

Contents

Page	Authors
2	Introduction
3	Journal Information
4	Subscriptions
5	A Continuous Improvement Process to Include Closing the Loop Activities <i>Stephen Allen, Paul Fellows, Keith Harrison</i> Truman State University – Kirksville, MO, USA
13	‘Bug Reports’ and ‘Too Cools’: Experiential Entrepreneurship Exercises to Develop Students’ Creative, Innovative, and Technological Abilities..... <i>Ji-Hee Kim and Lynn A. Fish</i> Canisius College, Buffalo, NY, USA
22	Increasing Student Engagement through Community Organization Partnerships..... <i>Dan A. Yates and Chris Ward</i> The University of Findlay-Findlay, Ohio, USA
32	Business Student Performance in Traditional vs. Honors Course Settings..... <i>Dr. Kristie Ogilvie and Dr. Ernesto M. Reza</i> California State University at San Bernardino, San Bernardino, California, USA
49	The Four-Year Experience: Expanding Horizons and Preparation..... <i>James C. Rothwell, Philip F. Rice, and Marshall J. Horton</i> Ouachita Baptist University, Arkadelphia, Arkansas USA
56	Effectiveness of Interactive Technology in Business Education..... <i>Sarah A. Humphries and Catherine Whelan</i> Georgia College & State University, Georgia, USA
62	ACHIEVE: A Career and Professional Development Program for Undergraduate Business Students..... <i>Karl D. Majeske and James S. Serocki</i> Oakland University, Rochester, Michigan, USA
71	Incorporating Academic Integrity into an Online Information Assurance Program <i>Jeffrey A. Livermore</i> Walsh College – Troy, MI, USA
78	Rethinking Motivation: Self-Interest vs. Others-Directed Models of Human Behavior... <i>J. Andrew Morris</i> , CSU-Channel Islands, Camarillo, California, USA <i>John C. Urbanski</i> , Sonoma State University, Rohnert Park, California, USA <i>James W. Slate</i> , Catawba College, Salisbury, North Carolina, USA
88	Internationalizing Business Curricula: An Outcomes-Focused Approach..... <i>Kurt D. Kirstein, Elizabeth A. Fountain, Kelly A. Flores</i>

City University of Seattle, Bellevue, WA

97 Online Discussion and Communities of Practice.....
.....*Herbert E. Rau*
Utica College – Utica, NY, USA

102 Manuscript Guidelines

Introduction

Welcome to the 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 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 and 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 © 2009, 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 from editor@beijournal.com

Business Education Innovation Journal

www.beijournal.com

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

James H. Browne

University of Texas at Tyler, Tyler, TX

J. Brad Gilbreath

Colorado State University – Pueblo, Pueblo, CO

Jose Castillo

Truman State University, Kirksville, MO

Maryann Grusetskie

Lore International Institute – a Korn/Ferry Company

Jui-Kuei Chen

Tamkang University-Dansui Campus, Taipei, Taiwan

Leigh Stelzer

Seton Hall University, South Orange, NJ

Steven I-Shuo Chen

National Chiao Tung University, Taipei, Taiwan

Alice Valerio

De La Salle University-Dasmarinas, Philippines

Lynn A. Fish

Canisius College, Buffalo, NY

Stuart H. Warnock

Metropolitan State College of Denver, Denver, CO

Business Manager

Drew C. Billington

Graphics, Design, and Production Consultant

Laurel Prud'homme and Jeannie Sheeks

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, ColoradoSprings,CO 80919-1899

Subscriptions

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

Subscription Rates:

<i>Destination</i>	<i>Individual *</i>	<i>Institutional</i>	<i>Back Issues</i>
United States	\$50	\$75	\$25
Countries other than the U.S.	\$75	\$100	\$50

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

Business Education Innovation (BEI) Journal © 2009 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 (editor@beijournal.com).

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.

A Continuous Improvement Process to Include Closing the Loop Activities

Stephen Allen, Truman State University – Kirksville, Missouri, USA

Paul Fellows, Truman State University – Kirksville, Missouri, USA

Keith Harrison, Truman State University – Kirksville, Missouri, USA

ABSTRACT

This paper examines a continuous improvement model for business program courses and suggests a curriculum-based activity to provide significant curriculum improvement. Curriculum delivery may take many forms from lectures to case-studies to homework and more. Traditional curriculum delivery techniques alone may fail to complete the assessment process. We define a Closing the Loop activity as an activity that addresses an assessment shortcoming while going beyond traditional curriculum techniques by providing an external curricular experience for the course content. We also present a model to facilitate the generation of Closing the Loop activities and illustrate the use of Closing the Loop activities for a project management course, an entry level accounting course, and an investments course.

INTRODUCTION

Academic organizations deploy a variety of means and methods to improve instruction. One method is the practice of continuous improvement. Choi (1993) has indicated that traditional course delivery of lectures and tutoring may no longer be an effective classroom strategy for management and higher education in general. In the late twentieth century, authors such as Cornesky (1991), (1992), Hubbard (1994), and Seymour (1991) suggested many quality improvements in management education. In that era, Karathanos, et. al. (1996) indicated that the Malcolm Baldrige National Quality Award was revised to include a higher education quality criterion. The Malcolm Baldrige criteria emphasized the importance of continuous improvement practices in university education.

Management Education Evolution

In 1992, Kaplan and Norton (1992) introduced the concept of the balanced scorecard which revolutionized the concept of performance criteria. They indicated that focusing on a few direct performance measures would not be effective for today's information driven enterprises. The use of four different perspectives was suggested to link performance measurements. The four perspectives are financial, a customer view, an internal business view, and innovation and learning. The last perspective, innovation and learning, focuses on business processes and their continuous improvement. Subsequently, Kaplan et al (1996) indicated that the balanced scorecard approach was successfully utilized in manufacturing and service areas. In addition, Huselid (2001) has created the HR Scorecard. His successful development of a scorecard showed particular applicability in HR area by connecting value creation through the HR function. Bailey et. al. (1999) showed that business school deans accepted the concept of the balanced score card as a quality performance measurement of improvement. In that study, business deans indicated that in the area of innovation and learning continuous improvement was vital to an effective business program.

The AACSB International organization (the Association to Advance Collegiate Schools of Business) amended its accreditation standards in 1991. The change promoted standards linking mission and school via a continuous improvement measure. The intent of the change was to ensure quality improvements on a continuing basis. A tenet of the AACSB International organization is to continuously improve its standards and quality measures. In 2003, AACSB International included Assurance of Learning (AOL) standards enabling the quality assessment of worldwide business education institutions with the expectation that by 2007 that business schools would have operational AOL programs in place.

A GENERALIZED CONTINUOUS IMPROVEMENT PROCESS

The basics of an Assurance of Learning process for a business school is the measuring, monitoring and controlling of program learning goals within the context of the school's mission. Essential to any assessment program is the incorporation and use of continuous improvement practices. A variety of assessment information may be analyzed to provide continuous improvement to both processes and programs. The AACSB International (2007) issued a white paper which further details AOL and standards and processes. See Figure 1.

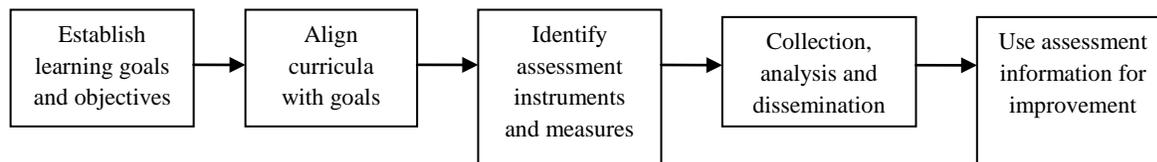


Figure 1

The continuous improvement process aims to ensure that programs are achieving program goals that support curricular expectations and quality learning experiences. The key stakeholders include faculty, administrators, staff, students, alumni, advisors, and business organizations who should weigh in on overall progress and improvement.

A mature AOL process routinely utilizes collected and analyzed data which assesses defined student learning goals and their objectives. It also exhibits a means of triangulation with regard to assessment measures to avoid relying on a single assessment element. A mature AOL process also ensures that collected assessment information about the learning process is woven back into the curriculum to improve learning. This process of using assessment information to identify learning issues, propose changes, implement changes and achieve learning improvements is commonly known as Closing the Loop. Additionally, Step 5 (see Figure 1) requires that the program demonstrate how assessment data is used to inform stakeholders of program effectiveness and how it has been used for continuous improvement of curricula.

A PROPOSAL TO INCLUDE CLOSING THE LOOP ACTIVITIES

The Assurance of Learning process provides a continuous process, environment and learning culture for faculty to deliver a continuously improving curriculum. Once mature and effective, an AOL process points to those small but important areas in the curriculum which require improvement. Improvement is demonstrated by the next AOL collection and analysis cycle.

When assessment information points to a problem area the typical AOL process may or may not aid faculty in the curriculum improvement process. In some cases, activities beyond the traditional curriculum delivery methods may be needed. In the context of this need, we define Closing the Loop activities as activities that go beyond the traditional curriculum content by providing an external curricular experience for course content to be better retained and understood by the student. The use of Closing the Loop activities extends the AOL process discussed above. See Figure 2. The process utilizes the analysis of a mature AOL process as an input. As a means to address a significant curriculum weakness, we suggest adding a curriculum activity that addresses the identified weakness and provides overall improvement in the course. Once implemented, the traditional mature AOL process is utilized to show that progress has been made.

The activity may take many forms. Examples include but are not limited to integrated applications, practices of principles learned, and decision-making activities with real financial consequences. Typically, the experience will require a significant faculty effort to modify the curriculum. Often, stakeholders will need to directly participate in the experience and additional resources may be required.

The Closing the Loop activity typically requires innovation within the curriculum. Innovation often forces faculty out of their comfort zones. Program stakeholder input is vital to the innovation process to ensure a quality improvement process. As seen in figure 2, creating a Closing the Loop activity is only the first step in the process. For full implementation, the activity needs to meet with the approval of the key stakeholders and have appropriate resources applied. Additionally, the Assurance of Learning process needs to be updated to reflect the new activity.

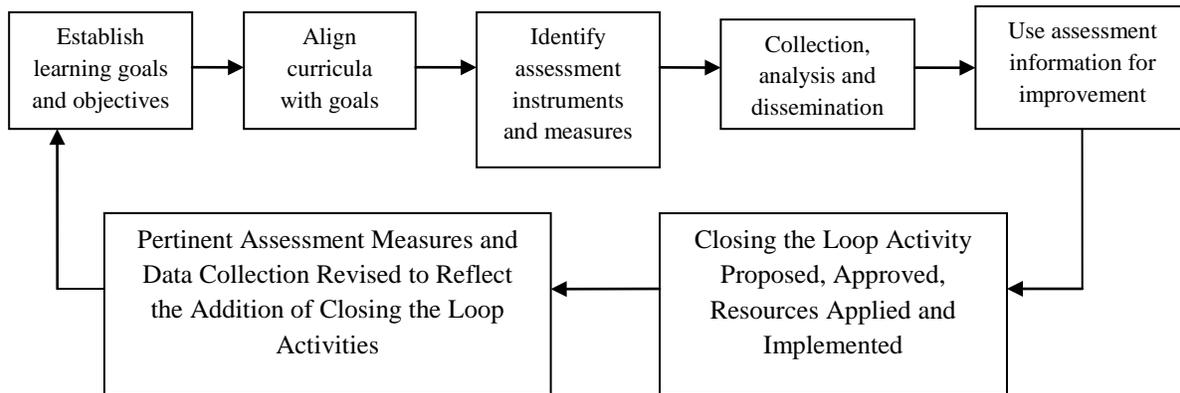


Figure 2

APPLIED MODEL EXAMPLES

Closing the loop activities for three undergraduate business courses are proposed. The courses include project management, an entry level accounting course and an investments course. These courses were chosen to illustrate the wide variety of business classes for which innovative curriculum can be created by applying the continuous improvement process to include Closing the Loop activities.

Project Management

During an annual review of Assurance of Learning outcomes, a clear gap in the management curriculum became self evident in the area of project management. The assessment data was insufficient to measure project management instruction as collected as a consequence of minor project management content in the business core. This indirect usage of the Assurance of Learning data led to a major program review of the management curriculum. After the program review and combined with stakeholder feedback, it became evident that management students understood the basic elements of project management. However, it was also evident that undergraduate management graduates likely would not be able to apply basic project management tools and analysis at an entry level in a professional manner. As a consequence, a project management class was added to the management curriculum. To ensure the learning loop was closed, a significant learning experience was incorporated in the class and is described below.

Project management education in the business curriculum is typically introduced through a core operations management, production and operations management, operations research or similar business course. The first full semester course in project management is a suitable candidate for a Closing the Loop enhancement. A key concept in the study of project management is the project lifecycle. Students begin to close the loop in the study of project management and the project lifecycle by a significant project design experience. The project lifecycle includes project conception, selection, planning and scheduling. Central to the project lifecycle is the concept of risk analysis and assessment. The typical activity involves design, scheduling and risk assessment phases. Students must also provide specific details about the project that is the subject of this design effort. Additionally, student-designed visual aids are used as part of the capstone presentation experience. The presentation is made to external professional project managers. Use of project management software is compulsory for the presentation to

demonstrate the student's technical skills in project design and management. Microsoft Project is available for a nominal fee when packaged with a text or may be available as part of the campus software suite.

A Closing the Loop activity that provided multiple learning assurances was to assess the student designed project. The project selected to be designed is left to the student pending a quality audit by the instructor. The audit is a brief but necessary step to ensure an appropriate size project. This quality step is consistent with the review expectation which occurs in practice.

During the presentation which concludes each design, the project managers are looking for a clear logical thought process. As a consequence of the design, students must critically assess their projects for risk elements and provide a supportive risk mitigation plan for each element. An additional assessment dimension is added to the activity through the use of an oral assessment rubric. Once trained, the professional project managers serving as project presentation reviewers find the rubric easy to use. A professional conference room setting is also highly recommended with appropriate media.

At the end of the review session, the professionals conduct a class debriefing for the students, highlighting best practices observed during the presentations. At the conclusion of the class debriefing, the team reviews the effective points of the student efforts with the instructor. A continuous improvement measure involved the reviewers indicating areas of future project management curricular improvements for faculty implementation. At present, the Assurance of Learning assessment reviews the business core curricula. As the Assurance of Learning program matures further, it is anticipated that it will include program assessment as well. In the interim, partnering with the industry professionals had led to direct course improvement continuously in incremental gains. The class's effectiveness is additionally supported by unsolicited program graduates comments such as "...the project management information that I retained has definitely been useful! I've never been so grateful for taking a class. I can see now just applicable the (project management) information really is." A graduate volunteered, "It was wonderful to be able to actually apply all of the (project management) education in a one hundred thousand dollar a day business." A student doing an internship indicated, "...that project management has been the most valuable class I have taken. (Learning the tools by designing my own project was extremely helpful.)"

Entry-level Accounting

Another example of a Closing the Loop activity in an undergraduate business course takes place in an entry level accounting course. The primary goal of an entry level accounting course is to introduce financial reporting concepts and enable students to understand and use financial statements. Traditional textbook exercises, examples, case studies and homework properly illustrate the financial reporting process. However, assessment results showed that students were unable to apply accounting techniques in other classes and failed to see the relevance of accounting data for other areas of business.

To respond to this weakness, we implemented a simulation that asked each student group to create a fictitious ice cream store and make business decisions. The simulation is designed to integrate the business curriculum areas of employment, sales, marketing, strategy and site location options for a business at an entry level. Students assess the success of their business using accounting information. The project simulates sales of ice cream products through a college town ice cream shop. A class composed of pre-business, pre-accounting and business minor students is broken into teams of two or three. The overall simulation runs six to seven weeks.

One tangible outcome is two months of business performance data for which the student teams create accounting entries and financial statements. Each group receives unique information based on their choices and a few random factors. At the conclusion of the simulation, students analyze company performance through ratios and financial statement interpretation. In addition, recommendations for future improvements are provided such as adding new products, and opening new stores.

This project has been used for several years and recently student evaluations were used to determine whether the project meets the goals of reinforcing accounting knowledge and increasing student awareness of the relationship

between accounting and other business courses. The results of the survey are presented in the Appendix. Students enrolled in the first semester financial accounting class in two different semesters completed the survey after finishing the ice cream store project. In total, 238 students completed the survey and all responses were anonymous. The results of the survey suggest that students continue to find the Arctic Blast project very helpful in understanding the accounting process and find it helpful in understanding how accounting information relates to business. Overall, 87% of the students agreed or strongly agreed that the project was helpful in learning financial accounting.

Student responses to the question, “What aspects of the ice cream store project enhanced your learning experience in Introduction to Financial Accounting?” showed that the project was successful. Many students commented that the journal entries, adjusting entries and financial statements in the project reinforced their learning. One student commented, “Basically the whole project helped to enhance my learning of financial accounting because aspects of accounting don’t sink in until you do them.” Another student responded, “Overall it helped my learning experience because it covered all aspects.” Many students felt that the simulation of a real company was successful. One representative comment is, “It felt like a real situation and it helped us take what we learned in the classroom and apply it to a ‘real life’ situation.” The survey data from all of the students combined with positive comments from many of the students indicate that the project achieves its objectives.

Investments Course

Investments courses are typically offered at the junior/senior level in the finance curriculum. Considerable technical coursework is undertaken by finance majors before students become somewhat comfortable at the entry level of the topics covered in the investments class. For example, course work in statistics, accounting and economics and an introductory finance class are prerequisites of investment classes. Students of finance practice the finance tools learned through traditional text materials, cases studies, and homework. In many programs, investments classes may use investment simulation (trading games) so that students have an opportunity to apply course content. The standard curriculum lacks any real consequences for failure to understand financial models.

Assessment data may reveal that for students, making mistakes has no real consequences and the incentive to learn and perform well may only be connected to the earned grade of the course. A suggestion for Closing the Loop in a finance curriculum is to create a portfolio management project. The project would assign control of actual investment monies to a student investment team.

Due to the potential of very real negative consequential outcomes, the control of investments would be assigned to a senior level student investment management team. A best practice method of creating admission to the team would be by performance based measures started early in the student’s academic education. We suggest that students participate by working up a ladder of responsibility over time. During the freshman year, interested students would be expected to participate through observation of investment team meetings, reading intermediate reports, and tracking the investment portfolio over time. At the sophomore level, as students are exposed to introductory economics, statistics, accounting and other business classes, the students’ business knowledge and analytical skills begin to develop. Students would be expected to generate ideas for alternative investments. As students become juniors in the curriculum, they develop a better understanding of accounting and the valuation of different financial investments. Admission to the team would be granted once a student demonstrated their ability to apply finance knowledge and quantitative skills in a real world setting.

In addition to traditional class (content) based testing, an external test such as the Chartered Financial Analyst exam could be used to triangulate knowledge and skills assessment. At the senior level, students would have benefited from additional finance and economic coursework. They are also more likely to have developed a global perspective about business and international markets. Yet, students will lack a practical, deeper knowledge of specific sectors and industries. At this level, students participate as an executive committee making recommendations to a faculty and business professional board which has veto power on decisions made by the team. Participation in real life decisions with real money on the table is one means of closing the loop in finance learning experiences. Additionally, the project participants and others are able to benchmark the project performance with appropriate reference portfolios on a periodic basis thus closing the loop from another basis.

The proposed portfolio management project clearly demonstrates two steps involved in many Closing the Loop activities. In addition to faculty participation, the project requires stakeholder participation and financial resources. Participating stakeholders could include members of the school's advisory board, or the school's endowment foundation and alumni involved actively in professional portfolio management. To make the project "real" for students, significant financial resources are required. These resources could come from school supporters or even from the school's endowment funds.

The proposed portfolio management activity can provide assessment information in a variety of ways. Student learning skills can be directly measured by comparing portfolio performance to a benchmark appropriately adjusted for portfolio composition and risk. Faculty and students can see the real consequences of the decisions made. Benchmarking serves as a tool for program assessment and can be used to determine strengths and weaknesses of the finance and accounting curriculum. It can also be used to provide feedback to student participants and help them to understand that financial decisions do have real monetary consequences.

In-class measures, such as exams, can be used at each stage in the curriculum to compare the average performance of students actively involved in the portfolio management project with the average performance of those not involved in the project. Because the project is designed to include student participants at different course levels in the curriculum, in-class performance measures can be used to determine whether participation in the project actually adds value to the educational experience of students.

Moreover, the proposed portfolio management activity provides a better measure of student learning and professional preparation than portfolio simulation games. These games tend to reward risk-taking and active trading. Basing part of a student's grade on games that don't require well-reasoned decisions makes no sense. However, allowing students to participate in a portfolio management project, and be responsible for real investment decisions, places students in a professional setting where stewardship and ethical responsibility are important.

CONCLUSIONS

This paper outlines a new means to greatly improve a wide variety of undergraduate business courses. Utilizing data from a mature Assurance of Learning process, we have described a means of continuous improvement by addressing significant curriculum needs through a Closing the Loop learning experience. Examples from undergraduate business courses demonstrated the possibilities of Closing the Loop activities. A common requirement of all three course improvement examples illustrated is the need for additional resources of monies, time, expertise and external stakeholder commitment.

Curriculum improvement in an undergraduate project management class may be achieved by requiring a student designed project. Having the student designed project assessed by external agents creates a real-life learning environment for the project management student. The result is a significant project management learning experience. Utilizing external professionals for the assessment also provides an opportunity for School and industry interaction. Immediate faculty debriefings enable faculty to improve the coursework delivery for subsequent course offerings in a short timeframe.

In an entry level accounting class, the accounting curriculum is seamlessly integrated into the course. Financial statement generation and analysis take on far more meaning than in a traditional educational approach. Additionally, other business areas are woven into the simulation as part of closing the loop. Accounting faculty are able to see firsthand the results of their instruction in the generation of financial reports from the design of the simulation. The timely performance feedback enables the faculty to make quick changes and improvements to course materials.

By creating a portfolio management project and charging an executive team of finance students with decision making control, the finance learning experience loop is closed. The consequences of these decisions provide real meaning and outcomes to finance students. Additionally, finance faculties receive timely feedback from both the

executive team's decision and process of applying learned financial theory and practice. The performance feedback enables finance faculty to quickly update finance course materials which reflect the indicated improvement areas.

All three courses are improved as a result of significant contributions by key stakeholders and the application of additional resources. While it may be possible that an adequate business curriculum can be delivered with traditional learning tools and techniques, the use of the continuous improvement process including the creation of specific Closing the Loop activities has greatly enhanced the educational outcomes of the students in these classes.

The Assurance of Learning program has been extremely helpful in the continuous improvement of the curriculum. Using direct assessment measures in the accounting core class led to a proven overall improved learning experience. Finding a gap in the Assurance of Learning outcomes regarding the project management curriculum led to a program review, increased stakeholder involvement, and ultimately an improved management degree. The Assurance of Learning process has also guided development of a new student learning opportunity in the finance curriculum. While the course is still proposed pending funding, the overall faculty involvement in course quality is evidenced by drafting a learning outcome plan.

REFERENCES

- AACSB International, *AACSB Assurance of Learning Standards: An Interpretation*. An AACSB White Paper issued 20 November 2007, Tampa, FL.
- AACSB International, *Eligibility Procedures and Standards for Experiential Reviews*, April, 2003, St. Louis, MO.
- Bailey, A.R., C.W. Chow and K.M. Hadad, "Continuous Improvement in Business Education: Insights from the For-Profit Sector and Business School Deans." *Journal of Education for Business*, Jan/Feb 1999, pp 165-180.
- Choi F.D.S., "Accounting Education for the 21st Century." *Issues in Accounting Education*, 1993, Vol. 8, pp 423-430.
- Cornesky R., "Implementing Total Quality Management in Higher Education," Madison, WI: Magna Publications, 1991.
- Cornesky R., "Using Deming to Improve Quality in Colleges and Universities," Madison, WI: Magna Publications, 1992.
- Hueslid M., *The HR Scorecard: Linking People, Strategy and Performance*, MA HBR Press, 2001.
- Hubbard D.L., "Can America Learn from Factories?" *Quality Progress*, 1994, Vol. 25(5), pp 93-97.
- Kaplan, R. and D. Norton, "The Balanced Scorecard-Measures that Drive Performance," *Harvard Business Review*, Jan/Feb 1992, pp 71-79.
- Kaplan, R. and D. Norton, "Using the Balanced Scorecard as a Strategic Management System," *Harvard Business Review*, Jan/Feb 1996, pp 76.
- Karathanos, D. and P. Karathanos, "The Baldrige Education Pilot Criteria 1995: An Integrated Approach to Continuous Improvement in Education," *Journal of Education for Business*, 1996, Vol. 71(5), pp 272-276.
- Seymour D.T., "TQM on Campus: What the Pioneers are finding," *AAHE Bulletin*, Washington, D.C., 1991.

Stephen Allen, Ph.D., is a professor of business administration-management at Truman State University. He holds a Ph.D. in engineering management from the Missouri University of Science and Technology. He teaches courses in operations management and project management.

Paul Fellows, Ph.D., is an associate professor of business administration-finance at Truman State University. He holds a Ph.D. in finance from the University of Illinois. He teaches courses in principles of finance and corporate finance.

Keith Harrison, Ph.D., is an associate professor of accounting at Truman State University. He holds a Ph.D. from the University of Kansas. He teaches courses in accounting information systems, auditing and introductory accounting.

APPENDIX

Assessment of the Ice Cream Store Accounting Project by Student Participants

n = 238	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. My ability to write a report describing decisions made in starting and running a business has improved as a result of this case.	53 22%	115 49%	58 25%	8 3%	3 1%
b. My ability to record business transactions in journal entries has improved as a result of this case.	110 46%	97 41%	22 9%	6 3%	3 1%
c. My ability to adjust the accounting records at the end of a period has improved as a result of this case.	89 38%	105 44%	38 16%	3 1%	3 1%
d. My ability to post transactions to accounts and prepare a trial balance has improved as a result of this case	110 46%	91 38%	25 11%	8 3%	4 2%
e. My ability to prepare financial statements (Balance Sheets, Income Statements and Statements of Changes in Stockholders Equity) has improved as a result of this case.	109 46%	96 40%	26 11%	2 1%	5 2%
f. My skills in understanding and analyzing the results of business operations improved as a result of this case.	68 29%	120 50%	33 14%	13 5%	4 2%
g. Overall, the ice cream store project was helpful in learning financial accounting.	89 38%	117 49%	21 9%	8 3%	3 1%
h. Overall, the ice cream store project was helpful in learning more about how a business operates.	70 29%	118 50%	36 15%	12 5%	2 1%

This table shows the results of a survey taken in first semester financial accounting classes after students completed all parts of the ice cream store accounting project. The first number in each cell represents the number of students responding in that category for the question indicated and the second number converts that number to a percentage for that row.

‘Bug Reports’ and ‘Too Cools’: Experiential Entrepreneurship Exercises to Develop Students’ Creative, Innovative, and Technological Abilities

Ji-Hee Kim and Lynn A. Fish, Canisius College, 2001 Main Street, Buffalo, NY, USA

ABSTRACT

The objectives of the ‘Bug Reports’ and ‘Too Cools’ experiential methods are to teach students not only a process for opportunity recognition, idea generation and development, but also process improvement. Through looking at opposite cases – best and worst – students develop skills to improve new product and service development. The activities enhance students’ creativity, innovation, and technological abilities – particularly for entrepreneurship students. The ‘Bug Reports’ and ‘Too Cools’ experiential methods offer a proven methodology to accomplish this goal over 2 weeks in a freshman-level course.

KEYWORDS: Experienced-based learning, entrepreneurship

INTRODUCTION AND INNOVATION

Entrepreneurship involves the skills necessary to identify and evaluate opportunities, acquire capital and resources, and to start, develop and operate a business. A collegiate curriculum in entrepreneurship emphasizes the development of creativity, innovation, interpersonal skills and entrepreneurial leadership. Experienced-based learning, which includes participative activities, has proven to be a very positive method to assist teaching (Brown et al., 1997, 1998; Heineke et al., 1995; Fish, 2001). In a freshman-level Introduction to Entrepreneurship course objectives include developing a student’s creativity, innovation and technological skills. The ‘Bug Reports’ and ‘Too Cools’ experiential exercises, which are taught within the Introduction to Entrepreneurship course, meet these objectives. By using these two exercises together, an alternative methodology to the traditional business plan model to address creativity and innovation is presented. The business plan model starts with opportunity recognition, ideas and moves through analysis, and does not offer a process for improvement. Through the methods presented here, students start with analysis and through the creative process, move to idea generation, and later more extensive evaluation and improvement of the initial ideas. Students learn to generate ideas - and improve upon these - from two perspectives: best and worst. Thus, students learn a process of idea generation, development – and improvement. Students learn to develop new ideas from their own needs (an area which is often ignored in the classroom) by scanning the world for products or services that bother – or ‘bug’ them, and currently available technological advances, that are ‘too cool’. Through individual and group brainstorming, they develop a process for innovative idea generation, the ability to scan their environment for potentially new and innovative technological products or services, and a better understanding of the impact of new ideas upon other business functions.

The methodology taught here could be modified by other instructors for similar topics. For example, operations management instructors could promote student creativity and learning to improve process design, new product design, and quality management. With respect to marketing, these exercises promote learning and practice of marketing’s 4 P’s (product, price, place and promotion). Thus, while the process that students are taught within these two exercises is primarily aimed at entrepreneurial skills, other business functions can benefit from the methods described here.

THE COURSE

The 100-level, second-semester Introduction to Entrepreneurship course is required for the Entrepreneurship major but open to others as a management elective. It is divided into two distinct sections. In Part I, the instructor introduces the students to the basic concepts of creativity, innovation, opportunity, idea generation and entrepreneurship; while in Part II, students apply these concepts through experiential entrepreneurship exercises.

The 'Bug Reports' and 'Too Cools' exercises are integral to the class during Part I and occur during the seventh and eighth weeks. The Introduction to Entrepreneurship course develops both individual and team learning by requiring students to first individually explore and present their own ideas, and then as part of a self-managed team, explore and present team ideas. The instructor uses reading assignments, lectures, and classroom discussions to further develop creative, innovative and entrepreneurship processes. The course meets bi-weekly for 75 minutes for each session. The class size is roughly 25-30 students who are divided into teams of 5-6 students per team.

THE EXERCISES & CLASSROOM INSTRUCTION

The 'Bug Reports' exercise occurs during the seventh week and students explore potential issues for product and service improvements as well as a process to develop opportunity recognition. That is, students explore various potential 'worst' case scenarios to develop potential avenues for new concepts. The 'Too Cools' exercise that follows and builds upon the 'Bug Reports' activities occurs during the eighth week and requires students to seek technological solutions to the issues raised by the 'items that bug' them. Students use 'best' case technology to seek improvements to the 'worst' case scenarios that they previously uncovered. Individual and group assignments are submitted through the computer to the instructor.

Bug Reports: Often, entrepreneurs get new ideas through their own or others' needs. Similarly, the objectives of the 'Bug Reports' are for students to learn to be more creative and innovative through the negative experiences in their daily life by evaluating products or services that 'bug' them. The 'Bug Report' activities include review of an appropriate article, development of an individual 'Bug Report', and development of a team 'Bug Report'.

Homework Prior to Week 7: Prior to week 7, students must read the article "Developing Creativity and Understanding Innovation" (Kuratko and Hodgetts, 2007) and submit an individual critique of the article. Students also complete the individual 'Bug Report' assignment – table and preparation for the 1-minute presentation with a prop. Each student must create and submit a table of 30 products or services that bother or 'bug' him, why the item bothers him, and how to improve each item. Each student develops this table by reflecting on his life, personal needs and activities, hobbies, relationships, observations and so forth. From the 'Bug Report', each student selects one product that needs to be innovated, and develops a 1-minute presentation describing what he wants to change about the item to the class.

First class, week 7: The first class of week 7 begins with a discussion of the article. Thought provoking questions outline the discussion and lead into the bug report exercise. Example questions include "In your words, state what is meant by the term creativity and innovation? What are the major sources of innovation? Explain and give an example of each." This discussion leads into the Bug Report activities. Table 1 serves as a partial listing of 'Bug Reports' submitted by students. In 1- minute, each student presents the one product or service that 'bugs' him the most. The presentation includes a visual prop for the class and if an item cannot be brought to class, the student is expected to bring an internet visual to show the class. Through this process, students are challenged to think about how to develop opportunities for innovation and improvement. Students' individual (and later group) presentations are evaluated by the class using an appropriate rubric (Table 2 Project: Oral Presentation Evaluation). Then, previously formed teams meet and select an item from the 'Bug Reports'. The class concludes with a classroom discussion on 'How to Innovate the Item Your Team Selected'.

Table 1: Partial Listing from Bug Reports Submitted by Students

Item	Descriptions of Problem/Issue	Solution
Outside gas stations.	Pumping gas in the cold and wet.	A drive-in gas station with heat in the building that is well-ventilated and includes necessary sprinklers and other safety features.
Chip bags	Chip bags are never filled to the top and at least a third of the bag is empty space.	Fill bags to the top or change package.

Pickle Jars	Pickle jars are always too filled with juice.	Put less juice in the jars or change packaging.
ATM Machines	Banks charge individual for use.	Offer free ATM access.
Gas can spillage	Spilling gas on my hands while using can.	A new form of gas can that does not require you to unscrew the cap to fill it. Instead on the end it has a fill only adapter and the other end has a long nozzle to pour.
Desk lamp	Desk lamps are large and take up too much space on the desk.	Smaller version to affix to the wall.
Wine bottle opener	Difficult to use manual wine bottle openers.	Pneumatic bottle opener.
Salsa or dip jars.	Jars are too tall and narrow. You can't reach into when the dip is getting low.	Make the jars shorter and wider so you can easily reach the bottom.
Spray bottle	Straw intake does not reach to the bottom of the bottle. User can't squirt the last little bit.	Make the straw reach to the bottom of the bottle.
5 lb. bags of hot dogs	Who cooks and eats 5 lbs. of hot dogs at a time? Package is not reasonable and user must move the remaining hot dogs to another container to keep them fresh.	Change packaging.

Table 2: PROJECT- ORAL PRESENTATION EVALUATION

Presentation Team/Company Name: _____

Judge (Your Name): _____

Presentation Date: _____

Overall Total Grade (A+, A, A-; B+, B, B-; C+, C, C-; D+, D, D-): _____

Please evaluate the Presentation following criteria: 1=Poor, 2=Fair, 3=Adequate, 4=Good, 5=Excellent						Comments
CONTENT AND ORGANIZATION						
Introduction and Body (30 points)						
1. Gave effective introduction	1	2	3	4	5	
2. Presented a clear structure	1	2	3	4	5	
3. Made it easy to follow progression of ideas	1	2	3	4	5	
4. Gave relevant examples	1	2	3	4	5	
5. Provided smooth transitions	1	2	3	4	5	
6. Covered required topics	1	2	3	4	5	
Delivery (35 points)						
1. Clear voice, could be heard	1	2	3	4	5	
2. Gave adequate eye contact	1	2	3	4	5	
3. Demonstrated vocal clarity	1	2	3	4	5	
4. Selected meaningful gestures	1	2	3	4	5	
5. Used clear diction	1	2	3	4	5	
6. Appeared organized and in control	1	2	3	4	5	
7. Not rushed	1	2	3	4	5	
Management of Visual (20 points)						

1. Used visual effectively	1	2	3	4	5	
2. Handled visual adeptly	1	2	3	4	5	
3. Reflected simplicity	1	2	3	4	5	
4. Were legible	1	2	3	4	5	
Conclusion and Suggestion (10 points)						
1. Summarized main points	1	2	3	4	5	
2. Had a summary and good Suggestion						
Kept within time allocation (5 points)						
1. Kept time allocation	1	2	3	4	5	

Be sure to provide this evaluation form to the instructor.

Between classes, week 7: Teams are expected to develop and submit a report on their bug product – what it is, how to innovate and improve it, and a 3-minute team presentation on their bug product.

Second class, week 7: At the next session, the team presents their bug product using the item or an internet visual in 3 minutes. The team also reviews their ideas for an improved product - modified design, features, and functions. Class discussion follows, lead by instructor questions such as: “What kind of additional changes will be challenges to innovate these products or service to the company or organization? What is the estimated additional cost – or cost reduction - for these changes? What organizational or processes changes will be needed to innovate the product? And if we improve the product or service, will the current market expand – and why?”

The instructor evaluates the written individual and team bug reports using a rubric evaluating the originality of the idea; feasibility in the real world; entrepreneurial market opportunity; concreteness of product ideas and functions; and report completeness. Thus, through the ‘Bug Report’ process, students learn to identify needs and brainstorm potential opportunities for new ventures.

Too Cools: The objective of the ‘Too Cools’ activity is to continue to develop students opportunity recognition, creativity and innovation skills through positive personal experiences and to develop a better understanding of currently available technologies. The instructor teaches students to look for positive opportunities in what they read and hear in the environment, and a creative approach to a new product or service through integration of the negative (‘Bug Report’) and positive (‘Too Cools’) activities.

Homework prior to Week 8: Students are expected to read and submit a critique of the article “The Complete Guide to Managing Traditional Brainstorming Events” (Baumgarner, 2005). Students are also expected to complete the individual ‘Too Cool’ assignment (Figure 1), which includes a report and a presentation. For the ‘Too Cool’ individual assignment, each student scans the environment for two very technologically-advanced, innovative products, that is, ‘cool’ products. Each student submits a report describing these items, the website, potentially ‘how’ the product was made, and using one idea from his student journal (where weekly entries are made), the potential to integrate the technology to improve it. Possible sources of ‘cool items’ include the world wide web, journals (trade, industry, scientific), magazines, newspapers, and other media. (In these exercises, technology implies the web-based observed technologies and technological processes the students may observe through their searches.) Each student also prepares a 2-minute presentation on the ‘too cool’ item using the product, materials or internet as presentation tools.

Figure 1. Instructions for “Too Cool” group project.

"TOO COOL" Instructions

Objectives:

- 1) To create awareness of innovation in our surroundings; to help freshman students to look for opportunity in what they read and hear, and to help them to develop a creative approach to new business development.
- 2) To give students practice scanning their environment for new ideas.
- 3) To introduce business concepts in short, experiential bursts.
- 4) To be a vehicle for discussion about whether the concepts are just cool ideas or real opportunities.

Group Instructions:

- 1) Each group is required to bring two cool products, ideas, concepts, technologies, information items or whatever is truly innovative and grabs your interest/captures your imagination that you can find, to class. This should be a concept that is totally new to you.
- 2) The class will then select item from those presented, and will brainstorm (either in team with each team selecting a different concept or with the entire class on the same concept) about different ways to commercialize the concept, and discuss some of the barriers and opportunities inherent in the idea.

Possible Sources of Cool Items: Internet (sites for patents, inventions, new products, MIT Media Lab, etc.), journals (trade, industry, scientific), magazines, newspapers, other media, other entrepreneurs"

First class, week 8: The class begins with a discussion on the article and highlights such concepts as effective brainstorming processes, and finding opportunities and technologies. Through open class discussion, five criteria for defining ‘Too Cool’, technologically, innovative products are selected and may include such concepts as the origin of the creative idea, advanced technology involved, and cost effectiveness. Then, the class moves into the ‘Too Cool’ portion of the week as individual presentations are given. Figures 2A and 2B offer example write-ups for ‘Too Cool’ products. Each student gives a two-minute individual presentation on the ‘Too Cool’ item using the product, materials or internet as presentation tools. Following the individual presentations, classroom discussion includes such questions as “What kind of technology may have been used to produce this? What kinds of technology could be used with this ‘cool product’? and Can you find some technology that you could use to do this better?” Then, the teams re-group and initially select the five best cool products, which is then narrowed down to the best ‘cool product’.

Figure 2 A. Example of Cool Product - Microsoft Surface: “Milan”

I. Microsoft Surface: “Milan”

- A. Description of item: Commercial surface computer that is in the form of an ordinary coffee table. Current cost: \$10,000 but projected to go down within first 5 years to “more common affordable pricing.”
- B. Source of Information for Cool Item #1: Gizmodo.com (<http://gizmodo.com/gadgets/touch-me/microsoft-surface-confirmed-touch+sensitive-10k-minority-report-table-264338.php>)
- C. Explain the reason why you think this is creative: It has real life attributes in the services it offers. It has programs built into it such as concierge service, photo library, games, art creative programs and many more features. This is ideal for small business meetings, lounges in commercial buildings, or the everyday household living room. You can place a digital camera on the table with your cell phone, then upload the picture, and literally drag it with your fingertip into your cell phone. The innovation deletes the middle man in many features such as this one with the chord to connect your camera to your phone or even your computer.
- D. Add your own creative idea: Allow all the information stored in the “Milan” to be stored on a portable flash drive so it is easier to do business between offices. It can be even the remote to many devices in your home, the TV, the oven, or even the central air conditioner.

Figure 2 B. Example of Cool Product - Sennheiser: MX W1 Headphones (Wireless)

2. Sennheiser: MX W1 Headphones (Wireless)

- A. Description of item: The cable-free Sennheiser MX W1 Headphones use a wireless transmitter that plugs directly into an MP3 player’s headphone jack to beam uncompressed sound to earring-size ear buds. Current cost: \$600.00
- B. Source of Information for Cool Item #1: PopularMechanics.com (<http://www.popularmechanics.com/technology/upgrade/4252208.html>)
- C. Explain the reason why you think this is creative: The innovation cuts out all competition by getting rid of the chords that consistently get in the way, especially while running. This also allows for a wider range in head motion for looking side to side without the chord coming unplugged because it is too short.
- D. Add your own creative idea to make this product: Allow a circumference of soft material that suppresses outside noise for better hearing quality and more comfortable fit. This noise-canceling feature will make it ideal for airline passengers to sleep easier.

Between classes, week 8: Teams prepare a report and presentation for the next class on one of these items. The team is challenged to discuss why the technology is innovative.

Second class, week 8: The class begins with team presentations that outline why the team believes this product is creative and innovative, and how to incorporate this technology into improving a team idea. Presentations, creativity and innovation are evaluated using the Creativity and Innovation rubric (Table 3). Typical questions regarding the technology include probing student as to ‘Where the market for these products is? And what special expertise is needed to start this product or business?’ Following team presentations, class discussion revolves around developing opportunities from both a positive (‘too cool) and negative (‘bug report’) perspective, and integrating and improving these ideas.

Table 3: Creativity and Innovation Part Scoring System

Date:

Instructor’s Name: _____

Presenter’s Name:

5 points per checked box:

1: lowest score,

Points:

5 highest score

Content	L				H	Comments
Clearly identified product (bug and cool part)	1	2	3	4	5	
Clearly stated the method of improvement	1	2	3	4	5	
Clearly identified the problem and strengths of products	1	2	3	4	5	
Clearly stated challenges to improve	1	2	3	4	5	
Clearly identified market niche	1	2	3	4	5	
Clearly stated competitors	1	2	3	4	5	
Clearly stated competitive advantages	1	2	3	4	5	
Clearly stated purpose of improvement	1	2	3	4	5	
Clearly stated financial request	1	2	3	4	5	
Clearly stated creative and innovative ideas	1	2	3	4	5	
Delivery						
Did not exceed time seconds	1	2	3	4	5	
Gaps in content vs. Prepared	1	2	3	4	5	
Slouching appearance vs. Good posture	1	2	3	4	5	
Frozen in space vs. Good movement	1	2	3	4	5	
Staring at floor or ceiling vs. Good eye contact vs.	1	2	3	4	5	
Listener straining to hear vs. Good voice projection	1	2	3	4	5	
Listener trying to decipher words vs. Good enunciation	1	2	3	4	5	
Backtracking or confusing delivery vs. Confident	1	2	3	4	5	
Weak persuasive arguments vs. Convincing	1	2	3	4	5	
Template delivery vs. Creative	1	2	3	4	5	

Deduct 25 points for not stating required content within 30 seconds.

Instructor grading of the 'Too Cools' reports is based upon the class-defined definition of 'too cool' and technologically innovative products as well as the peer team evaluations.

SUMMARIZING THE DEMONSTRATION & STUDENT FEEDBACK

In recent years, the experiential entrepreneurship course has been taught twice; however, student feedback regarding these exercises was only gathered for the last offering (29 students). As for validation of the exercise objectives, student free responses and a five-point scale feedback were gathered. Student responses (Figure 3) indicate that they felt they learned to 'think out-side the box'. Using a five-point scale, student feedback to the question "The 'Bug Reports' helped and challenged me to be creative and innovative in Entrepreneurship coursework" indicates that 44.8% (13) strongly favor, 51.7% (15) favor, and 3.4% (1) are 'okay' with the exercise. Similarly, with respect to the question "The 'Too Cools' exercise helped and challenged me to be creative and innovative in Entrepreneurship coursework" indicates 51.7% (15) strongly favor and 48.2% (14) favor this exercise. Therefore, while not statistically strong, indicators are very favorable to these exercises.

Figure 3. Student free responses to "bugs and cools" activities.

The Introduction to Entrepreneurship 101 class has shown me how to learn by thinking outside of the box. This assignment has given me a whole new perspective on group work, learning, enjoying and much more. When looking back at this semester I have found myself to have greater value then before coming into this class.

Aside from group projects we had many individual projects that required us to present in front of the class. Bug Reports and Cool Products where two of the projects that required us to present. Presenting in front of the class really helped with everyone's public speaking and helped everyone to get to know each other better. Also this

helped with our group presentations; we became very comfortable and knowledgeable with the technology in the market.

This assignment helped me to be more entrepreneurial in many ways; first it forced me to think outside the box and look for new and creative ways to improve products and home work assignments. I will be honest at times I would sit at my computer and just stare because I had no idea what I was doing but, through brain storming and persistence I was able to get through. Group projects aside from brain storming and planning, really helped me to work in groups and I learned to trust people.

This assignment is very unique because it puts all of the important business aspects into practice because students of this class actually create a new business idea, improved products, identify market for it and calculate financial cost and challenges. This is very beneficially for anyone who truly wishes to become an entrepreneur. In addition, this assignment forces students to use their “smart brains” and dig deep into their minds for creative and innovative thoughts, provoked by many projects such as a bug and cool products, fundraising idea and the elevator pitch presentation. The best part about this class is forcing students to voice their own ideas, for all of the different projects, in front of the class.

This project was more fun for me than anything because of the goal associated with it, which was to represent something using technology. All of the class assignments, including individual and group project such as the bug reports and too cool products allow each member of the class to express their individuality and creativeness. Every assignment, whether or not it was group or individual, forced each student to actively discover and voice his or her innovativeness. As an entrepreneur, being innovative is one of the most important aspects of this field. In terms of myself, I was able to focus in on the parts of business which I enjoy through these assignments and benefit from doing so. My own creativity has become so immense it is almost unbelievable.

Therefore, we conclude that students’ creativity, innovation, and technological understanding increases through the ‘Bug Reports’ and ‘Too Cools’ exercises. In particular, through these two related exercises, students develop an entrepreneurial attitude, analytical and inventive thinking, synthesis and integration, effectiveness and efficiency, and oral and written communication. Students learn a creative process to developing new products and business ideas by marketing scanning for potential improvement avenues, adding technology, and innovating. They develop their market scanning abilities; a basic understanding of operations, technology and the new product development process; and explore the barriers and opportunities for this business venture, a potential business model, and new markets. Therefore, we conclude that students highly favor these exercises as methods to develop creativity and innovation, while fostering technological growth.

REFERENCES

- Baumgarner, J. (2005). *The Complete Guide to Managing Traditional Brainstorming Events*. Bwiti, Belgium, pp. 1-19.
- Brown, K. Hyer, N. L., Smith-Daniels, D., & Sprague, L. (1998). “More cinematic ticklers for the OM classroom.” *Decision Line*, 29(3), pp. 15-17.
- Brown, K. Hyer, N. L., Smith-Daniels, D., & Sprague, L. (1997). “Cinematic ticklers add interest in the OM classroom.” *Decision Line*, 28(1), pp. 7-9.
- Fish, L. (2001). “Operations Mini-demonstrations.” *North East Decision Sciences Institute 2001 Proceedings*, Pittsburgh, PA March 21-23, 2001, pp. 64-66.
- Heineke, J. and Meile, L. (1995). *Games and Exercises for Operations Management*. Prentice Hall, NJ.
- Kuratko, D. & Hodgetts, R. (2007). Developing Creativity and Understanding Innovation., *Entrepreneurship*, 7th edition, Thomson, pp.142-164.

Ji-Hee Kim is an associate professor of Management and Marketing and director of entrepreneurship at Canisius College in Buffalo, NY. Dr. Kim’s areas of expertise include entrepreneurship, family business, small business,

international business and economic development. Kim's research includes work on family business and entrepreneurship from multi-cultural, environmental, and international perspectives.

Lynn A. Fish is a professor of Management and Marketing at Canisius College in Buffalo, NY, specializing in operations management and global supply chain management. She earned her BS, MS, and PhD in Industrial Engineering and MBA from the State University of New York at Buffalo. MBA students have honored her twice as the Donald E. Calvert Distinguished Professor. Dr. Fish has published over 50 articles in scholarly journals, conference proceedings, and professional publications.

Increasing Student Engagement through Community Organization Partnerships

Dan A. Yates, The University of Findlay-Findlay, Ohio, USA

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

ABSTRACT

This paper introduces a partnership model that uses several approaches to teaching and learning that encourages students to be actively engaged in the community by working with either small business owners or non-profit organizations. The model utilizes the collaboration of a university, the chamber of commerce, and the Small Business Development Center (SBDC) by pairing small business owners or non-profits with teams of college students. One approach assigns business owners to student groups within a college course with the outcome of a completed business plan for the owner. Another approach engages students from the university marketing club to develop marketing ideas through various venues for struggling business owners. A third approach uses college students from the marketing or entrepreneurship classes to create solutions and ideas for non-profit organizations or business owners. All approaches provide an excellent opportunity for the students to engage in active learning and use the information they have learned in their current and previous courses to assist the community. The approaches stress to the students about the importance of giving back to the community by using their accounting, financial, marketing, and research skills. (key words—active learning, experiential learning, community service)

INTRODUCTION

The U. S. Small Business Administration (SBA) administers the Small Business Development Center Program (SBDC) to provide management assistance to current and prospective small business owners. SBDCs offer one-stop assistance to individuals and small businesses by providing a wide variety of information and guidance in central and easily accessible branch locations. Rhodes State College in Lima, Ohio is the regional host (Region # 3) for the SBDC in West Central Ohio. The program is a cooperative effort of the private sector, the educational community and federal, state, and local governments. It enhances economic development by providing small businesses with management and technical assistance.

Due to the increasing number of small business owners needing assistance, the SBDC advisor contacted the University of Findlay for assistance. In August of 2006, the Nxlevel Entrepreneurial Training Program was started as a pilot in a business research course where six teams of students and six local businesses worked in collaboration to develop business plans. This pilot project blended theory and practice exposing the students to local entrepreneurial businesses. Our experience suggests that bringing the business owners into the classroom and teaming them up with students will produce an entrepreneurial, experiential, and supportive education learning environment. The Nxlevel educational material is designed to help entrepreneurs learn the skills needed to create, develop and strengthen successful business ventures. Nxlevel addresses the special needs of the entrepreneur by providing a practical, hands-on, common sense approach to developing their small businesses...whether they are just starting out or ready to grow. The Nxlevel material is an excellent source for the college students to learn about entrepreneurship as they work closely with their business owner.

Bringing the business owners into the classroom and teaming them up with students is intended to develop the students' understanding of how a business enterprise is conceived, launched and sustained. Because today's marketplace is getting more complex, navigation requires a more sophisticated set of management skills for the successful small business owner and those training for careers in business. In addition, technology is playing a greater role in small business operations and management. A key learning objective of this project is to share the relevant technology applications from the students, educate the business owners and apply the new knowledge into business applications. The key to this program is the emphasis on technology use by the students as some business

owners lack the technology skills. Websites, budgeting software, brochures, and customer databases were primary methods developed from this project that will improve the likelihood of success in the small business.

The knowledge transfer for the students and the business owners takes place in discussions, presentations, networking, and the actual business plan creation. The goal of the SBDC is to provide small businesses with a business plan and resources to help them succeed. The goal of the University of Findlay was to provide the students with real-world experience to better prepare them for work and engage them in the community. The ensuing outcome of the two goals was the development of a community partnership between the owners, students, and faculty members. After the course was completed, ongoing conversations and discussions took place between some of the student groups, faculty members, and the businesses.

The business research class is designed to give students “firsthand experience” in helping entrepreneurs to reach the next level of success. It is intended to provide encouragement and ideas to facilitate entrepreneurship education for the students. Both students and business owners develop new skills and gain new knowledge from this experience. The power of collaboration, the spirit of innovation, and the future of learning in a global economy are critical components in the success of the Business Research Class, the Marketing club, and the activities in the marketing and entrepreneurship classes enhance the community partnership between the student groups and the owners.

The authors believe that every college graduate must have a working knowledge of business organizations and a greater appreciation about the environment and life of the entrepreneur and the non-profit. For many students, this is the first time working with business owners and understanding such entrepreneurial traits as the need for being resourceful, having a vision, being passionate, developing creative and innovative ideas/solutions, etc. Instead of students using case studies, which are by design somewhat artificial, this fresh approach to learning provides the student with the opportunity to fully engage in the actual development of a business plan or marketing ideas that can be used and implemented by a real entrepreneur or non-profit.

LITERATURE REVIEW

There are many terms that describe the various forms of learning with each term having its subtle differences. This paper will briefly identify and define three learning terminologies and relate those terms to how the various approaches used them. The terms are active learning, entrepreneurial learning, and community service learning.

Active learning is any teaching method that gets students actively involved (Keyser 2000). Active learning can be anything that involves students in doing things and thinking about what they are doing (Bonwell and Eison 1991). Houston (1995) notes that many techniques can be used to get the students involved such as experiential learning, cooperative learning, problem-solving exercises, writing tasks, speaking activities, class discussion, case-study methods, simulations, role-playing, fieldwork, independent study, homework, etc. These approaches used active learning by requiring students to be engaged in such activities as: preparing a business plan, designing oral and written presentations for resolving problems, using in-class assignments and case studies, conducting market research, engaging in class discussion, working closely with their business owner or non-profit to resolve a real world issue/problem, discussing topics with guest speakers, etc. The business research course used most of the approaches identified in active learning with the students responding very favorably.

Entrepreneurial learning. Pittaway and Cope (2007) reference the following quote: “Effective entrepreneurs are exceptional learners. They learn from everything. They learn from customers, suppliers, and especially competitors. They learn from employees and associates. They learn from other entrepreneurs. They learn from experience. They learn by doing. They learn from what works and, more importantly, from what doesn’t work” (Smilor, 1997).

The business research course provides the venue for entrepreneurial learning for the students, business owners and instructors. Students learn from the experiences of the business owners and the instructors. The business owners

share with the students what did and didn't work for them. The business owners learn from the students' experiences and knowledge attained from their college courses. The owners also benefit from the students' competencies in technology. The students learn how to develop a business plan by actually creating one for their business owner. The business owners learn about the business plan through the students' presentations and from the many dialogues between them. The instructors continue to learn from working with the various types of businesses and the different challenges that the business owners bring to each course.

Using the students' prior experience of other business courses, the students have the opportunity to integrate that knowledge into the project, thus adding value to the project and to the course from which the knowledge was taken. The activities used in all three approaches are clearly supported by Pittaway and Cope as a form of entrepreneurial learning. Taylor and Thorpe (2004) note that actual experiences can shape learning. Actual experiences would include having actual entrepreneurs or representatives from non-profits come into a classroom to share their experiences. Taylor and Thorpe describe it as a "process of co-participation" where learning involves "reflecting, theorizing, experiencing and action" (p204). Throughout the business research course semester, the students actively participate with other team members, other groups, and with their business owners. Each class session includes a period of reflection along with opportunities to theorize about the various issues that were raised during that class session.

In the business research course, the students act as "business advisors" or practitioners by helping the business owners develop solutions to business questions and problems. It was observed by the course professor that the students' "first-hand" experiences in solving entrepreneurial problems resulted in the student groups taking the responsibility of developing solutions. It was further observed that the students appeared to be more motivated, involved, and committed as they worked together with the owner to jointly resolve challenges faced by the owner. Entrepreneurs learn by identifying opportunities and overcoming problems (Reuber and Fischer, 1999; Young and Sexton, 1997; Minniti and Bygrave, 2001; Soloman, 2007). Other research argues for a view that entrepreneurial learning should be seen as a social phenomenon (Rae, 2002; Hamilton, 2004) and entrepreneurs be viewed as practitioners who operate in social communities of practice (Hamilton, 2004; Cope, 2005).

Offering students opportunities to "experience" entrepreneurship and small business management has been the theme for many entrepreneurial education programs. McMullan and Long (1987) stated that effective entrepreneurial education requires students to have substantive "hands-on" experience in working with community ventures so they can learn to add value to real ventures. The approaches provided by the partnership model provide an opportunity for the students to "experience" entrepreneurship by actually working with and developing a relationship with an entrepreneur or a non-profit organization. The students are proactive in developing solutions to real world problems. Plaschka and Welsch (1990) state that what are needed are a more proactive, problem-solving and flexible approach rather than the rigid, passive-reactive concept and theory-emphasized functional approach.

Community service learning

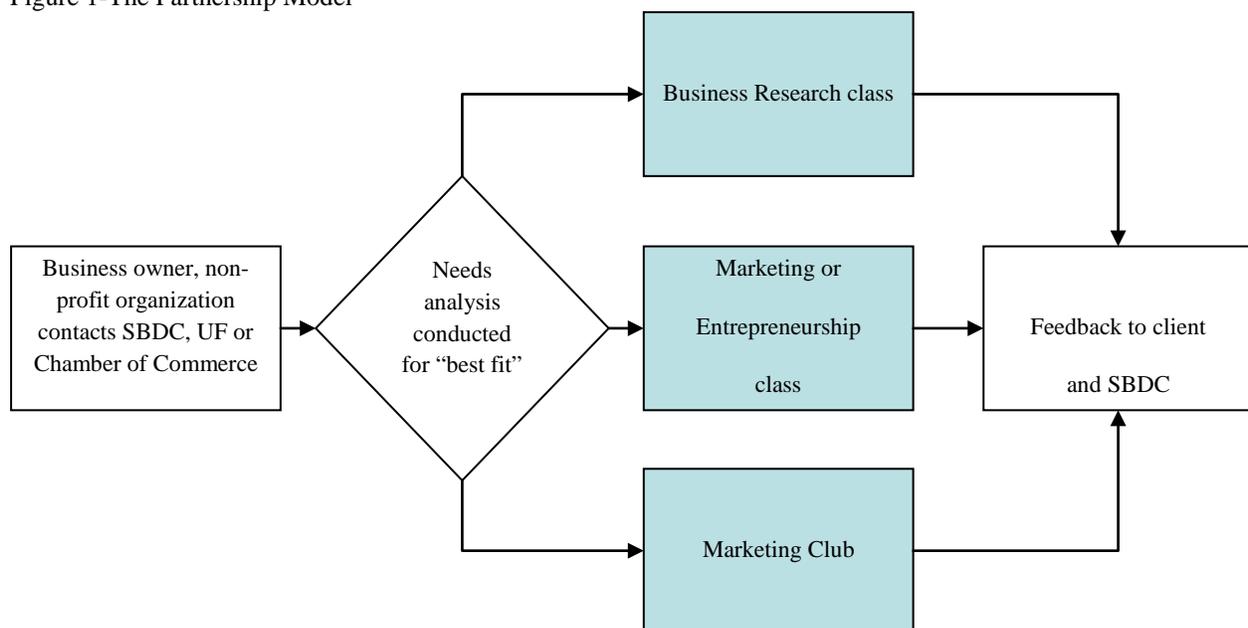
There is abundant research supporting the benefits of college students' engaging in community service activities (Jacoby, 1996) and research that emphasizes the importance of college student development (Chickering and Reisser, 1993; Yates and Youniss, 1996a, b). Educators have recognized the importance of linking community service with concepts learned in class which has been referred to as service learning. Jacoby and Associates (1996) define service-learning as "a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development" (p. 5). Findings show that college students who engage in community service in the past are more likely to volunteer and be currently involved in community service (McKinney, 2002). Other research findings note this type of engagement along with active/collaborative learning provide the most consistent predictor of student success across three validation studies and was linked with higher grades, higher course completion rates, credit hours completed, long-term persistence, and degree completion (McClenney & Marti, 2006, p. 6).

This type of service/experiential learning coupled with community partners provides students with the direct experience in working with various business issues. Students analyze and solve real problems in the community either through a small business or a non-profit organization. A major outcome for this type of learning is that students apply what they are learning in real-world settings and then reflect in a classroom about their service experiences. The partnership model embraces this type of learning and recognizes the benefits for the students and the community.

PARTNERSHIP MODEL AND ITS PROCESS:

The purpose of the Partnership Model (see Figure 1) is to show the relationship among the various components and the process used in assessing business owners for various university programs.

Figure 1-The Partnership Model



Below are the steps used in selecting businesses for this program.

- Initial Owner Contact: Local business owners who need help in various aspects of their business will contact either the SBDC advisor, UF business faculty, or the local Chamber of Commerce. The local Chamber will refer the business owner to the UF business faculty. The non-profit organizations usually contact the faculty members directly.
- Needs Assessment: The SBDC advisor and the UF business faculty conduct a needs assessment for each owner requesting service to determine the best program fit for the owner. The UF business faculty determine the best fit for non-profits.
- Program Selection: Businesses chosen for this effort are based on the type of assistance needed, the willingness of owner to participate in the partnership, the commitment level of the owner, etc. A decision is made between the course professors and the SBDC advisor to pair the business owners with the students in the business research course, the marketing or entrepreneurship class, or the marketing club.

- **Feedback:** In the business research course, the student groups prepare a comprehensive business plan and action plan for their owner. The groups also make three presentations to their owners. The SBDC requires that each student group log the amount of time spent in preparing the business plan, as well as, record the date/time/purpose of each communication with their owner. This document is required by the SBDC for reporting purposes to the State of Ohio. In the marketing club, student teams will summarize their ideas and send a report to the business owner. For the marketing and entrepreneurship classes, students provide feedback to the instructor through brainstorming exercises, comprehensive marketing plans, and small group discussions.

Below are the programs and the criteria used for placing a business owner into the various programs at the university:

Business Research Course

The business research course is designed to assist those business owners that would benefit from a comprehensive business plan. The student groups focus on developing a marketing plan and creating an action plan to help the owner implement the recommended changes. Owners assigned to this course typically need guidance and are looking for new ideas primarily in the areas of pricing, competitive analysis, and marketing. Both on-going companies and new start-up companies are assigned to this course. This is a 12 week commitment by the owner.

The University of Findlay (UF) faculty instructor assigns students to specific student groups for each business owner. Students in this course are either juniors or seniors and have completed the core business courses (economics, accounting, principles of management and marketing, etc.). The students act as business advisors by providing suggestions and recommendations to their assigned business owners throughout the project.

The business owners are invited to class to explain their situation and needs. The business owners then meet with their student groups and begin sharing information.

Guest speakers from the community are invited to two class sessions to provide information to student groups and the business owners. The speakers have been CPAs, insurance agents, website designers, and bankers. This is an excellent opportunity for both the students and owners to ask questions and begin to build a relationship with community experts.

Three student group presentations are made to the business owners throughout the course. The final presentation includes a completed business plan and an action plan for the owner.

Below is a chart that summarizes the various businesses that have been served to the business research course.

Semester/Year	Types of business
Fall 2006	Curbside recycling, massage center, rum cake, new product (planter), and metal art with new product added, and a non-profit.
Spring 2007	Office supply/PC, biodiesel lid (new product), pet grooming, tattoo business, t-shirt screening/sports equipment/clothing, and a dipping sauce (new product).
Fall 2007	Automotive oil changing, tooling, fragrance products, and window cleaning.
Spring 2008	Financial services, roller skating rink, radio station, handyman service, and photography.
Fall 2008	Tax service, jewelry design, hookah bar, travel agency, home moving, handyman, and retail.
Spring 2009	Wholesale meat cannery, wholesale premium nut, new invention, new coffee distributor, new restaurant, green tea distributor.

Marketing and Entrepreneurship Classes

The business owners or non-profits assigned to the marketing or entrepreneurship classes are usually looking for solutions or ideas on how to solve a specific issue or problem. Students in these classes generally have very basic business knowledge and require coaching and guidance by the instructor. Small groups are formed to address the

situations. Brainstorming is a common technique used to solicit ideas from the groups. Probable alternative solutions are created during the class meeting. The number of class periods devoted to this type of project range from one week to one month.

Marketing Club

The business owners and non-profit organizations assigned to the marketing club are usually looking for solutions or ideas on how to solve a more complex, specific issue or problem. The marketing club is a for-credit course. Marketing majors usually participate in this club to gain additional hands-on experience. Juniors and seniors serve as project managers for these businesses but it also provides an opportunity to mentor freshmen and sophomores. A moderate amount of coaching and guidance is required by the instructor. The owners or non-profits visit the marketing club evening meeting and present their problem to the club.

The two main activities for the marketing club are the extreme marketing makeover and the SWOT team. The marketing club advisor/faculty instructor selects the activity that best fits the business owner's needs.

- **Extreme marketing makeover**

As noted earlier, business owners assigned to the marketing club are looking for quick solutions or creative marketing ideas on how to solve or resolve a specific marketing issue or problem. In the "extreme marketing makeover", the students are divided into teams by the club advisor to address the issue as presented by the business owner. The students go to the computer lab to develop a strategy for implementing a solution. The student teams present their findings usually within 60-90 minutes. Each team will prepare a power point presentation to the owner. The teams compete for the best "recommendation plan" as judged by a panel from the local community. This exercise is a high energy, competitive activity that clearly strengthens the students' critical thinking, problem solving, creativity, and analytical thinking skills. It also reinforces time management skills.

- **SWOT team**

This event involves the business owner explaining the various issues facing the company as well as background information about the business. Students work in teams to identify the strengths, weaknesses, opportunities, and improvements for the business. Each team will present their findings and an action plan for the owner. This activity is typically completed in 2-6 weeks.

RESULTS/OUTCOMES OF PROGRAM

Below is a list of the program recognition events, business owner successes, and improvements of the students' competencies.

Program Recognition

- In the spring of 2009, the UF professors received a "Certificate of Appreciation" at the National Entrepreneurship Week in Ohio in Columbus, Ohio. The certificate was signed by the governor, Lt. governor, and the state director of the SBDC of Ohio and recognized the outstanding performance and valuable contribution to the education and development of Ohio's future entrepreneurs.
- In June 2008, the partnership model was presented to SBDC Region #2 in Toledo, Ohio. They plan to "benchmark" the partnership model by partnering with a local university.
- In the spring 2008, a faculty member and two students from former business research teams presented their experiences to the Small Biz Expo at the State Capitol in Columbus, Ohio.
- A student team from fall 2006 business research course shared their experiences of the pilot course at the spring 2007 Small Biz Expo at the State Capitol in Columbus, OH.

Business Owner Success Stories

Below are several success stories that resulted from implementing the business plans by several of the business owners and going through this business research course.

- The business owner who created a beef and bean dip began selling the product to local grocery stores. In the fall 2008, it will be distributing product in seven states. The business originally began in his home and then moved to a kitchen incubator. The business owner is producing and packaging the product in Ohio.
- The flower pot business secured the needed financing and is manufacturing the product in Ohio and distributing throughout the US. The business has expanded into India and is planning on expanding operations in Europe.
- The roller skating rink business used the business plan created by the students to secure loan to finance a building addition and to purchase equipment for selling ice cream. The idea to sell ice cream was suggested by the students in presentation #2—how to grow the business.
- The business owner with the new trailer hitch prototype is currently being reviewed by ten manufacturers and a video has been developed to promote it. Patents are pending and the potential revenue stream is over \$1 million over the next 15 years.
- Business owners use the billboards, logos, tag lines or other marketing ideas created by the students.

Improvements of Students' Competencies

- Students are better prepared in dealing with business issues as a result of their “hands-on” experience and include this experience in their student portfolios. During job interviews, students can demonstrate their critical thinking/problem solving skills by explaining how they used the PAR method (problem, action, results) in helping business owners develop solutions to their problems.
- Students became fully engaged by the “learning-by-doing” or application approach.
- Through research, the students evaluated the industry, market, and competitors then created specific plans for the business owners. Entrepreneurs have been advised to abandon their idea when the research showed the idea lacked a significant target market, credentials to launch the service/product or a technology-driven product dominated the industry.
- From the students' research, their comprehension skills improved by developing marketing ideas on how to improve the owner's situation.
- Once the students completed the research, they analyzed and synthesized the data. The students developed specific action plan items for the business owner to implement such as advertising using a billboard or implement a customer relationship database.
- Students solved problems by applying knowledge in a different way.

Based upon the course evaluations by students, the business owners, and the SBDC advisor, it was found that the students' competencies were strengthened the following areas:

- Critical thinking, analytic reasoning, teamwork, problem solving, written and oral communication, awareness of community needs and importance of utilizing resources and skill sets more efficiently and effectively. This closely resembles the way multi-functional teams are structured in organizations.

Rubrics are used by the instructors to assess the students' competencies for the oral presentations, action plans, and final business plans. The business owners provide feedback using an SBDC evaluation form regarding the overall results of the course activities. Also, the SBDC advisor serves as an outside/independent evaluator of the students' work.

FUTURE CHANGES OR RECOMMENDATIONS

Below are areas in the partnership model that need to be either maintained or improved as we move forward with the partnership.

- Continue fostering the relationship between the university, SBDC, and the Chamber of Commerce, as well as expand our partnership opportunities to other organizations serving small businesses.
- Continue to look for technology solutions to resolve owner problems.
- Continue to look for assistance from other college depts., perhaps team-up with their students in solving owner problems which will leverage skill sets across campus.
- Continue to develop student business research skills.
- Focus on developing follow-up surveys for business owners in which the student would analyze the data, report results, and prepare recommendations.
- Establish follow-up procedures to track the progress of the implementation of the student recommendations made for the business owners and non-profits.

CONCLUSION

At the time of this writing, we have completed our sixth semester of applying the partnership model at the university. After each semester, the authors meet to discuss what worked, what didn't work, and identify what can be done in the next semester to improve our methods and outcomes. We focus on the continuous improvement of this program by seeking feedback from the business owners, students, and the SBDC. Changes are implemented into the program based on the results of the feedback. The authors believe that the continuous improvement used for this partnership model will better prepare students for the employment that lie before them in the 21st century.

REFERENCES

- Allen, E. E. (1995). Active Learning and Teaching: Improving Postsecondary Library Instruction. *Reference Librarian* , 51-52, 89-103.
- Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. Washington, D.C.: The George Washington University (ERIC Clearinghouse on Higher Education).
- Chickering, A. W. (1993). *Education and Identity*. 2nd Edn. San Francisco, CA: Jossey-Bass.
- Cope, J. (2005). Toward a Dynamic Learning Perspective of Entrepreneurship. *Entrepreneurship: Theory and Practice* , July, 373-98.
- Fiet, J. O. (2001). The Pedagogical Side of Entrepreneurship Theory. *Journal of Business Venturing* , Vol. 16, 101-117.
- Garavan, T. N. (1994). Entrepreneurship Education and Training Programmes: A Review and Evaluation. *Journal of European Industrial Training* , Vol. 18, No. 8, 3-12.
- Hamilton, E. (2004). Socially Situated Entrepreneurial Learning in Family Business. *Proceedings of the 27th ISBA National Small Firms Policy and Research Conference*. Newcastle, November.
- Houston, J. (1995). *Thesauria of ERIC Descriptors, 13th edn. (p.8)*. Phoenix, AZ: Oryx Press.
- Jacobson, T., & Mark, B. L. (1995). Teaching in the Information Age: Active Learning Techniques to Empower Students. *Reference Librarian* , 51-52, 105-120.
- Jacoby, B. & Associates (1996). *Service-Learning in Higher Education: Concepts and Practices*. San Francisco, CA: Jossey-Bass.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Nuts and Bolts of Cooperative Learning, pp. 1-3*. Edina, MN: Interaction Book.
- Johnson, D., Johnson, R. T., & Smith, K. A. (1991). *Active Learning: Cooperation in the College Classroom*. Edina, MN: Interaction Book.
- Keyser, M. W. (2000). Active Learning and Cooperative Learning: Understanding the Difference and Using Both Styles Effectively. *Research Strategies, Vol. 17, Issue:1, Spring* , 35-44.
- King, A. (1993). From Sage on the Stage to Guide on the Side. *College Teaching* 41 (Winter) , 30-35.
- Mabry, C. H. (1995). Using Cooperative Learning Principles in BI. *Research Strategies* , 13 (Summer), 182-185.
- McClenney, K. & Marti, C. N. (2006). *Exploring relationships between student engagement and student outcomes in community colleges: Report on validation research*. Austin, TX: Sage .
- McKinney, K. G. (2002). Engagement in community service among college students: is it affected by significant attachment relationships? *Journal of Adolescence* , (25)139-154.
- McMullan, W. E., & Long, W. A. (1987). Entrepreneurship Education in the Nineties. *Journal of Business Venturing* , Vol. 2, No. 3, 261-75.
- Minniti, M., & Bygrave, W. (2001). A Dynamic Model of Entrepreneurial Learning. *Entrepreneurship: Theory and Practice* , 25 (3), 5-16.

- Pittaway, L., & Cope, J. (2007). Simulating Entrepreneurial Learning: Integrating Experiential and Collaborative Approaches to Learning. *Management Learning* , 211-233.
- Plaschka, G. R., & Welsch, H. P. (1990). Emerging Structures in Entrepreneurial Education is Beginning. *Entrepreneurship Theory and Practice* , Vol. 14, No. 3, 55-71.
- Rae, D. (2002). Entrepreneurial Emergence: A Narrative Study of Entrepreneurial Learning in Independently Owned Media Businesses. *International Journal of Entrepreneurship and Innovation* , 3 (1), 53-59.
- Reuber, A. R., & Fischer, E. (1999). Understanding the Consequences of Founders' Experience. *Journal of Small Business Management* , 37 (2), 30-45.
- Ridgeway, T. (1989). Integrating Active Learning techniques into the One-hour Bibliographic Instruction Lecture. In J. & G. E. Mensching, *Coping with Information Illiteracy: Bibliographic Instruction for the Information Age* (pp. 33-42). Ann Arbor, MI: Pierian Press.
- Sheridan, J. (1990). The Reflective Librarian: Some Observations on Bibliographic Instruction in the Academic Library. *Journal of the Academy of Librarianship*, 16 (March) , 22-26.
- Soloman, G. (2007). An Examination of Entrepreneurship Education in the United States. *Journal of Small Business and Enterprise Development* , Vol. 14, No. 2, 168-182.
- Taylor, D. W., & Thore, R. (2004). Entrepreneurial Learning: A Process of Co-participation. *Journal of Small Business and Enterprise Development* , 11 (2), 203-11.
- Yates, M. & Youniss, J. (1996b). A development perspective on community service in adolescence. *Social Development* , 5, 85-111.
- Yates, M. & Youniss, J. (1996a). Community service and political-moral identify in adolescents. *Journal of Research on Adolescence* , 6, 271-284.
- Young, J. E., & Sexton, D. L. (1997). Entrepreneurial Learning: A Conceptual Framework. *Journal of Enterprising Culture* , 5 (3), 223-48.

Dan Yates is an assistant professor of business at The University of Findlay. His teaching interests include entrepreneurship, leadership, organization development, and business strategy. He serves as an advisor to the campus College Republicans, member on the Small Business Advisory Council, lead facilitator for a local school strategic planning committee, and a finance committee member for Associated Charities.

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. He operates Yates Consulting which provides consulting services for individuals and small business owners.

Dr. Ward, an associate professor, has been an active faculty member, adjunct since 1998 and full-time with The University of Findlay since 2004. Professor Ward brings her expertise from two Fortune 500 companies into the classroom teaching operations and logistics, marketing, management, strategy and policy, communications, and research. She is the co-advisor for the Rotaract Club, advisor to the Marketing Club, and serves as the Lead Professor in Marketing for the College of Business. Her service to the community includes positions on the Small Business Advisory Council, Owens Community College Business Advisory Board, local school strategic planning committee, and multiple non-profit committees.

Professor Ward holds the following degrees: University of Sarasota, EdD, Organizational Leadership; The University of Findlay, MBA; The University of Findlay, Bachelor of Science in Business Administration; Owens Community College, Associate Degree in Business Management. She is also a Six Sigma Black Belt, a 2008 Ohio Partnership for Excellence Examiner, and completed the NxLevel Certification Course for Instructor Certification for teaching business plans at the Innovation Center (Ohio University).

Business Student Performance in Traditional vs. Honors Course Settings

Dr. Kristie Ogilvie, California State University at San Bernardino, San Bernardino, California, USA

Dr. Ernesto M. Reza, California State University at San Bernardino, San Bernardino, California, USA

ABSTRACT

Institutions of higher learning present a broad range of choices concerning student qualifications, course delivery, and program considerations. Student honors programs constitute one such discretionary choice for academic leaders that has received very little research attention and has been virtually ignored in most business education programs. In this study, we compare the experiences and performance of business students in a course section offered solely for honors students and an identical course section offered for non-honors students. Systematic comparisons of performance measures indicate that students in the honors section scored significantly higher in eight of ten evaluation measures collected during the 2008 spring semester at a public California university. Alternative explanations for the empirical results and implications for learning effectiveness are raised as basic issues that further research on honors programs can explore.

INTRODUCTION

The level of popularity and interest in honors programs has been growing among higher education institutions (Marsh and Craven, 2000; Seifert, Pascarella, Colangelo, and Assouline, 2007). Honors programs are generally considered to fall within the mission of higher education institutions to foster the learning process as well as contribute towards the accomplishment of their learning goals. Justification for honors programs is commonly based on the assumption that the performance and learning outcomes of highly motivated students will be enhanced in course sections that are exclusively designated for students with a proven propensity to excel in academic environments (Sederberg, 2005). Academic programs that successfully promote imminent scholars and successful alumni, in turn, add to the success and prestige of such institutions (Long, 2002).

PREVIOUS RESEARCH

Rinn (2007) ascertains that there is extensive research on honors students in the K-12 level; but there is very little similar research on honor programs at the college level. The college-level studies that do exist have focused on comparisons of the environmental context and the motivational factors for students who are affiliated with an honors program and students who are not affiliated with such groups. Studies that focus on the environmental context of honors programs propose that students affiliated with honors programs have a significant increase in academic performance when compared to students who are as intellectually capable, but restricted to the experiences of “normal” or average academic environments (Rinn, 2007). This perspective represents the basic argument espoused in a theory of relative deprivation, suggesting that deprivation or lack of access to highly selective environments leads to lower academic achievement (Davis, 1966). An alternative explanation for the enhanced performance of students in honors programs is espoused by proponents of the Environmental Press Theory. Their reasoning argues that students in a more selective environment develop higher aspirations than students in less selective environments (Thistlethwaite & Wheeler, 1966). Nonetheless, the general pattern of results suggest that in those studies where student groups did not differ in terms of aspirations, gifted college students enrolled in an honors program have significantly higher rates of academic achievement and academic self-concepts than gifted college students who are not enrolled in honors programs (Rinn, 2007).

Research focusing on demographic factors has also ascertained the value of positive childhood effects on honor program participants (Gerrity et al., 1993). Furthermore, there is a substantial amount of support for the idea that students need to find themselves in a social environment where they can grow and experience trust as well as an integral sense of belonging (Herbert, 2000). Such studies highlight the importance of experiencing membership in a

community consisting of intellectually compatible friends as well as networks of high-achieving peers (Hébert & Reis, 1999; Neumeister, 2002). These findings are also consistent with research literature, which describes the sense of relief that gifted young people experience when placed in settings in which they no longer experience a social stigma due to their giftedness (Cross, Coleman, & Stewart, 1993). Overall, the limited quantitative evidence compiled by Seifert and colleagues (2007) supports previous research patterns suggesting that honors students do in fact thrive in the honors environment. Hence, it seems evident that the enhanced performance and the positive reinforcement or added attention that is attributed to the success of the honors program creates a positive and self-reinforcing feedback process. Presently, there is little opposition or empirical evidence to counter policies that support the designation of exclusive social environments, such as honors programs, since these tend to promote an enhanced self-concept, additional cognitive growth and more acute analytical abilities among participants.

In the present exploratory study, the implicit proposition found in most studies of honors programs is tested in the context of a university business education setting. In essence, we examine the performance of students to see whether participation in an honors course section is associated with better academic performance and enhanced learning outcomes. Previous research consistently supports the notion that one can expect enhanced learning outcomes for students in such honors programs. In particular, we compare the scores of students who completed one of two sections of the same business course and examine some of the specific performance differences among students in the two sections of an introductory level management course; one section was designated for honors students and the other section for non-honors students.

RESEARCH DESIGN

Data for this exploratory study was collected by the first author during the 2008 spring semester. The data represent work performed by students in two undergraduate sections of an *Introduction to Organizational Management* course. One of the course sections was comprised of 43 traditional business students enrolled in a non-honors class. The second section of the course was comprised of 19 students participating in an honors program. The first author designed and taught both sections of the course. Every effort was made to ensure that the course content, lectures, exams, grading rubrics, and overall teaching methodology were identical for the two course sections. The nearly identical properties of the two course sections made it possible to compare the performance of students in the two course sections. Since the data represent measures that were obtained from students during the academic term for grading purposes, the present study is essentially exploratory and descriptive in nature. In the future, the present findings can be used as the basis for the development of more rigorous experimental or quasi-experimental designs.

Individual student scores on research papers, oral presentations, traditional tests, class participation, and on fourteen different assignments were recorded using measures that represented percentage scores or with other scores that could be readily converted into percentage scores. A score of 100% on a particular assignment was used to represent a perfect score or work of exceptionally high quality on the part of a student. All of the data and statistical analyses in the present study are also based on individual student scores that range from zero to one-hundred. In a few instances where student data on a particular assignment was missing, the corresponding field for that case was left blank and the case was omitted from the corresponding analysis.

RESULTS

Table 1A and Table 1B summarize the means, standard deviations, and the Welch t-test coefficients for work performed by students in these two sections (See Tables 1A & 1B). As indicated in the first column of Table-1A, in reference to the paper assignment for the course, the students in the honors section averaged 90.05 percent on the paper assignment, whereas students in the regular section scored an average of 70.47 percentage points. This paper assignment had groups of four to five students collaborating on a fifteen-page research paper. Members of each student groups were given assessment forms in order to assess one another as well as to ascertain that each group member contributed to a major section of the paper. The mean score on the paper assignment for the honors and non-honors groups proved to be

significantly different ($t=7.68$, $df=49$, $p<0.0001$), with the students average in the honors section almost twenty percentage points higher than the students average in the non-honors section.

The second column of Table-1A summarizes the group means on an assignment consisting of an oral presentation. Student scores on this assignment were based on oral presentation of approximately fifteen-minutes in duration which discussed the group paper described previously. A standard rubric was utilized for both courses and was subjective in nature. Students in the honors section scored an average of 93.84 on this assignment; whereas, students in the non-honors section scored an average of 86.21 on this oral assignment. Student scores on this assignment were also based on peer assessments and on the student's contributions to the presentation. On these oral presentations, the mean score for students in the honors section also proved to be significantly different than the mean score for students in the non-honors section ($t=5.89$, $df=52$, $p<0.0001$).

Table 1A
Descriptive Statistics and T-Test Coefficients* for Course Work Performed by Honors & Non-Honor Students

	Papers		Oral Presentations		Average of 14 Assignments		Test-1		Test-2	
	Non-Honors	Honors	Non-Honors	Honors	Non-Honors	Honors	Non-Honors	Honors	Non-Honors	Honors
Mean	70.47	90.05	86.21	93.84	72.21	82.26	73.23	83.40	81.58	91.32
s.d.	11.72	7.91	7.94	2.01	10.05	7.77	7.70	5.43	9.08	3.73
SE Mean	1.79	1.82	1.21	0.46	1.53	1.78	1.19	1.25	1.38	0.86
n	43	19	43	19	43	19	42	19	43	19
t	7.68		5.89		3.87		5.19		5.99	
d.f.	49		52		60		59		59	
SE of the Difference	2.55		1.29		0.03		1.96		1.63	
Two-tailed p value	< 0.0001		< 0.0001		0.0003		< 0.0001		< 0.0001	

*All T-Test coefficients are based on Welch t-test computations for independent samples with unequal variance

The third column in Table-1A represents a composite measure of fourteen different assignments. These assignments include individual as well as group-based work. Some of these assignments were conducted in class and others outside of the classroom; they also include case studies and short essay questions ranging in length from one to two pages. A standard rubric was utilized and was subjective in nature. The average score on this composite measure was 82.23 percent for students in the honors section and 72.25 percent for students in the non-honors section. The difference in group averages on this measure also proved to be significantly higher for students in the honors program ($t=3.87$, $df=60$, $p=0.0003$).

Columns four and five in Table-1A and column one in Table-1B represent the results of student scores on three multiple-choice exams (objective in nature) administered on an individual basis during class time. The mean scores on each one of these three tests were once again significantly higher for students in the honors section. Column two in Table-1B represents the average student scores on all three tests. The mean score for this overall tests index, representing students' average scores in Test-1, Test-2, and Test-3 is 75.40 percent for students in the non-honors section and 86.75 for students in the honors section. This difference in group means is slightly greater than eleven percentage points and as in previous work assignments, it is significantly higher for students in the honors section ($t=6.65$, $df=57$, $p<0.0001$).

Column three in Table-1B represents participation scores for students in both sections of the course. Participation scores were based on specific contributions by individual students throughout the term. During the lecture and discussion sessions, students were expected to contribute to the discussion of the theories presented, and when doing so, were awarded a score ranging from zero to four. A zero was awarded when students were not in attendance or students did not contribute to the entire discussion. A score of one was awarded when students' contributions were minimal; paraphrasing was used, or if there was a failure to provide any meaningful thought or analytical insight. A score of two was awarded when students' contributions were minimal, but some analytical insights were provided. A score of three was awarded when students' contributions furthered the discussion, provided insights, and were analytical in nature. A score of four was awarded when contributions took the discussion in another direction due to the analytical insights the comments brought to the discussion. The instructor during the course created a table, with columns for each score (1, 2, 3, 4). Students were required to create a name tag and display it during the class lecture. When the participation occurred, a determination in real time was made as to the score earned and recorded

on this table. The group average for students in the non-honors section was 44.42 percent; whereas the group average for students in the honors section was 65.0 percent. Although the absolute value of these group means differ considerably, they fail to be statistically significant due to the high levels of variance and standard error of the mean in both groups ($t=1.97$, $df=33$, $p=0.0575$).

Table 1B
Descriptive Statistics and T-Test Coefficients* for Course Work Performed by Honors & Non-Honor Students

	Test-3		Average of Tests		Participation		Extra Credit		Overall Grade	
	Non-Honors	Honors	Non-Honors	Honors	Non-Honors	Honors	Non-Honors	Honors	Non-Honors	Honors
Mean	76.66	85.55	90.05	86.75	44.42	65.00	86.05	94.74	75.49	87.95
s.d.	9.99	7.09	8.66	4.71	37.43	38.18	35.06	22.94	6.46	4.90
SE Mean	1.56	1.63	1.32	1.08	5.70	8.76	5.35	5.26	0.99	1.13
n	41	19	43	19	43	19	43	19	43	19
t	3.94		6.65		1.97		1.16		8.33	
d.f.	48		57		33		51		44	
SE of the Difference	2.25		1.71		0.11		0.08		0.02	
Two-tailed p value	0.0003		< 0.0001		0.0575		0.2521		< 0.0001	

*All T-Test coefficients are based on Welch t-test computations for independent samples with unequal variance

Extra credit scores are represented in column four of Table-1B. Extra credit consisted of an anonymous course feedback form given to students towards the end of the term. Scores were either five points for participation or zero for not participating. The mean extra credit group score for students in the non-honors section was 86.05 percent and the mean extra credit group score for students in the honors section was 94.74. Due to the high levels of variance and standard error of the mean in both groups, the group means did not prove to be significantly different on this measure ($t=1.16$, $df=51$, $p=0.2521$).

The last column in Table-1B represents the overall grades for the course and all of the assignments described above. The average overall group grade for students in the non-honors section was 75.51 percent; whereas, the average overall group grade for students in the honors section was 87.91 percent. As predicted, the mean overall grade for the two sections proved to be significantly different, with students in the honors section earning a higher grade on average than the students in the non-honors section ($t=8.33$, $df=44$, $p<0.0001$).

It is evident from these results that students in the honors sections scored higher in the various class assignments in comparison to the students in the non-honors section. In light of the magnitude of the differences in group means for the various measures, the results from this study support the idea that student performance in honors courses tends to be significantly better than the performance of students in similarly-structured courses for non-honor student groups. Possible explanations and the implications of these results are explored in the following discussion.

DISCUSSION

First, it should be noted that the data that was available for this exploratory research study was collected as an integral part of the course design and the instructional work for the *Introduction to Organizational Management* course developed by Professor Ogilvie in the spring of 2008. The original intent of the performance measures was to provide objective performance feedback to the students enrolled in the two course sections described previously and to assess their learning outcomes throughout the duration of the term. The scarcity of available research on honors programs became apparent after the course was taught, and the total absence of research on honors courses in business programs became an ominous void that the present study could begin to address. The empirical research literature on honors programs has established a clear pattern of enhanced performance for students who participate

in such programs. One of the primary objectives of the present study was to document whether the same pattern of performance differences exists in business education courses for honors students. The former description of our results unequivocally concurs with the pattern reported elsewhere and documents the significant performance advantages gained by the business students in the honors program. However, the actual reasons for the significant differences in the two student groups need to be explored more assiduously in future studies. The available data for this study do not allow testing or exploring possible causal relationships but some inferences about the actual differences in specific learning outcomes for the students in the honors and the non-honors sections merit further consideration.

In particular, the performance measures and the various grading criteria originally used for evaluating students in the honors and non-honors sections are a potential source of content for proxy indicators of learning outcome domains. An exploratory comparison of student performance along various measures of learning outcome domains may yield insights about the learning process in the honors group and a more accurate account of the performance differences documented in our exploratory research. It is noteworthy to report that for all of the measures in the present study, the average scores for students in the honors section were higher than the average scores of students in the non-honors section. Furthermore, in eight of the ten learning measures, the group means for students in the honors section proved to be significantly greater ($p \leq 0.0003$) than the group means for students in the non-honors section. The two group means that were not significantly different in statistical terms represent the extra credit scores ($p=0.2521$) and the student participation scores ($p=0.0575$). In both of these measures, the within group variance is substantial and contributes to the estimates for the standard error of the means as well as to the non-significant differences in corresponding group means. In terms of learning outcomes, the extra credit score is a single data point based on the submission of anonymous course feedback form. This measure is not an appropriate indicator of learning outcomes and likely to be a very unreliable proxy measure of performance in any future research.

On the other hand, the participation measure provides a qualitative indicator of general learning outcomes, and even though it may include student data for every course session or only one session at the other extreme, its substantial degree of variance reflects student attendance as well as the propensity of students to speak during class sessions. Nonetheless, since the magnitude of the difference in group means for the participation measure is over twenty percentage points, possible explanations for this difference in participation scores warrant further consideration. One possible explanation for the magnitude of the difference on this measure is the limited amount of interaction and participation that is possible on the part of students in the larger non-honors section, particularly during classroom discussions and some classroom activities. As the available research literature indicates, there is little concurrence on the effects of class size in the university setting on grades and scholastic performance. There are two well respected views that conclude that class size plays very little influence, if any, on student achievement (Williams et al., 1985; Pascarella and Terenzini, 1991). Alternatively, in courses that require critical-thinking skills, the research of McKeachie and his associates maintains that the smaller class environment promotes the development of those skills (Mc Keachie et. al, 1990). Problem-solving and critical-thinking skills were emphasized and promoted in both sections of the present study, but the size difference in the two sections may be responsible for the reported differences in the performance levels of the two groups, particularly for this measure of student participation. Nonetheless, given the non-statistical significance of the difference on this measure, it would be premature to draw any conclusions, particularly in light of the available literature on the effects of class size on student learning. This literature draws on research focusing on classes with less than 20 students to much larger courses, with as many as 250 students. A challenge for future research on honors programs is to control the effect of class size, ideally, in experimental designs that contain equal size groups.

Another factor to consider is the fact that the honors students are frequently linked in a cohort relationship, knowing one another from term to term, while the majority of students in the non-honors sections may have little in common with each other and likely to contain only a few students who can identify more than a handful of other students by name. Students in the non-honors courses generally lack the close-knit ties of students in the honors sections. If further research on student participation and on ambient factors, such as classroom cohesion should indicate that these factors moderate student learning outcomes, it can facilitate the development of pedagogy designed to foster

student participation in structured classroom discussions. Similarly, the design of specific interactive classroom activities may help promote more personal close-knit relationships and counteract student alienation and performance anxiety. Research that can help identify those factors that contribute to the enhanced performance of students in honors programs may prove to be advantageous to other students as well. The literature on cohort effects in higher education environments is sparse and we were at a loss for possible insights from other research that could contribute to our discussion. An extension of our current research might integrate a non-cohort group of honors students or a new cohort group consisting entirely of new students in order to explore the effect of cohorts on learning.

In reference to the research paper assignment, results from the quantitative analysis outlined previously show a significant gain in the performance scores of students participating in the honors section when compared to the performance of students in the non-honors section. The magnitude of the difference in group means on the research paper assignment was nearly twenty percentage points; the largest significant group difference among the performance measures used in this study. This research paper assignment involved the application of collaborative, interpersonal skills in the development of a scholarly paper and a related public discourse on selected organizational and behavior management theories discussed in the course. The assignment also involved the exercise of writing abilities on the part of students. The overall nature and complexity of this assignment, more so than the other assignments in this study, required exercising critical thinking abilities on the part of students and most readily reflects the enhanced performance in learning processes that has been previously attributed to the enriched environment and motivational stimulation created in honors groups. It should be noted that even though the number of students in the non-honors section was slightly more than double the number of students in the honors section; students in both sections had a substantial amount of time to prepare their research papers as well as equal grading considerations and the ability to earn the same amount of points on this assignment. Furthermore, both sections required one-on-one instructional and feedback sessions with the professor both in-class and out-of-class to discuss individual progress and overall group progress on the research paper projects. In spite of the efforts to provide comparable levels of support to students in both sections, it is conceivable that class size could in fact play a critical role in the difference between the performances of students in the honors and the non-honors sections on this research paper assignment.

In regards to the other performance measures, class size is less likely to have a significant impact on student performance. The other performance measures represent traditional multiple-choice exams completed on an individual basis by the students and reflect whether the student has completed the reading assignments and prepared for these pre-scheduled in-class quizzes. Similarly, the measure of student performance on fourteen classroom assignments represent student discussion of case studies, a summary report of assigned article readings, and class size is not a likely factor for the difference level of student performance. To identify the likely sources for these differences further inquiry is needed.

The findings from this study have to be interpreted within the constraints of the research design as well as other limitations of the study. In particular, these findings represent the comparison of student performance s in two sections of a public university course. Both course sections were designed to be identical in content and were also taught by the same instructor. Although this design feature controls the likely errors and likely effects introduced by comparing student performance in course sections taught by different instructors, it is still limited to a single instructor. A design consisting of two instructors and each teaching one honors and one non-honors section can provide support for the reliability of the present findings. Also, it is conceivable that the findings may reflect the subtle and unconscious influences of the researcher and the participants in a subliminal process often described as the Pygmalion effect. The Pygmalion effect suggests that the expectations of the instructor are projected through unconscious behavioral cues that reinforce the behaviors expected from the two groups of students participating in the study. It also acknowledges the likelihood that the results of the study may also be due to the expectations and effort expended by the students who are told that they are academically gifted and consequently put forth more effort to live up to such external expectations. Replications of the study by different instructors in different types of courses and in different institutions can help to validate or eliminate plausible explanations for these results.

Based on the results of our investigation as well as the scarcity of research on honors programs for university business students, it is the opinion of the authors that further research is warranted. Future research should aim to identify causal factors that are most likely to contribute to the performance differences between students in an honors program and non-honor students in similar classroom environments. Research on honors programs for business students should also try to identify innovative program designs that enhance the learning environment for the students who are most likely to benefit from honors courses. The positive influences of the honors programs are ones which have inherent differences from the non-honors courses, but ones in which, if utilized correctly, will challenge students that already have an increased performance. Further research in the area of honors students, programs, and program makeup are needed. As this exploratory study found, certain areas of the pedagogy seem to be correlated best with honors students, but the environmental factors of cohort atmospheres would need to be isolated to solidify the findings found within this exploratory study.

REFERENCES

- Cross, T. L.; Coleman, L. J.; and Stewart, R. A. "The Social Cognition of Gifted Adolescents: An Exploration of the Stigma of Giftedness Paradigm." *Roepf Review*. 1993, V. 16, No. 1, pp. 37-40.
- Davis, J. A. "The Campus As a Frog Pond: An Application of the Theory of Relative Deprivation to Career Decisions of College Men." *American Journal of Sociology*. 1966, V. 72, No. 1, pp. 17-31.
- Gerrity, D. A.; Lawrence, J. F.; and Sedlacek, W. E. "Honors and Non-Honors Freshmen: Demographics, Attitudes, Interests, and Behaviors." *NACADA Journal*. 1993, V. 13, No. 1, pp. 43-52.
- Hébert, T. P. "Defining Belief in Self: Intelligent Young Men in an Urban High School." *Gifted Child Quarterly*. 2000, V. 44, pp. 91-114.
- Hébert, T. P. and Reis, S. M. "Culturally Diverse High-Achieving Students in an Urban High School." *Urban Education*. 1999, V. 34, pp. 428-457.
- Long, B. *Attracting the Best: The Use of Honors Programs to Compete for Students*. 2002. Chicago, IL: Spencer Foundation (ERIC Reproduction Service No. ED465355).
- Marsh, H.W. and Craven, R. G. "The Pivotal Role of Frames of Reference in Academic Self-Concept Formation: The Big Fish Little Pond Effect." Paper presented at the *Inaugural Self-Concept Enhancement and Learning Facilitation (SELF) Research Centre International Conference*. October 2000, Sydney, Australia.
- McKeachie W.J., Asghar Iran-Nejad, and David C. Berliner. 1990. "The Multi-source nature of learning: An Introduction," *Review of Educational Research* 60(4) 509-516.
- Pascarella, E.T. and P.T. Terenzini. *How College Affects Students*. 1991. San Francisco: Jossey-Bass.
- Rinn, A. N. "Effects of Programmatic Selectivity on the Academic Achievement, Academic Self-Concepts, and Aspirations of Gifted College Students." *Gifted Child Quarterly*. 2007, V. 51, p. 232.
- Sederberg, P. "Characteristics of the Contemporary Honors College: A Descriptive Analysis of a Survey of NCHC Member Colleges." *Journal of the National Collegiate Honors Council*. 2005, V. 6, No. 2, pp. 121-136.
- Speirs, N. K. L. "Shaping an Identity: Factors Influencing the Achievement of Newly Married, Gifted Young Women." *Gifted Child Quarterly*. 2002, V. 46, pp. 291-305.
- Seifert, T. A.; Pascarella, E. T.; Colangelo, C. and Assouline, S. "The Effects of Honors Program Participation on Experiences of Good Practices and Learning Outcomes." *Journal of College Student Development*. 2007, V. 48, No. 1, pp. 57-74.
- Thistlethwaite, D. L. and Wheeler, N. "Effects of Teacher and Peer Subcultures Upon Student Aspirations." *Journal of Educational Psychology*. 1966, V. 57, No. 1, pp. 35-47.
- William David D., Paul F. Cook, Bill Quinn and Randall P Jensen 1985. "University Class Size: Is Smaller Better?" *Research in Higher Education* 23(3): 307-317.

Innovative Interdisciplinary Business Courses Offered in Partnership with Social Institutions

Dennis Muraoka, California State University Channel Islands, Camarillo, California, USA

ABSTRACT

Founded in 2002, California State University Channel Islands (CSUCI) is the newest campus in the CSU system. An important element of CSUCI's mission is to "facilitate learning within and across disciplines through integrative approaches..." CSUCI has addressed this mission element in part by forming partnerships with familiar social institutions—art museums, zoos, libraries, and universities—to develop and deliver courses that examine these institutions from business perspectives, as well as from other perspectives appropriate to the institution. A distinctive characteristic of these courses is that much of the course content is delivered by professionals employed by these institutions at these institutions (for example, much of the course about zoos is delivered at the Santa Barbara Zoo). Through these courses, business majors (a) develop a deeper and richer understanding of these institutions, (b) learn about business practices in "real-life" situations, and (c) learn of business careers in these institutions.

INTRODUCTION

Founded in 2002, California State University Channel Islands (CSUCI) is the first public university to open in California in the 21st century. Its mission statement is as follows:

Placing students at the center of the educational experience, California State University Channel Islands provides undergraduate and graduate education that *facilitates learning within and across disciplines through integrative approaches*, emphasizes experiential and service learning, and graduates students with multicultural and international perspectives. (Emphasis added.)

To fulfill this mission, the CSUCI faculty require all students to complete three upper-division, interdisciplinary, general education courses. Two of these courses also meet major requirements and connect the student's major to another discipline while the third course must be unrelated to the student's major. CSUCI has defined an interdisciplinary course as one that addresses problems and issues using the methodology of more than one discipline. (Cordeiro, et al., 2003). Business majors may select from an array of unique courses to meet this requirement including:

- Biotechnology in the 21st Century (cross-listed with Biology)
- The Business of Art (cross-listed with Art)
- Business and the Performing Arts (cross-listed with Performing Arts)
- Business and Economics in American Literature (cross-listed with English)
- Drug Discovery and Development (cross-listed with Chemistry)
- History of Business and Economics in North America (cross-listed with History)
- *The Museum: Culture, Business and Education* (cross-listed with Art and Education)
- *The Zoo: Conservation, Education and Recreation* (cross-listed with Biology and Education)
- *The Library: Collections, Services and Instruction* (cross-listed with Library Science and Education)
- *The University: Education, Research and Service* (cross-listed with Education)

While each of these courses has been successful, the focus of this article is the group of four courses shown in italics at the end of the list. These courses are related to one another in that they are based on a common model. Specifically, these courses have all been developed and delivered in partnership with familiar social institutions. In this article, these courses and the model on which they are founded are described. There are also reflections on the

strengths of and concerns about these courses and this model. Finally, advice is provided for business schools interested in developing similar courses.

A COURSE ABOUT ART MUSEUMS

As noted above, CSUCI has developed and offers a group of courses in partnership with local social institutions. The first of these courses, “The Museum,” was developed and offered in partnership with the world famous J. Paul Getty Museum (Los Angeles) in 2003. The course is cross-listed between Business, Art, and Education, and is typically team-taught by faculty from these departments. In addition to on-campus presentations by faculty, there are many presentations given by professionals from various museum departments. Rather than bringing these guest speakers to campus, the students travel to the museum to “experience” their presentations. This gives students a “behind-the-scenes” look at the museum and allows the guest speakers to use the museum to enhance their presentations. The course has been offered annually since its debut with the Getty Museum and other art museums serving as educational partners. These museums have included the Getty Villa (Malibu), the Los Angeles County Museum of Art (Los Angeles), and the Museum of Contemporary Art (Los Angeles). An important element of the course is a term project prepared by student teams. An example of the term project is the preparation of a catalogue for a proposed new exhibition at the museum. The student teams present their exhibition proposals to the museum staff, who, in turn, critique the proposals and participate in their grading. All courses at CSUCI are founded on a set of student learning outcomes. The catalogue description and student learning outcomes for the museum course are as follows:

Catalogue Description: The Museum

The Museum: Culture, Business, and Education. This course is an interdisciplinary, in-depth study of a museum from the perspective of art, business, and education. Analyzes how artistic values, business and management issues and educational projects are linked within museum practices. Each term this course is offered it will focus on a specific museum in the area.

Student Learning Outcomes: The Museum

Upon the completion of this course, students will be able to:

- Describe, understand and analyze the connections between the art, business and education within museum practices.
- Evaluate the ways that art, business and education can be mutually beneficial in a museum environment.
- Examine from three different perspectives the role of the museum in contemporary culture.
- Reflect in written and oral form on the various aspects of the museum as a cultural institution.
- Describe and analyze the processes of collecting and displaying art in museums.
- Analyze critically the development of an art collection and the specificity of museum practices.
- Evaluate and analyze the business practices of running a museum.
- Analyze ethical issues in running a museum.
- Analyze the educational services offered by the museum and reflect on possibilities for new projects.
- Analyze how the educational projects of the museum are connected to what children learn in schools (California framework).
- Apply the knowledge and information to real life situation in a final presentation.

A COURSE ABOUT ZOOS

Following the successful launch of the museum course, CSUCI developed a second course using the same model that focuses on zoos. This course was first offered in 2004 and shares many common elements with the museum course. These include the following:

- The zoo course is offered in partnership with a local institution (in this case the Santa Barbara Zoo).

- The zoo course is cross-listed between Business and other departments (in this case, Education and Biology) and is team-taught by faculty from these departments.
- There are many guest speakers from the zoo who deliver presentations to the students at the zoo. The presenters are encouraged to “walk the zoo” to illustrate important aspects of their presentations.
- The zoo course culminates with a team term project. For this course, student teams prepare proposals for new exhibits at the Santa Barbara Zoo. The exhibits are presented at the zoo to the zoo staff, who, in turn, critique the proposals and participate in the grading of the proposals.

Since its initial offering, a field trip to the Los Angeles Zoo has been added to the course. The Los Angeles Zoo differs from the Santa Barbara Zoo in size, scope, management and source of funding. Presentations and tours at the Los Angeles Zoo broaden student understanding of zoos by providing a view of an alternate zoo.

The course about zoos has been extraordinarily successful in two ways. First, it is very popular among students. Indeed, the course usually fills on the first day of registration. Second, the course has received excellent publicity to the benefit of both the university and the zoo. This latter point is evidenced by the fact that the course has been featured in articles in the Chronicle of Higher Education (Millman, 2007) and the Los Angeles Times (Alvarez, 2004). In response to the popularity and success of this course, a second course entitled “Service Learning at the Zoo” has been developed. The sole prerequisite for this course is the successful completion of “The Zoo.” In this follow-up course, teams of students work with zoo staff on a project of interest to the zoo.

The catalogue description and student learning outcomes for the zoo course are as follows:

Catalogue Description: The Zoo

The Zoo: Conservation, Education and Recreation. An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo.

Student Learning Outcomes: The Zoo

Upon completion of this course, students will be able to:

- Describe the roles of biology, business, economics and education within the zoo.
- Analyze the interactions of biology, business, economics and education in a zoo. This analysis will include the ways that these disciplines complement and conflict with one another.
- Reflect in written and oral form on the zoo as a social institution and the role of the zoo in contemporary society.
- Describe the processes of collecting and displaying flora and fauna in zoos.
- Analyze the development of a zoo collection.
- Describe the effects of the macroeconomy on a zoo.
- Describe microeconomic issues facing zoos.
- Evaluate the business and management practices of zoos including marketing and public relations.
- Analyze ethical issues in managing a zoo.
- Analyze current trends in zoos.
- Analyze the educational services offered by zoos and reflect on possibilities for new projects.
- Analyze how the educational projects of zoos are connected to what children learn in schools (California framework).
- Synthesize knowledge and information by developing a proposal for a new zoo exhibition.

A COURSE ABOUT LIBRARIES

In 2007, CSUCI opened the John Spoor Broome Digital Teaching Library, and timed the initial offering of a course about libraries to correspond to this opening. The library course shares many common elements with the museum and zoo courses. These include the following:

- The library course is offered in partnership with local institutions (in this case, private and public libraries throughout the region).
- The library course is cross-listed between Business and other departments (in this case, Education and Library Science) and is team-taught by faculty from these departments. For the library course, one of the instructors has been the Dean of the Library.
- There are many guest speakers from the CSUCI library and other regional libraries. The students travel to regional libraries to hear presentations about different types of libraries and to tour these facilities.
- The course culminates with a term project. For this course, each student prepares proposals for a special collection at the CSUCI library.

In the library course, students learn about common elements of all libraries from the department heads at the CSUCI library. Following this introduction to library operations, the students make a series of field trips to regional libraries. In this regard, CSUCI is fortunate to be located very near the Ronald Reagan Presidential Library, which has hosted the class and provided a tour of its facilities. Students have also visited both elementary and high school libraries, the Amgen Corporate Library, and the Camarillo and Los Angeles Public Libraries. The catalogue description and student learning outcomes for the library course are as follows:

Catalogue Description: The Library

The Library: Collections, Services and Instruction. A study of university, school (K-12), public, and special libraries from business, economic, library science, and educational perspectives. Analyzes how these perspectives are linked within library practices. The course will include study of local libraries. The course will include field trips to local libraries.

Student Learning Outcomes: The Library

Upon completion of this course, students will be able to:

- Reflect in written and oral forms on the history, mission, and roles of libraries.
- Describe the roles of business, economics and education within libraries.
- Analyze the interactions of business, economics and education in libraries. This analysis will include the ways that these disciplines complement and conflict with one another.
- Describe the functions and basic organizational structures of libraries.
- Evaluate critically library collections and services.
- Compare and contrast the roles of public, school, academic, and special libraries.
- Analyze ethical issues in managing libraries.
- Synthesize knowledge and information by developing and presenting a proposal for a new library program, service, or collection.

A COURSE ABOUT UNIVERSITIES

The course about universities is the newest course in this series and will be offered for the first time in Spring 2010. CSUCI President Richard Rush participated in the development of this course and intends to be among the faculty who will team-teach the course. It is anticipated that many faculty, administrators (including members of the

President's Cabinet, division heads, deans and department heads), and staff will participate in the course as guest speakers. The catalogue description and student learning outcomes for the university course are as follows:

Catalogue Description: The University

The University: Education, Research and Service. A study of institutions of higher education from multiple perspectives including, but not limited to education (teaching and learning), scholarly and creative activities, community service, management, and public policy. The course will include case studies of colleges and universities in the region and may include field trips to these institutions.

Student Learning Outcomes: The University

Upon completion of this course, students will be able to:

- Reflect in written and oral forms on colleges and universities as social institutions and on the roles of colleges and universities in contemporary society.
- Compare and contrast the missions and responsibilities of the three segments of California public higher education as denoted in the California Master Plan for Higher Education.
- Describe the basic organizational structures of colleges and universities.
- Describe the processes of developing and delivering the curriculum.
- Describe political, economic and budgetary issues facing colleges and universities.
- Evaluate the business and management practices of colleges and universities.
- Analyze current trends in colleges and universities.
- Synthesize knowledge and information by preparing and presenting a group paper/project on a current challenge facing higher education.

A MODEL FOR INTERDISCIPLINARY BUSINESS COURSES BASED SOCIAL INSTITUTIONS

Each of these courses is based on a common model, the elements of which can be discerned by analyzing the information provided about each course described above. Here are important elements of the model.

The focal point of each of these courses is a highly familiar social institution. This has the benefit that students enrolling in the courses have visited, experienced, and interacted with the institutions prior to enrollment. Indeed, there appears to be a selection bias among enrollees as they typically “like” the institution at the heart of the course and enroll in the course to learn more about the institution. Typically, these institutions are either not-for-profit businesses or government agencies. As such, there are several topics that are addressed in many, if not all of these courses including: mission statements, governance, organizational structure, budgeting, fund raising, labor unions, volunteers, accreditation, education, marketing, public relations, security, retail, and food services. Although these topics are discussed in the context of the social institution under study, the lessons learned are applicable to other organizations as well.

Each of these courses is classified as an upper-division general education course. As these courses focus on social institutions, they are deemed to meet the general education requirements in the area of social perspectives. As general education courses, they are not only taken by business majors, but also by students from other majors.

These courses are offered in partnership with local institutions. As noted earlier, much of the course content for these classes is delivered by working professionals at their job sites. This provides the students with an opportunity to learn “first-hand” from industry experts who are often seen as role models for careers in their fields. It is also of note that the partner institutions benefit from working with the university and the guest speakers greatly enjoy the opportunity to convey to students the nature of their work and how they arrived at their current positions.

These courses are team-taught by faculty from different disciplines. This provides students with a truly interdisciplinary experience as the students are able to observe the interaction between the instructors throughout the course. It also benefits the faculty teaching the courses by creating dialogues across disciplines.

There is a culminating term project for each of these courses. The projects are typically prepared by teams of students and are presented to the professionals at the partner institutions. They allow the students to demonstrate their knowledge of course topics and how they have integrated topics from the beginning to the end of the course.

BENEFITS AND CONCERNS

Our experiences with these courses have given us the opportunity to reflect on the benefits of and concerns regarding the courses from the perspectives of students, faculty, the university and partner institutions. We share these reflections below.

A Benefit for Students: Developing Cooperative Skills

Each of these courses culminates with the presentation of a term project related to the mission of the social institution. To accomplish this task, the students have been asked to form their own teams, keeping in mind that it is wise to assemble teams with diverse skills and interests. When the students submit their term projects, each student also completes a rubric evaluating the contributions of each of team member to the term project. An individual grade is given to each student based in part on information gleaned from these rubrics.

A Benefit for Students: Developing Communication Skills

Each of these courses includes a student learning outcome that begins “Upon completion of the course, students will be able to reflect in written and oral forms on...” A characteristic of these courses not previously mentioned is that they are designated as “writing intensive.” At CSUCI, it is a requirement of all upper division general education courses that they focus on writing. As such, each course has multiple written assignments. For example, in the zoo and library courses, students draft a weekly reflective essay linking what they have learned in a given class session to the student learning outcomes for the course. This assignment has the benefit of developing writing skills while refocusing the students on the course’s student learning outcomes. Students also prepare a “revise-and-resubmit” term papers on topics developed in the courses (that is, term papers that can be submitted as first drafts to the instructors for comments and suggestions, and then resubmitted at a later date for a final grade). Finally, each course culminates with the development of a term project. These projects are both presented orally and submitted as reports. In each of these courses, students make “practice presentations” before their classmates and instructors prior to their final presentation. These activities have served to build communication skills.

A Benefit for the University: Assessment of Student Learning Outcomes

A current trend in higher education is an increasing emphasis on the assessment of student learning (Barr and Tagg, 1995). In fact, the assessment of student learning is now a requirement for AACSB and regional accreditation (Corderio and Muraoka, 2009), and faculty and administrators are on the lookout for student work that can be used for the direct assessment of student learning. The student work prepared throughout these courses provides materials that can be used by business schools and universities in just this way. For example, the term projects developed in the museum course and the zoo course have been collected and used to assess a general education student learning outcome on integrating materials across disciplines and term papers from the zoo course have been used to assess writing by the school of business.

A Benefit for the University and the Partner Institution: Strengthening Community Partnerships

A significant spillover benefit from these courses is that they have strengthened partnerships with participating social institutions. For example, as a result of the zoo course:

- The Santa Barbara Zoo and CSUCI are planning a pair of “home-and-home” donor events whereby one event will be held at the university and the second event will be held at the zoo. The first of these events, the one held at the university, has already taken place. This event took the form of a joint presentation by

Mr. Richard Block, the CEO of the Santa Barbara Zoo, and the CSUCI professors who teach the zoo course. The second event is planned to correspond to the opening of the new education pavilion at the Santa Barbara Zoo.

- Santa Barbara Zoo staff and faculty are collaborating on research projects.
- CSUCI faculty have facilitated strategic planning at the Santa Barbara Zoo.
- CSUCI students have developed senior theses with the Santa Barbara Zoo.
- CSUCI students have taken internships with the Santa Barbara Zoo.
- CSUCI graduates have taken employment at the Santa Barbara Zoo.

A Benefit for the Partner Institution: Staff Development

The partner institutions regard the opportunity of having members of their organizations make presentations to a college class as an excellent vehicle for staff development. While this is a benefit for the partner institution, it can also be a concern for the students (see below, “A Concern for Students: The Quality of Presenters”).

A Concern for the University: Relatively High Costs

With multiple instructors and limited enrollments, these are relatively high cost courses. As noted earlier, full participation by two or more professors in these courses enhances the interdisciplinary nature of the courses. This is, however, not without cost. The enrollment in the courses is limited based primarily on space limitations found at the partner institutions.

A Concern for Students: Relatively High Costs

CSUCI has been unable to provide transportation to partner institutions. Although the distances to the partner institutions have typically been less than 40 miles, the responsibility to travel to these institutions falls upon the students enrolled in the classes. Undoubtedly some potential students have not enrolled in the classes because of the travel costs associated with the courses. To help mitigate these costs, the faculty have encouraged carpooling and arranged parking as needed. It should be noted that in some instances carpooling has been converted by students into meeting times to discuss the course and term projects.

In addition, because many class sessions are held off campus, students cannot enroll in other courses that either end immediately before the class or begin immediately after the class. To mitigate this impact, these courses have usually been scheduled in one, three-hour time block per week, and have often been scheduled in the mid to late afternoon or on Fridays.

A Concern for Students: No Textbooks

Owing to the unique nature of these courses, there is a general lack of printed materials for these classes and there are no textbooks. The presenters often prepare PowerPoint presentations for the students, and these presentations are made available to students on the college course management software package (in our case, “Blackboard.”) In addition, there are a few journal articles that can supplement presentations. Nevertheless, students who will not be able to attend class regularly are greatly disadvantaged and are discouraged from enrolling in the courses.

A Concern for Students: The Quality of Presenters

This model relies heavily on institution professionals to tell their stories. Without exception, these guest speakers have been passionate about their jobs and institutions. However, it should be noted that many of the presenters are seldom called upon to make presentations, and, as such, may not be skilled presenters. This concern has not often proven to be a problem as the guest speakers have taken the task seriously and have always been well prepared for their presentations. One area of concern is time management for inexperienced presenters. It is not uncommon for presenters to have too much or too little material for their allotted time periods.

A Concern for the Students and Partner Institution: Scheduling Guest Speakers

With the large number of guest speakers, scheduling the guest speakers is challenging. In addition, there can be mix-ups in the speaker schedule due to emergencies, illness and the like.

A Concern for the University: Identifying Partner Institutions

One characteristic of each of the partner social institutions is that education is an important element of its mission. One way in which these courses are attractive to partner institutions is that they allow them to fulfill in part their educational missions by teaching college students about their institutions. It can be challenging to find institutions to partner with the university to offer these classes. This problem may be solved by seeking partners who share with the university an educational mission. In these instances, the offering of the class is a “win-win” situation for the university and the partner institution.

ADVICE TO OTHER BUSINESS SCHOOLS

At CSUCI we have been highly satisfied with this group of upper division courses. The courses have been popular among students and the student’s term projects indicate that they are learning a great deal in these courses. Our satisfaction with the courses is evidenced by their growing number. Indeed, another course based on this model “The National Park,” has been proposed. CSUCI is fortunate to be near the Channel Islands National Park, which will serve as the partner institution for this course when it is offered. Still another course on symphony orchestras is in the planning stage.

Given our success with these courses, we recommend this model to business schools interested in expanding their interdisciplinary course offerings. Partner institutions, like art museums (or other types of museums), zoos, and libraries can be found near all college campuses, and, of course, all institutions of higher education can develop a course on colleges and universities. We have found local social institutions to be willing and eager partners. As noted above, partner institutions that include education in their mission make excellent candidates as the basis for these courses. The key contact at these institutions is the person in charge of the education department at the institution.

REFERENCES

- Alvarez, F., “For Students, Zoo Class Is a Jungle; Competition is Intense as Cal State Teams Draw Up Exhibits for Santa Barbara Animal Park,” *Los Angeles Times*, November 21, 2004, Section B, p.4
- Barr, R. and J. Tagg, “A New Paradigm for Undergraduate Education”, *Change*, Vol. 27, No. 6, 1995, pp. 12-25.
- Cordeiro, W. and D. Muraoka, “Case Presentation: Course and Program Level Assessment for a School of Business and Economics,”** *Review of Business Research*, forthcoming, 2009.
- Cordeiro, W., D. Muraoka, P. Rivera, Paul and A. Vaidya, “Excellence in a Business and Economics Curricula Through Interdisciplinarity”, *Review of Business Research*, Vol. 1 (1), 2003, pp. 88-93.
- Costache, I. and D. Muraoka, “A Model for Interdisciplinary Courses Based on Non-Profit Social Institutions,” *Review of Business Research*, Vol. 4, No. 1, 2004, pp. 67-73.
- Millman, S., “A Positively Beastly Course in California,” *The Chronicle of Higher Education*, July 27, 2007, Section: The Faculty, Vol. 53, Issue 47, p. A9.

Dennis Muraoka is a founding faculty member at California State University Channel Islands where he is a professor of economics in the Martin V. Smith School of Business and Economics. He earned his PhD in economics from the University of California, Santa Barbara, and prior to joining the CSUCI faculty, was a faculty member at California State University, Long Beach. He currently serves as the interim associate provost at CSUCI.

The Four-Year Experience: Expanding Horizons and Preparation

James C. Rothwell, Ouachita Baptist University, Arkadelphia, Arkansas USA
Philip F. Rice, Ouachita Baptist University, Arkadelphia, Arkansas USA
Marshall J. Horton, Ouachita Baptist University, Arkadelphia, Arkansas USA

ABSTRACT

The Four-Year Experience program of the Hickingbotham School of Business at Ouachita Baptist University is designed to help students bond with the school beyond the classroom through on-campus activities and off-campus trips to major U.S. cities that expose students to cultural and learning events. Interactions with alumni and potential employers are an important part of the unique program. Preliminary results indicate that the program has been helpful in student retention.

INTRODUCTION

During the past few years, many universities have initiated First-Year Experience programs. Those programs have multiple objectives, such as reading current business literature, making new friends, learning communication skills, participating in community service, and using university support services. This is consistent with Kelly (2006) who pointed out the effectiveness of facilitating “cross-functional communications.” Some of these programs are referred to in the sources section at the end of this paper.

Three years ago, the Frank D. Hickingbotham School of Business (HSB) at Ouachita Baptist University began a Four-Year Experience program. This program is designed to supplement the first-year activities sponsored by the university. The initial idea evolved from an awareness of a program at the University of Evansville that focused on four years of experienced- based business education. Discussions among HSB faculty during the fall of 2005 generated a consensus that such a program could be developed to enhance student learning and retention efforts. Additionally, an expectation for the HSB program was that it would significantly broaden the students’ overall education beyond the classroom. This is important because of the university’s location in an isolated town of 10,000. From those discussions the following program goals emerged.

1. Create a strong bond to the Hickingbotham School by promoting and enhancing the development of relationships between students, faculty, alumni, and business professionals.
2. Provide unique and varied experiences for all business majors and focus on activities and events to supplement the traditional classroom setting with a special emphasis on off-campus opportunities.

As the Four-Year Experience name implies, the purpose of the program is to create experiences and activities for each class, freshmen, sophomores, juniors and seniors, to be outside the traditional classroom setting and mostly off-campus events. The program was begun in fall 2006 with all costs underwritten by the Hickingbotham School of Business (HSB).

The two primary components of the Four-Year Experience are:

1. First Friday Speaker Series open to all business majors (this series includes the speaker at the annual spring semester Business Administration Day Luncheon).
2. Special activities for each class including a unique travel program.

Initially the intent was for all components of the program to be mandatory. However, because of student commitments to other university sponsored activities (athletics, band, choir, etc.) and work obligations the practical

application is that participation in some of the program activities is voluntary. Students are strongly encouraged to participate in all the activities that they can. The school makes a strong effort to maximize student participation in the voluntary activities. The ultimate goal is for the student to view the Four-Year Experience as a “must-do” activity because of the opportunities and experiences provided through the program.

FIRST-FRIDAY SPEAKER SERIES

One of the key components of the Four-Year Experience is the school’s First-Friday Speaker Series. All business majors are invited to attend these presentations held during the noon hour in Young Auditorium in the recently constructed Hickingbotham Hall. First-year business students are required to attend (sign-in sheets are used and participation is reflected in grading) and each program is open to all students enrolled in business classes. On average over 60% of all business students attend each of the First Friday Speaker programs. The speakers are invited to speak for about 20 minutes with a short Q/A session following the presentation. A light lunch is served in the lobby of the building where students have additional time and opportunity to interact with the speaker.

The speaker series has been very popular in that students anticipate the event (in particular when the speaker is in his or her field of study) and frequently inquire as to whom the next speaker will be. The inaugural speaker was Frank D. Hickingbotham, founder of TCYB and currently Chairman and CEO of Hickingbotham Investments. Since that initial event, speakers have included:

1. President and CEO of a regional bank holding company and member of the St. Louis Federal Reserve Board
2. President and CEO of a large regional hospital system
3. Deputy Chief-of Staff for the Governor of Arkansas
4. Owner and founder of an extreme sports retailing chain
5. Administrator for a large church, consultant and author
6. Vice-president of a large not-for-profit foundation
7. Former U.S. Ambassador to Tanzania and Administrator of the U.S. Agency for International Development
8. Executive vice-president and CFO for an investment holding company
9. Managing partner for a large law firm
10. CEO of a large advertising firm
11. Director of professional training for a global healthcare products provider

Several of the speakers are business school alums. Speakers are encouraged to share with the students their experiences in the workplace, the issues that confront them, and insights on being successful in all areas of life.

All business majors are given a Hickingbotham School of Business t-shirt with Ouachita’s purple color during the first few weeks of school and are encouraged to wear the shirts on First Fridays, future business trips, and other special events involving the school of business. In addition, each senior student is provided with a polo shirt or long-sleeve button shirt with the Hickingbotham School of Business logo.

The year-end event for the Hickingbotham School of Business is the Business Administration Day in late spring. This day includes an opportunity for all business majors to attend a luncheon with a distinguished keynote speaker and meet with advisory board members during and after the luncheon.

SPECIAL ACTIVITIES FOR EACH CLASS (Including a unique travel program)

The second component of the Four-Year Experience includes special activities for each class, freshmen through seniors. A particular goal of this component is to establish cohort-groups and promote student-interaction, particularly in the first year. Also, a unique element of this component is an out-of-town trip for each class. The

purpose of these trips is to (1) continue to promote student interaction, (2) enhance student knowledge of the business environment, and (3) observe the application of business principles in the workplace.

Three of the trips, freshmen, sophomore, and senior are overnight lasting three or four days. All four of the trips usually include three components: (1) professional, (2) cultural, and (3) fun/entertainment. The Assistant Dean coordinates and participates in every trip. Various faculty members (and sometimes spouses) also participate in the travel programs providing the opportunity for faculty and student interaction outside of the normal classroom or office environment.

Year 1: Freshmen

The freshman year is very important in the implementation of the Four-Year Experience. In the first semester at Ouachita, declared business majors are enrolled in "Introduction to Economics and Business" and "Microcomputer Applications." Each course has a specific role in the preparation of new business students.

The "Introduction to Economics and Business" course establishes a cohort group and provides a forum for communication and interaction with first-year business students. Three special components are present in this class: (1) Students are provided a subscription to Business Week and quizzed weekly over discussions of various articles from the current issue, (2) students are required to complete an on-line aptitude and skills assessment survey related to career opportunities and choices, and (3) Business alumni and local business professionals are invited to speak in class to acquaint students with careers they would want to consider. In the second semester, students typically enroll in "Principles of Microeconomics" to begin their study of markets and how institutions operate in them.

The "Microcomputer Applications" class focuses on developing technology skills (word processing, presentation packages, and spreadsheet applications). In the second semester, students from this course track into the "Business Communications" course where the emphasis is on developing oral and written communication skills needed in future semesters.

Additionally, in the first semester, the students enrolled in the "Introduction to Business" class participate in an exercise coordinated by a management professor and senior students from a Leadership class. This leadership and team-building exercise is the beginning of the Freshman Leadership Experience (FLEX), a program designed to facilitate communication, problem-solving, teamwork, and trust. At the end of the afternoon exercise, faculty members host their freshman advisees at a dinner in an informal setting. The goals are to provide the students with an understanding of the importance of effective teamwork, enhance student interaction, and connect with HSB faculty and upper-level students. This event has been hosted on the Ouachita campus as well as at nearby Camp Winnamocka, a scenic conference and resort facility. The program is voluntary, but approximately 60 percent of the freshmen students have been able to participate in the FLEX program each year it has been offered. The results of an assessment survey of those who participated each indicates that the students have found the activity to be beneficial and worthwhile (3.25 on a satisfaction scale with 4.00 being extremely satisfied)

In the spring semester, freshmen business students travel to Memphis, Tennessee. Average participation on the trips has been around 60% of the freshmen business majors. Past trips have included activities at:

1. Gibson Guitar
2. Graceland
3. Memphis Motor Speedway
4. St. Jude Children's Research Hospital
5. Vining-Sparks
6. AutoZone corporate offices
7. Sanyo plant

Year 2: Sophomores

During the sophomore year students are encourage to enroll in Accounting Principles 1 and 2, Principles of Macroeconomics, and the Business Statistics course to continue the cohort process. Faculty advisors begin career discussions and are available for consultation as students pre-plan the remainder of their academic careers at Ouachita. This process is preliminary to the formal Degree Plan prepared in the fourth semester.

The Hickingbotham School has two majors, Accounting and Business Administration (Emphasis areas in Finance, Management, and Marketing). The accounting curriculum is regimented, and students are advised when specific required courses should be taken. Students majoring in Business Administration must choose at least one emphasis area. Advisors assist in the choice and the appropriate Junior/Senior business elective courses to support the chosen emphasis. A tutoring program is made available to sophomore students in Principles of Accounting, Principles of Economics, and Statistics.

The sophomore business majors have had a travel experience in the spring to either Nashville, Tennessee or Dallas, Texas for the past three years and on average over 70% of the sophomore business majors participated in the travel experience. These trips included visits to:

Nashville

1. LifeWay
2. Nissan plant (Smyrna)
3. Boswell's (Harley- Davidson dealership)
4. Hermitage (Andrew Jackson's home)
5. Grand Ole Opry
6. General Jackson Showboat

Dallas

1. New Cowboy Stadium (under construction)
2. Dallas Trade Mart
3. Myerson Center (Dallas Symphony)
4. Prestonwood Baptist Church
5. Medieval Times
6. Mesquite Rodeo

Year 3: Juniors

The focus during the junior year is on career preparation and professional development with students involved in résumé and interview preparation workshops sponsored by SIFE (Students in Free Enterprise) and conducted by the Office of Career and Corporate Development in the spring semester. These workshops include such topics as professional dress, appropriate business casual dress, cell phone etiquette, text-messaging etiquette, and dining etiquette. The cohort process continues as the students enroll in Corporate Finance, Organizational Behavior, and Principles of Marketing in year 3. Additionally, in the fall semester, junior students have a one-day trip to Little Rock. The trip includes visits to:

1. Clinton Presidential Library
2. Stephens Inc.
3. Dillard's
4. Little Rock Chamber of Commerce.

A special feature of the trip is a formal luncheon with the Hickingbotham School of Business Executive Advisory Board. At this event, students have the opportunity to meet and visit with the founder of the school, Frank D. Hickingbotham, as well as other members of the board. Also in the spring semester, students have the opportunity to participate in individual mock interviews conducted by business alumni and local business professionals. After

the interviews, there are follow-up discussions of the evaluations by the interviewers. The fall of 2008 was the first time for this trip and approximately 65% of the junior business majors participated.

Year 4: Seniors

At the beginning of the next to last semester, all senior students have an individual meeting with the dean of the school. The focus of the meeting is two-fold: (1) the course-work needed to graduate is reviewed and (2) the student's future plans in regard to employment (secured or needed) and graduate school or law school plans are discussed. These meetings are very productive as they provide each student one-on-one interaction with the dean.

The continuity of the cohort group is maintained through enrollment in the "Business Ethics" course and the capstone course, "Management Strategy and Policy", which integrates the core competencies and practices and promotes teamwork development through participation in a business simulation as teams. Simultaneous with the capstone course is the Senior Seminar that focuses on special readings and current business topics. A primary purpose of the Senior Seminar is to stimulate life-long learning by reading professional literature.

Also, senior business majors have travelled to either Chicago or St. Louis during September of the past three years. Participation in these trips has been over 75% of the senior business majors.

The following experiences and activities have been a part of the trips:

Chicago

Chicago Board of Trade
Federal Reserve Bank of Chicago
Shedd Aquarium
Museum of Natural History
John Hancock Building
Sears Tower
White Sox baseball game
Morse Automotive plant

St. Louis

Fox Midwest studio
Edward Jones corporate office
Conoco-Phillips refinery
Mid-America Arch tour
Cardinals' baseball game

RESULTS

The Four-Year-Experience program of the Hickingbotham School of Business is in its third year. Based on student evaluations and comments from students and parents, the various activities have been well received. The accomplishment of each of the earlier stated objectives is described below.

Objective 1: Create a strong bond to the Hickingbotham School by promoting and enhancing the development of relationships between students, faculty, alumni, and business professionals.

The FLEX activity introduces first-year students to academic advisors over dinner early in the first semester. Freshmen are introduced to each other and to senior students as they participate in leadership/team building activities during the first month of classes.

The travel program enables students and faculty members (who serve as sponsors) to spend time together in various activities away from campus.

The speakers (including several alumni) in the First-Friday Speaker Series always make time to attend the lunch and visit with students and faculty members.

Business Administration Day (in addition to a speaker) provides time for students to meet and interact with more than thirty advisory board members who are on campus for a formal luncheon with students.

Alumni frequently help arrange site visits for the travel groups and join the students for dinner as their schedules allow.

A special interaction for junior students is a luncheon with the Executive Advisory Board members which takes place when the board has its fall meeting in the Little Rock.

The mock interview process enables students to meet and interact with local alumni and friends.

Objective 2: Provide unique and varied experiences for all business majors focusing on activities and events to supplement the traditional classroom setting.

Component 1: The First-Friday Speaker Series has provided students the opportunity to learn about:

- The career of personal financial advisor,
- The anxiety and surprise associated with starting a business,
- The role of fund-raising for a hospital,
- The workday of a banker,
- The career path of a hospital administrator,
- The career of a church administrator.

Component 2: The Travel Program has helped students connect business principles and concepts by:

- Seeing the impact of globalization by visiting the last U.S. plant to manufacture televisions,
- Touring a major research hospital and experiencing the importance of social responsibility at corporate and personal levels,
- Witnessing the excitement and dynamics of markets at the opening bell of the Chicago Board of Trade,
- Experiencing the operations of an automobile brake manufacturer and the use of robotic systems in an automobile manufacturing plant,
- Seeing and learning about financial services operations at the St. Louis office of a major investment advisory firm and the Chicago Federal Reserve Bank,
- Learning about the distribution processes of a major retailer.

Preliminary data tracking the initial 2006 freshman group (now in their sixth semester) suggest that the program has been well-received and is contributing to greater retention from freshman to sophomore and from sophomore to junior years. For example, 61 percent of freshmen participated in one of the two major four-year experience events and 68 percent of sophomores participated in two of the three major events for their class. The more activities in which a student participates increase the prospect of retention. Of the freshmen who entered in 2006 that participated in one of the freshman events, 82 percent are still currently enrolled. Only 24 percent of the students who did not participate in either FLEX or the freshmen trip are still currently enrolled. Overall retention of students between the freshman and sophomore years was 65 percent, but for those participating in either of the freshman FLEX activities, retention was 74 percent. Also, the percentage of students participating in the travel experiences is increasing, particularly for seniors.

Since the program is still relatively young, more data will be analyzed as students make their way through the program. The results thus far indicate that the Four - Year Experience program at HSB has been an excellent investment.

SOURCES:

Cox, Pamela L., Elizabeth Dunne Schmidt, Paula E. Bobrowski, and Glenn Graham (2005) "Enhancing the First-Year Experience for Business Students: Student Retention and Academic Success," *Journal of Behavioral and Applied Management* 7:1 (September): 40-68.

Dowling University First-Year Experience Webpage <http://www.dowling.edu/admissions/FYE.shtm>

Indiana State University Four-Year Experience Webpage <http://www1.indstate.edu/business/cec/files/Four.pdf>

Indiana University Purdue University Indianapolis Kelley School of Business First-Year Experience Webpage <http://kelley.iupui.edu/undergrad/academics/firstYear.cfm>

Kelly, Jeffrey M. (2006) "Why Focus on the First Year?" *The First-Year College Experience: Strategies for Improvement* <http://www.newfoundations.com/OrgTheory/Kelly721Sp06.html> accessed May 2009.

University of Delaware First-Year Experience Webpage <http://www.ugs.udel.edu/fye/FYEbyDept.htm>

University of Evansville School of Business Webpage <http://www.evansville.edu/areasofstudy/business/>

Williams, Chuck, and Richard E. Fetter (2009) "Real Challenges, Real Change (in New and Improved B-School Curriculum)," *BizEd* VIII (1) (January/February): 46-47.

James C. Rothwell, MBA is Assistant Dean of the Hickingbotham School of Business at Ouachita Baptist University. His degree is from Louisiana Tech University. He teaches courses in auditing and financial accounting.

Philip F. Rice, Ph. D. is retired dean and current Professor of Business Administration of the Hickingbotham School of Business at Ouachita Baptist University. His degree in engineering management is from Clemson University. He teaches courses in statistics and operations management.

Marshall J. Horton, Ph. D. is the Regions Bank Chair of Economics and Finance at the Hickingbotham School of Business at Ouachita Baptist University. His degree in economics is from Southern Methodist University. He teaches courses in economics and finance.

Effectiveness of Interactive Technology in Business Education

Sarah A. Humphries, Georgia College & State University, Georgia, USA
Catherine Whelan, Georgia College & State University, Georgia, USA

ABSTRACT

This study investigates both the effectiveness of a Personal Response System in enhancing student learning and student perceptions of the use of a Personal Response System. The technology was tested in two different courses being taught by different professors in Accounting and Business Communications. Each professor taught one class incorporating the Personal Response System and another class without the system. The same content was covered and the same major assessment items were used in each class. Results supported the hypothesis that the use of a Personal Response System enhances perceived student learning. Furthermore, survey data indicated that the interactive nature of the technology was appealing to students. However, objective measures of student learning (exam results) did not show the anticipated improvement based on publishers' claims about the effectiveness of Personal Response Systems. This research suggests that instructors should carefully weigh the cost of implementing this type of technology against perceived benefits to student learning.

INTRODUCTION

Today's students live in an interactive world where they are connected through multi-media technology. Unless we can engage these students in the learning process it is highly likely they will quickly lose interest. Consequently, traditional lectures may no longer be the most appropriate means of conveying information to support student learning. Textbook publishers have recognized the need for change and are now providing materials that support a range of new technologies that they claim will enhance student learning. The effectiveness of educational technologies has been the focus of numerous studies. Thompson *et al.* (1992) and Bryant and Hunton (2000) provide extensive reviews of this literature.

A Personal Response System (PRS) is a form of interactive educational technology that has the potential to improve student learning by connecting the learner and instructor in a dynamic two-way exchange. Students are able to become both cognitively and physically engaged in the learning process. Using remote handheld devices, referred to as clickers, students can respond to questions delivered through a PowerPoint presentation. Student responses are instantly recorded and can be tabulated and charted to provide immediate feedback for the benefit of both the students and the instructor. This enables the instructor to assess the collective understanding of course material in real-time and then review topics or move on to new material as appropriate. As responses can be anonymous, use of the system can also build student confidence and encourage participation by all students. Results can also be exported into spreadsheets or grade book software.

The use of PRS is relatively new to the business classroom, and as such, requires investigation prior to widespread adoption. Given the time and resources required to implement new technology, it is imperative to test the validity of the publishers' claims. Furthermore, in the current educational environment that focuses on assurance of learning, it is essential that the effectiveness of PRS should be evaluated to determine the impact on student learning.

Research into the effectiveness of PRS has focused on two main attributes of effectiveness; student perceptions and student performance. Findings generally support the proposition that students value the use of clickers and believe that the use of clickers enhances student learning. These subjective measures of student learning provide some evidence of the benefits derived from the use of clickers. However, there is minimal evidence that the use of clickers enhances student performance as measured objectively, that is, through exam scores or course grades.

PRIOR RESEARCH

An early study of the role of PRS in business education focused purely on student perceptions regarding the use of technology rather than its effect on student learning. Robinson & Ritzko (2006) used clickers to deliver “games” to review content in three management and two managerial accounting classes. Students reported that they were more likely to attend class and be more engaged in class when clickers were used.

Stowell and Nelson (2007) assessed the impact on short-term learning by administering a post-lecture quiz to psychology students. While their results indicated that the use of clickers was correlated with positive academic emotion, there was no significant difference in the scores on the post-lecture quiz. Longer-term learning was examined by Watkins and Sabella (2008) in their study of the use of clickers with physics students. To evaluate student performance, comparison was made between student responses to question in class (using the clickers) and student responses to similar questions on the exam. While there was some improvement in student knowledge during the lecture, learning did not carry over to the exam despite questions being very similar, if not the same. In contrast, King and Joshi (2008) found that active use of clickers resulted in improved performance on exam questions that were similar in content to the clicker questions used in class. This effect was greater for male students than female students. In this study, all students were given a clicker to use during a chemistry class, but there was no requirement to actually use the clickers. Thus, the students using the clickers were self-selecting to become more active participants in the learning process. The students who decided to use the clickers may generally take a more active role in their learning regardless of the use of technology. Consequently, their higher level of performance may be due to personality characteristics rather than the use of the clickers.

Trees and Jackson (2007) examined the impact of student characteristics and course design on student perceptions of the effectiveness of clickers in enhancing learning and class involvement. Using students in large enrollment course, the study found that positive perceptions of clicker usage were related to a student’s desire to be actively engaged in class, the view that traditional lectures are not best, valuing of feedback, class standing, previous experience with lecture courses, anticipated course performance, and the amount of clicker use in the classroom.

The novelty of the technology may enhance student perception of its effectiveness. Students majoring in Management Information Systems (MIS) may be less susceptible to the novelty factor due to their exposure to different technologies in the course of their study. However, when examining the use of clickers in MIS classes, Nelson and Hauck (2008) found results similar to prior studies. That is, the use of clickers increased the perception of student learning but there was no significant effect on student performance as measured by course grades. However, there was a higher attendance rate in the clicker class and it was found that higher attendance correlated with higher grades. A limitation of this study was the use of different instructors for each of the three classes.

Carnaghan and Webb (2007) investigated the effectiveness of PRS in accounting education. While they found that students were generally satisfied with their experience using clickers, there was limited support that the use of clickers led to greater satisfaction with the course. In line with prior research, they found evidence that students perceived the clickers to have a positive impact on learning. However, in contrast to other studies, there was some evidence that clickers enhanced student performance on exams. This evidence is limited to improved performance on multiple choice questions similar to those employed when using the system in class.

It is clear that student perceptions relating to the use of clickers are extremely positive. While students may feel that the clickers enhance their learning, there is little objective evidence that clickers enhance student performance. Much of the research has been conducted using students in non-business disciplines and/or large class sizes. This study will further examine the question of student learning in the business disciplines of accounting and business communications in a small-class liberal arts setting. The same instructor will teach the classes in each discipline, thereby removing the confounding effect of different instructors. It is proposed that the interactive nature of a PRS will enhance student learning. Student learning will be measured using one subjective measure (student perception of learning) and one objective measure (examination scores) to evaluate the effectiveness of a PRS.

METHOD

Participants

Participants were 113 undergraduate students at a liberal arts university enrolled in Business Communication (BCOM) or Accounting Principles II (ACCT) courses. During one semester, two sections of each course were used to provide an experimental and control group within each course. One professor taught both Business Communication sections and another professor taught both Accounting sections. Both professors were seasoned academics who had taught their course material many times. This was their first exposure to using the clicker technology. Sixty-four students participated in the two ACCT sections (33 in the clicker section and 31 in the traditional section). Forty-nine students participated in the BCOM sections (25 clicker, 24 traditional). Informed consent was obtained from all participants. Basic student demographic comparisons yielded no significant differences between the two courses or within sections of each course.

Procedures

The same material was covered in both the clicker section and the traditional section for each of the courses. The text book, lecture notes, and homework assignments were identical with the only difference being the inclusion of additional PowerPoint slides for the clicker questions. Both professors used the technology primarily during lectures. Interactive slides were created and used to assess learning to that point, to emphasize an important concept, or to ask for anonymous opinions on potentially sensitive topics (i.e., ethics questions). Feedback from student answers was utilized to determine speed of topic progression and/or areas that needed further coverage.

Students in the clicker sections were assigned a specific device to be used throughout the semester. Since the devices were purchased through a University research grant, students were required to sign a document indicating their agreement to return the devices at the end of the semester. To encourage students to remember to bring the device to class each session, a portion of the final course grade in each experimental section was determined by daily participation.

Measures of Student Learning

The measures of student learning typically used in educational research include exam scores (Carnaghan and Webb, 2007; Hamer, 2000), course grade (Brokaw & Merz, 2000; Young *et al.*, 2003), student perceptions of learning (Carnaghan and Webb, 2007; Clarke *et al.*, 2001; Watkins & Sabella, 2008; Young *et al.*, 2003), and student perceptions of course value (Carnaghan and Webb, 2007; Marks, 2000). This research examines the impact of PRS on student learning as measured by (1) student perception of learning and (2) examination scores.

At the conclusion of the semester, students in the experimental sections were asked to complete a brief questionnaire. This questionnaire was designed to collect student self-reported perceptions of contributions to learning and usefulness of the technology. Eleven items such as “The use of this technology helped me understand the material” and “I found the instant feedback helpful” were assessed on a 1 to 7 scale. The scale was marked with end points of “Strongly Disagree” at 1, “Strongly Agree” at 7, and “Neutral” at 4. Answers to demographic items such as gender, age, class standing, and expected grade were also gathered.

Throughout the semester, students in both sections were required to take identical exams. Prior studies have attempted to assess student learning by looking at performance on exam questions that were similar to, if not the same as, questions used in the clicker class. This study looks at the overall score on exams that include a variety of questions and question types. The questions on these exams are not merely a replication of the questions used in class. This approach provides a better measure than those used in prior studies as true student learning is demonstrated by applying knowledge to new scenarios.

RESULTS

On self-reported measures of PRS effectiveness, all items in both experimental sections indicated statistically significant positive perceptions of contributions to learning and effectiveness of the technology. The mean response for each statement was compared to the neutral mid-point of 4 using one-tailed t-tests. The results presented in Table 1 indicated a positive response to all statements. The number of respondents is less than the class sizes of the experimental sections due to students being absent on the day the survey was administered.

Statements 1 through 4 relate to the students' general satisfaction with the technology. The results suggest that students find the technology easy to use and would be happy to see it used more extensively in other classes. Statements 5 through 11 examine the effectiveness of the technology in relation to student learning. Once again, significantly positive responses to these statements indicate that students perceive that the use of the PRS enhanced their learning. They stated that they found it easier to remain engaged in the class and found the immediate feedback they received from the use of the PRS helpful in developing a more focused study plan.

A statistical comparison was made between the results for the Business Communications (BCOM) and Accounting (ACCT) courses. The discipline in which the PRS was used made no significant difference to student self-reported measures of clicker effectiveness. Overall, students perceived the technology to be useful to learning the material associated with the course.

Class	Survey Item	n	Mean ^a	Std Dev
ACCT	1. The technology was easy to use.	31	6.77***	0.43
	2. I felt comfortable using this technology.	31	6.74***	0.51
	3. I enjoyed using this technology during class.	31	6.39***	0.80
	4. I would like to see this technology used in other classes.	31	6.10***	1.11
	5. The use of the technology helped me learn the material.	31	5.81***	1.08
	6. The use of the technology helped me understand the material.	31	5.58***	1.46
	7. The use of the technology encouraged me to prepare for class.	31	5.06***	1.50
	8. The use of the technology encouraged me to attend class.	31	6.10***	0.94
	9. The use of the technology encouraged me to pay attention in class.	31	6.03***	1.08
	10. I found the instant feedback helpful.	31	6.16***	0.86
	11. I made use of the feedback provided in class to guide my study of the material.	31	5.48***	1.31
BCOM	1. The technology was easy to use.	24	6.83***	0.38
	2. I felt comfortable using this technology.	24	6.92***	0.28
	3. I enjoyed using this technology during class.	24	6.00***	1.38
	4. I would like to see this technology used in other classes.	24	5.50***	1.67
	5. The use of the technology helped me learn the material.	24	5.38***	1.35
	6. The use of the technology helped me understand the material.	24	5.46***	1.28
	7. The use of the technology encouraged me to prepare for class.	24	4.58*	1.50
	8. The use of the technology encouraged me to attend class.	24	5.75***	1.87
	9. The use of the technology encouraged me to pay attention in class.	24	5.50***	1.59
	10. I found the instant feedback helpful.	24	6.08***	1.02
	11. I made use of the feedback provided in class to guide my study of the material.	24	4.79*	1.69

^aMeans were compared to the mid-point of 4 using one-tailed t-tests. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Exam scores were used as an objective measure of student learning. Comparisons were made between the clicker section and the traditional section for each exam and for the average exam score for each student. The results presented in Table 2 indicate that the exam scores in the experimental sections were higher than in the control sections. This suggests that the use of the PRS enhanced student learning as measured by exam performance. However, the differences in exam scores between the groups were not statistically significant. Therefore, it must be concluded that exam performance was not significantly impacted by the use of the PRS technology.

Class	Assessment Item	Clicker Section			Traditional Section			Mean Diff	t-stat ^a
		n	Mean	Std Dev	n	Mean	Std Dev		
ACCT	Exam 1	33	71.27	18.13	31	67.26	17.14	4.01	0.910
	Exam 2	33	79.51	17.97	31	75.03	15.46	4.48	1.072
	Exam 3	33	75.51	13.79	31	70.99	22.33	4.52	1.033
	Exam 4	33	80.50	10.58	31	79.72	10.70	0.78	0.291
	Final Exam	33	77.24	10.32	31	74.71	10.30	2.53	0.982
	Exam Average	33	76.80	11.12	31	73.54	12.30	3.26	1.111
BCOM	Exam 1	25	84.16	9.34	24	81.83	10.78	2.33	0.806
	Exam 2	25	80.16	7.74	24	78.67	12.92	1.49	0.488
	Exam 3	25	82.88	8.91	24	81.79	10.73	1.09	0.385
	Exam Average	25	82.40	7.56	24	80.77	10.41	1.63	0.628

^aMeans were compared using one-tailed t-tests. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

CONCLUSION

The results of this study mirror those of other studies investigating the usefulness of Personal Response Systems (ie. Carnaghan and Webb, 2007; Nelson and Hauck, 2008; Stowell and Nelson, 2007; Watkins and Sabella, 2008). Subjective measures of effectiveness appear to indicate an overall positive student response to the technology. Unfortunately, objective measures do not indicate the anticipated positive learning outcomes. Although our results are similar to prior studies, we believe that this study contributes to the literature by providing further evidence from a new setting (small class business course) and using a broader objective performance measure (exam scores) than previously considered. Consequently, it must be concluded that there is little evidence to support the claims made by textbook publishers about the astounding improvement in student learning that occurs with the use of a PRS.

In 1924, a series of studies was conducted to assess the effects of changes in the working environment on productivity of workers at Western Electric's Hawthorne plant in Chicago (Mayo, 1933). The results indicated that regardless of the change, productivity increased. This phenomenon has become known as the "Hawthorne effect" and is a classical example of social influences in the workplace. Productivity increased not because of what was being manipulated, but because of worker's perceptions that management was taking an interest in their well-being. Why should the classroom be any different?

It is entirely possible that student perceptions of the effectiveness of this technology are related more to the extra attention a professor must devote to the class than to any benefits of the technology itself. In these tight budgetary times, where monies for "cutting-edge" technologies may be difficult to find, perhaps we should look for ways to "change" our classes that would create this same phenomenon without the expense.

REFERENCES

- Brokaw, A.J. and T.E. Merz, "The effects of student behavior and preferred learning style on performance." *Journal of Business Education*. Spring 2000, V. 1, pp 44-53.
- Bryant, S. and J. Hunton, "The use of technology in the delivery of instruction: Implications for accounting educators and education researchers." *Issues in Accounting Education*. 2007. V. 15, No. 1, pp 129-163.
- Carnaghan, C. and A. Webb, "Investigating the Effects of Group Response Systems on Student Satisfaction, Learning, and Engagement in Accounting Education." *Issues in Accounting Education*. 2007, V. 22, No. 3, pp 391-409.
- Clarke, I., T.B. Flaherty, and S. Mottner, "Student Perceptions of Educational Technology Tools." *Journal of Marketing Education*, 2001, V. 23, No. 3, pp 169-177.
- Hamer, L.O., "The Additive Effects of Semistructured Classroom Activities on Student Learning: An Application of Classroom-Based Experiential Learning Techniques." *Journal of Marketing Education*. 2000, V. 22, No. 1, pp 25-34.

- King, D. and S. Joshi, "Gender Differences in the Use and Effectiveness of Personal Response Devices." *Journal of Science Education & Technology*. 2008, V. 17, No. 6, pp 544-552.
- Marks, R.B., "Determinants of Student Evaluations of Global Measures of Instructor and Course Value." *Journal of Marketing Education*, 2000, V. 22, No. 2, pp 108-119.
- Mayo, E., *The Human Problems of an Industrial Civilization*. 1933, New York: MacMillan.
- Nelson, M.L. and R.V. Hauck, "Clicking to Learn: A Case Study of Embedding Radio-Frequency based Clickers in an Introductory Management Information Systems Course." *Journal of Information Systems Education*, 2008, V. 19, No. 1, pp 55-64.
- Robinson, S. and J. Ritzko, "Increasing Student Engagement Through Electronic Response Devices." *Proceedings of the Academy of Educational Leadership*. 2006, V. 11, No. 1, pp 79-82.
- Stowell, J.R. and J.M. Nelson, "Benefits of Electronic Audience Response Systems on Student Participation, Learning, and Emotion." *Teaching of Psychology*. 2007, V. 34, No. 4, pp 253-369.
- Thompson, A., M. Simonson, and C. Hargrave, *Educational technology: A review of the research*. 1992, Washington, DC: Association for Educational Communication and Technology.
- Trees, A.R. and M.H. Jackson, "The learning environment in clicker classrooms: Student processes of learning and involvement in large university-level courses using student response systems." *Learning, Media, & Technology*. 2007, V. 32, No. 1, pp 21-40.
- Watkins, E.P. and M.S. Sabella, "Examining the Effectiveness of Clickers on Promoting Learning by Tracking the Evolution of Student Responses." *AIP Conference Proceedings*. 2008, V. 1064, No. 1, pp 223-226.
- Young, M.R., B.R. Klemz, and J.W. Murphy, "Enhancing learning outcomes: The effects of instructional technology, learning styles, instructional methods, and student behavior." *Journal of Marketing Education*. 2003, V. 25, No. 2, pp 130-142

ACHIEVE: A Career and Professional Development Program for Undergraduate Business Students

Karl D. Majeske, Oakland University, Rochester, Michigan, USA

James S. Serocki, Oakland University, Rochester, Michigan, USA

ABSTRACT

The faculty in the School of Business Administration at Oakland University identified the need to supplement the traditional business curriculum with a career and professional development program. To this end, it was decided to implement the “ACHIEVE” program to assist students with selecting a career that matches their interests and skill set, and ideally increase job placement in their chosen field. ACHIEVE consists of four zero credit courses – taken one per year during a student’s undergraduate education. Each course consists of a collection of tasks such as attending a student organization meeting, networking with professionals and participating in a job fair. A student survey administered at the end of the first year served as one assessment tool that provided feedback to modify the program for the second year. A summary of the “lessons learned” is provided in this article which may benefit others who develop similar programs.

INTRODUCTION

Oakland University (OU), located in Rochester, is one of fifteen state universities in Michigan. Fall term 2008, OU had an undergraduate enrollment of 14,397 with a median age of 21 and consisted of 61% female and 39% male students. Almost half of OU’s undergraduate students attended high school in the same county as OU and over 80% attended high school within 30 miles of campus. OU has accommodations for 1,951 students (of the 18,169 total) to live on campus and can be described as a regional commuter school. The School of Business Administration (SBA) at OU graduated 374 undergraduates during the 2006-2007 academic year and 356 in 2007-2008. In the 2008-09 academic year, SBA enrolled 487 new students: 279 (57%) students classified as first time in any college (FTIAC), and 208 transfer students mostly from local community colleges.

The scope, goals and approach of higher education must continually evolve to match the needs and learning styles of the current student body. Twenty years ago, academics needed to calibrate pedagogy and delivery methods for the shift from Baby Boomers to Generation X and then ten years later to Generation Y. Currently, we are at the cusp of the Generation Y to Generation Z (a.k.a. the iGeneration) transition that (potentially) will impact learning styles and education delivery methods more than past transitions. These students have grown-up in a technology heavy environment and become accustomed to instantaneous feedback that they expect to be positive. One major issue we face is how to prepare them for the workforce in a way they will embrace and ultimately benefit from.

In anticipation of this evolutionary process the Dean’s office conducted a survey of the faculty at the School of Business Administration (SBA) at Oakland University (OU) in Rochester Michigan in Winter of 2006 to identify interest and support for a variety of possible changes. The topic that garnered the highest support among the faculty was to implement a career and professional development program for the undergraduate students (Williams and Fetter, 2009) that placed emphasis on preparing graduates for job placement (Morey, 2001). This result gave support to the notion that the role of the SBA should expand beyond the teaching of the traditional business disciplines. In other words, the faculty recognized that students now value career preparation and job placement. These functions are handled centrally at OU by Career Services that supports all students within the University. Some faculty believed that creating some SBA specific support functions would enhance the placement of business undergraduates within their field. This presented an opportunity to supplement the standard business curriculum that emphasizes critical thinking and mastery of discipline content (Myers, 2008) with career and professional development. In the Fall of 2006 a task force of SBA faculty was formed to explore the career and professional development concept and make a recommendation for how to proceed. The task force recommended a required

program that leveraged Career Services resources and consisted of a blend of curricular, extra curricular and co-curricular learning opportunities. The program would supplement the job placement functions supported throughout OU by Career Services. In Fall of 2007 the SBA formed a committee to develop and implement such a program. This two-year process resulted in the Accomplish Career Hopes Including Excellent Valued Employment (ACHIEVE) program launched in Fall of 2008.

The objective of the ACHIEVE program is to help students determine their selected business major and course plan, match their career choices with their talents, find employment within their chosen field, and make immediate and valuable contributions to their employers. As part of the ACHIEVE program, students will identify various business career paths, obtain within major career specific information, and have exposure to employment trends and forecasted future opportunities. Students will obtain hands on knowledge of business sectors and functional areas by interacting with business professionals at various stages of their careers. The ACHIEVE program assists students with identifying and obtaining support services and resources to develop an understanding of the work world, aid in career planning, and optimize future employment options. The ACHIEVE program prepares students for finding suitable employment by developing effective job search skills, the ability to market oneself in a career fair, and presenting a professional image in the job interview setting. However, we recognize that providing students with a realistic preview of career specific industry may not, in and of itself, be the key to early career satisfaction (Dickerson, 2009).

This paper presents an overview of the genesis of the program and provides background and rationale for the final program design. The next section provides a summary of the design issues considered in the ACHIEVE program's conceptual design. Then appears a detailed description of the ACHIEVE program curriculum. This is followed by a summary of the first year assessments methods. Next appears a section on the lessons learned and the paper ends with a conclusion.

CONCEPTUAL DESIGN

This section outlines the steps we followed to develop a high level design of ACHIEVE - the SBA career and professional development program. The initial task force consisted of one faculty representative from each of the four departments within the SBA along with representatives from Career Services, the SBA undergraduate advising office and the dean's office. To begin defining the program, each faculty representative met with their department to develop a list of topics that the program could potentially cover. The committee then consolidated these into categories and identified some general themes. For example, after completing the core business curriculum – generally at the end of their sophomore year – students declare one of 12 majors within the SBA. Students would benefit from a better understanding of the curriculum differences between the majors and the types of careers a given major would support. Also, a high percentage of SBA alumni reside in Michigan and presented a potential resource to a career and professional development program. Incorporating alumni in the program could also foster longer term relationships and play a role in fundraising. In addition, since a majority of the freshmen at OU do not live on campus, the new program could help to assimilate and acculturate new students into the SBA. From this faculty input we identified four key program objectives:

- Assist students with relevant information in selecting a major.
- Provide students with networking skills to expose them to the business environment.
- Provide students connections to the alumni network so they can experience a business career perspective.
- Help create a community of students exchanging ideas and concerns.

Establishing objectives first allows evaluating other design attributes in terms of their ability to accomplish the objectives. These objectives help position the SBA as a transitional institution - the connection from high school to the workplace – well suited to respond to changes in labor market demand (Mobley, 2001).

Very early on, we determined that the program should span the entire four-year business curriculum rather than focus on the freshman experience (Case, 2006; Johnson, 2009). We also determined that in addition to hosting interviews with potential employers, Career Services conducted a variety of seminars and workshops that could be

included in a professional development program. Rather than replace the role of Career Services with new SBA specific functions we decided to make Career Services a partner. Career Services in turn agreed to have some SBA specific offerings of seminars and workshops, and committed to developing new material if necessary. Next we wanted to develop a brand identity for the program. Initially, this consisted of a program name and a graphic element or symbol to designate the program. We agreed to develop a program name that has a meaningful acronym and settled on ACHIEVE (Accomplish Career Hopes Including Excellent Valued Employment). Creating a symbol to identify ACHIEVE became more difficult than expected yet we continued to pursue this so that we could use the symbol on documents and begin developing a brand image. Ultimately, we settled on the four step stair symbol of Figure 1 to represent a four year upward progression toward matriculation.



Figure 1: ACHIEVE Stair-Step Graphic Element

The next steps were to develop a mission statement and learning objectives. We developed two versions of the mission statement. The short version “Inspire and guide students towards their ideal career in business, and provide skills to equip students for excellence in their chosen fields” clearly and succinctly stated the ACHIEVE mission. This version could be used in a letterhead or as a tag line in communications. A longer version of the mission statement would properly document the program mission and serve as a guide during further development. The longer version of the mission statement identified three areas which appear below. Detailed learning objectives were then developed for each of the three segments of the mission.

Exposure to Industry — The ACHIEVE program will describe the variety of career alternatives available and help students determine which career options best fit their talents and desires. Opportunities to explore the business environment will include short courses, alumni networking, job shadowing, and internships. The ACHIEVE program will also help students target their coursework toward their chosen professional fields.

Job Acquisition Skills — The ACHIEVE program will provide students with the necessary tools and support to successfully complete the job search process. Students will improve their job acquisition skills through activities such as networking, resume writing and interview training.

Workplace Skills — The ACHIEVE program will allow students to build professional skills that will initially distinguish them from their peers, ensure that they will make immediate and valuable contributions to their employers, and help them reach their full career potential in the long run. Examples include teamwork, oral and written communication, and critical thinking. To master each skill, students will learn and apply simple, effective, and practical tools multiple times throughout their academic program.

ACHIEVE CURRICULUM

Various methods were evaluated to determine the best way to incorporate ACHIEVE into the SBA curriculum. We wanted to make the program required for undergraduate students and felt that creating courses for ACHIEVE would best support this objective. However, two main drawbacks to this strategy appeared to be roadblocks. This first issue was where to include the credits in the student’s course distribution. Do they count as electives or should we consider them part of the core? If they are in the core do we increase the core credits or eliminate another requirement? Unfortunately, there appeared to be no consensus on how to approach including the courses in the curriculum. The second issue had to do with the financial implications. Students pay tuition by the credit hour so they would be paying for ACHIEVE yet we did not intend the program to directly contribute to their business education. Many faculty members felt this financial cost to students would create a negative perception of the

program. Ultimately, we adopted a strategy that addressed both these issues. ACHIEVE would be developed as four zero credit hour courses, intended to tie to the four year undergraduate experience. We made the courses part of the degree requirements thus ensuring that all students would participate and since they had zero credit hours associated with them the students would not incur any additional expense.

The detailed curriculum development began with developing a list of tasks, each linked to portions of the learning objectives. For example, completing Career Services interviewing workshop was one task on the list and it was linked to the develop interview skills learning objective. Similarly, the Personality Style Assessment task supports the objective of matching a career with a student's specific skill set. Initially, the plan was to allow students to complete a course by selecting a set of tasks that met certain constraints. For example, students must complete the Introduction to Career Services (that includes creating their on-line account) before they can attend other Career Services activities. This led us to require the Introduction to Career Services seminar during a student's first semester in the SBA. Also, students must complete the resume writing workshop (which includes posting their resume on-line) prior to scheduling interviews. To facilitate task scheduling and tracking student progress, the final curriculum design of ACHIEVE specified a fixed set of tasks for each course. Three of the courses (SBC 199, SBC 299 and SBC 499) would be common for all students. The SBC 399 course taken during a student's third year is intended to prepare the student for their job search process and we decided it was best to focus that by major. This allowed each area to tailor the SBC 399 course to finding employment in a specific discipline. After a great deal of deliberation, we agreed to have all four ACHIEVE courses graded as pass/fail. Making each course a prerequisite for the next (e.g., SBC 199 is a prerequisite for SBC 299), forces students to take them one at a time and in the proper order. Requiring major standing for the SBC 399 course ensured that students would take the correct course for their major and not take the course too early in their matriculation. Below appears the course description and tasks for each of the three common courses.

SBC 199 - ACHIEVE I. Introduction to functional areas in business, careers in business, Career Services, and the job search process. Students must register for SBC199 their first term as a pre or undecided business major (or first term in the SBA). SBC 199 consists of five tasks:

- 1) Introduction to functional areas of business and careers in business.
- 2) Introduction to using the library for business research.
- 3) Introduction to Career Services.
- 4) Attend a student organization meeting.
- 5) Networking with business professionals.

SBC 299 - ACHIEVE II. Focus on preparing students for the job search process. Students will develop materials and skills to support one-on-one job interviews. Completion of SBC 299 is a requirement for admission to major standing. SBC 299 consists of five tasks:

- 1) Introduction to careers within each major and perspective on future business trends.
- 2) Language of Wall Street
- 3) Resume / cover letter / thank you note writing
- 4) Attend a student organization meeting
- 5) Personality Style Assessment

SBC 399 - ACHIEVE III. Guide students through the job search process within their major. This course has a prerequisite of SBC 299 and requires major standing. Each of the majors within the SBA will develop a major specific section of SBC 399 with their own set of tasks.

SBC 499 - ACHIEVE IV. This course is intended to assist students with their acclimation to the workplace environment, the first major post graduation adjust students face (Ng and Feldman, 2007). This course has a prerequisite of SBC 399 and requires senior standing. SBC 499 consists of five tasks:

- 1) From Student to Professional – A Transitional Workshop.
- 2) First Year Work Experiences – Biggest Surprises as a New Professional

- 3) Preparing for and Participating in Corporate Meetings
- 4) Knowing and Understanding Your Supervisor's Expectations
- 5) Career Development Inventory – Completing the ACHIEVE experience

Lastly, we needed to identify an implementation strategy. Launching the entire program at one time would require developing all of the tasks and create coverage issues. For example, what course or courses would be required for a student who is a junior when the program is launched? To distribute the development resource requirement over a long time period and address the coverage issue, we decided to utilize a phased implementation strategy. Specifically, SBC 199 would be launched in Fall 2008 and ACHIEVE would be required of all in-coming freshman from that date forward. This allows developing one course per year for four years. The ACHIEVE program and implementation strategy are similar to Champlain College in Vermont (Bushong, 2009). Champlain redesigned their undergraduate curriculum – to be phased-on with only freshman participating the first year - to prepare students for their entire career rather than qualify them to obtain a job upon graduation. To reduce the instructor and administrative workload, SBC 199 was developed as a hybrid course that contained on-line portions. OU utilizes an on-line course management system and we incorporated many of the features in the SBC 199 course. Specifically, on-line components consisted of task registration, pre and post task quizzes, reading material, the entire introduction to the library task, the end of term survey and tracking of task completion.

PROGRAM ASSESSMENT

Assessment takes on many forms. In terms of higher education, governmental agencies use institutional efficiency, consumer satisfaction and job placement while university administrators and faculty use measures that reflect the quality of the education (Dunn, 2003). McLendon, Hearn and Deaton (2006) suggest retention and graduation rates, undergraduate access, measures of institutional efficiency, student scores on licensure exams, job placement rates, faculty productivity, and campus diversity as measures of success. For ACHIEVE, the ultimate measure of success would be determining if the placement of graduates in jobs within their major has improved as a result of ACHIEVE. While the phased implementation strategy has many benefits, one downside is that the first students will not complete the curriculum until 2012. This creates a long time lag between program design and the ability to evaluate the overall program effectiveness. After completing the implementation and graduates have completed ACHIEVE we will be able to assess the program's impact on job placement. In the mean time, we must seek other means of program assessment.

Another aspect of assessment is to take data on the program itself and use the feedback to identify changes to improve the program. During the first year of ACHIEVE, we instituted two such programs. Near the end of fall term, we used a focus group to obtain feedback on ACHIEVE. The group consisted of approximately ten students and was facilitated by a marketing professor not involved in ACHIEVE design or development to eliminate potential bias. The group identified logistical, scheduling and curricular issues such as task timing, lack of registration reminders and which tasks the students liked and disliked. This information was used to modify the day-to-day operation of the program as well as begin to formulate changes to the SBC199 curriculum for the second year. There was also continuous informal feedback gathered by the committee from the ACHIEVE advising staff who had direct contact with ACHIEVE students who presented various questions and issues. Another form of feedback consisted of an end of term course survey of the students.

Students took the survey on-line and it was completed by 124 students. First, the students were asked to rate their overall ACHIEVE experience on a four point scale with the following results: 11.29% Excellent, 25.0% Very Good, 45.97% Good and 12.10% Poor. While a higher proportion of the Excellent rating would have been preferable, only 12.10% of students gave the program a poor rating. The rating question was followed by four open-ended questions that required the students to input an answer. From the responses to the first question "The hardest part about ACHIEVE - SBC 199 was:" we gleaned two key points (scheduling and communication) that reinforced the results of the focus group. To complete four of the five tasks the students had to attend an event that was not part of their regular course schedule. Many survey respondents identified the specific task timing and variety of times to choose

from as inhibitors to completing the tasks. They stated that the tasks conflicted with other activities, which made scheduling difficult. In the case of attending a student organization meeting, the scheduling does not fall within the purview of the ACHIEVE program. However, based on this feedback we will attempt to balance scheduling networking events in the evening to accommodate the volunteer participants with events during the day which students indicated they would prefer. The second issue of communication resulted in one major change to the program that directly and indirectly should address most of the communication issues identified by the students. The change is the addition of an ACHIEVE orientation as a required task in the SBC 199 curriculum. This will expose the students to the program objectives, the SBC 199 course website and they will be encouraged to register for all five tasks at the beginning of the term.

Table 1 below shows the results of the favorite task portion of the question “What was your favorite task, and why?” The introduction to functional areas of business and careers in business task was implemented as Business Buzz. The task provided a learning element through a pre-reading component (by major) and challenged the students using a TV game show competitive interactive question format. Students liked Business Buzz because it was fun and interactive. The students who choose Networking indicated they liked the ability to talk to professionals and learn about potential careers from people working in the field. Over 77% of the survey respondents choose one of these two tasks that required interaction as their favorite while none of them choose Library Research, the only purely on-line task. For the second year, the Library Research task will be replaced with a personal finance task. Rather than remove the Library Research task from the curriculum it will be pushed back to either SBC 399 or SBC 499. Students provided a variety of responses to the question “If I could change anything about the tasks, it would be:” The most frequent response at 25.8% was “nothing”. The second highest response was having more interactive or fun tasks, consistent with responses regarding their favorite task. Another high response item was the on-line quizzes associated with each task. While the students found them unnecessary we decided to retain them in the course. In response to the question “What I liked best about ACHIEVE:” the most often cited item at 35.5% was that the program was informative and helpful. We took this as a very positive evaluation of the first year of the program.

Table 1. Response to question “What was your favorite task, and why?”

Business Buzz	Library Research	Career Services	Student Orgs	Networking	None/All equally
40.16%	0.00%	5.51%	8.66%	37.01%	8.66%

The open ended questions were followed by 21 questions that students answered on a four point scale. The questions, along with a summary of the responses, appear in Table 2 below.

In some cases these questions reinforced the responses to the open ended questions and in other cases they contradicted those responses. For example, 89.9% of respondents either agreed or strongly agreed that they are more aware of the value of networking and 87.1% either agreed or strongly agreed that they liked Business Buzz both consistent with earlier findings. However, 92.7% agreed or strongly agreed that learning to use the library is important yet no one selected this as their favorite task. This suggests that the topic is valued and important but the task itself needs to be modified or placed elsewhere in the sequence. Notice that 87.1% agreed or strongly agreed that Career Services can help develop valuable skills and 92.8% agreed or strongly agreed they can help in career development compared with only 5.51% selecting Career Services as their favorite task. This suggests that the students developed an understanding, and recognize the value of Career Services from the task yet didn’t particularly enjoy the experience. One of the goals of the program was also to better coordinate existing services, such as Career Services and certain departmental activities, as part of an integrated career program for business students.

Table 2. Summary of Survey Questions

Question	Strongly Agree	Agree	Disagree	Strongly Disagree
I was both inspired and motivated by the professionals.	33.1%	56.5%	8.9%	1.6%
I am more aware of the personal and professional value of networking.	49.2%	40.3%	8.9%	1.6%
The networking event helped me to be more comfortable when introducing myself.	26.6%	53.2%	16.9%	3.2%
I enjoyed the game show, "Business Buzz."	45.2%	41.9%	8.1%	4.8%
The game show was helpful in defining business majors for me.	24.2%	56.5%	12.9%	6.5%
The content was challenging.	20.2%	54.0%	19.4%	6.5%
Participating in the student organization meeting was helpful to me in choosing a business major.	10.5%	38.7%	37.1%	13.7%
Student organizations offer valuable networking opportunities.	22.6%	62.9%	12.1%	2.4%
Attending a student organization meeting gave me valuable information about that organization.	23.4%	52.4%	16.9%	7.3%
The Library Research task taught me efficient and effective research methods.	25.8%	60.5%	10.5%	3.2%
This task was interesting.	12.1%	39.5%	39.9%	10.5%
This task made research easier than I expected.	13.7%	62.1%	19.4%	4.8%
Learning to use the Library is important to my college career.	41.9%	50.8%	6.5%	0.8%
The workshops offered by Career Services will help me develop valuable skills.	23.4%	63.7%	11.3%	1.6%
There are many ways Career Services can help me in my career development.	33.1%	59.7%	5.7%	1.6%
It is valuable to me to be able to have online help from Career Services.	29.0%	62.1%	8.1%	0.8%
I thought the pre-reading helped me to complete the tasks.	26.6%	54.8%	16.1%	3.2%
The quizzes helped me to retain the information in the pre-reading.	16.1%	61.3%	19.4%	3.2%
It was easy to find events that fit my schedule.	12.1%	41.1%	35.5%	11.3%
I understood how to cancel an event.	39.5%	44.4%	12.9%	3.2%
My questions were quickly answered when I needed help.	22.6%	59.7%	13.7%	4.0%

LESSONS LEARNED

The SBA at OU successfully began implementation of the ACHIEVE program with the launch of SBC 199 in Fall 2008 and will continue the roll-out over the next three academic years. Our primary goal was to provide business students a progressive four year curriculum that would help them plan their major course of studies with a view toward successfully finding not only a job but also a business career. From conceptualization of the idea throughout the development process, we had to keep a primary focus on helping the students in their business career planning. This may sound like an easy task but there are many competing objectives including academic requirements, financial resources, deadlines and obtaining a consensus among the committee members, faculty and administration. Although sometimes frustrating, we found it helpful to get as much input from the interested parties upfront and provided the faculty with updates as development progressed.

The ACHIEVE program is still evolving, as it should, and we continue to monitor successes and failures and make appropriate adjustments. We are currently about to launch the second course of the program, SBC 299 for sophomores in the Fall 2009, and will offer a revised version of SBC 199 for freshmen. During the 2009-2010 academic year, we will continue to develop the major specific SBC 399 courses and SBC 499 (with significant departmental input). While we used a committee format to design, develop and initially operate the program, this structure became cumbersome during detailed curriculum development and first year program operations. A lesson learned was to be more realistic about the amount of time required to develop curriculum. Since these career and professional development courses span functional areas and incorporate non-academic units they require agreement from a large group of stakeholders. We attempted to accomplish this by developing SBC199 in a committee context. A better approach may be to develop a course with one or two faculty who then work with the various stakeholders to develop buy-in and build consensus. Additionally, despite all the planning and discussion, there seems to be an endless stream of new issues that arise such as how to time compress the ACHIEVE program for transfer students and should the program be mandatory for a new student seeking a second undergraduate degree in business. We have now identified three distinct administrative support functions: curriculum development that will transition to curriculum revision and update, course operations, and setting policies and procedures. In hindsight, these three functions should have been separated prior to the launch of the first course and handled by separate groups or committees.

CONCLUSION

In summary, the ACHIEVE program is off to a successful start in providing business students a structured progressive program to help them formulate their business careers. Much work is still ahead of us and we will continue to monitor student success resulting from the program and make adjustments as required. For those business schools considering a similar program, we hope this paper has provided some insights as to how the process evolved for us. We suggest that you carefully consider the time and resources required – not only for design and development but for course administration as well - and get commitments upfront for those who will work in the development and implementation, and resources available. You may also find as we did, that your various departments are probably offering several aspects of such a targeted program but need to be packaged appropriately. And lastly, make sure you have the support and commitment among the stakeholders (Dean's office, faculty and university administration) for the entire process of development through program implementation as many unexpected adjustments will be required.

ACKNOWLEDGMENT

While we have served as the authors of this paper, we represent just two of the many people who played a role in designing, developing, implementing and overseeing ACHIEVE in the SBA at OU. The two-year design process began in the 2006-2007 academic year with the *Career & Profession Development Skills Task Force* comprised of: Sherman Folland, Donna Free, Karl Majeske, Mark Simon, Wayne Thibodeau and Tricia Westergaard. This followed in 2007-2008 with the *Career and Professional Development Committee* comprised of: Cynthia Coppins-Miree, David Doane, Donna Kellstrom, Karl Majeske, Brenda Paine, Jim Serocki, Mark Simon, Wayne Thibodeau, Rose Wedemeyer and Tricia Westergaard. ACHIEVE was launched in Fall 2008 and on-going development and operations were handled by the *ACHIEVE Oversight Committee* consisting of: Mukesh Bhargava, Fred Hoffman, Karl Majeske, Jim Serocki, Jonathan Silberman and Tricia Westergaard. ACHIEVE would not have been successful without the support of many others including: Cathy Cheal, Pearla Delao, Julie Dermidoff, Mariela Gunn, John Henke, Jill Lawson, Doug Meese, Nikki Owens, Myra Roberts, Laurie Shano, Michelle Serafino, Mohan Tanniru, Ron Tracy and Rebekah Wilson.

REFERENCES

- Bushong, S., "Revamped Curriculum at a Vermont College Focuses on Life Skills and Career Goals.(Education in 3 Dimensions)." *The Chronicle of Higher Education*. 2009. Vol. 55, No 27.
- Case, C., "Effectively Designing and Implementing the Successful Business Freshman Experience Course." *Academy of Educational Leadership Journal*. 2006. Vol 10, No 1, pp. 105-117.
- Dickerson, J., "The Realistic Preview may not Yield Career Satisfaction." *International Journal of Hospitality Management*. 2009. Vol 28, No 2, pp. 297-299.
- Dunn, D., "Accountability, Democratic Theory, and Higher Education." *Educational Policy*. 2003. Vol. 17, No 1, pp. 60-79.
- Johnson, M., "The Role of Peer Leaders in an honors Freshman Experience Course." *Honors in Practice*. 2009. Vol 5, pp. 189-197.
- McLendon, M., J. Hearn and R. Deaton, "Called to Account: Analyzing the Origins and Spread of State Performance-Accountability Policies for Higher Education." *Educational and Policy Analysis*. 2006. Vol 28, No 1, pp. 1-24.
- Myers, C., "Divergence in Learning Goal Priorities Between College Students and their Faculty." 2008. *College Teaching*, Vol 56, No 1, pp. 53-58.
- Mobley, C., "The Impact of Community Colleges on the School-to-work Transition: A Multilevel Analysis." *Community College Review*. 2001. Vol 28, No. 4, pp. 1-30.
- Morey, A., "The Growth of For-Profit Higher Education." *Journal of Teacher Education*. 2001. Vol 52, No. 4, pp. 300-311.
- Ng, T. and D. Feldman, "The School-to-work Transition: A Role Identity Perspective." *Journal of Vocational Behavior*. 2007. Vol 71, No 1, pp. 114-134.
- Williams, C. and R. Fetter, "Real Challenges, Real Change." *BizEd*. 2009. Vol 17, No 1, pp. 46-47.

Karl D. Majeske, PhD is an Associate Professor of Quantitative Methods Management in the School of Business Administration at Oakland University in Rochester Michigan. He received the B.S., M.S., and Ph.D. degrees in industrial and operations engineering from the University of Michigan in 1985, 1991 and 1995, respectively. Dr. Majeske's research interests include optimal decision criteria, automotive body manufacturing, and warranty data modeling.

James S. Serocki is an Assistant Professor of Accounting in the Department of Accounting and Finance, School of Business Administration, Oakland University. He has a JD, LLM, MBA and BS. His research interests include U.S. income and international taxation.

Incorporating Academic Integrity into an Online Information Assurance Program

Jeffrey A. Livermore, Walsh College – Troy, MI, USA

ABSTRACT

Plagiarism and cheating is on the increase around the world. Academic misconduct hurts the student committing the offense, other students who know about the offense, the faculty, and the academic reputation of the school where the misconduct occurs. Information Assurance (IA) programs are not exempt from academic misconduct and can be seriously damaged by incidents at their host schools. Information Assurance is a relatively new academic discipline that addresses the protection of information systems by balancing their confidentiality, integrity, and availability. Because the graduates of IA programs go on to trusted positions in the military, law enforcement, legal firms, consulting, and national intelligence, it is important that these graduates have strong ethical backgrounds. Walsh College has found students in their completely online Information Assurance program that had plagiarized and cheated in their coursework. This paper presents the problem, suggests some methods of minimizing academic misconduct, presents best practices from a variety of schools, and hopefully begins a dialog on what can be done to eliminate academic misconduct from the Information Assurance educational system.

INTRODUCTION

Plagiarism and cheating is increasing in higher education (Bramble & Stevenson-Clarke, 2005). Cheating is becoming more common in universities and Information Assurance programs are not exempt from students committing academic misconduct. In a survey of more than 18,000 students from 23 colleges, 38% of the students admitted to cut and pasting material into their papers on at least one occasion (Rimer, 2003). Plagiarism may be defined as copying from previously published work or original ideas without citing the source of the work or ideas (Berk, 1991). Plagiarism may involve copying the ideas of others or even the same author, which is called self-plagiarism (Berk). Internet technologies have made it easier than ever for students to plagiarize (Mainka, Raeburn, & Earl, 2006). These same technologies have also made it easier to identify plagiarism. Academic misconduct can also occur during original research projects. Research misconduct may occur by falsifying data, fabricating data, research population selection, duplicating existing research and claiming originality, and improper handling of research data (Jones, 2002).

Several studies have been conducted to profile students who commit academic misconduct. A study at a U.K. university found that male students were twice as likely to cheat as female students, undergraduates were more than twice as likely to cheat as graduate students, and non-native English speakers were ten times more likely to cheat than native English speaker (Mainke, et al., 2006). Students are more likely to commit academic misconduct if they are unsupervised or not proctored during examinations (Howard, 2001; Harmon & Lambrinos, 2008).

The causes of academic misconduct vary. Much of the literature attributes the increase in academic misconduct to either contextual factors or to individual factors (McCabe & Trevino, 1997). Some of the individual factors associated with academic misconduct are that cheating students tend to be male, younger (17-22), and be poor academic performers (Bramble & Stevenson-Clarke, 2005). Other individual factors associated with academic misconduct are participation in intercollegiate athletics, receiving a non-academic scholarship, and participation in extra-curricular activities (McCabe et al.).

The increase in academic misconduct may have a generational component. The members of Generation X are committing more academic misconduct than members of their parent's generation. In a survey originally conducted in 1963 and repeated in 1993, the number of students admitting academic misconduct greatly increased. The number of students admitting to plagiarism decreased from 30 percent to 26 percent but the number of students

admitting to copying other student's exam answers increased from 26 percent to 52 percent and the number of students admitting to unauthorized collaboration increased from 11 percent to 49 percent (Turner et al., 2003). This increase is of concern to Information Assurance professionals because there is a strong relationship between student academic misconduct and their later attitude toward unethical behavior in the workplace (Bramble et al., 2005).

Contextual factors strongly associated with academic misconduct are membership in a sorority or fraternity (McCabe et al., 1997). The attitudes of a student's peers influence the student's willingness to commit academic misconduct. Students are less willing to commit academic misconduct if they believe that their peers will report any observed misconduct or if the penalties for academic misconduct are severe enough (McCabe et al.). Some students may commit academic misconduct because they value obtaining an academic credential more than the learning associated with completing the assignment or course (Howard, 2001).

The problem of plagiarism is not limited to students. Cases of faculty members committing plagiarism from their own work and the work of others are being reported and followed up on (Chalmers, 2006). Schools and journals have often downplayed faculty plagiarism to avoid embarrassment and sanctions (Chalmers; Eysenbach, 2000). It is important that faculty serve as role models for academic integrity to their students and the university environment (Henry, 2004).

Online Pedagogy

Academic conduct in online programs may be higher than in on-ground programs as people cheat more when they feel disconnected from their faculty (Rowe, 2004). Many IA programs are completely online and allow students to do everything from application to graduation without ever setting foot on a campus. Online pedagogy must take the nature of the online environment into consideration. It is easier to cheat online simply because it is difficult if not impossible to determine what resources the student has access to during examinations (Rowe). Online students typically take their examinations under unsupervised conditions with access to books, reference materials, and the Internet. This is much different than the testing conditions faced by on-ground students.

Some online IA programs are run in a cohort format where a cohort of students takes all of the same courses on the same schedule. Interacting in multiple group projects with the same students over a period of years can create strong social bonds that impact academic performance. Carrell, Malmstrom, and West (2005) discovered that there is a peer influence on cheating and that each college cheater creates 0.55 to 0.80 new college cheaters. The incidence of cheating is higher in close knit groups like cohorts, fraternities, and sororities. Older students in these close social groups may pass on exams, papers, and case studies to new students. In some cases these legacy assignments are used as study aids but in some cases students will resubmit the work of the older students as if it were their own. A higher level of peers that cheat increases the likelihood that an individual will cheat (Carrell).

Mitigating Actions

Schools can take many steps to mitigate the risks of academic misconduct. The first step to be taken is to educate students and faculty on what proper academic conduct is (Jones, 2002). Students are not always prepared to cope with the academic pressure of the college environment and do not understand proper academic conduct and tradition (Hart & Freisner, 2004; Macdonald, & Carroll, 2006). In some schools, faculty may not have been adequately trained on the school's academic misconduct policies (Macdonald, et al.). Academic misconduct and plagiarism need to be defined and a consistent discipline policy codified and publicized to all students and faculty.

One of the first steps that many organizations take in implementing IT security is to implement policies. The same holds true for schools. Colleges and their IA programs need to have strong policies in place to cover student usage of virtual labs, network access, and for how to handle academic misconduct. These policies must be enforced consistently to minimize legal repercussions but schools need to be prepared and willing to deal with student lawsuits over academic discipline (Turner, et al., 2003). One policy that has been found helpful at Walsh College is to have faculty members report academic misconduct but then step back from the investigation and discipline. This encourages faculty to report misconduct since the department chairs and administrators play the "bad guy" and the

disciplinary decisions are out of their hands. The students benefit from this decision because discipline decisions are more consistent with fewer people making them.

IA programs that have students conducting original research or publishing papers must develop and enforce research policies. Research policies must cover requiring students to declare potential conflicts of interest or anything that compromises their academic integrity. Schools with research projects must establish an Institutional Review Board that sets and enforces standards for sample selection, research methodology, and ethical standards (Jones, 2002).

It is important that schools establish policies that prohibit the forms of academic misconduct that can come with publishing. Policies can minimize the amount of gift, ghost, pressured, and duplicated publishing (Grieger, 2005).

Best Practices

Students should be made to sign an academic integrity statement whenever they turn in a written assignment (Hart et al., 2004). Online students can provide digital signatures that are as legally valid as traditional “wet” signatures. Walsh College identified best practices for academic integrity statements from schools including University of Maryland University College and the National Defense University. The statement accepted at Walsh’s BIT/IA department is:

"This assignment is my/our own work. Any assistance I/we received in its preparation is acknowledged within the assignment in accordance with academic practice. If I/we used data, ideas, words, diagrams, pictures, or other information from any source, I/we have cited the source(s). I/we understand that copying text word for word from other sources without placing it in quotation marks is considered plagiarism and not acceptable even if I/we cite the source where the material was copied from. I/we certify that this assignment was prepared specifically for this class and has not been submitted, in whole or in part, to any other class at Walsh College or elsewhere. I/we understand that I/we am submitting this work for grading and that it is the final version of my/our work and not a draft.

Signature(s) _____"

Academic integrity statements work like an honor code. An academic honor code encourages ethical behavior, and requires students to commit to the values of honesty and personal integrity (Turner et al., 2003). Honor codes place responsibility on the students and their fellow students to maintain academic standards and provide a level academic playing field for all students. For example, the U.S. Military Academy’s honor code clearly states, “A cadet will not lie, cheat, steal, or tolerate those who do” (Carrell et al., 2005). Students at the Academy are given a copy of the code on a laminated card that they are asked to carry with them at all times (Fleischmann, 2006). This card serves a reminder that they will be accountable to the honor code. Constant reminders are necessary because in a study, 40% of university students felt that they should whistle-blow on their fellow students but only 13% said they would actually do it (Rennie & Crosby, 2002). Placing the honor code on the back of each student’s identification card would also serve as a similar reminder. Turner and Beemsterboer (2003) propose that an honor code must contain the following elements:

- 1) A statement of the values upheld by the code and school
- 2) A list of the academic violations and the categories of unacceptable behavior
- 3) A list of the potential consequences and punishments for violations
- 4) A description of the group that will be investigating and making any decisions based on the outcomes of the investigation
- 5) A description of the investigation and decision making processes
- 6) A statement promising confidentiality of the investigative process and the outcomes of the investigation and decision making process
- 7) A statement promising that records will be kept of the process
- 8) A statement promising a decision within a stated period of time
- 9) An appeals process for students to appeal their punishment

If a school adopts an honor code, it is important to adhere to all elements of the code to minimize potential litigation arising from academic misconduct decisions (Turner, et al., 2003). The honor code should be presented in the syllabus of each course so students can see the faculty's commitment to the code.

Many faculty members allow students to pick their own topics and data sources for writing assignments. Giving students wide discretion in topic choice may be facilitating their academic misconduct. Assignments should be designed in ways that make it difficult to plagiarize or outsource to a paper writing service. Harris (2004) suggests requiring current data sources, mandating the use of specific articles and book titles that you designate and change every semester, requiring that material from your lectures be incorporated, and requiring a personal interview with an expert or faculty member. Some instructors require students in on-ground classes to make an oral presentation of their papers where it becomes obvious whether they are familiar with the material or are presenting the work of someone else. Walsh College is experimenting with having online students make presentations via webcams or Voice Over PowerPoint to provide similar integrity checks.

Many online teaching tools enable instructors to select exam and quiz questions from a test bank. Most online teaching tools allow for randomizing the selection and order of test questions that each student sees. It is important that these test banks be as large as possible and that the randomizing feature be turned on. Students that collaborate and "share" questions can be slowed down by large question banks. Instructors should not be limited to the questions prepared by the publisher and should be encouraged to add questions to the question bank and possibly rotate "old" questions out of the bank if they have been there for years.

If instructors are going to use test bank questions there should be a strict time limit set on the test. Distance students have access to their notes, text books, and the Internet and given enough time should be able to look up every question that they do not know the answer for. While some programs are online, they can still make provisions for their exams to be proctored. Proctored testing has been demonstrated to be more effective than non-proctored testing (Wellman & Marcinkiewicz, 2004; Wellman, 2005). In an experiment at Ferris State University, students told that they would be taking proctored exams took significantly more practice exams and registered more page hits within the course pages on WebCT than students who were told that they would be taking non-proctored exams (Wellman, 2005). Students that are told that they will be taking a non-proctored exam will take fewer online practice quizzes than students who are told they will be taking a proctored exam (Wellman et al., 2004). At Walsh College we have made arrangements with libraries and other colleges for exam proctoring. Proctoring services are also available from commercial training companies that proctor the GMAT and other standardized exams. Proctoring expenses are typically borne by the students and are usually under \$100.

Faculty members should utilize technological tools to identify plagiarism and assignments that have been previously turned in by another student. Schools have found that this type of software is easy to use and takes very little faculty time and effort (Mainka et al., 2006). Some schools have developed interfaces to their online teaching tools that check to see if the assignment had been turned in by another student (Mainka et al).

One of the simplest steps to fighting academic misconduct is refreshing courses, cases, examinations, and writing assignments (Hart et al., 2004). For example, in one of the classes at Walsh College we utilize a case study that requires students to address the issue of selling materials to minors. The case is altered every two semesters to a different business that faces the same issue. So far we have used a microbrewery, cigar shop, ammunition store, and a variety of other businesses that sell dangerous products which cannot be sold to minors. If your cases contain numerical values, consider shuffling the values every semester. If last semester's answers pop up this semester, there is a misconduct problem that requires investigation. Constantly changing the business and products makes it a little more difficult to plagiarize from previous case studies.

Students can police themselves while working on group assignments (Rowe, 2004). Part of the group assignment can be evaluating the work of other students in the group so the students help police for plagiarism and participation. Precautions need to be taken to prevent students from sabotaging the grades of other students (Jones, 2002).

IA faculty need to apply IA thinking to the issue of academic integrity. IA Faculty are trained to monitor access, search for patterns, examine digital evidence, and learn from the experiences of others. One of the basic tenets of IA is to monitor the environment. IA faculty need to be diligent and monitor the educational environment for misconduct. There are some patterns of misconduct to check for just like an Intrusion Detection System (IDS) checks for digital signatures. The use of a matching tool like Turnitin can increase detection of cut-and-paste plagiarism from 3% to 13% (Jocoy & DiBiase, 2006). Turnitin is not a silver bullet as it can only match against material contained within its database and cannot match paraphrased text (Mulcahy & Goodacre, 2004).

One of the basic tenets of IA practice is to analyze traffic for network patterns and suspicious content. Many times a plagiarist can be identified by patterns within their work. Papers written in a mix of writing and formatting styles are as suspicious as papers written in anachronistic language (Harris, 2004). Another pattern to look for are references to current events or research that is dated. The students may not have proofread the paper and thus overlooked statements that this is an Olympic year or that the current president is George W. Bush.

Some schools have run into resistance when implementing Turnitin. Students are not happy that their material is added to the Turnitin database without their consent and stored outside the university environment (Mulcahy et al., 2004). Faculty members have resisted using Turnitin because of the time it takes to learn and use the tool (Mulcahy et al.). Schools need to allocate training and faculty time to promote the use of this type of tool.

When student work is being collected for evaluation it is important that there is a system or criteria for selection (Macdonald et al., 2006). While instructors may have an intuitive feel for when a paper does not seem right, it is important that students not be able to allege that they were discriminated against when their work was selected for evaluation and other students' work was not. The issue may rapidly switch from the student's misconduct to discriminatory behavior by the school.

If your online course tool provides the information, check the IP addresses and times when students take examinations. One instance of academic misconduct was when a group of students sequentially take an exam on the same computer. There was less than a one minute gap between one student terminating a session and another student initiating a new session at the same IP address. This type of computer access strongly suggests collaboration on the exam. Some course tools can tell you how much time the student spends logged into the learning tool. If the student is only signing in to submit assignments and never opens the lectures or other resources there may be a problem.

Check the forensic information on the document files submitted for papers and other writing assignments (Liu, Lee, Lin, & Magjuka, 2007). One item to check for is the owner of the file. You may be surprised to see the name of a previous student as the creator of the file. The creation and last updated dates may be revealing as well. If the student has not turned off Word's change tracking feature you may find some very revealing changes that point to academic misconduct.

Tools exist that can check plagiarism in coding assignments (Eysenbach, 2000). If your courses require students to create custom software, you might want to check Websites such as www.rentacoder.com to see if your assignment is posted there by a student. Some students in programs at business schools may consider this simple outsourcing as opposed to academic misconduct (Hill, 2006).

CONCLUSIONS

Stopping academic misconduct is a difficult if not impossible task. Faculty members will never be able to spot all incidents of plagiarism or collaboration. Students that purchase papers from closed, subscribers-only Web sites that create original papers or who hire out their work to ghostwriters or contract programmers may never be identified and disciplined (Harmon et al., 2008).

Whether the misconduct is deemed to be minor or major, educational institutions need to address it. Breaches of academic and professional misconduct must be revealed and condemned (Berk, 1991). It is important that schools administer discipline for academic misconduct in a consistent and reasoned manner. For any school attacking the problem of academic misconduct, a review of best practices and the application of IA principles will help immensely.

What has worked well at Walsh College may not work in your educational community. Different schools have different policies and “rules of engagement.” Each school must decide how much effort they are willing to spend searching for and punishing academic misconduct. If schools are unwilling to discipline and expel students for academic misconduct, there is no point in trying to detect it. The IA community needs to develop a set of common practices to show that academic misconduct will not be tolerated. These practices may need to become part of the requirements for achieving the Center of Academic Excellence designation from the National Security Agency.

REFERENCES

- Berk, R. (1991). Is plagiarism ever insignificant? *American Journal of Roentgenology*. 157(3), 614
- Bramble, M. & Stevenson-Clarke, P. (2005). Perceptions of the prevalence and seriousness of academic dishonesty in Australian universities. *The Australian Educational Researcher*. 32(3), 19-44.
- Carrell, S., Malmstrom, F., & West, J. (2005). Peer effects in academic cheating. Retrieved January 15, 2009 from <http://www.ssrn.com/abstract=842224>
- Chalmers, I. (2006). Role of systematic reviews in detecting plagiarism: case of Asim Kurjak. *British Medical Journal* 333. 594-596.
- Eysenbach, G. (2000). Report of a case of cyberplagiarism – and reflections on detecting and preventing academic misconduct. *Journal of Medical Internet Research*. 2(1).
- Fleischmann, S. (2006). Teaching ethics: More than an honor code. *Science and Engineering Ethics*. 12(2), 381-389.
- Grieger, M. (2005). Authorship: An ethical dilemma of Science. *Sao Paulo Medical Journal*. 123(5), 242-246.
- Harmon, O., & Lambrinos, J. (2008). Are online exams an invitation to cheat? *The Journal of Economic Education*. 39(2), 116-125.
- Harris, R. (2004) Anti-plagiarism strategies for research papers. Retrieved January 15, 2008 from <http://www.virtualsalt.com/antiplag.htm>
- Hart, M. & Friesner, T. (2004). *Electronic Journal on E-learning*. 2(1) 89-96.
- Henry, R. (2004). Where is the honor? *Phi Kappa Phi Forum*. 84(4).
- Hill, A. (2006) Students using rent-a-coder.com to outsource programming homework. Retrieved February 12, 2009 from <http://www.realtechnews.com/posts/2533>.
- Howard, R. (2001, November 16). Forget about policing plagiarism. Just teach. *The Chronicle of Higher Education*.
- Jocoy, C., & DiBiase, D. (2006). Plagiarism by adult learners: A case study in detection and remediation. *International Review of Research in Open and Distance Learning*. 7(1).
- Jones, R. (2002). Research misconduct. *Family Practice*. 19(2), 123-124.
- Liu, S., Lee, S., Liu, X., Magjuka, R. (2007). An empirical study on online MBA cheating and plagiarism issues. *Proceedings of the 23rd Annual Conference on Distance Teaching & Learning*.
- Macdonald, R., & Carroll, J. (2006). Plagiarism – A complex issue requiring a holistic institutional approach. *Assessment & Evaluation in Higher Education*. 31(2), 233-245.
- Mainka, C., Raeburn, S., & Earl, S. (2006). A UK institution's university-wide approach to plagiarism: First results and recommendations. *International Journal for Educational Integrity*. 2(1), 13-25.
- McCabe, D., & Trevino, K. (1997). Individual and contextual influences on academic dishonesty: A multicampus investigation. *Research in Higher Education*. 38(3), 379-395.
- Mulcahy, S., & Goodacre, C. (2004). Opening Pandora's box of academic integrity: Using plagiarism detection software. *Proceedings of the 21st ASCILIE Conference*. Perth, Australia. 688-696.
- Rennie, S., & Crosby, J. (2002). Students' perception of whistle blowing: Implications for self-regulation. A questionnaire and focus group study. *Medical Education*. 36(2), 173-179.
- Rimer, S. (2003, September 3). A campus fad that's being copied: Internet plagiarism. *The New York Times*.
- Rowe, N. (2004). Cheating in online student assessment: beyond Plagiarism. *Online Journal of Distance Learning Administration*. 7(2).
- Turner, S., & Beemsterboer, P. (2003). Enhancing academic integrity: Formulating effective honor codes. *Journal of Dental Education*. 67(10), 1122-1129.
- Wellman, G. & Marcinkiewicz. (2004). Online learning an time-on-task: Impact of proctored vs. un-proctored testing. *Journal of Interactive Online Learning* 8(4), 93-104.
- Wellman, G. (2005). Comparing learning style to performance in online teaching: Impact of proctored v. un-proctored testing. *Journal of Interactive Online Learning*. 4(1), 20-39.

Dr Livermore is the Chair of Information Assurance and Business Information Technology at Walsh College in Troy Michigan. Dr. Livermore has degrees from Wayne State University, Central Michigan University, Nova Southeastern University, and completed a post-doctoral fellowship at the University of Maryland University College. Dr. Livermore's research interest is the ethic aspects of teaching Information Assurance.

Rethinking Motivation: Self-Interest vs. Others-Directed Models of Human Behavior

J. Andrew Morris, CSU-Channel Islands, Camarillo, California, USA
John C. Urbanski, Sonoma State University, Rohnert Park, California, USA
James W. Slate, Catawba College, Salisbury, North Carolina, USA

ABSTRACT

Emerging literatures in both evolutionary economics and evolutionary psychology suggest that human behavior may be a complex mix of hedonism and altruism, and under certain conditions, may exhibit a high propensity for others-directed behavior. Here, we draw from this evolutionary research and explore ways in which a fuller, more complete understanding of the human capacity for cooperation and others-directed behaviors can impact how business educators understand motivation and teach motivational theory.

INTRODUCTION

Business educators currently find themselves in a quandary. Society's favorable attitude toward for-profit businesses and their management is turning to one of frustration, and feelings of outright betrayal exist, as the failures, corruption and scandals of Wall Street and other industries dominate headlines. Ghosal (2005) has recently argued that business educators may, in fact, bear some responsibility for many of these dysfunctions because many management theories currently taught in business schools may be fundamentally flawed. Ghosal believed that business scholars draw from models that over-emphasize motivation which stems primarily from self-interest. As a consequence, management theory and practice has converted "our collective pessimism about managers into realized pathologies in management behaviors" [Ghosal, 2005: p. 77]. Interestingly, this perspective is strikingly similar to that taken by McGregor's "Theory X" manager, where employees act only in service of self, are inherently selfish, and are motivated to act in an organizationally desirable manner only by the particular outcomes work performance will bring them.

Despite these unflattering portrayals of business, anecdotal evidence exists which demonstrates that organizational members, CEOs included, often act non-selfishly, in ways that are others-centered. In direct contrast to the notorious Dennis Kozlowski of Tyco fame, Daniel P. Amos, the CEO of Aflac, a private insurer, voluntarily relinquished claims to his golden parachute, estimated to be worth \$13-\$26 million USD, resulting in the saving of approximately 400-500 jobs for a company that has never laid off an employee in its history. Interestingly, research in both evolutionary economics (Beinhocker, 2006; Gintis, 2006; Hodgson, 1993) and evolutionary psychology (Pinker, 1997; Ridley, 1997; Sober & Wilson, 1998) may provide an antidote for Ghosal's pessimism and an explanation for Amos's giveback. Rather than being completely selfish, researchers have found that human behavior may actually be a complex mix of hedonism and altruism, and under certain conditions may be significantly influenced toward cooperation and others-directed behavior. Seabright (2004) argues that the human capacity for others-directed behavior acts as the very foundation of business activity. An evolutionary understanding of human nature, however, has not yet made its way into the management classroom.

This paper addresses some of the concerns noted above. First, findings from evolutionary psychology and evolutionary economics which suggest that much of mainstream management theory does not yet represent the true complexity of human nature are reviewed. Second, the evolution of others-directed behavior in humans is discussed in order to reconsider whether self-interest is the only valid behavioral assumption within mainstream theory. Finally, methods through which educators and their students may explore this less gloomy view of human nature, come to a fuller, more complete understanding of the human capacity for others-directed behaviors, re-frame understanding of motivation, and finally teach motivational theory using this perspective are illustrated.

SELF-INTEREST MODELS OF HUMAN BEHAVIOR

The utilitarian model (Hodgson, 1993), presents human behavior by making several key assumptions: (a) individuals are rational; (b) individuals can express transitive properties when making a choice; (c) individuals have complete preferences; (d) individuals believe that more is better; and (e) individuals seek to maximize their personal, and thus subjective, utility function. “Rational” individuals make choices based on the information at hand, and never make decisions that would violate their personal preferences and utility maximizing objectives. Such individuals, as the neo-classical model stipulates, are also capable of exhibiting transitivity in making choices. It is also assumed, implicitly or not, that rational agent X has complete preferences, which simply means he or she is capable of making some choice. This agent cannot become befuddled during the decision making process, and *always* prefers more to less, as, one can never have too much. Finally, the rational agent makes decisions that maximize his or her personal utility. In summation, decisions are based on an internal calculus that yields the greatest satisfaction for the rational agent.

This self-interest model of human nature assumes a world of very intelligent individuals, termed *Homo Economicus*, who behave in amazingly simple ways. Evidence, however, suggests a substantially different agent operating in a significantly different environment: a cognitively limited person coping with an incredibly complex world (Beinhocker, 2006), where individuals often pursue multiple goals while confronting personal and collective interests that may partially correspond with, yet simultaneously partially oppose one another. Here, interactive (non-static) decision-makers must consider more than self-interest in order to maximize expected utility, since that utility is largely dependent upon the behaviors of others as well as their own (Dreu, 2006).

Although mainstream scholars have begun to accept the shortcomings of traditional assumptions, substantial limitations remain in developed models of human behavior (Meglino & Korsgaard, 2004). For example, behavioral economists have shown that not only are people not fully rational economic agents but have also demonstrated that economic agents will make choices that are not self-serving (Dreu, 2006; Lopez, 2008). Fehr, Gintis, and their associates (2005; 2006; 2007) observed that thousands of subjects, from several cultures who engage in activities which result in monetary gains or losses simply do not behave as traditional economic theory predicts. In general, the Ultimatum Game provides one of two participants (the “proposer”) with ten one dollar bills. The “proposer” is then informed that he or she must offer some fraction of the money to the “receiver”, whose identity may or may not be hidden from the proposer. The proposer may offer any amount, from nothing, to the entire ten dollars. The receiver may then accept or reject the offer. If the offer is accepted, the cash is shared according to the offer made. If the receiver rejects the offer however, no one receives any money.

Assumptions of rationality and self-interest indicate that the proposer should make an offer significantly less than five dollars, and the receiver should accept almost any offer, as something is better than nothing! The “rational” proposer, convinced that all human behavior is influenced by the rational pursuit of self-interest, would then make a relatively simple resource allocation decision: offer \$1, as the game is played only once under “take it or leave it” conditions. Results consistently demonstrate, however, that most proposers offer about 40% of the money, either believing this is fair or worrying that a smaller offer will be rejected. Approximately half of all receivers reject offers at the 20% level, even when the stakes are financially significant. Here, Fehr argues that receivers reject low sums because the sums are perceived as unfair.

In reality, individuals may not be the rational self-interested agents suggested in mainstream theory, but rather are “conditional cooperators”, those who will behave generously as long as others are doing so, and “altruistic punishers”, those who will strike back at those perceived to behave unfairly, even at the expense of the punisher’s own immediate interest. It appears economic agents try to follow the Golden Rule, but with a slight twist: do unto others as you would have them do unto you, but if others don’t do unto you, then nail them. The logic behind this is relatively simple: in a world of non-zero-sum games, conditional cooperators experience better outcomes than agents who follow either purely selfish or purely altruistic strategies (Wright, 1994).

Self-interest scholars have argued that research in evolutionary economics does not necessarily refute assumptions regarding *Homo Economicus*, since people often cooperate to serve their own ends (Fehr & Gintis, 2007). There are two crucial distinctions, however, which exist between strong reciprocity (cooperation) and traditional self-interest. First, traditional *Homo Economicus* cares not about the process of economic interaction, but only whether the outcome will maximize one's self-interest. Studies show, however, that participants not only care about outcomes, but also about whether the process leading to the outcome itself was fair. Additionally unfair behavior will be punished at a cost to the punisher, even if he or she has no hope of recovering that cost in the future (Lopes, 2008). Therefore, cooperation in social interactions requires two moral capacities that are alien to *Homo Economicus*: process fairness and impartiality.

Furthermore, evolutionary research does not deny that self-interest can and often does matter, but rather argues that placing an exclusive emphasis on self-interest is detrimental to understanding and modeling human behavior (Folger & Salvador, 2008). It is also important to understand that different cultures and societies use a number of diverse methods to exhibit and enforce the behaviors needed to ensure cooperation and others-directed behavior. For example, different social structures, such as the degree to which targeted punishment opportunities are available, can generate vastly different patterns and degrees of cooperation. Beinhocker (2006) suggests that while genetic evolution provided the mental adaptations that made others-directed behavior possible, cultural evolution provided the mechanisms for the transmission of the necessary moral systems. In the next section, we explore how others-directed tendencies could have evolved in humans given the risks associated with such behaviors.

OTHERS-DIRECTED MODELS OF HUMAN BEHAVIOR

Darwin (1859/1964) has proposed that over time, organisms adapt and evolve in response to environmental challenges. Research in evolutionary psychology indicates that early humans, as a response to a number of environmental pressures, lived in tightly-knit social groups which developed complex hierarchies and alliances, as these features offered members benefits such as protection, aid, and mutual support (Sober & Wilson, 1998). Group living, however, presented a number of problems, including increased competition for resources, as well as the presence of certain group members who gained benefits without incurring costs, Axelrod's (1984) "free-rider" problem. Darwin, aware of this "fundamental problem of social life", proposed a solution, arguing that adaptations evolve not only at the individual level, but at the group level as well (Sober & Wilson., 1998).

It appears that as with many other species, as humans evolved, cooperation first occurred with kin, possibly due to gene relatedness. Eventually, humans developed a kin-recognition module which seems to play a vital part in a system of modules which control behavior governing the provision of favors and help to others, particularly to those who are close relatives. Unlike other sentient creatures, however, humans frequently cooperate with genetically unrelated strangers as well as kin (Seabright, 2004). A key issue in this willingness to engage in non-kin cooperation is the potential to cheat others by accepting a favor now and not returning it later (Wright, 1994). This issue is illustrated in the Prisoner's Dilemma game, which addresses issues of trust and reward by examining cooperation and defection behavior between players. Here, cooperation, or others-directed behavior occurs when the pay-off for exchange outweighs the costs. Human evolutionary history suggests that despite there being no perfect solution to the Prisoner's Dilemma, humans have developed certain strategies that favor cooperation and others-directed behavior. Cosmides and Tooby (1992) suggest that evolution resulted in development of special modules which allow humans to calculate the value of favors given and received in situations such as the Prisoner's Dilemma, and that these cognitive adaptations influence all human behaviors involving exchange. The calculations performed by this social accounting include a number of variables, including cost to the donor as well as the value of the benefit he or she may receive. Human cooperation, however, is not strictly reciprocal, suggesting other elements in the social cooperation modules besides social accounting influence human interactions.

"Theory of mind" (TOM) or intuitive psychology (Pinker, 1997) is a specific cognitive ability which allows individuals to understand others as intentional agents, suggesting that humans developed the ability to understand the behavior of others in terms of the others' beliefs and desires. Although similar to the concept of empathy, the

influences of TOM on behavior are more automatic and perhaps unconscious, while empathy requires the individual to engage in cognitive effort to understand the plight of the other person, and to then be conscious of his or her reaction to this understanding. The evolutionary value of TOM for humans is the provision of the capability to anticipate the actions of others in a way that helps to detect lying and cheating. Without TOM, the ability of humans to engage in cooperative behaviors would be greatly diminished. Cosmides and Tooby's (1992) research indicates that people appear to possess a specialized cognitive algorithm which governs the manner in which people reason about social exchange, making humans especially sensitive to detecting cheaters, those who violate social contracts by taking benefits without reciprocating.

Haidt (2006), in *The Happiness Hypothesis*, suggests another evolutionary mechanism which promotes human cooperation and others-directed behavior. Haidt posits that human morality is driven by two separate mental systems, one ancient and one modern. The ancient system, termed moral intuition, is based on the emotion-laden moral behaviors which evolved long before the development of language. The modern system, labeled moral judgment, developed subsequent to language. Emotional responses triggered by moral intuition occur instantaneously, while moral judgment arises out of the conscious mind. Haidt, states there are five key elements of morality, including reciprocity and fairness. Each element should be considered an innate psychological mechanism predisposing humans for retention of certain virtues. Since these virtues are learned, variance in morality across cultures is possible, but all the virtues serve to enhance cooperation, restrain selfishness, or do both. In other words, humans appear to have a moral instinct (Hauser, 2006; Pinker, 2008) which, as one of its primary functions, ensures reciprocity and fairness.

Pinker (2008) suggests that the moral emotions that arise out of the universal moral instinct enhance cooperation in several ways. For example, sympathy prompts a person to offer a favor while anger protects a person against cheaters who accept a favor without reciprocating. Love commits us to a relationship, and guilt makes cheating more painful (Tangley et al., 2007). Moral emotions such as shame, guilt, gratitude, and sympathy thus become powerful forces which enhance group cohesiveness (Haidt, 2006; Pinker, 2008; Tangley et al., 2007). As a common element, these forces depend not only on internal states, but also on TOM. Moral emotions are evoked by one's concerns regarding how others perceive him or her, with particular regard to whether he or she is being judged as being fair and trustworthy. Thus it may not be the guilt or shame of the act itself, but rather the risk of being found out that provokes one's moral dilemma, which then influences the willingness to forego selfishness. Haidt (2006) and others (Hauser, 2006; Pinker, 2008) argue that the evolution of moral emotions not only leads to a human morality that strongly binds people to others and encourages self-sacrifice, but also that moral emotions also make it possible for humans to form tight cooperative groups that pursue collective ends and punish cheaters.

In summary, experimental evolutionary research provides strong support for the notion that evolution has provided humans with certain adaptations that make others-directed behavior possible, as well as probable. Human social cooperation seems to arise from both genetic predispositions for altruism and cultural norms that encourage and reward such behaviors. These influences, however, are subject to an intelligence high enough to allow judgment and subsequent manipulation of the tension generated by cooperation-defection problems.

IMPLICATIONS AND APPLICATIONS

The current authors' central premise is that evolutionary research questions the dominant paradigm of self-interested human behavior in organizations. In contrast, evolutionary findings on the human capacity for cooperation provide a strong argument for development and utilization of models of work behavior incorporating a more nuanced and positive understanding of human nature. Folger and Salvador (2008) believe that falling back on the self-interest paradigm obscures other potentially divergent, yet valid explanations for human behavior. Therefore, in the following section, the ways an evolutionary foundation for human nature might impact understanding and conceptualization of human motivation, organizational citizenship behaviors, and positive organizational scholarship are explored. Three practical and immediate ways business educators could incorporate a more dynamic understanding of human behavior into their teaching activities are then discussed.

Motivation: As noted, most current theories of motivation are significantly dependent on rational self-interest assumptions (Meglino & Korsgaard, 2004). Expectancy theory, for example, emphasizes both rationality and self-interest as driving one's behavior, stating that there must be conscious alignment between offered rewards and individual wants. Motivation occurs when individuals believe that one's effort leads to desired performance, which in turn leads to specific outcomes that one values (Vroom, 1964). Evidence supports expectancy theory as a predictor of work motivation (Erez & Isen, 2002); however, the influences of personally experienced outcomes and considerations of immediate self-interest may become significantly attenuated when individuals are other-, rather than self-directed (Dreu, 2006). In this situation, self-interest theories of motivation may not be designed to address or consider this possibility. Incorporating the human capacity for others-directed behavior into an integrated cross-disciplinary model of motivation could overcome this and other limitations in several ways.

First, the understanding that human behavior arises as the result of adaptive responses to environmental problems adds considerable strength to the notion of innate needs or drives as influences on human behavior (Folger & Salvador, 2008). Needs, which can be expressed through such dimensions as intensity, press, and strength, represent internal forces that directs one to engage in behavior that leads to the satisfaction of the need itself. Economists have generally considered needs to be irrelevant in the explanation of human behavior (Caplan, 2003). Empirical findings over the last decade, however, indicate this position simply is not supportable. Gintis and Fehr's (2005) use of neuro-imaging techniques strongly indicate that some motivational drives appear encoded in both mid-brain and prefrontal cortical functioning suggesting that the mind has an architecture of constituted goals and actions patterns which direct and influence effort. In addition, Haidt's (2006) work on moral instincts also suggests that not all cognitive processes are deliberate. As Locke and Latham (2004; 395) note, "...it is undeniable that people can act without being aware of the motives underlying their behaviors" thus "one of the best ways to advance motivational theory is to study subconscious as well as conscious motivation and the relationship between them".

Maslow's (1954) model of the hierarchy of needs that drive behavior can serve as an illustration. Although most management texts address this theory, many of the authors misreport or misunderstand the theory's full intent. Contrary to popular interpretation, Maslow never argued for a rigid progression of need satisfaction, but rather that any behavior is likely to be influenced by more than one motivator. The possibility that numerous needs operate simultaneously is directly related to the discovery that people are both conditional cooperators and altruistic punishers, which in turn suggests that social needs may drive exchange activities, while esteem and self-actualization needs may drive the willingness to punish agents that abuse that exchange. Moreover, it may be that the impetus for defection decisions is the satisfaction of lower-order needs, while cooperative strategies may be controlled by the search for higher-order need satisfaction. An avenue for future motivation research may be then to explore the exact role any specific need may play in both cooperation and defection decisions. Additionally, an understanding of the way different needs impact the willingness to punish defection, even when such punishment appears irrational, would be especially useful.

Second, the central role of perceived fairness in exchange relationships suggests a greater need to explore the exact conditions that influence and direct judgments made when individuals attempt to determine if they are being treated equitably. Equity theory (Adams, 1963) addresses the individual's perception of whether he or she is being treated fairly by the organization. The initial model involved self-maximization, as it predicted that individuals attempted to "get what they deserve". Here, one's behavior is aimed at the appropriate distribution of rewards: ensuring that one's outcomes are received in direct proportion to the amount of one's inputs. Evolutionary findings, however, indicate that this approach is only one of many possibilities. Not all individuals seem to adhere to this maximization perspective. Later research in equity situations have discovered at least two other perspectives concerning the "proper" level of reward distribution, which differ significantly from Adam's original propositions, and indicate an orientation to others-directed behaviors.

The first takes an egalitarian approach to reward. Here, all participants in the action or behavior receive the same level of outcomes, no matter what the level or amount of one's own inputs may be (Chen, 1995). This distribution

rule seems to be directed at minimizing conflict in order to maintain group harmony, therefore ensuring that cooperation will continue. The needs-based approach to outcome distribution disregards the ratio of one's inputs as they may influence received outcomes. Rewards are distributed in relation to an individual's perceived need for the outcomes (Mowday, 1996). Here, the idea of others-directed behavior is manifested in the form of social responsibility. Even though it is readily apparent to the individual that he or she may have earned more, and therefore through a greater contribution is entitled to more, he or she will forgo what is rightfully his or hers in order that someone with a greater need may then benefit. Finally different individual responses to input-outcome ratios have also been noted (Huseman, Hatfield & Miles, 1987). Specifically, those individuals termed "benevolents" prefer their input-outcome ratios to be marked less than those individuals chosen as referent others, these benevolents can be characterized as "givers", certainly not capable of "cheating". The authors suggest that business educators who draw from an evolutionary foundation can more effectively explain the various ways individuals conceptualize, react to, and enact fairness.

Finally, if hedonic intent and maximization of self-interest are over-emphasized in process theories of motivation, it is likely that the manner in which individuals consider the expectancy, instrumentality and valence components of the behavior may be significantly more complex than currently modeled. For example, the valence component of the expectancy model is commonly termed a first level outcome, that which comes directly to the employee upon completion of the desired behavior, and is most often represented by pay, promotion, or other types of remuneration (Lawler, 1973/1994; Vroom, 1964). In a desire to simplify the theory, many educators fail to note the influence of the valence scores of related second and higher level outcomes on the score of the first level outcome. One can become financially rich (first level) by lying, cheating and stealing, or through hard work. Not only does the outcome of each behavior have a score, but the behavior itself required to obtain this outcome has a score as well. The individual will be more or less likely to engage in the behavior depending on not only (a) what the behavior will bring the person, but also (b) others' perceptions of the desirability of the behavior itself, which may then likely have a direct effect on the value placed on choice (a). "Whistleblowers", for example, choose to place the welfare of others over their own, saving the organization while personally suffering ostracism, discipline and even immediate termination as a direct result of their behavior, all undesirable outcomes. The exact manner in which social-accounting, moral emotions, and the willingness to punish social loafers or cheaters, even at personal cost impact instrumentality and valence decisions is unclear. At the very least, the authors suggest that in work environments encouraging cooperation rather than solo performances, the motivation of the individual may be based to a larger extent on consideration of features and characteristics of his or her work group rather than self.

Organizational Citizenship Behaviors: Organizational citizenship behavior (OCB) represents those activities within the workplace not specifically linked to an employee's job description. Examples of OCB may include volunteering for additional tasks, orienting new employees, and presenting positive information about the organization to external stakeholders (Bateman & Organ, 1983). Organizational research has also demonstrated that affective organizational commitment is a strong predictor of OCB (Harrison et al., 2006). Grant and his associates (2008) found that employee support programs cultivate affective organizational commitment by allowing employees to both receive as well as to provide support. The researchers suggest these findings challenge the long running debate as to whether citizenship behavior is driven by self-interest or others-directed motives, since giving can serve both sets of motives simultaneously. This position, while not framed within evolutionary theory, is entirely consistent with evolutionary findings that human motives are a complex mix of hedonism and altruism.

Researchers have also explored relationships between OCB and outcomes related to both individual and group levels of performance. At the group and organizational level, data shows that OCB has a positive impact on performance, however, the relationships between OCB and individual outcomes are less clear. As Bergeron (2007) notes, most reward systems favor task performance, thus employees who engage in significant OCB may do so at eventual detriment of their careers. The extent to which being a good citizen carries an individual cost may depend on factors such as the type of reward system used, one's level of role ambiguity, and the visibility of the particular OCB.

The possibility that the organization may benefit while the individual suffers as a direct result of his or her organizational contributions suggests that the decision to engage in OCB may actually represent a social dilemma. While self-interest theorists often recommend defection in social dilemmas (i.e. Prisoner's Dilemma) such recommendations are problematic. Indeed, within most organizations, prior knowledge of others' behaviors, as well as extensive and on-going encounters with various organizational members indicate that cooperation, not defection, can be and often is the optimal strategy. Grounding OCB within an evolutionary perspective raises several interesting questions and issues which business educators can introduce to students. For example, it suggests a need to model the ways organizations can best demonstrate the appropriateness and legitimacy of OCB. Second, it raises the question of how organizations can build positive reputations without generating underlying attributions of hypocrisy. Finally, using the evolutionary perspective suggests that the consequences for the organization, which stem from defections which occur in the above-mentioned OCB dilemma, are likely to be significant. It is likely that moral emotions, such as righteous indignation and the willingness to punish defection, even at significant personal cost, might lead employees to not only diminish pro-social behaviors, but to actively seek to bring negative consequences down on the organization.

Positive Organizational Scholarship: Calling their approach positive organizational scholarship (POS), Cameron, Dutton, and Quinn (2003) and others (Wright & Quick, 2009) have argued that business educators should examine the talents and competencies that allow individuals to perform above expectations and explore how these competencies positively impact organizational effectiveness. We suggest that business educators can draw upon research on gratitude and leader humility to explicitly reexamine others-directed motivational processes in organizations.

Gratitude, where one has a sense of thankfulness and joy in response to receiving a gift, is a personal strength which appears to influence others-directed motivational decisions. Emmons and McCullough (2004) found that gratitude was a key component of one's personal happiness, life satisfaction, and work performance. While *Homo Economicus* is assumed to function without gratitude, Emmons and McCullough found that gratitude is a common virtue, that once developed, becomes a significant predictor of an individual's willingness to offer help and emotional support to others. This suggests that individuals with higher levels of gratitude are more likely to enact cooperative strategies in initial interactions, since they are both more others-directed and more concerned with fairness.

A future extension for research may be the influence of evolutionary processes on the concept of leadership. Noting an effect similar to that of OCB, Collins (2001) found that consistently high performing organizations were led by those termed "Level 5" leaders; individuals who possessed a blend of humility and strong personal will. Collins suggested that such leaders, like many others, were ambitious, but their primary focus was not to ensure personal success, but rather to foster the success of the entire organization and its members (i.e. others-directed behaviors). Within the context of social dilemmas and the decision to cooperate, it is likely that those with greater humility are more likely to choose cooperative strategies in social dilemmas, since these individuals are better able to adopt an impartial view, where the interests of all involved parties are perceived as being equally important.

A similar notion of leadership acting out of concern for others rather than self is McClelland's (1975) concept of socialized power, which a leader uses for the betterment of others, influencing organizational success, rather than for self-benefit. Socialized power is characterized by a concern for group rather than personal goals, and facilitating the achievement of group goals through the efforts of group members. Evolutionary research indicates that multiple interactions, reputation, and frequent communication are critical for trust and cooperation (Seabright, 2004) and trust is essential to socialized power. Grounding the concept of socialized power within an evolutionary perspective suggests interesting possibilities to include better insights into the best time, place, and context for the use of socialized power.

Applications: As evolutionary models have not as yet appeared in management texts, the authors suggest an initial set of three practical and specific ways that would be especially helpful to business educators to incorporate evolutionary findings into classrooms activities.

First, readers may wish to explore more fully the theoretical underpinnings of the arguments made in this article. Pinker (1997), Ridley (1997), and Sober and Wilson (1998) are excellent, highly readable overviews of evolutionary research that both instructors and students may find to be helpful. In management theory, Ghosal (2005), and Folger and Salvador (2008) explore the role of self-interest, and its resulting problems. Each piece challenges the dominant place of self-interest in organizational research, although arriving at slightly different conclusions.

Second, educators can use exercises such as the Ultimatum Game and Prisoner's Dilemma to great effect at both the undergraduate and graduate level in courses such as Principles of Management, Organizational Behavior, and Leadership to illustrate problems with self-interest models as well as the possibility of others-directed behavior in organizations. While a full description of these exercises is beyond the scope of this article (see Murnighan, 1991), it should be emphasized that grounding these exercises explicitly within an evolutionary framework helps students gain a better general understanding of fairness as well as their personal reactions to unfair allocations. In particular, the exercises help illustrate the automaticity of behavioral reactions to unfair behavior to include those below conscious awareness (i.e. social-accounting, moral instincts, and moral emotions). In another exercise, Stecher and Rosse (2007) utilize a two version scenario in which a focal person fails to receive a desired and deserved promotion. In one version, an unfair outcome results despite use of procedural justice. In the second version, the unfair outcome results from use of unfair procedures. These exercises induce experiences of injustice, which enhances students' understanding of specific theories of motivation, and assists them in relating motivational concepts and principles to specific situations. The grounding of the exercises both within and from an evolutionary perspective further enhances student understanding. Specifically, the use of the evolutionary theory perspective allows educators to better explain that what first appears to be an irrational reaction (such as turning down "free" money in the Ultimatum Game) may actually be logical and predictable when one understands that perceptions of injustice often result from automatic and unconscious determinations.

Finally, there are several free web sites that illustrate and clarify many of the concepts discussed above. Students have used them as part of course assignments; with generally very favorable feedback. Many aspects of organizational behavior and motivation are related to morality and motives. At www.yourmorals.org, Haidt explores the foundations of morals and morality. Using the *Moral Foundations Questionnaire* helps students better understand their own work values, work motivators, and perceptions of fairness. At www.authentic happiness.sas.upenn.edu/questionnaires.aspx Seligman provides measures of individual traits, strengths, and virtues (i.e. capacity for love, concern for others, gratitude, etc.) frequently associated with being others-directed. Student feedback indicates that using the measures helps them understand their individual character strengths and also reveals ways to use positive, cooperative behaviors to enhance their own work lives.

CONCLUSION

"... The critics of selfish schools have a point, for everything becomes normative. If people are not rational maximizers of self-interest, then to teach them that such behavior would be logical is to corrupt them". Ridley (1997; 145)

Emerging research in evolutionary economics and psychology offer business educators an alternative perspective by which to understand and explain human behavior occurring within the confines of the organization. This research infers that human behavior arises from adaptations that encourage caring and altruism, and also provide a mechanism to transmit complex rules and norms regarding others-directed behavior to members of any group or organization. Humans, therefore, are neither inherently altruistic nor selfish; but rather have the capacity to be caring and cooperative. The extent to which that capacity is utilized, however, is largely influenced by cultural institutions. Ghosal (2005) and others (Folger & Salvador, 2008) have stated that current business models fail to

capture this more complex and robust understanding of human behavior. The current authors have argued that business educators should therefore use these findings as a guide to reexamine the business discipline's understanding of forces which bear on human behavior in organizations. Finally several specific ways an others-directed understanding of human behavior would impact the understanding and teaching of motivation, organizational citizenship behaviors, and positive organizational scholarship are provided.

REFERENCES

- Adams, J.S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67: 422-436
- Alexrod, R. (1984). *The Evolution of Cooperation*. New York: Basic Books.
- Bateman, T. & Organ, D. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *Academy of Management Journal*, 26: 587-595.
- Beinhocker, E. (2006). *The Origin of Wealth*. Cambridge: Harvard Business School Press.
- Bergeron, D. (2007). The potential paradox of organizational citizenship behavior: Good citizens at what cost? *Academy of Management Review*, 32(4): 1078-1095.
- Cameron, K., Dutton, J., & Quinn, R. (Eds.). (2003). *Positive Organizational Scholarship*. San Francisco: Berrett-Koehler.
- Caplan, B. (2003). Stigler-Becker versus Myers-Briggs: Why preference-based explanations are scientifically meaningful and empirically important. *Journal of Economic Behavior and Organization*, 50: 391-405.
- Chen, C. (1995). New trends in reward allocation preferences: A Sino-U.S. comparison. *Academy of Management Journal*, 38: 408-428.
- Collins, J. (2001). *Good to Great: Why Some Companies Make the Leap and Others Don't*. New York: Harper Business.
- Cosmides, L., & Tooby, J. (1992). Cognitive adaptations for social exchange. In Barkow, Cosmides, & Tooby (Eds.), *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. New York: Oxford University Press.
- Darwin, C. [1859](1964). *On the Origin of Species*. Cambridge: Harvard University Press.
- Dreu, C. (2006). Rational self-interest and other orientation in organizational behavior. A critical appraisal and extension of Meglino and Korsgaard (2004). *Journal of Applied Psychology*, 91(6): 1245-1252.
- Emmons, R., & McCullough, M. (Eds.) (2004). *The Psychology of Gratitude*. New York: Oxford University Press
- Erez, A. & Isen, A. (2002). The influence of positive affect on the components of expectancy motivation. *Journal of Applied Psychology*, 87: 1055-1067.
- Fehr, E., & Gintis, H. (2007). Human motivation and social cooperation: Experimental and analytical foundations. *Annual Review of Sociology*, 33: 43-64.
- Folger, R. & Salvador, R. (2008). Is management theory too "self-ish"? *Journal of Management*, 34(6): 1127-1151.
- Ghosal, S. (2005). Bad management theories are destroying good management. *Academy of Management Learning & Education*, 4: 75-91.
- Gintis, H. (2006). Moral Sense and material interests. *Social Research*, 73(2): 377-404.
- Gintis, H., Bowles, S., Boyd, R., & Fehr, E. (2005). *Moral Sentiments and Material Interests: On the Foundations of Cooperation in Economic Life*. Cambridge: MIT Press.
- Grant, A., Dutton, J., & Rosso, B. (2008). Giving commitment: employee support programs and the pro-social sense-making process. *Academy of Management Journal*, 51(5): 898-918.
- Haidt, J. (2006). *The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom*. New York: Basic Books.
- Harrison, D., Newman, D., & Roth, P. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49: 305-325.
- Hauser, M. (2006). *Moral Minds: How Nature Designed our Universal Sense of Right and Wrong*. New York: ECCO.
- Hodgson, G. (1993). *Economics and Evolution: Bringing Life Back into Economics*. Ann Arbor: University of Michigan Press.
- Huseman, R., Hatfield, J. & Miles, E. (1987). A new perspective on equity theory: The equity sensitive construct. *Academy of Management Review*, 12: 222-234.
- Lawler, E. (1973, 1994). *Motivation in Work Organizations*. Monterey and San Francisco, CA: Brooks-Cole and Jossey-Bass.
- Locke, E., & Latham, G. (2004). What should we do about motivation theory? Six recommendations for the twenty-first century. *Academy of Management Review*, 29(3): 388-403.
- Lopez, H. (2008). From self-interest motives to justice motives: The challenges of some experimental results. *American Journal of Economics and Sociology*, 67(2): 287-313.
- Maslow, A. (1954). *Motivation and Personality*. New York: Harper
- McClelland, D. (1975). *Power: The inner experience*. New York: Irvington.
- Meglino, B. & Korsgaard, M. (2004). Considering rational self-interest as a disposition: Organizational implications of other orientation. *Journal of Applied Psychology*, 89: 946-959.
- Mowday, R. (1996) Equity theory predictions of behavior in organizations. In Steers, Porter & Bigley (Eds.), *Motivation and Leadership at Work*. New York: McGraw-Hill, 53-71
- Murnighan, J. (1991). *The Dynamics of Bargaining Games*. New York: Prentice Hall.
- Pinker, S. (1997). *How the Mind Works*. New York: W. W. Norton.
- Pinker, S. (2008). The moral instinct. *New York Times*. <http://www.nytimes.com/2008/01/13/magazine> (30 Jan 2008).
- Ridley, M. (1997). *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*. New York: Viking.
- Seabright, P. (2004). *The Company of Strangers: A Natural History of Economic Life*. Princeton, N.J.: Princeton University Press.
- Sober E., & Wilson, D. (1998). *Unto Others: The Evolution and Psychology of Unselfish Behavior*. Cambridge: Harvard University Press.

Stecher, M. & Rosse, J. Understanding reactions to workplace injustice through process theories of motivation: A teaching module and simulation. *Journal of Management Education*, 31(6): 777-797.

Tangney, J., Stuewig, J., & Mashek, D. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58: 345-372.

Vroom, V. (1964). *Work and Motivation*. New York: Wiley.

Wright, R. (1994). *The Moral Animal: Evolutionary Psychology and Everyday Life*. New York: Pantheon Books.

Wright, T. & Quick J. (2009). The emerging positive agenda in organizations: Greater than a trickle, but not yet a deluge. *Journal of Organizational Behavior*, 30(2): 147-159.

J. Andrew Morris received his PhD from the University of South Carolina. He is an Associate Professor of Management at California State University, Channel Islands. His current research interests include emotions in the workplace and pedagogical applications of both positive organizational scholarship and evolutionary theory.

John C. Urbanski received his PhD from the University of South Carolina. He is currently a faculty member in the School of Business and Economics at Sonoma State University, teaching Management and International Business. His current research interests include leadership, work-related personality issues, organizational discipline, and cross-cultural management.

James Wesley Slate received his PhD from the University of Tennessee. He is an Associate Professor of Economics at Catawba College. His current research interests include Economics Education and Banking Regulation.

Internationalizing Business Curricula: An Outcomes-Focused Approach

Kurt D. Kirstein, City University of Seattle, Bellevue, WA
Elizabeth A. Fountain, City University of Seattle, Bellevue, WA
Kelly A. Flores, City University of Seattle, Bellevue, WA

ABSTRACT

Recent literature has highlighted the need for including internationalization into higher education programs, especially business programs, but there does not seem to be agreement on the best method to do so. City University of Seattle has adopted an outcomes-focused approach to infusing international content into both program and course level outcomes where appropriate and useful. This process is presented and described along with key lessons that were learned during implementation.

INTRODUCTION

In recent years, there has been no shortage of conversations and literature about the need for including internationalized content into college and university programs. This is particularly true for business programs. Bremer (2006) stated that “Globalization has impacted the majority of the world’s modern workforce, making competencies once considered essential for productive professionals within a regional or national economy no longer sufficient in a market place with crumbling borders (p. 40). Dolby and Rahman (2008) concluded that “Over the past 10 years, the pressure to “be international” and to “internationalize” has dramatically intensified in all aspects of education” (p. 676). Yet, what does internationalization mean in higher education?

Moffet (as cited in Bremer, 2006) believed that a person prepared for the global workforce is one with “a grasp of global systems, global issues, the dynamics of how things are interrelated and interconnected in the world, and how society can best address global issues” (p. 40). The American Council on Education provides a comprehensive definition of internationalization, as it relates to learning:

We use *global learning* as a shorthand for three related kinds of learning: global (denoting the systems and phenomena that transcend national borders), international (focusing on the nations and their relationships), and intercultural (focusing on knowledge and skills to understand and navigate cultural differences). Thus, we define global learning as the knowledge, skills, and attitudes that students acquire through a variety of experiences that enable them to understand world cultures and events; analyze global systems; appreciate cultural differences; and apply this knowledge and appreciation to their lives as citizens and workers. (Olson, Green, & Hill, 2006, p. v)

What seems to emerge most frequently, when defining internationalized higher education, are terms like global awareness, systems focus, interconnected, and necessary. Yet, along with a variety of reasons for including internationalized content into higher educational programs, there appears to be a number of preferred methods for achieving it, each with its strengths and limitations. This paper will present one method for internationalization that is directly tied to the creation of outcomes and assessments.

Methods of Integrating Internationalization in Curricula

A primary method, and one that is often cited as having the best chance of providing a truly international experience (Kirwan as cited in Bremer, 2006) is the study abroad opportunity. Such experiences can be “the single best way to provide the knowledge and experience needed to succeed in the twenty-first century workforce” (p. 42). If students are provided an opportunity to immerse themselves into the culture that they are visiting, they may have a good chance of developing skills that will serve them well as global citizens. This, however, cannot be the only method by

which universities attempt to internationalize their students' experiences as the majority will never participate in study abroad programs and, those who do will complete them with varied levels of skill development vis-à-vis internationalization (Manuel, Shooshtari, & Fleming, 2002; Obst, Bhandari, & Witherell, 2007).

Other common methods to internationalize programs include the incorporation of courses that focus on global issues, the development of majors or minors that address global concerns, or internships or work opportunities that provide direct international experience (Black, 2004). Another, less frequently cited, method is to integrate international content into each course where it makes sense to do so. In 2002, the Oxford Brookes University (cited in Black, 2004, p.7) published a list of guidelines for integrating international content into curricula. Some of the items on this list are methods that curricular designers can use to incorporate global content directly into programs or courses and their associated activities or assessments. Specifically, the guidelines include such activities as: referring to international research, applying theory in an international context, using international material in case studies and other assignments, using small group discussions of international aspects, requiring the demonstration of international knowledge in assessments, and promoting cultural sensitivity and diversity. The Oxford list also includes more traditional methods such as study abroad, international exchanges, and internships.

Yet, in many cases, the intention to include activities, such as those on the Oxford list, may not be enough to ensure that students complete their programs with the level of global awareness that will be required to succeed in the increasingly globalized marketplace. Emphasis on business related program and course outcomes may take precedence relegating internationalization to a secondary concern that could be missed unless it is tightly integrated with these outcomes. Linking internationalization to assessed program and course outcomes is one way to ensure the global perspectives are not missed.

A STUDENT ORIENTED, OUTCOMES-FOCUSED APPROACH

Suskie (2004, p. 4) proposed a student-centered method for designing programs and courses that follows a prescribed, circular pattern. This four-step continuous cycle includes:

1. Establishing learning goals
2. Providing learning opportunities
3. Assessing student learning
4. Using the results

The results from this process can be used to measure both student performance and overall program quality.

One method for ensuring that internationalized content is part of both the program and its courses is to include it in all four stages of the Suskie model, using an outcomes-based curriculum design process that reflects the central concepts outlined by Wiggins and McTighe (2005). Learning goals, or program and course outcomes, can be established that call for students to demonstrate skills in ways that infuse global perspectives. Learning opportunities can utilize internationalized activities such as those proposed in the list provided by the Oxford Brookes University. Assessments that are tied to internationalized outcomes should measure the extent to which all parts of those outcomes are met. Rubrics that call for evidence of internationalization along with the program and course related requirements can be useful in ensuring that both aspects of the outcomes are present in the assessments. And, finally, results from program assessments can be applied to the continuous improvement of both the program and its courses to ensure the internationalized content is being properly provided by instructors and achieved by students. Inclusion of concerns for internationalization in all parts of the design, delivery, and review process can be a viable method of ensuring that globalized content remains at the forefront during the program and course development process.

A Case Study of Internationalized, Outcomes-focused Design

The remainder of this article will present a case study that demonstrates how one university employed a learner-centered, outcomes-focused approach to infuse internationalized content into its business programs

to address a deficit that was revealed in a recent program review.

The University

City University of Seattle, headquartered in Bellevue, WA, is primarily a degree completion and graduate university that, in the U.S., focuses on an adult student population. Since its founding in 1973, the university has valued international education and has formed a network of partnerships resulting in its programs being offered at locations across Europe, China, Australia, Canada, and Mexico. While primarily focused on adult students in the U.S., the populations within the international network tend to contain more traditional age students, particularly in the undergraduate business programs. The university employs a practitioner faculty model whereby instructors are hired for their industry expertise and courses are designed to allow them to teach skills that are directly applicable to the careers and lives of their students.

To ensure that its programs are consistent across the international network, the university employs a team-based, centralized curriculum development process. Subject matter experts are hired at the Bellevue headquarters and work with design teams to develop programs and courses which then can be exported to international locations. Typically, each location uses the same syllabi, the same textbooks (depending on availability), and student performance is assessed in a consistent manner with slight regional variations.

The Problem

Until 2008, the university's centralized curriculum development process did not place the same level of emphasis on internationalized content as it currently does. While still important, the primary method for internationalization was left to specific courses in international business or the practice of specific instructors. American students were receiving internationalized content through limited methods. And, while students in foreign locations were still taking the same courses as American students, there were a few fundamental differences.

First, students at international locations were, by default, participating in an internationalized program that was developed in the United States and largely taught by ex-patriot or traveling American faculty using American textbooks, resources, and case studies. The program was presented as an American-style education, an attribute that was deemed highly attractive by international students. Employment rates for graduates in locations such as Slovakia and Bulgaria were favorable as employers appreciated the business and English language skills that resulted from the program. Because efforts were made to keep the program consistent at all locations around the world, American students were getting the same Americanized curriculum with the occasional international business course included as an elective. This would prove to be insufficient international exposure for these American students.

Second, the university was relying on its network of international partners to provide opportunities for American students to study abroad. For students not interested in such programs, international contact was reliant on interactions with a relatively small population of international students on the home campus. However, both approaches came with problems. Given the nature of the busy domestic adult students, interaction with international students was kept to a minimum and limited to the classroom. Few structured international exchanges were built into the curriculum, and most of these were focused primarily on traditional business skills. This problem was even more pronounced in online courses which, due to visa requirements, international students rarely participated in. Additionally, adult students almost never participated in study abroad programs and student surveys revealed that they had little interest in doing so.

In 2008, the university's undergraduate business program underwent its scheduled program review and revision process. The first step was to gather a random sample of program capstone projects and send them to independent reviewers whose job was to assess them against the program outcomes and determine the extent to which evidence existed in the capstones to suggest that each of the outcomes had been met. The results were mixed but the program outcome on international awareness provided the biggest surprise. Only 56% of American students provided evidence that they had achieved proficiency in this area. The students taking the program in other countries fared slightly better at 66%. Action needed to be taken to address this problem among both populations. The question that

the university had was how to provide sufficient international awareness to students who were unlikely to participate in study abroad programs and how to ensure that this awareness was not an afterthought.

Adoption of an Outcomes-focused Curriculum Development Process

Hale and Tijmstra (1990) proposed four methods for including internationalized content in the curriculum of a program: internationalizing courses in a wide range of disciplines, adding international courses to the curriculum, adding language courses to the curriculum, and offering work or study assignments abroad for students. To a certain extent, the university has recently embraced three of these strategies (foreign language study is not a requirement) but it is the inclusion of internationalization of courses in a wide range of disciplines that has become a fundamental part of the university's curriculum development model. This is done, first, at the program level and, second, at the course level. These processes will be presented and described in the sections that follow.

Before presenting the process by which the university internationalizes its programs, it is necessary to introduce the university's Learning Goals. These six goals are common to every program that the university offers. Every graduate, from any program, should be able to demonstrate proficiency in all six of these attributes. The Learning Goals are:

1. Professional competency and professional identity
2. Strong communication and interpersonal skills
3. Critical thinking and information literacy skills
4. Commitment to ethical practice and service
5. Global and diverse perspectives
6. An appreciation and desire for lifelong learning

The Learning Goals play a key role in the university's program and course design process. As each program outcome is designed, it will be associated with one or more of these Learning Goals. The question to be asked during the design process is if the student is able to demonstrate proficiency on the program outcome, which of the Learning Goals will he or she also have demonstrated competency on? And how will the assessment be structured to allow that competency to be demonstrated?

Given the importance of internationalization to the university, the Learning Goal for global and diverse perspectives has risen to prominence. Thus it is likely to appear more frequently than the other five goals in many of the programs. This Learning Goal is often referred to as international awareness or international proficiency throughout the university's curriculum development processes.

Program Design Process

The first part of any program design at the university is to establish a comprehensive list of program level outcomes; these are objective, demonstrable, actionable skills that the student will be able to demonstrate upon successful completion of the program. Associated with each of those outcomes are one or more key assessments through which students demonstrate competency. Additionally, each program has one or more key capstone assessments that are intended to provide evidence of demonstrated competency on all program outcomes.

As the program level outcomes and their associated assessments are drafted, consideration is given to the university's Learning Goals from an outcomes perspective. The program design team must consider each program outcome to see if there is an opportunity to incorporate one or more of the Learning Goals into both the outcome and the assessments. The Learning Goals are general enough that it can be tempting to say they are all represented in each program outcome. However, using an outcomes-based assessment approach requires greater precision. The link between a program outcome and a Learning Goal can only be established if the Learning Goal is part of the assessments used to measure the program outcome.

Thus, the program design process follows a consistent pattern. Outcomes are drafted, associated assessments are created, and consideration is given to the inclusion of the Learning Goals which often requires adjustment to both the wording of the program outcome and the design of the assessment. Lastly, rubrics become an important part of the process. Not only do they guide the evaluation of the different attributes of an assessment but they also ensure that evidence of achievement of Learning Goals, such as global and diverse perspectives, is also present.

The tool that the university uses to create program outcomes and assessments is the Program Design Guide. It contains the following program attributes:

- Program Description
- Program Outcomes – Objective, actionable skills that the student will be able to demonstrate upon completion of the program.
- University Learning Goals – Indication of which of the six Learning Goals is evident in the assessments associated with each program outcome.
- Required Assessments – A list of the assessments and the courses where they appear. (This is an evolving list as specific assessments or even courses may not be known at the time of initial program creation.)
- Core Concepts, Knowledge, and Skills – A list of the fundamental knowledge that the student must gain in order to be successful on the assessments. This helps the instructor know what the class activities should focus on in order to prepare the student for performance that will demonstrate competency on the program outcomes and the associated Learning Goals.

Figure 1, below, is an excerpt of a Program Design Guide for an undergraduate business program. The actual Program Design Guide for this program contains 10 program outcomes. The program description has been left out to focus on the associations between the other four elements. In this example it is easier to see how program level outcomes are associated with University Learning Goals and measured with specific assessments. The first program outcome was initially drafted using language that was locally focused. However, upon consideration of the Learning Goals, it was reworded primarily to include the international portions; the outcome's scope was transformed from local to global. This, in turn, drove the selection and creation of the assessments intended to measure student competency on both the outcome and the Learning Goals. The last column lists Core Concepts, Knowledge, and Skills that the student must acquire in order to successfully achieve the business related outcomes in this program. Since both the program outcomes and the assessments are focused on what the student will be able to *do*, there must also be a process by which the program design team will be able to state what the student must *know*. This is what is listed in the last column on the Program Design Guide and it can be a valuable guide in designing course activities.

The Course Design Process

Once the initial draft of the Program Design Guide is completed, a similar design process is applied to each of the courses that make up the program. The tool used in this process, the Course Design Guide, is similar to the Program Design Guide with a few small exceptions. The level of detail is much more specific in both the outcomes and the assessments. There is also a Program Context column that allows the course designer to indicate where the course fits in the program, what the prerequisites for the course are, and which of the program level outcomes the course supports.

Figure 2 contains an excerpt of a Course Design Guide for an undergraduate critical thinking course. The heading of the Course Design Guide is not shown but it contains the course description and it indicates which of the University Learning Goals will be supported by this course.

The selection of a critical thinking course as an example allows an important point to be demonstrated; not all course level outcomes will be open to internationalized content. Quantitative courses are examples where it may not make sense to attempt to internationalize the outcomes and assessments. This is fine given that there will be many other opportunities, throughout the program, to include internationalized content. In figure 2, only the fourth program

outcome is a good fit for internationalized content. In this case, expanding this outcome to include both domestic and international writers actually strengthens both the outcome and the assessment. At the course level, the intention is to include internationalized content only where it is useful and genuinely enhances the course. If there is not a good fit or it appears that internationalized content has been forced to fit, it is best to leave it out.

Figure 1. The Program Design Guide

Program Outcomes	CityU Learning Goals	Required Assessments		Core Concepts, Knowledge and Skills
What must the student successfully demonstrate as a result of this program?	Which CityU Learning Goals are supported by program outcomes?	What graded assessment(s) provide evidence that the learner can demonstrate proficiency in this program outcome?		What core concepts, knowledge, and skills must the learner acquire to demonstrate proficiency in program outcomes?
1. Evaluate the international industry and worldwide economic sector in which a given organization operates and propose strategies that the business can use to succeed in that sector.	Communication and interpersonal skills Critical thinking skills Global and diverse perspectives	Course	Assessment	<u>Industry/Sector Perspective</u> Industry research and analysis Broad financial risks Macroeconomics Microeconomics Regulatory context of business Research plan Financial analysis Present value concepts
		BSM 407	Economic Analysis	
		BSC 401	Financial Analysis	
		BSC 405	Quality Management Paper & Operations Improvement Plan	
2. Appraise the threats and opportunities of conducting business in a world with fewer barriers.	Critical thinking skills Global and diverse perspectives Appreciation for lifelong learning	MK 300	Marketing plan	<u>International/Global Perspective</u> Market structures International economy Ethics Business policy Business strategy Organizational behavior SWOT International business Environmental analysis Financial analysis
		BSC 407	Trade Theory paper	
		BSC 401	Financial Analysis Statement	
		BSC 405	Operations Improve Plan	

Figure 1. Excerpt of a Program Design Guide that shows the relationships between the program level outcomes, the University Learning Goals and the assessments that will be used to measure competency on both.

Drafting the Syllabus

Once the Course Design Guide is completed, the next step is to draft the syllabus. In many cases, content that was included in the design guide is copied into the syllabus. The majority of the effort required in transforming a design guide to a syllabus is in completing the course activities and the descriptions of the assessments along with the associated rubrics. In these areas, the course designer can provide additional details and assistance by being clear about how international content is to be included in the assessment and how the rubric can be structured so that the importance of this content is not missed.

Figure 2. Excerpt of a Course Design Guide

Program Context	Course Outcomes	Required Assessments	Core Concepts, Knowledge and Skills
Where does this course fit within the program? Which program outcomes are supported by this course?	What abilities must the learner successfully demonstrate as a result of this course? In this course, learners are able to:	What <i>major</i> graded assessment(s) provide evidence that the learner can demonstrate proficiency in this course outcome?	What core concepts, knowledge, and skills must the learner acquire to demonstrate proficiency in course outcomes?
BC 301 is one of four courses designed to provide foundational academic and business skills. There are no prerequisites for this course. BSBA program outcomes supported by this course are: 6. Objectively consider issues, identify alternatives, and choose and implement solutions...	Analyze business propositions for examples of fact and inference, inductive and deductive reasoning, and emotional appeal	Personal Journal Exercises, Discussion Board Exercises	The relationship between careful observation and critical thinking; Obstacles that impede the critical thinking process; The functions of assimilation, accommodation and disequilibrium in the thinking process; The difference between the denotative and connotative meanings of words;
	Construct an argument that defends a business claim with appropriate supporting data and logical consistency	Argumentative Essay	
	Trace the development of an argument from proposition to conclusion	Editorial Evaluation, Personal journal exercise, 12 Angry Men	
	Compare and contrast attitudes or values as expressed by domestic and international writers with differing perspectives	Viewpoints Comparison	

Figure 2. Excerpt of a Course Design Guide that demonstrates the link between course outcomes, assessments, and core concepts. This is an example of a Course Design Guide where some outcomes may be internationalized while others are not. The decision to expand the scope of an outcome to include international content is made according to the extent to which it enhances the outcome and the assessments.

As is the case with both the Program Design Guide and the Course Design Guides, all syllabi and associated documents are centrally created and shared with international faculty. The review process for these documents has been expanded to ensure that international partner participation is a key part of the design process. In the recent revision of the undergraduate business program, described earlier in this article, international contributions and feedback played a significant role and many course modifications were driven by this feedback. The resulting syllabi have a much more international flavor given that none were approved without first being reviewed by international faculty.

Validation of Curriculum

The final stage in the design process is to submit the program or course to a centralized approval process. During this review, a committee of peers examines the documents to determine whether they meet all the standards of the university. This is another opportunity to ensure that internationalization is included in either the program outcomes or the course outcomes where appropriate.

The validation process is driven by checklists. There are separate lists for the program approval process and the course approval process. In the program approval checklist, there is a criterion that asks whether all six University Learning Goals have been properly included somewhere in the program. This is the first validation that internationalization was built into the program outcomes. Given the university's emphasis on internationalization, it is expected that this Learning Goal will appear frequently throughout the program.

The course reviewers then check the internationalized courses to ensure that appropriate content is present in the course outcomes and accounted for in the assessments and their associated rubrics. Lastly, as part of the approval process, the program's capstone course will be reviewed to ensure that all program level outcomes and associated Learning Goal outcomes are addressed.

Reviewing the Process

The new process of internationalizing the university's curriculum has been in place since early 2008. It was used to revise several programs within the university's School of Management. These programs began in the fall of 2008 and while there are yet to be any graduates who have fully experienced these new programs, the university has already learned some key lessons. These include:

- It is important to include international participation, to the extent that it is possible, in the course design process. This can come from an international faculty member or just a member of the design team that has relevant international experience. Inclusion of international participation was integral in highlighting how some of the university's design teams were using an overly American-centric perspective which was causing them to miss opportunities to include international content by overprescribing course activities. The international faculty challenged some of the course activities and course assessments and adjustments were made.
- The international review process should include feedback from faculty who will actually be teaching the courses at domestic and international sites. It should not depend solely on an administrator or a group of individuals who are only charged with providing feedback on the structure of a course yet may lack the familiarity with the specifics of the course since they have not taught it.
- Once the program and course outcomes have been drafted and agreed upon among all members of the design team, it is important that they become the stable and unchanging backbone of the program. Given the diverse and widespread network of international partners that the university has, it is sometimes difficult to teach the same course in exactly the same way in all locations. Schedules, textbook availability, or even instructor preferences may create differences in the way that course activities and assessments are handled. To a certain extent, such differences can be allowed if the outcomes are regarded as mandatory

and unchangable. That way, the destination is the same but the route that is used to get there can be altered to accommodate legitimate differences.

In the coming year, the university will have an opportunity to assess its newly revised business programs to ensure that appropriate evidence of international competency is present. Early indicators suggest that there is reason to expect more positive results in the next round of capstone assessments. Once gathered, these data will be used in a continuous improvement process to ensure that programs, courses, outcomes and assessments, are adjusted to prepare students to succeed in the rapidly changing global marketplace.

CONCLUSION

As the conversations continue about internationalizing the higher education experience, the outcomes-based curriculum design process being implemented at City University of Seattle provides a useful case study. The university is already engaged in international education by bringing students from other countries to study at its home campus and, more uniquely, by offering its programs in ten countries outside the U.S. Even so, it had to confront the reality that most of its domestic students are unlikely to take advantage of study abroad opportunities, and made a substantial investment in building a business curriculum that embeds global and diverse perspectives throughout the student experience. Early indications from the assessment process indicate that this approach will overcome some of the challenges that led to low achievement of these learning outcomes in earlier iterations of the curriculum, and will provide a more solid basis for all its graduates to be effective in the global business environment.

REFERENCES

- Black, K. (2004). A review of factors which contribute to the internationalization of a programme of study. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 3(1), 5-18.
- Bremer, D. (2006). Wanted: Global workers. *International Educator*, 15(3), 40-45.
- Dolby, N., & Rahman, A. (2008). Research in international education. *Review of Educational Research*, 78(3), 676 – 726.
- Hale, A., & Tijmstra, S. (1990). *European management education*. Geneva: INTERMAN.
- Manuel, T. A., Shoostari, N. H., & Fleming, M. J. (2002). Differences in the effectiveness of internationalization of undergraduate business education in achieving job placement success. *Journal of Teaching in International Business*, 14(1), 7-25.
- Obst, D., Bhandari, R., & Witherell, S. (2007). Meeting America's global education challenge: Current trends in U.S. study abroad & the impact of strategic diversity initiatives. New York: Institute of International Education.
- Olson, C. L., Green, M. F., & Hill, B. A. (2006). *A handbook for advancing comprehensive internationalization: What institutions can do and what students should learn*. Washington D.C.: American Council on Education.
- Suskie, L. (2004). *Assessing student learning: A common sense guide*. San Francisco: Anker Publishing Company.
- Wiggins, G.P. & McTighe, J. (2005). *Understanding by design* (Expanded 2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Kurt D. Kirstein is the Dean of the School of Management at City University of Seattle and has also served as a faculty member and program director in both business and technology. He spent 20 years managing technical support and training teams for organizations in the telecommunications and pharmaceutical industries. He holds a BS degree from The Evergreen State College, an MA in Adult Education from Seattle University, and a doctorate in Organizational Leadership from Nova Southeastern University.

Elizabeth A. Fountain is the Associate Provost and Director of the Office of Institutional Effectiveness at City University of Seattle. Dr. Fountain directs learning outcomes assessment and strategic planning at the university. Her background includes fourteen years in higher education as a faculty member, program director, and Dean of the School of Arts and Sciences at City University. She holds a BA and an MA in psychology from Seattle University, and earned her PhD in Higher Education Leadership from Capella University.

Kelly A Flores has been the Director of Curriculum and Faculty Development at City University of Seattle since 2006. She has worked in higher education since 2002 and brings both academic and corporate experience in training and development of faculty, leaders, and managers. She holds a Masters of Education in Adult Education and Distance Learning and is currently pursuing her Doctorate in Education Leadership.

Online Discussion and Communities of Practice

Herbert E. Rau, Utica College – Utica, New York, USA

ABSTRACT

The increased use of online course offerings provides the opportunity for learners to engage in written discussions with others. However, an issue arises regarding the establishment of standards for acceptable online postings. A rubric has been created that attempts to address this issue by providing clarity to students regarding their individual postings, and attempts to create an electronic Community of Practice for a graduate-level management course.

INTRODUCTION

A concern with developing communities of practice has been noted by Wenger (1998), and that concern is of increasing importance in the development of organizations that are responsive and sustainable. However, it is not apparent that the skills necessary for building communities of practice are being disseminated to non-participants. For example, college courses are frequently structured to “deliver” information to the receptive student, and this might be appropriate for undergraduate level courses. But when students bring life experiences to the class, are working adults, and have moved to the graduate level courses, “delivering” knowledge may no longer be the most appropriate method for teaching. The student – and the community of learners for that subject – may now have transitioned to a community of practice. That is, knowledge is no longer a matter of explicit information that is to be delivered, but the explicit and tacit knowledge of the community is to be shared and enlarged. Knowledge may now be viewed as transitioning from being of a uni-dimensional flow (“delivered” to a recipient), to being actively created by all participants in an emergent process that ebbs and flows. In keeping with Messick’s framework for evaluation (1989) (in this regard, the value implications and social consequences of Messick’s model), this paper takes the position that higher education should transition from being principally a purveyor of information emanating from the authority figure, to the co-creation of knowledge with the intended user community. Further, in keeping in line with the findings of Dede (2005) of unintended consequences, the richness and complexity that may emerge from a community of practice in graduate education may create insights that extend to long-term benefits for the collection of individuals involved in a course and the larger society body in which they reside, that were not originally envisioned in the initial design of a specific course.

DISCUSSION

To be clear, for this paper a community of practice is defined as a group of individuals with a common purpose that extends the individual and collective abilities to identify, clarify, resolve and monitor complex issues. The members will likely have membership in other organizations, and may be nodes in networks. Individuals in communities of practice will likely have shared vocabularies (jargon and meanings), and the structure of the community is a self-policing social structure that may or may not be sanctioned by a larger group. A community of practice will tend to be self-organizing with permeable boundaries, and the fundamental distinguishing feature is that it is focused around a specific set of knowledge sharing, learning, and creation.

The challenge that faces this transition from the delivery of explicit knowledge to the sharing of tacit knowledge as noted by Nonaka (Ready, 1995) and the creation of emergent knowledge requires a different communication process. In the dissemination of explicit knowledge, a monologue may be the appropriate medium for transmission. But a monologue is not appropriate for the creation of emergent knowledge. Even a distributed monologue may not be appropriate because of the potential for isolated positions to not be effectively communicated. It may be more appropriate to create a “container” that enables a multilogue / polylogue for the emergence of this knowledge, and the advent of online discussion groups may provide the necessary boundaries for this type of knowledge creation.

Creating communities of practice is difficult in organizational settings where people are closely engaged in real time and spatial situations. However, it becomes even more difficult to create a community of practice in a distributed

setting (such as an online course). This has been noted by Martinez et.al (2006) regarding the challenges that face distance education students in attempting to balance work, family responsibilities, and online learning that “keep these students from high levels of engagement beyond the work they do in their individual courses”. Yet, if the future of organizations is through knowledge management, we must create structures that help individuals be more successful with communication in electronic media. To that end, a rubric (Figure 1) was created in order to provide structure for students who are engaged in online discussion formats. This rubric was utilized in a graduate level online course at Utica College in the Spring semester of 2009. The course is a required course in a Masters of Science of Health Administration curriculum with 13 participants, and was structured for an eight-week session. Twelve of the students were actively working in the health sector, and one student was enrolled in the program directly on completion of undergraduate studies.

A particular challenge for students enrolled in online courses, is that the format for online courses may not align with their preferred learning style. In their work on Human Dynamics, Seagal and Horne (1997) have identified that people not only process the world in distinct patterns, but that the distinct dynamics have different preferred styles of learning. Seagal and Horne have identified nine different dynamics, and five of these dynamics are predominant in the Western world. Two of these dynamics actively learn through conversation, two of these dynamics tend to be reticent and prefer a sequential process for learning, while one dynamic learns preferentially through reading. The issue that needs to be addressed in this context, is that the two dynamics that prefer learning through conversation represent nearly 75% of the Western urban population. On the face of it, this appears to be a dilemma that needs to be addressed for online courses. If the preferred style of learning is through conversation, how should an online class be structured to achieve conversational learning in a predominantly asynchronous electronic media? The discussion rubric attempted to address this concern.

The rubric was created to specify particular aspects of writing in online discussions that would move beyond the simple metric of how many times a student responded to an assignment, and aligns with the work of Baker, et al. (2002). The rubric, in conjunction with a netiquette policy, was also designed to encourage the spontaneous development of a community of practice. As noted above regarding Messick’s concern of unintended consequences, the rubric was created to address the potential student question of what is specifically expected for the content of an online posting and the concern of isolation among the distance learners in the class as noted by Clark (1994). The Discussion Rubric (Figure 1) is on the next page.

As noted from reviewing the rubric, two major components for assessing a posting are addressed; contents and mechanics. A simple rating system for the various elements allows for speed of assessment by the instructor; the element meets expectations, is somewhat deficient, or does not meet expectations. The numbers (0, 1, and 2) were included in the rubric to facilitate the creation of a composite score that might be used for an individual student, and might also be used for generating an average score for a class. Generating an average score for a class could also help an institution with qualitative monitoring of general goals and objectives beyond content knowledge for a particular course/program, with the intention of supporting an institution’s accreditation activities.

The content component consists of seven elements, while the mechanics component consists of eight elements. However, not all elements of the rubric have “equal” value when being reviewed for a grade. When assessing a posting, greater “weight” is assigned to the elements of “Posting serves as a key leverage point for further exploration and discussion for others”, and “Posting serves as an important learning for the person who posted”. In effect, the mechanics components are the basic requirements expected for “civil” behavior in the online space. The content components address the issue of what is being learned. The two elements identified as having greater “value” are meant to drive the creation of communities of practice, and to further the sharing and creation of knowledge. Obviously, there is a certain level of subjectivity involved in assessing whether a particular individual has had an “ah-ha” moment, however, it is common in the writing of a posting that the student gives an indication of the insight that has been gained from the ongoing discussion. For example, a student posting may begin with the comment “I hadn’t realized that ...”, or “I found your posting to be very interesting, and I was wondering...” More frequently, the insight of the student is evident in the response to a posting of another individual.

RESULTS

Students were instructed at the beginning of the semester that a “Discussion Rubric” would be used to encourage substantial and meaningful postings. The rubric was electronically forwarded and readily available online, and before beginning the process of writing their respective postings, ten students accessed the rubric. For the class of 13 students (and an eight-week duration), there were 112 original postings, and 202 replies.

FIGURE 1: DISCUSSION ASSESSMENT RUBRIC

	Does Not Meet Expectations	Somewhat Deficient	Meets Expectations	N/A Or Comments
Content				
Posting is accurate, original and relevant.	0	1	2	
Posting is insightful.	0	1	2	
Posting enriches the class understanding and knowledge.	0	1	2	
Posting might be provocative, but is not offensive.	0	1	2	
Posting serves as a key leverage point for further exploration and discussion for others.	0	1	2	
Posting serves as an important learning for the person who posted.	0	1	2	
Differences are recognized and valued.	0	1	2	
Mechanics				
Posting is well written, and uses professional language.	0	1	2	
A safe and receptive conversational space is maintained. Respect is maintained.	0	1	2	
As appropriate, the posting cites relevant sources.	0	1	2	
As appropriate, the posting encourages and reinforces the discussion thread and members of the discussion group.	0	1	2	
Posting responds to questions that have been asked.	0	1	2	
Reflective “listening” is apparent.	0	1	2	
Student is adequately engaged with discussions (primary postings at least once/week).	0	1	2	
Student is adequately engaged with replying to postings (at least three times/week)	0	1	2	
OVERALL ASSESSMENT				
Overall, the student:	0	1	2	

Only one half of the class achieved full compliance with the minimum requirements for volume of postings, with the significant shortcoming being not having responded to other student postings a minimum of twice per week. Also, two students were significantly short on original postings. However, the amount of time devoted to reading and responding to classmate postings was greater than 385 hours (the average time invested was greater than 3.7 hours/week/student). The number of replies to other student's original postings ranged from a low of 0 to a high of 59. Interestingly, the student that responded 59 times was writing substantial offerings, and not just a response of "good post". This student would frequently include web-site references in addition to providing critical thought to what others wrote.

The rubric was used to help determine the grade for each posting. If all of the elements in the rubric "meet expectations" and the posting was germane to the topic at hand, the post would receive a grade of "A". As more elements received an evaluation of "somewhat deficient" or less, the grade for the posting would decrease. Grades for the postings were predominantly "A's" and "A-'s", but a number of "B's" were also awarded. Six students received "A's" for the quality of their postings (for the average of the entire semester), four students received an "A-", and three students received a "B+" for their posting quality. Also, as noted above, the rubric was intentionally designed for ease of use. The average additional time required for the use of the rubric was less than 10 seconds per posting.

A few concerns should be noted from this exercise. The first concern regards the subjective aspect of assessing a posting. This concern is similar in aspect to assessing any written submission - does the student adequately address the question that has been posed? It might be argued that the experience and knowledge of the evaluator is the limiting factor for the assessment process, and that this factor varies from individual to individual. Another concern is whether a community of practice is being created. Regarding the submissions for this class, it was the value judgment of the assessor that sharing and co-creation of knowledge was occurring. However, as with the issue of the grading of a posting, this becomes a subjective assessment. There is also the possibility that there are stages of maturity for communities of practice, and what was demonstrated in this class might represent an early stage in the development of a community of practice. It is likely that the final determiners of whether a community of practice had been created are the students themselves, however this type of assessment was not attempted for this class.

An additional concern exists regarding how to increase the minimum compliance rate for discussion postings for all students. The "carrot-and-stick" approach used for this class (the student's grade is negatively effected if the minimum number of postings and responses has not been received) is only partially effective. The "carrot-and-stick" approach risks being "insulting" and antagonizing to students who are compliant and learn best from online discussion. However, it should be noted that a problem of the response rate for this class involve a technology issue regarding all students being able to work efficiently online for the first few weeks of the course (for some of the students, this was their first online class). There is also the compounding issue of some students working best in an on-campus setting, and online learning is anathema to those students. Further clouding the problem is that almost the entire class consisted of working adults with multiple responsibilities and issues. There is also the baseline perspective that these students are adults - that is, the students are not freshmen in undergraduate school who need a significant amount of guidance in study and work habits. Generally, graduate students have mastered these issues years earlier. Even though "gentle" reminders for participating in the online discussions were given, it may be necessary in the future to be more proactive in making sure that some students do not get left behind. However, an equally important and potentially more challenging issue (in keeping with the findings of Seagal and Horne), is how to adequately address the learning needs of students who prefer face-to-face conversation learning style when involved in an asynchronous environment. This issue is important not only for online education, but also for many organizations as the structure of work changes and becomes distributed across time and space.

REFERENCES

- Clark, R. E. 1994. "Assessment of distance learning technology". In E.L. Baker & H. F. O'Neal, Jr. (Eds), *Technology assessment in education and training*. (pp. 63-78). Hillsdale, NJ: Erlbaum.
- Dede, C. "Speaking personally". *American Journal of Distance Education*. 2005. V.19, No.2, pp 119-123.
- Baker, A. C., Jensen, P.J., and Kolb, D.A. 2002. "Conversational Learning". Westport, CT. Quorum Books.
- Messick, S. "Validity". *Educational Measurement* (3rd ed.)

Martinez, R., Liu, S., Watson, W., & Bichelmeyer, B. 2006. "Evaluation of a web-based master's degree program: Lessons learned from an online instructional design and technology program". *The Quarterly Review of Distance Education*. V7., No. 3., pp 228-267.

Ready, D.A. (ed) 1995. "*In Charge of Change*". Lexington, MA. International Consortium of Executive Development Research.

Seagal, S., and Horne, D. 1997. "*Human Dynamics: A New Framework for Understanding People and Realizing the Potential in Our Organizations*". Cambridge, MA. Pegasus Communications, Inc.

Wenger, E. "Communities of Practice: Learning as a Social System" *Systems Thinker*. June, 1998. V.9 , No.5.

Herbert Rau is the Director of the MBA Program and an Assistant Professor of Management and Marketing at Utica College. His 35 years of business experience include the semiconductor, construction, food, metal finishing, and garment industries.