. Bartels, L.K., Bommer, W.H., & Rubin, R.S. (2000) "Student performance: Assessment Centers Versus Traditional Classroom Evaluation Techniques," Journal of Education for Business, Vol. 75(Mar/Apr), p. 198-201.

Benne, K.D. & Sheats, P. (1948). "Functional Roles of Group Members," Journal of Social Issues, Vol. 4, 41-49.

Buckenmyer, J.A. (2000). "Using Teams for Class Activities: Making Course/Classroom Teams Work," Journal of Education for Business, Vol. 76(2), p. 98-107.

- Cannon-Bowers, J.A. & Bowers, C. (2011) Team Development and Functioning. In S. Zedock (Ed.), APA Handbook of Industrial and Organizational Psychology, Volume 1, Building and Developing the Organization (p. 596-650). Washington, DC: American Psychological Association.
- Chen, G., Donahue, L.M., & Klimoski, R.J. (2004). "Training Undergraduate Students to Work in Organizational Teams," Academy of Management Learning and Education, Vol. 3(1), p. 27-40.
- Conference Board (2008) New Graduates' Workforce Readiness: The Mid-Market Perspective (Research Report R-1413-08-RR), New York: The Conference Board.
- Connerley, M.L., & Mael, F.A. (2001). "The Importance and Invasiveness of Student Team Selection Criteria," Journal of Management Education, Vol. 25(5), p. 471-494.
- Halfhill, T.R. & Nielsen, T.M. (2007) "Quantifying the "Softer Side" of Management Education: An Example Using Teamwork Competencies," Journal of Management Education, Vol. 31, p. 64-80.
- Hansen, R. S. (2006) "Benefits and Problems with Student Teams: Suggestions for Improving Team Projects," Journal of Education for Business, Vol. 82, p. 11-19.
- (2009) Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn. Hart Research Associates. Washington, D.C: Hart Research Associates.
- Hobson, C.J. & Kesic, D. (2002) "A Behavioral Framework for Skills Assessment and Development in Teamwork Training," International Journal of Management, Vol. 19(2), p. 147-154.

Hobson, C.J., Strupeck, D., Griffin, A., Szostek, J., Selladurai, R., & Rominger, A. (in press) "Field Testing a Behavioral Teamwork Assessment Tool with U.S. Undergraduate Business Students," Business Education and Accreditation.

Holmer, L.L. (2001). "Will We Teach Leadership or Skilled Incompetence? The Challenge of Student Project Teams," Journal of Management Education, Vol. 25(5), p. 590-605.

Holtham, C. W., Melville, R.R., & Sodhi, M.S. (2006). "Designing Student Groupwork in Management Education," Journal of Management Education, Vol. 30(6), p. 809-817.

Hughes, R.L. & Jones, S. K. (2011) "Developing and Assessing College Student Teamwork Skills," New Directions for Institutional Research, Vol. 149, p. 53-64.

May, G. L., & Kahnweiler, W.M (2000) "The Effect of a Mastery Practice Design on Learning and Transfer in Behavior Modeling Training," Personnel Psychology, Vol. 53, p. 353-374.

Nielsen, T.M., Sundstrom, E., & Halfhill, T. (2005) Group Dynamics and Effectiveness: Five Years of Applied Research. In S.A. Wheelan (Ed.), Handbook of Group Research and Practice (p. 285-311). Thousand Oaks, CA: Sage.

Page, D., & Donelan, J.G. (2003) "Team-building Tools for Students," Journal of Education for Business, Vol. 78(3), p. 125-129.

Riggio, R. E., Mayes, B.T., & Schleicher, D.J. (2003) "Methods for Measuring Undergraduate Business Student Outcomes," Journal of Management Inquiry, Vol. 12, p. 68-78.

Robbins, S.P. & Judge, T.A. (2014) Essentials of Organizational Behavior. (12th Ed.) Boston, MA: Pearson.

Sashittal, H.C., Jassawalla, A.R., & Markulis, P. (2011) "Teaching Students to Work in Classroom Teams: A Preliminary Investigation of Instructors' Motivations, Attitudes, and Actions," Academy of Educational Leadership Journal, Vol. 15(4), p. 93-106.

Stevens, M.A., & Campion, M.J. (1994) "The Knowledge, Skill and Ability Requirements for Teamwork: Implications for Human Resource Management," Journal of Management, Vol. 20, p. 503-530.

Sheppard, J.A. (1995) "Remedying Motivation and Productivity Loss in Collective Situations," *Current Directions in Psychological Science*, Vol. 4, p. 131-134.

Stevens, M.J. & Campion, M.A. (1999) "Staffing Work Teams: Development and Validation of a Selection Test for Teamwork Settings," Journal of Management, Vol. 25(2), p. 207-228.

Selingo, J. (2012, September 12). Skills Gap? Employers and Colleges Point Fingers at Each Other, *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/blogs/next/2012/09/12/skills-gap-employers-and-colleges-point-fingers-at-each-other/.

Thompson, L.L. (2001) Making the Team: A Guide for Managers. Boston, MA: Prentice Hall.

Thompson, L.L. (2011) Making the Team: A Guide for Managers. (4th Ed.), Upper Saddle River, NJ: Pearson-Prentice Hall.

Vik, G.N. (2001) "Doing More to Teach Teamwork Than Telling Students to Sink or Swim," Business Communication Quarterly, Vol. 64, 4, p. 112-119.

Wiggins, G. (1998) Educative Assessment: Designing Assessments to Improve Student Performance. San Francisco: Jossey-Bass.

Running a Business: An Extremely Experiential Approach to Teaching Organizational Behavior

Leonard J. Glick

D'Amore-McKim School of Business, Northeastern University - Boston, Massachusetts, USA

ABSTRACT

The discussed approach engages students in experientially learning many of the major concepts of an organizational behavior course. Essentially, "organizations" of 20 students create, plan and run an event (business) in parallel with—but outside of-- class sessions. Because of the activity's size, scope, and complexity, the students observe and experience behaviors related to much of the content of the course, including organizational culture and structure, leadership, motivation, communication, conflict, and groups. The first-hand experience and concrete examples provide a rich context in which to discuss these underlying concepts. The final assignment is a reflective paper in which they apply course concepts to discuss their real-world experiences." This article describes how to implement this approach and discusses some choice points for faculty.

Keywords: Experiential learning, organizational behavior, reflection

INTRODUCTION

Concerned teachers struggle with incorporating activities and processes that will increase understanding and application. Many believe that experiential learning provides an answer. For example, students taking an experientially oriented international business course reported that the activities help them learn and that they enjoyed them. (Chavan, 2011). Case studies are probably the dominant form of experiential learning in many business courses. However, although they present real or realistic situations, students are asked to discuss them as outside observers. They talk *about what they would do* as opposed to *doing something themselves*. Similarly, role plays and exercises (simulations) elicit behavior in artificial situations and often with limited complexity (depending on the situations.) Further, they are done in a classroom under the time constraints of the class schedule. Despite their limitations, these methods serve useful purposes such as energizing students and increasing relevance. Nevertheless, there must be better alternatives.

What might be better? Barram (2011) has described a highly experiential approach for a two semester general business course for seniors. In both my undergraduate and graduate organizational behavior course (OB), a required course in virtually every business curriculum, I have used a somewhat similar model with some important differences. The basic question I asked was: "Is there a way to enable students to experience and reflect on several OB concepts in the context of a business—as opposed to merely reading and talking about them?" These concepts include organizational culture and structure, leadership, motivation, communication, conflict, and groups. I answered this question by having students plan, start-up, and run a business (or event) outside of class during the semester. Because the businesses have 20 students and handle money, their experience is much more complex—and has more at stake—than a small group project. As a result, the students encounter many of the "people" issues/concepts that occur in the real workplace. It presents students an opportunity to experience many of the challenges, situations, and dynamics of a "real" business. As such, it brings many OB concepts to life and thereby hopefully increases their understanding of these concepts.

THE APPROACH

The following schedule is designed for an approximately 14 week semester, although it has worked in an 11 week quarter.

Choosing and staffing the businesses (weeks 1&2)

I introduce the "exercise" in the first class session and provide an overview. I also assign each student to think about and propose an idea for the next session. At that class, we prune the list quickly by first eliminating duplications,

those that generate little interest, and those that are impractical because they require too much work, too much elapsed time, and too much money. Students then volunteer to investigate the ones that remain. Based on their reports, discussion, and voting, we decide on the businesses. Some examples have been a comedy night, casino night, cruise, and a three person basketball tournament. Students pick their preferences within the constraint of having the same number of students in each business. Because our courses enroll about forty students, I form two businesses of 20 students each. Note that this is not another small group project with only six members. The size and numbers are intended to add complexity and to increase the challenge of communication and coordination.

Creating an organizational structure and selecting leaders (week 3)

Their next task is to create an organizational structure for their business. I begin by having a lecture/discussion on various forms of organizational structure and their implications for behavior. They immediately apply the lessons by discussing and deciding on their organizational structure. They may adopt any structure they want as long as they meet two constraints. First, they must have co-presidents because I found that having one president required too much time and responsibility for one student. In addition, I prefer to have some redundancy in case one doesn't work out or lacks certain skills. I generally ask students to self-nominate themselves to be president. They then speak about their qualifications, interest, and time available before the students in the business vote. Second, they must have at least three departments. Department heads (vice-presidents) are chosen by its members. Requiring 20 employees and three departments is intended to make communication and coordination challenging. Remember, the activity is meant to simulate a "company" not a group.

Writing a business plan (week 4)

Their next assignment is to write a business plan. I provide guidelines for the content of the plan (see exhibit 1) but they decide how they will approach the task. Some have used a top down approach; i.e. the co-presidents write and submit the plan. Others have also involved the department heads. Others have used a more participatory approach and included all 20 students. At some point during the course, I have them reflect on the impact of their approach on issues such as the employees' commitment to the organization and its culture. Upon approval of the plan, I, as venture capitalist, loan them \$100. All profits are donated to the charity of the business' choice.

Doing the work: preparing for and running the event (weeks 5-12)

During the next several weeks, the businesses prepare for and run the event. For example, if they are planning a casino night, they need to select and reserve the date and location, ensure that it meets the university's legal requirements, secure the needed equipment, purchase refreshments, market and sell tickets, and staff the tables. To the extent that this work mimics a business, it raises many of the real-world organizational issues. I ask for examples as we discuss the various topics in class. Typically, there are good examples for most of the traditional topics of an organizational behavior course. As a result, there are many teachable moments, and both the topics and the business exercise gain credibility. Here are a few examples of students' observations and experiences that have provided rich fodder for class discussions.

Motivation One of the major topics of the course is motivation; e.g. What organizational conditions decrease/increase motivation? Here are two students' comments that added value to the discussion. One said, "...showed to me how hard it is to be motivated to work when you are just a regular grunt level employee...it was hard to get motivated...when I knew very little about what was going on... Another added, "...I truly now understand what a dramatically positive effect exposing people to the end result can have..."

Organizational Culture When I teach organizational culture, I emphasize not only to describe the culture but also to analyze the impact of the culture on performance. The fact the students live in the culture of their business for the semester typically provides some powerful examples. As one student wrote, "Another 'rule' was simply not to disagree with other members of the class...hindered the effectiveness of the organization because people would refrain from giving valuable information because it might go against what someone already decided..."

Organizational Structure As mentioned earlier, before students structure their organization, I teach them about some choices they have (e.g. functional, product) and their likely impacts on behavior. It's one thing to hear about these impacts and another to experience them. I have always found that students have trouble imagining the power of structure just from reading about it. Here are two observations on the impact of a functional structure that emerged from the businesses. One student observed, "...it seemed to isolate the departments...this goes along with what we learned in class. Each department felt responsible for...own part of the business...wasn't very concerned with what

other departments were doing or the end product...Another said, "the lack of a linking mechanism between departments led to confusion...surprising was the \$60 purchase of flowers by the operations department...someone (else) if they had known about it...could have gotten a discount"

Reflection (weeks 13-14)

Following the event, students are required to reflect on their experience and write a paper in which they apply course concepts to help explain and understand their behavior and the behavior of their fellow "employees." (See Exhibit 2)

SOME CHOICES FOR FACULTY

Now that I have described the basic approach, I will raise two remaining fundamental pedagogical decisions, the answers to which will reflect different teaching and learning philosophies. The first relates to the salience of the activity to the overall class. Specifically, is it background to the traditional class or does it crowd out the traditional class? The second shapes the relationship and role of the faculty member to the business. Specifically, to what extent do you help them avoid mistakes as opposed to letting them make mistakes? And, to what extent does that answer impact student learning?

Amount of class time to devote to this experience

If you choose to include this experience in your course, you will have to devote some class time to it. The question is, how much? Compared to other faculty who have tried it, I have generally minimized the class time and maximized class time for more traditional activities including lecture, discussion, simulations, videos, and case studies. Mostly, I have used class time to get the project started (identifying the two businesses) and using examples from what is happening in the businesses as students learn the various concepts. (e.g., How well is your department functioning as a group? How have you dealt with conflict? Describe the culture of your business.) Alternatively, some faculty have allocated class time to business and department meetings. I choose to minimize it for two reasons. First, it means there is more class time for other activities. Second, it takes away the option of easily having companywide meetings and rather "forces" them to coordinate departments and communicate to the whole organization indirectly in that rarely is everyone in the same room at the same time. This choice makes the experience both more realistic and more challenging, both of which I believe increases their learning.

Amount of intervention to improve the operation and/or prevent errors

It is almost inevitable that you will encounter opportunities to make suggestions and prevent errors. Whether you intervene or not depends on your teaching philosophy. For example, because I believe that mistakes followed by reflection foster learning, I prefer to let mistakes happen, let the students see the consequences, and then discuss them. Here are a few examples. First, the marketing department printed literature with the wrong date because the operations department hadn't informed them of a necessary change of date. Second, the presidents withheld "bad news" (their preferred venue cancelled their reservation) from the rest of the organization because they feared it would demoralize the employees. In the former, I viewed that spending about 50 dollars photocopying an announcement with the wrong date was an investment in learning important lessons about the challenges and importance of interdepartmental coordination rather than a waste of money. In the latter, the presidents' behavior enabled a full discussion of the many difficult choices that leaders face and the impact of their choices. In summary, as long as the mistake is not dangerous, illegal, or excessively wasteful, I let it happen and discuss it afterwards.

STUDENT REACTION

Students have evaluated the overall course and the "running a business" component very favorably. Although the vast majority of students view this approach as a great learning experience, students have expressed some reservations. Most of them have been aimed not at the value of the approach but at its "messiness." For example, inevitably some students will recommend far fewer students per business because 'it would be easier to coordinate and there would be less conflict.' Others will be bothered by mistakes and false steps of their business. Still others will note that a few did far less work than others. I view all of these as opportunities to learn; e.g., how to coordinate an organization more complex than a small group, ways to diagnose and deal with conflict and non-performers, etc. More positively, students speak of it as a valuable learning experience that connects theory and practice. Here are a few examples of their comments. "I can honestly say that I have learned more in this class, and through this project, than any other class to date." "…through this event we were able to concretely and vividly see the application of theories of culture, motivation…develop. We in essence created our own case study…" "I have learned so much in

this class project that it is hard to wrap up in this paper. Actually being able to apply concepts to an activity is priceless. I admit that most of what I have learned has been through mistakes of my own and those I observed in others."

SUMMARY

In summary, this semester long experience is an engaging activity and a rich learning experience. Students are able to innovate and exercise their creativity and entrepreneurial skills while they: (a) experience (and observe) many of the core concepts of Organizational Behavior, (b) learn how to apply these concepts, and (c) witness the consequences of organizational practices and managerial actions. As one student wrote, "The process of generating an idea, formulating a plan...and actually executing our plan forced us to more fully examine and apply the concepts we have been learning in class. ...our organization came across many issues that can readily be found in real organizations."

REFERENCES

Barram, Dick. (2011) A Pedagogical Approach to Teaching Senior Business Majors in a Small Liberal Arts University: Creating and Operating a Real Business. *Business Education Innovation Journal*. Vol 3, No. 2, pp. 107-111.

Chavan, Meena. (2011). Higher Education Students' Attitudes Toward Experiential Learning in International Business. Journal of Teaching in International Business. Vol. 22 Issue 2, pp126-143.

Exhibit 1: Assignment for the Business Plan

Each business is required to submit a draft business plan (without an HR section) and a final business plan on. Each submission is the equivalent of one homework (case) assignment. The plan must include the following sections:

A. <u>Business:</u> What business are you in? What is your product or service? What is your value-added to your customers? Who are you customers? Who are your competitors? Why would a person want your product/service?

B. <u>Goals</u>: What are you trying to achieve? What 3-5 outcomes (be specific) would lead you to conclude that your business has been effective (successful)? Why did you pick these?

C. <u>Finance:</u> How will you spend the venture capital? How will additional money be raised? What are your projected costs and expenses? How will you control expenses? What is your break-even point? What are your profit projections? What is your financial goal; i.e. how much profit do you expect? To what charity will profits be dispersed?

D. <u>Operations:</u> What are the major blocks of work? How will the product be made and/or the service be delivered? What is the sequence of activities? How will you ensure efficient operations and high quality outcomes?

E. <u>Structure and Jobs</u>: How will you organize to do the work? How many groups/departments will you have and what will each do? (Include an organizational chart.) How will the work and activities of the different departments be coordinated? Why do you think this will work? What are the responsibilities (job) of each individual; how will the work be shared?

F. <u>Information and Communication</u>: What information do individuals and groups need to do their work? How will it be communicated and shared?

G. <u>Marketing</u> How will people learn of your service/product? Why did you select these approaches? How will you attract customers? What will your message be?

H. <u>Human Resource Practices:</u> What training is needed? How will performance (and non-performance) be identified and handled? Will you award bonuses? If so, why? On what bases will bonuses (grading points) be distributed? Why did you choose this method? If you choose not to award bonuses, why not?

I. <u>Management and Decision Making</u>: Who will make what decisions? Why? How will oversight occur to ensure that the work is on schedule and that everyone is doing his/her assignment?

J. <u>Schedule:</u> What are the major milestones and activities? When will each be completed throughout the quarter? Include a chart with dates and milestones.

Exhibit 2: Final Assignment: Reflective Paper

Each student is required to submit a paper (5-8, double-spaced, pages long) that analyzes his/her experience with the class business throughout the quarter. Do not just tell me what happened. The main objective is to apply course (OB) concepts to help you understand your organization and the behavior of your "colleagues". At a minimum, the paper should include the following sections:

How did you contribute to your department and the organization? What did you do to help the business? List what you consider to be your three main contributions. Be very specific.

How effective was your department in achieving its financial and non-financial goals and measures?

Describe and evaluate the structure of your organization. What behaviors did it foster? To what extent were these behaviors consistent or inconsistent with what you learned in this course about the impact of structure?

How effectively did your department operate as a group? Were the goals, roles, procedures, etc. clear and accepted by all members?

Describe and evaluate the methods of communication and coordination both within and across departments. How well did they work? What behaviors did they foster? What features caused them to work well--or not well? In what ways did they help--or hinder--the effectiveness of your department and organization? What efforts, if any, were made to improve any methods that were hindering effectiveness? What else, if anything, should have been done to improve the methods; that is, if you were to do this again, what changes would you recommend?

Discuss the nature and quality of interpersonal communication you experienced. For example, how were disagreements resolved? What styles of conflict resolution were demonstrated and to what effect? How well was feedback, if any, delivered?

Discuss the leadership of the organization. For example, what styles of leadership were used? Was it limited to a few or shared by many? How was it established? Did leadership emerge? Did it shift? Discuss what happened and why you think it happened. Evaluate the effectiveness of the leadership.

Describe the culture of your organization. What were the primary "rules", values, and beliefs of this organization? How did it get that way; that is, how did the cultural rules, values, and beliefs develop? How ethical was your organization? Analyze the impact of the culture; in what ways did the culture: (a) contribute to, and/or (b) interfere with, the effectiveness of the organization?

How motivated were you to perform well? Why? What were the main sources of motivation for you? What, if anything, was "demotivating"? Explain. What theories of motivation might explain your behavior? What theories might help you understand the behavior of others?

Most importantly, what were you main learnings (or relearnings) about organizations and the behavior of people in organizations from this experience?

Remember that the above questions are the minimum requirements. You are encouraged to discuss other relevant topics, issues, and observations. The papers will be evaluated on completeness, insightfulness, application of OB concepts, and writing quality.

Leonard J. Glick is an Executive Professor of Management and Organizational Development in the D'Amore-McKim School of Business at Northeastern University. He has 20 years of experience as an organizational effectiveness consultant, including the design and implementation of high performance work systems, organizational culture, self-managing teams, organizational change, and non-stop learning. Among the courses he teaches are: Great Companies, Strategic Human Resource Management, and Organizational Behavior.

The Interactive, Progressive Case Study

David O. Egleston, Lawrence Technological University, Southfield, Michigan, USA

ABSTRACT

The case study method is one of the most common teaching tools used in business education. However, a number of limitations of this method reduce its effectiveness. The interactive, progressive case study addresses these limitations and improves learning outcomes for students. This paper introduces the technique as it was used in teaching organization development and explains how it could be used in a number of business disciplines.

Keywords: case study method, problem-based learning, plagiarism, learning outcomes

INTRODUCTION

The case study method of teaching is widely used in business education (Gragg, 1940). According to Gragg, the benefits of case studies stem from active participation with actual business problems. Hammond (2002) described case study learning as "the most relevant and practical way to learn managerial skills" (p. 1). According to Hammond, students improve analytical skills and develop experience and expertise in a variety of fields as they learn rules of thumb for decision making. However, there are significant limitations to the case study method. This paper introduces a technique, the interactive, progressive case study that addresses these limitations.

PREVIOUS RESEARCH

Case studies increase student learning in a variety of subjects including economics (Capon & Kuhn, 2004), engineering (Keefer & Ashley, 2001), marketing (Arts, Gijselaers, & Segers, 2002), teacher training (Koehler, 2002), psychology (Mayo, 2002; Mayo, 2004) and forensic science (Nobitt, Vance, & DePoy Smith, 2010). Aaron, et al. (1998) used an experimental design to test whether students who learn using the case method retain information longer than students learning in a traditional lecture format. Students in the experimental group showed no change in performance on an exam one year after the end of class whereas students who studied in a pure lecture format performed significantly worse on the follow-up exam as compared to their performance at the end of the course. A meta-analysis by Albanese and Mitchell (1993) showed that students who learn in a problem-based approach (including case-based learning) found education more nurturing and enjoyable, performed as well as or better than students learning in "traditional instruction" and rated faculty more favorably on evaluations.

Problem-based learning (PBL) has proven an effective way to increase learning in students of all ages and those from different socioeconomic groups. Gordon, Rogers, Comfort, Gavula and McGee (2001) report that PBL improves learning outcomes for low-income urban minority students. Elementary pupils identified as gifted students, regular students and ESL students also benefit from PBL (Liu, 2004).

Although the advantages of case-based learning are documented, there are important limitations as well. Case studies typically present a student with a large amount of information and a set of questions designed to assess whether the student can glean the answers from the pages of the case. Although a case may well present a vast amount of data, it is still finite and available. The answers are there if only the student continues to dig. Students do not learn to ask appropriate questions; they learn to answer those asked by others. Students do not learn where to go to find answers to questions; they learn that the answers are in front of them. Such an experience does not prepare students to address the problems they will face upon acquiring positions in management.

Another limitation is posed by the fact that many commonly used cases have been compromised. McCardle (2010) searched the Internet for information related to older cases stating sites with a variety of information were readily available including "case write-ups, student presentations, instructor lecture slides, Excel spreadsheets, and blog posts discussing the case" (p. 77). I have found issues with cases in previous courses using plagiarism-detection software. Use of such software creates an expense for the institution, consumes faculty time and displays an inherent distrust of students.

A single innovation, the interactive, progressive case study, addresses all these limitations. Since the case is developed in real time over the course of the semester, there are no answers available for students to download. Once a case has been developed, the instructor can simply modify the case when reusing it to prevent it from becoming compromised. Students must design and submit questions to access data from the company rather than having the information spoon fed to them over several pages of a case. Students learn what questions to ask and to whom they should be directed. This more accurately reflects the way business information is collected and allows the students to learn the process of formulating appropriate questions in a safe environment, better preparing them for the jobs they will fill upon graduation.

A WORKING EXAMPLE

Recently, I used the interactive, progressive case study to teach organization development (OD). Students selfselected into teams of three to four and each team was assigned a case. Teams were told to approach the case as though they were outside OD consulting firms rather than inside OD practitioners. The initial case description consisted of a short narrative of an organization experiencing a challenge. The hypothetical company described what it believed to be the problem. Teams were told, as part of the course, that companies often believe they know the cause of their problem and many even suggest particular solutions when contracting with OD consultants. They were also told that power and politics within an organization can complicate the job of diagnosing and developing an organization and that they could expect this as part of the project.

The assignment consisted of a number of steps to be conducted over the course of the semester. Each team was instructed to conduct a minimum of three rounds of diagnostic activities to identify the actual problem(s) to be addressed. Once a team had identified the problem(s), it was to select an OD intervention and develop an implementation plan to present to top executives at the company. The plan was to include a timeline of major activities, a communication plan to introduce and advance the intervention, feedback mechanisms to monitor progress, an evaluation plan and a budget.

Diagnostic Activities

After covering the material related to diagnostic tools in class, I instructed the teams to develop their first set of diagnostic activities. Each team was required to submit to me a request for interviews and focus groups with key organizational personnel, observation of personnel and processes and tests and surveys to be administered to management and employees. The request included a list of questions to be asked, the purpose of any proposed observation (e.g., types of behaviors of interest), survey instruments and the names of tests to administer and to whom these activities were addressed. I responded to the diagnostics from the perspective of organizational members. Where specific questions were provided of an individual, a specific answer was given. For focus groups and surveys, responses were provided in aggregate form. For observations, a list of behaviors with their frequency was provided. I delivered the requested data to each team along with my comments relating to improving the content of subsequent diagnostic activities. I hoped for, and was not disappointed to see, many opportunities for improvement in the diagnostics from round one. Detailed written comments were provided for each team and specific teachable points were shared with the class without reference to a particular team so that all students could benefit from the experience of every team. Rounds two and three of diagnostic swere conducted in much the same way as round one. However, I noticed the quality of proposed diagnostic activities improved considerably from round one to round two and somewhat from round two to round three.

One team completely missed the mark with the first round of diagnostics. All members of the team visited with me during office hours for advice on how to improve their diagnostics in round two. I was able to reiterate material from the textbook and from personal experience regarding diagnostic techniques. During this meeting, I determined that team members were acting as a group rather than a team and suggested techniques to improve coordination and teamwork. The team's performance improved considerably in subsequent diagnostic rounds.

Intervention Design

Upon completion of diagnostics, teams were required to present their proposals to company executives. Each team made a presentation to the class detailing the issues they discovered in the organization and the plan to address those issues. Teams were encouraged to visit with me during office hours in the stages of intervention design. This gave me more opportunity to share the lessons learned from my own consulting experience with the students. As a result,

the quality of the interventions was superior to that I typically see in an undergraduate course. Finally, teams were required to present their intervention to the class and answer questions.

Student Responses

Initially, students expressed their dislike of the unstructured format of the assignment. After I explained the rationale for the project, they accepted the assignment and went about attempting to meet my expectations. As a result of my close cooperation with the teams over the course of the semester, the teams grew to enjoy the assignment. Several students wrote on the final course evaluation they had learned a great deal from the team assignment and found it both challenging and fun.

APPLICATIONS

This technique could be used to teach most business disciplines. In a marketing course, the instructor could require students to develop a marketing campaign for a product. Students would begin by brainstorming marketing ideas and follow up by pilot testing those ideas with a focus group. The focus group could be simulated by simply asking students to prepare the list of questions or students could hold actual focus groups with members of another team playing the part of participants. Once a marketing strategy had been selected, students would continue by developing the actual marketing materials such as advertising copy or commercial storyboards.

In a human resource management (HR) course, students could be asked to design an HR intervention such as a compensation plan. Students would begin by conducting a job analysis. With appropriate information about the compensable factors of the job, students could next research compensation at competing firms and design a total compensation package.

Students in a finance course could be assigned to finance a new capital project. They would need to identify the costs of the project, its expected life-span, the firm's cost of capital and availability of funds from various sources. Based on this information, students would develop a plan to finance the project and report to senior management.

DISCUSSION

This technique did create additional demands on my time as an instructor. Students came to visit with me on many occasions during office hours and I spent a number of hours responding to teams, particularly in the diagnostic phases of the assignment. However, after seeing the depth of understanding students gained with the process, it is time I consider well spent and I shall use the technique in future classes.

As the semester progressed, I found the technique to be more and more enjoyable. It gave me the opportunity to work closely with teams of students and to help them develop skills they would not otherwise have developed. I provided lessons learned from my own days as a consultant, built teamwork and problem-solving skills in the teams and helped students learn to ask the right questions when analyzing a company and developing an OD intervention. Students were able to make novice mistakes in an environment where there is little risk. As a result, they will be better prepared to accept this type of assignment when they face it in the real world. They will have confidence they know what questions to ask, to whom they should be addressed and what to do with the information they learn. Initially, my primary reason for using this technique was to prevent cheating. What I learned in the process is that students learn more, and enjoy learning more, when they are actively involved in the process.

REFERENCES

Aaron, S., Crocket, J., Morrish, D., Basualdo, C., Kovithavongs, T., Mielke, B., and Cook, D. (1998). Assessment of Exam Performances after Change to Problem-based Learning: Differential Effects by Question Type. *Teaching and Learning in Medicine*, V. 10, Issue 2, 86-91.

Albanese, M., and Mitchell, S. (1993). Problem-based Learning: A Review of Literature on its Outcomes and Implementation Issues. *Academic Medicine*, V.68, Issue 1, 52-81.

Arts, J., Gijselaers, W., and Segers, M. (2002). Cognitive Effects of an Authentic Computer-Supported Problem-based Learning Environment. *Instructional Science*, V. 30, Issue 6, 465-495.

Capon, N., and Kuhn, D. (2004). What's So Good about Problem-based Learning? Cognition and Instruction, V. 22, Issue 1, 61-79.

Gordon, P., Rogers, A., Comfort, M., Gavula, N., and McGee, B. (2001). A Taste of Problem-based Learning Increases Achievement of Urban Minority Middle-school Students. *Educational Horizons*, V. 79, Issue 4, 171-175.

Gragg, C. (1954). Because Wisdom Can't Be Told. In Malcolm P. McNair, ed. The Case Method at the Harvard Business School: Papers by

Present and Past Members of the Faculty and Staff. New York: McGraw-Hill.

Hammond, J. (1976). Learning by the Case Method. Harvard Business School Cases, 1.

- Koehler, M. (2002). Designing Case-based Hypermedia for Developing Understanding of Children's Mathematical Reasoning, *Cognition and Instruction*, V. 20, Issue 2, 151-195.
- Liu, M. (2004). Examining the Performance and Attitudes of Sixth Graders during Their Use of a Problem-based Hypermedia Learning Environment. *Computers in Human Behavior*, V. 20, Issue 3, 357-379.
- Mayo, J. (2002). Case-based Instruction: A Technique for Increasing Conceptual Application in Introductory Psychology. *Journal of Constructivist Psychology*, V.15, Issue 1, 65-74.
- Mayo, J. (2004). Using Case-based Instruction to Bridge the Gap Between Theory and Practice in Psychology of Adjustment. *Journal of Constructivist Psychology*, V. 17, Issue 2, 137-146.
- McCardle, M. (2010). The Case of the Compromised Case: How the Online Posting of Case Solutions Killed off Black and Decker (A) and Other Great Marketing Cases. *Proceedings of the Marketing Management Association*, 77.
- Nobitt, L., Vance, D.E., and DePoy Smith, M.L. 2010. A Comparison of Case Study and Traditional Teaching Methods for Improvement of Oral Communication and Critical-thinking Skills. *Journal of College Science Teaching*, V. 39, Issue 5, 26-32.

Assessing Student Learning in International Business through a Foreign Internship Scenario Exercise

David J. Jamison, South Carolina State University, South Carolina, USA

ABSTRACT

One of the major goals of teaching international business at the undergraduate level is fostering an appreciation for the diversity that exists in the world and of getting students to move beyond their own parochial and ethnocentric perspectives in thinking about global business opportunities and challenges. This paper describes an exercise designed to assess the degree to which students in an undergraduate Introduction to International Business course are able to apply concepts presented during the course to a hypothetical situation that engages students in personal reflection and the need for critical thinking.

Keywords: globalization, global mind-set, course assessment, critical thinking

INTRODUCTION

Fostering an appreciation and respect for global diversity and the challenges of different global business environments is a critical component of modern business education. The challenges of globalization from an economic, political and cultural standpoint demand a generation of managers and entrepreneurs knowledgeable about the key features and conditions of international diversity and sensitive to the need to challenge their own expectations and ethnocentric perspectives in dealing with situations and conditions that may be, literally and figuratively, foreign to them.

The need for developing these perspectives as part of a modern business education is so great, that the premier international accrediting body for business programs, AACSB, has identified globalization as a key learning outcome for accredited business programs (AACSB, 2011). According to AACSB, "...present day curricula will prepare graduates to operate in a business environment that is global in scope. Graduates should be prepared to interact with persons from other cultures and to manage in circumstances where business practices and social conventions are different from the graduate's native country." (AACSB, Standard 15, Standards for Accreditation, 2009).

Increased emphasis on globalization in the curriculum is not just an academic issue. As stated in AACSB's report entitled *Globalization of Management Education: Changing International Structures, Adaptive Strategies and the Impact on Institutions*, "The imperative for more focused globalization of business schools' core curricula comes from many sources within the business community that business schools are positioned to serve, and is driven most strongly by the need to produce graduates with the knowledge and skills necessary for conducting business in a global environment." (AACSB, 2011).

Datar, Garvin, and Cullen's (2000) research involving academic and business leaders on the perceived need for increased global education notes that developing a global perspective as a significant gap in the education of modern business students. They further note that enhancing global awareness among business students will "require more than just providing students with "abstract, theoretical knowledge about the world's many different economic and political systems" but must also enhance students' abilities to engage in critical thinking and problem solving in the international context " (Datar, Garvin and Cullen 2000, 85-86). Other studies suggest that business schools are responding to the challenges of increasing the internationalization of their programs (Kwok and Arpan 2002) while simultaneously seeking ways to make the curriculum more relevant to students who may lack direct international experiences (Cant, 2004).

THE INTERNATIONAL BUSINESS COURSE

The international business course used as the subject of paper is an undergraduate junior level course designed to provide an overview of international business for business majors. The course is a required course for all management and marketing majors at the institution and is an approved elective for other business majors. The course is also a required course for international business minors at the University and therefore occasionally draws

some non-business majors seeking the international business minors. The course is typically taken by students who have, at a minimum, completed the introductory courses in their major areas. In fact, a prerequisite of the course is the completion of the Introduction to Management and Introduction to Marketing course required by respective majors. In addition, all business majors completing the course are also required to have completed a freshmen level "Intro to Business" course that is designed to introduce students to the field of business and to the major functional business areas (marketing, management, accounting, economics and information systems). Business students registered in Intro to Business have therefore had prior exposure to general business concepts, theories and operations and many have enrolled in and completed courses in their chosen field.

Junior-level students would also have been expected to have completed most of the University's General Education Curriculum (GEC). Through the GEC, students would have successfully completed at least one World History course, two World Literature courses, an art or music history course and two additional courses in the social sciences. As such, it might be expected that students would have at least some exposure to world history and culture through the University curriculum that could serve as the foundation of knowledge for applying an understanding and appreciation for global diversity to the particular concerns of international business. In addition, as an AASCB accredited institution, business faculty are encouraged to have "globalization" as a learning objective for every business course and to include assignments or readings on their syllabi.

The goal of the International Business course is to build on the prior knowledge and exposure of business students by channeling this knowledge toward business problems and strategy while at the same time substantially developing an appreciation of the inter-connectivity of culture, history and commerce within the context of historical and contemporary globalization processes. Specific learning goals include the following:

-Providing an awareness of the nature of international business.

-Sensitizing students to the domain of international business.

-Recognizing the importance of an understanding of international trade and investment to business managers.

-Establishing an informed perception as to why trade occurs between countries: the dimension (products, market segments, nature of the market); structure of trade flows (nature and size of industries and contribution of trade to total economic output); the direction of trade between various countries; and the international influences affecting trade and commerce between nations.

-Building the skills to identify the nature and operational aspects of firms that participate in international business.

Key challenges in meeting the above goals include the challenge of building and encouraging "awareness", "sensitivity" and "perception". These goals and related outcomes exist within the minds of individual students and at individual levels of attainment. Yet the development of these "global mindsets" may be critical in producing students who are prepared to take on the challenges of globalization as future managers (Massingham, 2013, Levy et al, 2007). The additional assessment challenge is to determine the extent to which these mainly attitude based outcomes are applied to the business challenges that are the main subject of the course.

The course itself is divided into three major modules. This format conforms closely to the format provided by most international business textbooks and the syllabi of similar introduction to IB courses (Sagafi-Nejad et al, 2011).

The first module is an introduction to the globalization and global trade. In this module, students are exposed to the concept and definition of globalization and the ways in which globalization has impacted the US and world economy and world commerce as a whole. Global franchising and branding, global production and distribution networks, outsourcing and shifts in labor and economic growth are some of the issues covered in the first weeks of the course.

The second module focuses on the diversity of the global environment and the challenges and opportunities presented by global diversity. The concept of culture and the role of culture in IB, different political systems and risks in the political environment and the relationship between economic development and political risk are the major emphasis in this module. In additional, there is an emphasis on world geography that runs throughout the course and is emphasized in this module. Students are required to have the ability identify countries on a continent

by continent basis through the inclusion of blank continent map component on all quizzes and exams throughout the course.

The final module of the course focuses specifically on business strategy in the international context with emphasis on the functional business areas (marketing, human resource management, accounting and finance). This module attempts to provide the context for application of the knowledge gained through the first two modules.

In the first two modules, lectures, textbook readings and class discussions are supplemented by four or five short exercises completed outside of class. The third module concludes with a short case study. Students are typically allowed to choose between a marketing case study and a management case study.

THE ASSESSMENT METHODOLOGY

The assessment exercise detailed here is given toward the end of the semester as a final graded exercise during the last week of classes. Students are told in the class meeting immediately prior to the execution of the assessment that the next class meeting will involve a final in-class exercise worth a given number of points on toward the final grade. Students are advised to treat this class period as they would a period involving a quiz or exam with regard to their attendance and punctuality.

The goal of the exercise is to produce a course-embedded direct measure of students' higher order learning in the course context (Revere, Decker and Hill, 2012, Stivers, B. and Phillips, J., 2009). Higher order learning, in this course, are defined as having primarily cognitive and affective outcomes relative to Bloom's Taxonomy (Bloom, 1956). The exercise requires students to evaluate the situations presented in the exercise and produce a response that synthesizes factual and interpretive information while at the same time demonstrating an appropriate mitigation of their own ethnocentric attitudes.

Typically, the assessment tool is distributed in class, instructions are given for completion and the instrument is collected within a 40 minute time frame. As part of the oral instructions, students are told that there are no wrong answers with the exception of failing to identify two countries on two different continents at the start of the exercise. An example of a wrong answer on this question (e.g., identifying Africa as a country) is given in order to make sure the distinction is made. Students are then told that will receive full credit for the assignment only if they complete it in full. Students are told that most of the question require at least two or three full sentences to answer and that "yes" or "no" alone answers to questions are not acceptable. All answers are to be written within the space provided on the survey. Before beginning the assessment, students are encouraged to ask questions in order to clarify any instructions for the assignment. When time permits, the class engages in a discussion of the instrument and a debriefing by the instructor after the instrument is collected.

The assessment exercise is evaluated using a seven point "Global Awareness Rubric" (Exhibit 1). The Rubric was developed by the author in order to provide a measurement of students' ability to apply knowledge, attitudes and skills gained in the course. The students were previously exposed to the rubric as part of the case study assignment. Students are given the rubric prior to the case study and told to use it as a guide for self-evaluation as they complete that assignment. They are also told that their case study grade is independent of the rubric, in other words, the rubric is not the grading instrument, just a method of self-evaluation as the assignment is completed. Students are not reminded of the rubric prior to completing the assessment exercise nor are they given any instruction concerning the grading or review of the exercise other than the previously noted imperative that they fully complete the exercise and that they make an appropriate selection of subject countries.

The rationale for not referencing the rubric as part of the assignment is that the assessment is meant to demonstrate a student's ability to immediately think through a series of challenges applying only their own perceptions, knowledge and attitudes.

EXHIBIT 1: The Global Awareness Case Rubric

Sub-Objectives	Poor 0-50%	Good 50-80%	Excellent
	0.3070	50 0070	00 10070
1. Recognizes key international structural/environmental differences* in the problem context.	The student fails to recognize how specific international environmental differences may have created or have impact on the problem.	The student identifies specific environmental differences that contribute to the creation or impact of the problem.	The student presents an analysis of specific environmental differences that have contributed to or created the problem. This analysis includes direct connections between specific environmental variables and specific issues/problems raised in the case.
2. Displays knowledge of the specific country/regional environment(s) and conditions that form the context of the case.	Student does not demonstrate any specific knowledge of the international context outside of facts presented by the case.	Student displays general knowledge of the country and/or region in the context of interpreting facts and other information through the appropriate application of additional historical, political, cultural, geographical facts.	Student displays the ability to relate additional historical, cultural (etc.) facts to the specific context of the case and develop generalizations that are used in interpreting case facts.
3. Displays a consideration of possible self-referencing biases when examining the problem.	The student displays interpretation of case facts that reveal his/her own ethnocentric assumptions, or assumes outcomes that are inconsistent with environmental differences.	The student recognizes that case facts may require additional interpretation from the viewpoint of the international environment.	The student actively seeks to compare and contrast assumptions and interpretations from their own ethnocentric experience to the lives and experiences of the case subjects.
4. Applies theoretical concepts related to specific functional business disciplines to the problem to the international context.	The student fails to identify the main functional area and related functional concepts related to the case problem.	The student identifies the appropriate functional area and specific conceptual issues related to the case facts.	The student integrates knowledge of the functional area into the analysis and resolution of the case with specific theoretical concepts from the functional area used to examine and interpret case facts.
5. Develops analytical comparisons of at least one other international context as a point of reference and for further examination of the problem.	The student provides little or no points of reference or comparisons.	The student provides a comparison to at least one additional international environment (including his/her own).	The student provides a comparison to at least one additional international environment (including his or her own) that critically and systematically seeks to both compare and contrast constraints, opportunities, behaviors and outcomes.
6. Presents a resolution to the issue that is consistent with the theoretical and context-specific information contained in the case.	The student does not clearly present a resolution or presents a resolution that is inconsistent with the environmental context of the case.	The student presents a resolution that is environmental sound but theoretically unsupported or visa versa.	The student presents a resolution that incorporates both the environmental context and the theoretical/conceptual application of the functional business area presented by the case. Specific reference to both the conceptual and factual basis of the case is made in the resolution write-up.
7. Displays an appropriate consideration of ethical conduct in the international arena.	Makes no consideration of possible ethical concerns or assumes ethical standards using self-referencing criterion.	Recognizes possible ethical dilemmas and attempts to deal with them using context specific or ethnocentric rules.	Recognizes possible ethical dilemmas and the source of their genesis and attempts to apply or create universal ethical rules relative to the specific environmental context.

THE ASSESSMENT INSTRUMENT

The assessment instrument seeks to establish a measurement of student learning throughout the course. As such, each of the ten questions on the exercise is related to some specific lecture, reading or assignment featured in the course. This section will provide a question by question review of the instrument with specific rationale provided for each question and examples of student responses.
Question 1: Imagine you've received a yearlong internship in a foreign country. First, give me the name of a two countries on <u>two different continents</u> where you would like to be posted. Country 1 = Country 2 =

The first question provides the basis for the entire scenario presented by the exercise. Students are initially told to imagine a job placement in two different countries. The goal of this question is to both identify if they have developed the very basis knowledge of world geography to answer this question correctly and, more importantly, to stimulate them to actively consider some of the issues that might be involved in a long-term visit to a foreign country. One of the last topics in the course is international human resource management. The challenge of placing and supporting expatriates is one of the issues included in this topic. Students are therefore recently aware of scenarios involving foreign employment opportunities and are motivated to revisit some of these issues via this question.

More than 90% of students correctly identify two countries on two different continents in response to this question. Students who fail to answer it correctly typically identify two countries on the same continent (e.g. France and Italy), mistake a continent or city for a country (e.g. Africa, Paris) or identify only one country. Some subset of students undoubtedly miss this question due to lack of geographic knowledge, but it is likely that some simply fail to follow directions.

The instrument next provides the following instruction:

For each of the following questions, indicate your response for <u>each</u> of the two countries identified in Question 1. Your response should be followed by a short justification of your answer. <u>You must answer ALL questions and you</u> <u>must include a statement justifying each answer</u>. This is an evaluation of your perception, attitude and opinions. You don't have to let the facts get in the way.

Students are thereby required to delve deeper into the expatriate scenario and their personal response to a long term foreign posting. The justification of the answer is emphasized in the verbal instructions preceding the start of the exercise. The requirement that the student provide a justification for each country seeks to elicit contrasts that may demonstrate the ability to think critically about the scenario and utilize both factual and interpretive knowledge in drawing a conclusion.

The second question provides a measure of the student's factual knowledge of language use and linguistic diversity while engaging them in the problem solving requirement noted above.

2. How important is it that you know the local language in this country?

Linguistic diversity as a part of the cultural environment is an important component of the discussion of crosscultural communication and its impact on business presented earlier in the class. This question also presents the student with an opportunity to consider the impact of globalization, or at least Americanization, through a consideration of the likelihood of there being large numbers of English speakers among the general population or at least in the world of business. Students who identify countries where English is spoken (e.g. Canada, Australia) demonstrate a basic and expected understanding of language use in these countries and indeed, may demonstrate through their initial choice that these countries are relatively comfortable places to complete their internship. Students choosing more "exotic" locations (e.g. Kenya, Thailand) must consider the use of language and make a determination of the likelihood that not speaking the language may cause problems. This question also presents an opportunity for a student to consider the role of economic development in language use and diversity. For example, a student choosing Sweden might conclude that most people will speak Swedish but that most Swedes are highly educated and that most are therefore also likely to speak some English. A student choosing Thailand might say that not knowing Thai will be a major problem in living and working in the country. The evaluation of their answer takes into account both their knowledge of the main language(s) spoken and the prevalence of multi-lingual people in the country.

3. Should you ask to be paid in the local currency or in American dollars?

This question gets directly at a student's consideration of the economic conditions present in the country and the relative advantages/disadvantages of currency exchange in the international context. Students were previously

exposed to the strategic dimensions of currency value and exchange through previous readings, lectures and a graded homework exercise featuring the Big Mac Index as an example of the concept of Purchasing Power Parity (The Economist, 2013). Students answering the question must first make a determination of relative currency values and then considering the possible effects of purchasing power parity on actual spending power and the associated impact on lifestyle standard of living while in the country. A student choosing France, for example, might ask to be paid in Euros justifying this answer by stating that the Euro is in a stronger exchange position relative to the dollar therefore would go farther while in France. A student choosing Mexico might choose the dollar while concluding that the stronger dollar will allow her to buy more in Mexico than the peso. In answering this question, some students also make reference to their perception of the overall economic condition of the country, relative to the US, when making their choice. While this choice may in fact be opposite of what the actual exchange rate might be (e.g. choosing dollars over Brazilian real) it demonstrates an understanding that currency strength often corresponds to level of economic development.

4. You are thinking about going on a trip to see some of the cultural attractions of your host country. Should you ask your fellow employees if they would like to go with you?

Students are asked to consider the nature of social relationships and the possibility that social relationships may operate with different rules than in the US. As such, this is the first question that requires a consideration of whether the student's own ethnocentrism is informing their opinion. Most American students are likely to believe that social contact with co-workers outside of the workplace is not only socially acceptable but indeed are one of the main ways in which adult social relationships, platonic friendships and romantic relationships are formed. Indeed most of the responses to this question suggest that this would be a good way to begin to "fit in" and "make new friends". Some students, however, suggest that they would "go slow" or that they might see if someone invites them first. These students justify the answer by noting that the rules for interacting with colleagues at work may not be the same in country X. For example:

"In China, I should ask others to come with me. China is a communist country and they are always in groups. They probably would be willing to go with me."

"I would rather ask my partners, people on a similar business level as me. I('ve) experienced that too much personal friendship with employees doesn't help the business."

The pattern in the responses seem to be that counties that are thought of as "like the US" (e.g. Australia, Germany) are more likely to have similar rules of social behavior than countries that are more "exotic" (e.g. Egypt, Japan). As in the case of language use, students seem to utilize a Western/non-Western, North/South dichotomy in estimating the "foreign-ness" of a foreign country.

5. People in the apartment complex where you are living continually ask your opinion about the war in *Afghanistan?* Should you give them your true opinion or should you refuse to answer?

In answering this question, students are required to consider both the cultural appropriateness of discussing this situation with people in the countries of their choice and the possible risk associated with discussing a potentially controversial subject matter with political implications. The expectation is that students will both recognize the need to consider the appropriateness of this kind of discussion in a foreign environment and the possibility that such a discussion may carry some risk depending on the political environment of the country. The question reflects back to the issue of political risk and the idea that expectations based on American concepts of free speech, criticism of government actions, the role of citizens in influencing the actions of their governments, are not universally accepted or acceptable standards. Students answering the question note the possible need to guard their speech based on their assessment of the political environment of the country. Some reference the form of government present in the country as a rationale for whether they would answer questions regarding the war. Some of the most complete answers to the question reference not only the form of government, but also whether or not the student believes that their country's citizens were generally supportive or against US involvement in Afghanistan.

6. In the break-room, your co-workers are discussing how much money they have left in their paychecks after taxes. Should you join in this discussion?

Like question 5, this question asks the student to consider the appropriateness of a behavior while forcing them to consider the behavior from an ethnocentric perspective. Students often state that it is something they probably would not do at home and would therefore refrain from doing above. Others students state that if it is apparent that everyone discusses money issues, it may be considered rude or selfish not to likewise engage. To most students completing the assessment, the subject appears sensitive enough to require a "wait and see" attitude as illustrated by the following responses:

"If everyone is doing it, it must be a part of their culture. It might be rude to ignore the discussion and not join in." (Argentina)

"Yes. It is good to listen to more ideas or critiques. I would choose my words carefully in order not to offend...I think both countries have enough freedom to discuss some particular issues." (Brazil and Spain)

"I would not join in such a discussion as this is personal financial affairs. It may serve as means of bonding in Italy due to the closeness of males. In Argentina, a more conservative stance may be held and such a matter may not be discussed unless the parties are very close to each other."

An ethnocentric and therefore less appropriate response is to provide a knee-jerk "it's none of their business" response which displays an ethnocentric focus on privacy and a failure to consider the possibility that the discussion is a way to demonstrate trust.

7. You discover that your supervisor is having a romantic relationship with one of the other international interns. Should you report this to someone?

This question is meant to not only elicit a response to the cultural values that may be involved in this issue, but also the ethical implications of employer-employee and superior/ subordinate workplace relationships. Students tend to recognize that, in the American context, the relationship would be considered, at a minimum, in "grey" ethical territory and by some standards a violation of most workplace rules. Some might also consider it an actionable offence if reported in an American workplace. Most answering the question apply situational ethics. The idea that ethical standards require some degree of relatively is raised in several assignments and in class discussion throughout the semester. Students recognize the ethical dilemma but tend to take a "none of my business" approach.

8. A friend in the US has sent you some of the latest CDs in the mail. It's been about ten days since the package was mailed. Should you go to the local post office to find out what's happened or should you wait a few days more?

Unlike the previous two questions, the final questions seek to assess the student understanding of possible differences in economic developing and distribution infrastructure. Students answering the question must first consider whether there should be an expectation for postal services to work the same way they do in the US. The 10 day time frame is more than enough time to receive almost anything from anywhere in the US. Most students also recognize that the physical transport of an item as small and as common as a CD *could* be accomplished to almost any geographic location on the planet. The issue as to whether ten days is enough time has more to do with the postal infrastructure present in the country and the efficiency of distribution. The Western/non-Western dichotomy is pronounced in students' statements of their expectations. Students choosing European countries state that the ten day delay is too much and that something must have gone wrong (wrong address. etc.). Students picking countries like Nigeria tend to recognize that things might take a bit longer because the country is not well developed. The idea that economic develop impacts distribution infrastructure, including the presence and operation of roads, ports and warehouses. Some students also raise the possibility that, in poorer countries, the delay may be caused by pilferage by people involved in the distribution process.

9. There is a large shopping mall right around the corner from where you work. You have some time left in your lunch break. You just found out that the latest CD from your favorite musical artist has been released today in the US. Should you go today to see if the CD is available at the mall?

As in question nine, students answering this question must consider the impact of distribution infrastructure and the availability and efficiency of marketing channels. The Western/non-Western split is typically recognized by students as the main factor in whether the CD will be available or not. European countries should have the CD

around the same time as it would appear in the US, Africa, South America and other poorer countries would be behind in terms of getting access to the product. Some students suggest that the presence of a large mall means that there would be little delay in that area, while other locations in the country might see delayed distribution of the product.

10. At the end of the internship, you are offered a full-time, permanent position in the country. What perks or bonuses (if any) should you ask for in accepting the job?

The final question relates directly to the "expatriate experience" topic previously discussed. Expatriate pay and bonuses are often determined by the level of "hardship" present in the foreign posting (Collins, Scullion and Morley, 2007). The country's cost of living and currency strength also determines the level of salary and other necessary financial support. Students answering this question are expected to recognize the economic environment of the country along with any "hardship" incentives for which they may be eligible. The question requires that they specify the perks to be requested. This part of the question forces them to move beyond the mere, "France is more expensive than Kenya" observation that was elicited by previous questions. Instead, the student must, in this example, determine whether living in France (more expensive living conditions) or Kenya (poorer overall infrastructure) should be considered a hardship and to what degree. For example, a student might say that their income would be sufficient to live in a large, modern apartment in Kenya but that personal safety and transportation may be a problem, whereas in France, the apartment may be small but there is plenty of transportation, places to visit and conditions at least as secure as one might find in the US.

STUDENT RESPONSES TO THE EXERCISE

Given the open-ended nature of the questions on the survey, there is the expected widespread variability in the quality of the student responses both in content and communication clarity. The Global Awareness Rubric described earlier in the paper provides the template by which the assessment of the student responses is evaluated.

The rubric's seven dimensions (see Exhibit 1) produce a format for analyzing the assessment instrument on a question by question basis. Student responses were evaluated as poor, good and excellent based on the author's qualitative assessment of how well the response addressed the question. The "poor, good and excellent" distinctions. While the rubric was initially designed for a longer form case study, the application to the assessment exercise is warranted to the extent that "awareness" issues are present throughout the ten questions. While not all rubric sub-objectives are relevant to every question, each question provides some opportunity to apply the rubric. Examples of "poor, good and excellent" responses to Question 2 (How important is it for you to know the local language in this country?) are given below:

Poor Responses:

"It is very important that I know the local language because I would be interacting with locals and others for a year." (Spain)

"It is very important that I know the local language in China. Knowing the local language enhances my abilities to communicate better with people as well as handle business more effectively."

Each of these responses fails to provide the context for language use or recognize that multi-lingualism may or may not be an important feature of the country. The observation that "they speak a different language and might not understand me" is considered poor because they do not provide a context for the observation nor go beyond the basic knowledge of the major spoken language of the country. In the case of Question 2, rubric sub-objectives 1, 2 and 3 are most directly related to the response. The categorization of "poor" responses present in the rubric matches the quality of the above responses in that the "student does not demonstrate any specific knowledge of the international context outside of facts presented by the case".

Good Responses:

"It is important to know the local language because I do not want to make a gesture that would offend people. What may be acceptable to Americans may be offensive to others." (Japan)

"It would be important for me to learn the local language because there are many dialects of speech throughout Hispanic countries. One word in one country may mean something else in another." (Argentina)

"I believe knowing the local language in Brazil isn't as important, because it is a tourist visiting country and I'm sure a lot of people speak English." (Brazil)

Each of these responses indicates a consideration of context and factual knowledge beyond mere language differences. In each response, the student "recognizes that case facts may require additional interpretation from the viewpoint of the international environment".

Excellent Responses:

"Since Belgium is the center of the European Union, many different languages are meeting there. Anyhow, for me as a politician or diplomat, it is crucial for me to speak English since I would be dealing mostly with non-native partners."

"It is very important to know the local languages in these countries because there aren't many nationals who will speak English and in Italy, English-speakers and foreigners in general are not exactly viewed with kindness due to their nationalistic attitude."

"In France, I think it is important to know the language, although I do think you don't have to be fluent in it. There are a lot of English speaking people in France which will make the transition easier."

These responses go beyond the previous two categories of responses in that they identify what they believe to be the linguistic characteristics of the countries and apply them to some outcome related to the initial scenario of working in the country. They also go farther in relating the specific characteristic (language use) to more general conclusions and assumptions about the countries. In these examples, the student "displays the ability to relate additional historical, cultural (etc.) facts to the specific context of the case and develop generalizations that are used in interpreting case facts." These answers demonstrate the ability to critically apply factual knowledge as part of a problem solving process.

USAGE AND CLOSING THE LOOP

A review of student responses to the exercise is revealing. To the extent that the ten questions in the exercise reflect issues presented during the course of the class, the exercise can reveal which "highlights" are recalled by students as they consider the various scenarios. For example, students tend to utilize Hall's "high-context/low-context" (Hall, 1976) dichotomy in explaining why learning the local language may be useful. They refer to Purchasing Power Parity when explaining why they make expect more or less in salary when posted in a give country. They tend to consider the political environment of a country and whether the features of democracies (such as freedom of expression) exist in considering whether it is appropriate to discuss a controversial political issue.

From the instructor's standpoint, the recall and correct application of these and other specific concepts is evidence that higher order learning is taking place relative to course content. The general goal of increasing student's global awareness and developing a global mindset is supported to the extent that students are careful to avoid drawing ethnocentric conclusions in their responses.

The exercise is also helpful in identifying topics and concepts that can be reinforced through greater emphasis on developing additional course materials and assignments. An evaluation of the aggregate of student responses can give the instructor a sense of whether the objectives of the course are being achieved by the class as a whole or of only a subset of students. For example, rubric scores for the entire class can produce percentage of students who perform in the "poor, good and excellent" categories. If the majority of the class fails to reach the upper two categories based on rubric scores, the instructor may consider adjusting teaching methods and assignment s to reinforce some of the topics where students do less well. For example, if a majority (or significant number of students) fails to identify two different countries on two continents, an increased emphasis on geography is needed.

CONCLUSION

This paper has presented a method for assessing and evaluating student learning in international business. The assessment exercise detailed here should be seen as one of several ways in which learning outcomes can be assessed in similar courses. To exercise is informative to the extent that it engages the student in self-reflection and reveals something of the student's ability to analyze and synthesize in the context of exposure to the concepts presented in the course. The results of the student responses to the exercise present a potentially rich source of qualitative data and insight into student thought processes. These insights may be used to refine teaching methods and points of emphasis in developing course pedagogy that will match learning objectives related to building a global mindset.

REFERENCES

Association to Advance Collegiate Schools of Business (AACSB). (2009) Eligibility Procedures and Accreditation Standards for Business Accreditation.

Association to Advance Collegiate Schools of Business (AACSB). (2011) Globalization of Management Education: Changing International Structures, Adaptive Strategies, and the Impact on Institutions.

Arevalo, J., E. Mcrea and J. Yin (2012) Global Literacy in the Classroom: Developing and Applying an Assessment Framework. *Journal of Teaching in International Business*, 23 (3), 176-200.

Bloom, B.S. (1956) Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York, David McKay Co., Inc.

Cant, A. (2004) Internationalizing the Business Curriculum: Developing Intercultural Competance. *The Journal of the American Academy of Business*, 14(1), 131-136.

Collings, D.G. Scullion, H. and Morley, M.J. (2007) Changing Patterns of Global Staffing in the Multinational Enterprise: Challenges to the Conventional Expatriate Assignment and Emerging Alternatives. *Journal of World Business*, 42(2), 198-213.

Datar, S., Garvin, D. and Cullen, P. (2010) *Rethinking the MBA: Business Education at a Crossroads*. Cambridge, MA: Harvard University Press. The Economist (2013) Bunfight; The Big Mac index (currency valuation). February 2.

Hall, Edward (1976) Beyond Culture. New York, Anchor Books.

Kwok, C.Y. and Arpan, J. (2002) Internationalizing the Business School: A Global Survey in 2000. Journal of International Business Studies, 33(3), 571-581.

Levy, O., Beechler, S., Taylor, S., and Boyacigiller, N.A. (2007), What We Talk About When We Talk About "Global Mindset": Managerial Cognition in Multinational Corporations, *Journal of International Business Studies*, 38, 231–258.

Massingham, P. (2013) Cognitive Complexity in Global Mindsets. International Journal of Management, 30(1),232-248.

Revere, L., Decker, P. and Hill, R. (2012) Assessing Learning Outcomes Beyond Knowledge Attainment. Business Education Innovation Journal, 4(1), 72-79.

Sagafi-Nejad, T, Bakay, A., Limaye, A. and Moqbel, M. (2011) Common Themes and Topics in International Business Textbooks. Available at SSRN: http://ssrn.com/abstract=1910252

Stivers, B. and Phillips, J. (2009) Assessment of Student Learning: a Fast Track Approach. Journal of Education for Business, 258-262.

David Jamison, Ph.D. is Associate Professor of Marketing at South Carolina State University. He teaches courses in International Business and International Marketing. His research interests center on the cultural dimensions of international business and international business pedagogy.

Manuscript Guidelines, Submission and Review Process

TOPIC AREAS (BUT NOT LIMITED TO THESE):

- Course design current courses, new courses, new trends in course topics
- Course management successful policies for attendance, homework, academic honesty ...
- Class material
 - o Description and use of new cases or material
 - o Lecture notes, particularly new and emerging topics not covered effectively in textbooks
- o Innovative class activities and action-learning games, active learning, problem based
- Major or emphasis area program design that is new or innovative.
- Assessment all aspects including AACSB and university level assessment strategies and programs
- Integration of programs or courses with other academic disciplines
- Internship programs
- Business partnerships
- Successful student job placement strategies
- Any topic that relates to higher education business education.

SUBMISSION AND REVIEW PROCESS:

Copyright

- Manuscripts submitted for publication should be original contributions and should not be under consideration with another journal.
- Authors submitting a manuscript for publication warrant that the work is not an infringement of any existing copyright, infringement of proprietary right, invasion of privacy, or libel and will indemnify, defend, and hold Elm Street Press harmless from any damages, expenses, and costs against any breach of such warranty.

Prepare your manuscript

- See the Style Guideline page for specific instructions.
- Articles must make a contribution to business education innovation.
- Manuscripts should be limited to 8 to 10 pages or less, although longer will be accepted if warranted.
- Articles can be either regular research papers, or shorter notes that succinctly describe innovative classroom teaching methods or activities.
- Manuscripts should be completely finished documents ready for publication if accepted.
- Manuscripts must be in standard acceptable English grammatical construction.
- Manuscripts should be in MS Office Word format. Word 2007 files are acceptable, as are earlier versions of Word. If you are using a new version of Word after Word 2007, save in Word 2007 format.

Submit your manuscript

- Manuscripts may not have been published previously or be under review with another journal.
- Submit the manuscript attached to an email to **submit**@beijournal.com
- We will respond that we have received the manuscript.
- Article submissions can be made at any time.
- Submission deadlines: September 15 for December issue, March 15 for June issue.

Manuscript review

- The editor and reviewers will review your submission to determine if 1) the content makes a contribution to innovative business education, 2) is of the proper page length, 3) is written in proper grammatical English, and 4) is formatted ready for publication.
- Submissions not meeting any of these standards will be returned. You are invited to make revisions and resubmit.
- If the submission meets the standards, the manuscript will be sent to two reviewers who will read, evaluate and comment on your submission.
 - The editor will evaluate the reviews and make the final decision. There are 3 possible outcomes:
 - Accept as is.
 - Accept with minor revisions.
 - o Not accepted.
- Reviews will be returned promptly. Our commitment is to have a decision to you in less than two months.
- If your paper is not accepted, the evaluation may contain comments from reviewers. You are invited to rewrite and submit again.

If your paper is accepted

- Minor revision suggestions will be transmitted back to you.
- Revise and send back as quickly as possible to meet printer deadlines.
- Upon final acceptance, we will bill you publication fees. See <u>www.beijournal.com</u> for latest per page fees. Sole author fees are discounted.
- The fees include all costs of mailing a copy of the issue to each author via standard postal ground.
- Delivery to locations outside the continental US will cost an additional \$10 per author for 5 day delivery.
- Faster delivery methods are available for US and international delivery. Contact the editor for a specific pricing.
- All publication fees should be remitted within 10 business days of acceptance, if possible.
- If you decide not to publish your paper with BEI Journal after submitting payment, we will refund publication fees less \$200 to cover costs of review and processing.
- Cancellation cannot occur after the paper has been formatted into the final printer's file.

Manuscript Style Guide and Example

An example is providing following these instructions.

This style guide represents style guidelines in effect for future issues.

Authors are responsible for checking for correct grammar, construction and spelling. Authors are also responsible for formatting pictures, tables, and figures such that a pdf black and white file sent to the publisher will reproduce in a readable manner.

General Setup:

- All fonts: Times New Roman. 10 point for text. Other sizes as noted below
- Margins: 1 inch on all sides of $8\frac{1}{2}\times11$ inch paper size.
- No headers or footers.
- Avoid footnotes unless absolutely necessary.
- Page numbering bottom centered.
- No section breaks in the paper.
- No color, including url's. Format to black. No color in tables or figures. Use shading if necessary.
- All pages must be portrait orientation. Tables and figures in landscape orientations should be reformatted into portrait orientation.
- All paragraphs should be justified left and right, single spaced, in 10 point Times font, no indent on first line, 1 line between each heading and paragraph.
- One line between each paragraph.

Titles, Authors, and Headings:

- **Title centered 14 point bold**. One line between title and author's name.
- Authors: centered, 12 point. Name, affiliation, state, country.
- One line space to **ABSTRACT** (title 10 point, bold, all capitalized, aligned left; text of abstract 10 point, no bold)
- After ABSTRACT, one line space, then Keywords. Followed by one line space to first major heading.
 - **HEADINGS, MAJOR**, 10 point, bold, all capitalized, aligned left. The specific headlines will be based on the content of the paper, but major sections should at a
- minimum include an abstract, keywords, introduction, conclusion, and references.
 Sub-headings: 10 point, bold, first letter capitalized, no line to following paragraph. Align left.
- Third level headings: Italic, 10 point, first letter capitalized, no line to following paragraph. Align left.
- Keywords: heading: 10 point, bold, first letter capitalized, no line to following paragraph. Align left. Your list of keywords in 10 point, no bold.

Tables, Figures and Graphs:

- All fonts 10 point.
- Numbered consecutively within each category. Table 1, Figure 1 etc.
- Title: 10 point, bold, left justify title, one space, then the table, figure, etc.
- Example: Table 1: Statistical Analysis

References:

- APA format when citing in the text. For example (Smith, 2009).
- References section: 8 point font, first line left margin, continuation lines 0.25 inch indent. Justify left and right. No line spacing between references. List alphabetically by first author.
- Specific references: Last name, First initial, middle initial (and additional authors same style) (year of publication in parentheses). Title of article. *Journal or source in italics*. Volume and issue, page number range.
- Example: Clon, E. and Johanson, E. (2006). Sloppy Writing and Performance in Principles of Economics. *Educational Economics*. V. 14, No. 2, pp 211-233.
- For books: last name, first initial, middle initial (and additional authors same style) (year of publication in parentheses). *Title of book in italics*. Publisher information.
- Example: Houghton, P.M, and Houghton, T.J. (2009). APA: The Easy Way! Flint, MI: Baker College.

Example (note that this example represents a change from previous style guides) Evidence to Support Sloppy Writing Leads to Sloppy Thinking

Peter J. Billington, Colorado State University - Pueblo, Colorado, USA (12 point) Terri Dactil, High Plains University, Alberta, Canada

ABSTRACT (10 point, bold, all capitalized, left justified)

(text: 10 point Times font, no indent, justified, single space, 150 words maximum for the abstract) The classic phrase "sloppy writing leads to sloppy thinking" has been used by many to make writers develop structured and clear writing. However, although many people do believe this phrase, no one has yet been able to prove that, in fact, sloppy writing leads to sloppy thinking. In this paper, we study the causal relationship between sloppy writing and sloppy thinking.

Keywords: sloppy writing, sloppy thinking (10 point, bold title, first letter capitalized, left justified).

INTRODUCTION (10 point, bold, all capitalized, left justified).

The classic phrase "sloppy writing leads to sloppy thinking" has been used by many to make writers develop structured and clear writing. However, since many people do believe this phrase, no one has yet been able to prove that in fact, sloppy writing leads to sloppy thinking. Is it possible that sloppy writing is done, even with good thinking. Or perhaps excellent writing is developed, even with sloppy thinking.

In this paper, we study the writing of 200 students that attempts to test the theory that sloppy writing leads to sloppy thinking.

PREVIOUS RESEARCH

The original phrase came into wide use around 2005 (Clon, 2006), who observed sloppy writing in economics classes. Sloppy writing was observed in other economics classes (Druden and Ellias, 2003).

RESEARCH DESIGN

Two hundred students in two business statistics sections during one semester were given assignments to write reports on statistical sampling results. The papers were graded on a "sloppiness" factor using...

Data Collection (Sub-heading, bold but not all caps, 10 point, aligned left, bold, no line after to paragraph) The two hundred students were asked to write 2 short papers during the semester...

Data Analysis(Sub-heading, bold but not all caps, 10 point, aligned left, bold, no line after to paragraph) The two hundred students were asked to write 2 short papers during the semester...

DISCUSSION

The resulting statistical analysis shows a significant correlation between sloppy writing and sloppy thinking. As noted below in Figure 1, the amount of sloppy writing increases over the course of the spring semester.

Figure 1: Sloppy Writing During the Semester



The count results were compiled and shown in Table 1 below.

Table 1: Counts of Good and Sloppy Writing and Thinking (bold, 1 line after to table, left justify)

	Good Thinking	Sloppy Thinking
Good Writing	5	22
Sloppy Writing	21	36

*-Indicates significance at the 5% level)

As Table 1 shows conclusively, there is not much good writing nor good thinking going on.

CONCLUSIONS

The statistical analysis shows that there is a strong relation between sloppy writing and sloppy thinking, however, it is not clear which causes the other...

Future research will try to determine causality.

REFERENCES (title10 point, all caps, bold, align left, one line to first reference)

(1line spacing) (All references 8 point, indent second line 0.25 inch, justify left and right)

Clon, E. (2006). Sloppy Writing and Performance in Principles of Economics. Educational Economics. V. 14, No. 2, pp 211-233.

Devad, S. and Flotz, J. Evaluation of Factors Influencing Student Class Writing and Performance. *American Journal of Farming Economics*. V. 78, Issue 3, pp 499-502.

Druden, G. and Ellias, L. (1995). Principles of Economics. New York: Irwin.

(short bio section optional, can run longer than these examples; removed before sent to reviewers) **Peter J. Billington**, Ph.D., is a professor of operations management at Colorado State University – Pueblo. His research interests span from lean six sigma to innovative education.

Terri Dactil, Ph.D., is a professor of business communication in the College of Business at High Plains University, Alberta, Canada. His research interests include instructional methods to improve student communication skills.

The authors wish to acknowledge the assistance of graduate student Philipp Ecken in compiling and reading numerous student papers.