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This paper describes the difficulties and rewards found by a cohort of undergraduate researchers as they engaged local Tea Party chapters. While gathering data as part of a research methods course, students found themselves in complicated territory, confronted by research subjects who were wary of higher education, and thus the students' motives and demographics. Our engagement with the Tea Party highlighted a number of challenging issues related to researcher perspectives and roles, and the relationship between higher education and community. Ultimately students benefitted by being placed in a situation in which they had to justify their presence and engage members.
Leadership in Higher Education

Lloyd Moman Basham

The purpose of the study was primarily concerned with exploring the major issues that are confronting presidents of higher education and the transformational leadership practices and concepts warranted in addressing today’s issues. A Delphi technique was used with a broad-based panel of 52 experts who were university presidents in the United States. The expert panel provided input to 41 distinct indicators that included a list of concerns, issues, management practices and concepts, and effective leadership qualities. These indicators were force rated through three rounds to determine levels of agreement and consensus determined from medians and interquartile ranges for each indicator. Specifically, the study determined the following: 1) The major issues confronting college/university presidents; and 2) The major issues confronting college/university presidents are susceptible to transformational leadership practices and concepts.

A Five-Year Retrospective Analysis of Student Learning in a University Diversity Course

Cynthia H. Brock, Lynda R. Wiest

This paper reports the results of a qualitative study of seven students from the United States who completed a diversity-oriented university course with us in Spain in the summer of 2003. Analysis of student work and interviews conducted five years after the course provides insight into student’s most significant learning experiences.

Interesting Times: Relation between Test Times and Student Performance in Online Courses

Hedayeh Samavati, Carolyn Fabian Stumph, David A. Dilts

Many instructors are now using online technology for the assessment of student learning. However, there are still relatively few empirical studies of the technology’s implications for student learning. In this study, the authors use student performance data from over two hundred students in principles of microeconomics to assess the correlation between student performance and the duration of an online exam. Conclusions were drawn regarding the “optimum” time allotted for multiple-choice, computer-based course examinations. The results should be of interest to all educators who are involved with distance learning programs generally, and those instructors who administer non-proctored online exams, specifically.

Organizational Culture: Comparing Faculty and Staff Perspectives

Bela Florenthal, Yulia Tolstikov-Mast

A university’s organizational culture influences students’ overall educational experience. One critical aspect of a positive campus cultural experience is the strong sense of community largely established by a constructive working relationship between faculty and staff. The current study focuses on sources of potential conflict in faculty-staff relations that could negatively influence this organizational culture, and thus, inhibit positive student educational experiences. The study uses 272 questionnaires collected from faculty and staff at a private Midwestern university. Findings indicate that greater staff involvement in decision-making, clearer communication of roles and responsibilities, and an adequate rewards system can reduce faculty-staff tension.
Match/Mismatch of the College Business Student Service-Learning Experiences: Drivers of Perceived Attitude Change, Satisfaction, and Future Volunteering Intentions

Jeananne Nicholls, Kurt Schimmel

This paper explores the role of the college service-learning experience as a driver of future volunteering decisions. Utilizing the service-learning context and a sample of 157 business students, the TMI is used as a pre-post functional motivation measure. Perceived attitude change and satisfaction are examined as mediators of the relationship between TMI and future volunteering behavioral intentions. The hypotheses are tested using PLS-SEM for the analysis. The findings indicate that perceived attitude change and satisfaction are mediators and the service learning experience, as well as perceived attitude change and satisfaction, are drivers of future volunteering intentions.

Integrative Business Education Focused on the Environment: A Description of the Sophomore Scholars Program, Its Effects on Academic Performance, and the Regulatory Focus of Its Participants

Jane McKay-Nesbitt, Elizabeth Yobaccio, Angela Wicks, Kwadwo Asare

The Sophomore Scholars Program (SSP), an innovative program for the delivery of core business courses to select sophomores at a university in the Northeastern United States, is discussed. The SSP required integration of discipline-specific subject matter and featured student-centered learning approaches such as site visits, cases, exercises, consulting projects, and large-scale simulations to enhance the educational experience. Each of these experiences focused on the environment. The results of the assessment of the SSP’s impact on student learning as well as differences in SSP and non-SSP students’ Chronic Regulatory Focus are discussed. Suggestions for program improvements are also presented.

Increasing Global Awareness with Team-based Learning

Patricia Wallace

This paper describes utilizing team-based learning to present global concepts in an Information Systems course, MIT 310, in an AACSB Business School to help instructors design and revise courses and programs that increase students’ global awareness. Drawing on teamwork and globalization literature, this paper reviews key themes in teaching/learning as it relates to both business school curricula, and, more specifically, information systems and technology courses. The paper concludes by discussing the implications for fostering global literacy via team-based learning and provides a framework that instructors may utilize in their revision of teaching materials in both business and information systems courses.
GUIDELINES FOR SUBMISSION

Journal of Higher Education Theory and Practice
(JHETP)

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The Journal of Higher Education Theory and Practice (JHETP) is dedicated to the advancement and dissemination of academic and intellectual knowledge by publishing, through a blind, refereed process, ongoing results of research in accordance with international scientific or scholarly standards. Articles should combine disciplinary methods with key insight to contemporary issues central to faculty, administrators, and industry specialists. Articles of regional interest are welcome, especially those dealing with lessons that may be applied in other regions around the world. Accepted manuscripts should make strong empirical and/or theoretical contributions and highlight the significance of those contributions to the higher education field.

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2. Enhance the development of theory and application useful to faculty and administrators
3. Provide an additional outlet for scholars and experts to contribute their research findings in the area of higher education

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Include a title page with manuscript which includes the full names, affiliations, address, phone, fax, and e-mail addresses of all authors and identifies one person as the Primary Contact. Put the submission date on the bottom of the title page. On a separate sheet, include the title and an abstract of 150 words or less. Do not include authors’ names on this sheet. A final page, “About the authors,” should include a brief biographical sketch of 100 words or less on each author. Include current place of employment and degrees held.

References must be written in APA style. It is the responsibility of the author(s) to ensure that the paper is thoroughly and accurately reviewed for spelling, grammar and referencing.
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The Role of Community Source Software in University Business Models

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The Kuali Foundation provides open source community software for universities. The foundation is comprised of many universities, colleges, and commercial firms who have joined together to develop an application portfolio for higher education administration. This research studied the software quality of the Financial System which is one of eight Kuali applications. Specifically, four Financial System modules were analyzed including Budget Construction (BC), Capital Asset Builder (CAB), Capital Asset Management (CAM), and Purchasing/Account Payable (PUR/AP). The analysis of software quality utilized NASA as a reference model. The NASA reference model uses three software metrics for determining software quality and reliability.

INTRODUCTION

Today’s large businesses rely on enterprise resource planning (ERP) to enable business processes and to provide integration and end-to-end processing. Two tier-1 vendors, SAP and Oracle, dominate the ERP market, and SAP has 35 years of ERP implementation experience. While ERP solutions are widely popular for business integration solutions, the functionality of these commercial ERP solutions do not fit the unique business processes of universities. SAP and Oracle software modules enable business processes such as manufacturing, logistics, and generally accepted accounting principles while university business models include functions such as class scheduling, registration, funded research administration, and grant management. The university community has searched for alternate solutions for its unique business requirements.

This paper describes the growing market of open community software offered through the Kuali Foundation. Indiana University is the founding partner in Kuali. Today, a growing community of 67 universities, colleges and commercial firms have joined together to form the Kuali Foundation Community Members. These organizations are building and sustaining open-source software for higher education, by higher education. In addition, this paper presents the results of analyzing Kuali software quality using contemporary software metrics. The results of this analysis are presented to provide an indication of whether the outcome of the consortium development strategy is one that is risky for a university.

BACKGROUND

The complexity and cost of tier-1 commercial ERP implementation are major constraints on universities. An SAP or Oracle implementation can cost a business anywhere from $50M to $1B,
depending on the breadth and depth of ERP deployment. This financial commitment is generally beyond the project investment expenditures of most universities. As a result, universities typically deploy software solutions using various acquisition methods. Universities have at their disposal several methods of software acquisition that may be mixed and matched into hybrid solutions. They are as follows:

- In-house developed
- Commercially developed
- Open source developed
- Community source developed

**In-House Developed**
In-house developed is software that is designed, created and supported by either the institution’s in-house programming staff or contract programmers. It affords the greatest level of institutional control in exchange for having a very high lifecycle cost. This cost lies mainly with fact that the needed application expertise is supported entirely by the individual institution. (Shelly & Harry, 2010)

**Commercially Developed**
Commercially developed and distributed software is often referred to as commercial off the shelf software (COTS). SAP and Oracle are types of COTS. They require the least amount of institutional technical expertise. It is thought to have the least costly lifecycle cost. This benefit is gained in exchange for the surrender of institutional control over its design and upgrade path. In addition, the institution risks losing future vendor support by not following the vendor’s upgrade path or the vendor choosing to discontinue supporting their application. (Shelly & Harry, 2010)

**Open Source Developed**
Open source development is best thought of as “peer production” by multiple collaborators. The end-product is an application and appropriate design documentation that are available at no cost. It gives the participating institution a free starting point that allows development control at a low initial cost. Unlike in-house developed software, there is a support community available outside the institution. Unfortunately, it is a community of independent developers with different agendas and differing approaches to code development. Any significant institutional enhancement efforts still run the risk of high maintenance costs, design creep, and a possible lack of expertise when support issues are encountered. (Aberdour, 2007)

**Community Source Developed**
Community source development differs from open source in that it is sponsored by a community of institutions. This community charges membership fees and enforces best programming practices. (Technical Council, 2007) Most members contribute developers to the effort. This acquisition method is a community of developers with similar agendas and an agreed upon approach to code development. Thus, the community source model provides a more solid support structure, rather than purely volunteer efforts as found in strictly open source communities. High maintenance costs and design creep are still a very real risk. (Wheeler, Open Source 2010 Reflections on 2007, 2007) As the need for an enterprise, integrated software solution continues to rise, university business models are increasingly turning to the use of community source developed software. They see this tactic as a benefit in part because: (Wheeler, Open Source 2010 Reflections on 2007, 2007)

- It provides more control over features provided, development priorities, and an upgrade path than COTS.
- Its initial cost is often less than COTS.
- It is less expensive than strictly in-house developed software.
- It is more scalable than open source development.
- It has more ready access to consistent technical support than open source.
KUALI FOUNDATION

As previously written, the Kuali Foundation is a consortium of interested universities, colleges and commercial firms have joined together to produce an enterprise software solution for the academic business model. The Kuali Foundation utilizes a community source developed software acquisition method. TABLE 1 contains a number of the Carnegie Mellon class universities participating in the foundation. In addition, other leading commercial firms such as IBM and VMware are participants.

TABLE 1
CARNEGIE MELLON CLASS KAULI UNIVERSITY MEMBERS

<table>
<thead>
<tr>
<th>Boston College</th>
<th>Michigan State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston University</td>
<td>University of Arizona</td>
</tr>
<tr>
<td>Clemson University</td>
<td>University of Arkansas</td>
</tr>
<tr>
<td>Colorado State University</td>
<td>University of California - Berkeley</td>
</tr>
<tr>
<td>Cornell University</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Clemson University</td>
<td>University of Hawaii</td>
</tr>
<tr>
<td>Colorado State University</td>
<td>University of Illinois</td>
</tr>
<tr>
<td>Cornell University</td>
<td>University of Michigan</td>
</tr>
</tbody>
</table>

The consortium pools resources to develop and sustain many of the software systems needed for higher education. This approach reduces costs and produces software that better fits institutional needs. The Kuali Foundation is funded through a fee-based membership starting at $4,500 growing to $24,500 based upon university budget size. These universities share information technology (IT) resources to develop software and the software can be used by anyone without a purchase or maintenance fee. There are 15 lead universities who share IT resources and coordinate project activity as numerous “virtual” projects. These institutions freely share work with the world as that fits the public service mission of colleges and universities. Working collaboratively together, the outcome is shared best practices and reduced costs beyond legacy approaches to purchased software.

Kuali Software

The Kuali software is a portfolio of applications ranging from financial to mobile connectivity. Below is a short summary of each module:

- Financial System (2005): Financial software that meets the needs of Carnegie Class institutions
- Coeus (2006): Research administration for grants administration to federal funding agencies
- Student (2007): Business needs of students, faculty and institutions throughout the academic lifecycle
- Rice (2007): Middleware products that integrate products allowing applications to be built in an agile fashion
- Open Library Environment (2010): Integration of academic and research libraries for managing and delivering intellectual information
- Mobility (2011): Connect mobile devices to a variety of campus systems
- People for the Enterprise (scheduled 2013): HR/Payroll System built by higher education for higher education
- Ready (scheduled 2013): A business continuity planning tool

These modules are in various stages of development of implementation. Currently, all of the consortium universities and colleges are using or are in deployment phases of the Financial System.
FINANCIAL SYSTEM SOFTWARE ANALYSIS

This research project studied the software quality of the Financial System. The Financial System was chosen due to its wide spread implementation including Colorado State University (CSU). The Financial System consists of 8 modules identified as follows:
1. Account Receivable (AR)
2. Budget Construction (BC)
3. Capital Asset Builder (CAB)
4. Capital Asset Management (CAM)
5. Contract and Grants (CG)
6. Effort Certification (EC)
7. Labor Distribution (LD)
8. Purchasing/Account Payable (PUR/AP)

For the purposes of this study, four of these modules were analyzed - Budget Construction (BC), Capital Asset Builder (CAB), Capital Asset Management (CAM), and Purchasing/Account Payable (PUR/AP). CSU has not yet deployed the other modules.

Code Complexity
Analyzing software quality can be subjective or objective methodology. As a basis for software quality, NASA was chosen as a reference model given the agency’s mission critical, high performance standards. The following three metrics are used in NASA’s Metrics Data Program (MDP) repository for determining software quality and reliability. (NASA, p. 4)
- Halstead Metrics: Halstead's metrics assumes that a program should be viewed as an expression of language. Halstead expressed mathematically the relationships among the number of variables, the type of programming statements and the complexity of the code. Unfortunately, Halstead metrics are difficult to compute. In order to be useful, a metric must be computed quickly and easily understood. (Kaur, Minhas, Mehan, & Kakkar, 2009)
- McCabe Cyclomatic Complexity: McCabe’s cyclomatic complexity measures the number of linearly-independent paths through a program module. The basic assumption is that software complexity is directly related to the number of control paths generated by the code. This metric is easy to understand. In fact, this metric has been criticized because it seems too simple. However, the McCabe metric is an easy-to-compute, high-level measure of a program's complexity which has been shown to agree with empirical data. (Kaur, Minhas, Mehan, & Kakkar, 2009)
- Lines of code metrics: The lines of code metric seems easy to measure. While a longer program can be more prone to error than a short program, that is not always true. In addition, newer object oriented coding techniques make it difficult to determine the actual lines of code executed.

Looking at the competing metrics, McCabe's cyclomatic complexity is an appropriate metric to use to predict software reliability. It has been validated by two NASA studies. (NASA IV&V Facility, 2008). It might also aid in projecting the cost of software support. There are several applications available to measure cyclomatic complexity. However, McCabe IQ is an automated tool that has an array of graphical presentations and is widely accepted by software developers. Therefore, McCabe IQ was chosen as the automated tool for this study. Based upon prior research results, the following McCabe metrics were determined for Kuali Financial Systems modules:
- Cyclomatic complexity: a measurement of the size of a software module’s decision logic. Cyclomatic complexity, v, is determined for each software program’s modules. Research has shown that when the cyclomatic complexity of a module exceeds 10, then its reliability degrades exponentially. So, a v > 10 is considered low quality and riskier software.
Essential complexity: a measurement of a software module’s decision structure or architecture. Essential complexity, ev, is determined for each software program’s modules. Research shows that when essential complexity of a module grows higher than 1, it is harder to maintain. So, an ev > 3 is considered to be harder and more difficult to maintain.

Module design complexity: a measurement of a software module’s integration decision structure with other modules. Module design complexity, iv, is determined for each software program’s modules. Research shows that when module design complexity of a module grows high, the level of integration testing is increased. More integration results in higher operational risk. So, when iv is a high proportion of a module’s decision structure, it is an integration risk.

FINDINGS

Capital Asset Builder (CAB)
The kfs-cab sub-system contains 59 source code files. Parsing by McCabe IQ resulted in 868 modules. Twelve modules had a v > 10. There were no modules with a v > 20. Key profile indicators are:

- The average cyclomatic complexity is 2.18.
- The average essential complexity is 1.40.
- The average module design complexity is 2.05.
- The total executable lines of code are 7,477.
- The cyclomatic complexity density is .2525.

A further review of the profile indicators for high risk modules (12 modules with v > 10) yielded the following results:

- The average cyclomatic complexity is 12.8.
- The average essential complexity is 7.6.
- The average module design complexity is 11.2.
- The total executable lines of code are 551.
- The cyclomatic complexity density is .2778.

The cyclomatic complexity results indicate that the kfs-cab sub-system was structured with quality. FIGURE 1 is a scatter plot of cyclomatic and essential complexities. By McCabe metric thresholds, quadrant one contains modules that are unreliable and hard to maintain (1.3% of the modules with v > 10). It would appear that this application is generally reliable & maintainable by the small number of modules in quadrant one. Few errors will be likely when using this module.
A flowgraph visually represents the logic in a module. It comprises nodes connected by edges. A node designates one of the following program design elements:

- Module entry
- Data element usage
- Call to another module
- Inflow from more than one branch
- Module exit

Nodes and edges are critical to the cyclomatic complexity calculation. A flowgraph that is visually complex merely reflects that the module logic it represents is overly complex. A flowgraph of the most complex module in kfs-cab, as seen in FIGURE 2, illustrates this point.
Budget Construction (BC)

The kfs-bc sub-system contains 343 source code files. Parsing by McCabe IQ resulted in 6,266 modules. Forty-five modules had a $v > 10$. Of these, only five modules had a $v > 20$. Key profile indicators are as follows:

- The average cyclomatic complexity is 1.41.
- The average essential complexity is 1.11.
- The average module design complexity is 1.37.
- The total executable lines of code are 44,445.
- The cyclomatic complexity density is .1982.

A further review of the profile indicators for modules that had a $v > 10$ give the following results:

- The average cyclomatic complexity is 15.4.
- The average essential complexity is 6.0.
- The average module design complexity is 14.0.
- The total executable lines of code are 3,764.
- The cyclomatic complexity density is .1849.

The cyclomatic complexity results indicate that the kfs-bc application is high quality. The scatter plot, as shown in FIGURE 3 for kfs-bc, illustrates this quality. It shows, by the small number of modules in quadrant one (45 modules), that most modules are reliable & maintainable.

Application kfs-bc contains five high risk modules with a $v > 20$. One of these modules, whose cyclomatic complexity is 29, is presented in FIGURE 4. Note the visual complexity of the software logic.
FIGURE 3
SCATTER PLOT OF KFS-BC

FIGURE 4
FLOWGRAPH OF A KFS-CAB COMPLEX MODULE
Capital Asset Management (CAM)

The kfs-cam sub-system contains 160 source files. Parsing by McCabe IQ resulted in 2,221 modules. Thirty-two modules had a v > 10. Six of the 32 modules had a v > 20. Key profile indicators are as follows:

- The average cyclomatic complexity is 1.83.
- The average essential complexity is 1.26.
- The average module design complexity is 1.74.
- The total executable lines of code are 16,774.
- The cyclomatic complexity density is .2423.

A further review of the profile indicators for modules that had a v > 10 provide the following measurements.

- The average cyclomatic complexity is 16.3.
- The average essential complexity is 5.6.
- The average module design complexity is 14.5.
- The total executable lines of code are 2,450.
- The cyclomatic complexity density is .2135.

The cyclomatic complexity results indicate that the kfs-cam application is high quality. The scatter plot, as shown in FIGURE 5 for kfs-cam, illustrates this quality. It shows, by the small number of modules in quadrant one (32 modules), that most modules are reliable & maintainable.

FIGURE 5
SCATTERPLOT OF KFS-CAM SHOWING A LARGE NUMBER OF RELIABLE MODULES
FIGURE 6 is the flowgraph of one of the most complex modules in kfs-cam. Visually, it is easy to see that this module is overly complex with high levels of dense print for the module’s logic.

FIGURE 6
FLOWGRAPH OF AN OVERLY COMPLEX KFS-CAM MODULE WITH A CYCLOMATIC COMPLEXITY OF 40

Purchasing/Account Payable

The kfs-purap sub-system represents a mixture of old and new code. Most of the development was conducted at CSU to facilitate integration of SciQuest (an existing purchasing system) with Kuali. The kfs-purap application contains 547 source files. Parsing by McCabe IQ resulted in 5,778 modules. One hundred twenty-one of these modules had a $v > 10$. Thirty out of the 121 modules had a $v > 20$. Of these modules, several stood out as very complex, such as:

- Processing Taxes
- Processing Encumbrances
- Purchase Order Creation

Based on their cyclomatic complexity, the three functional areas noted above should be problematic.

Key profile indicators for kfs-purap are as follows:

- The average cyclomatic complexity is 2.04.
- The average essential complexity is 1.37.
- The average module design complexity is 1.93.
- The total executable lines of code are 50,366.
- The cyclomatic complexity density is .2345.

A further review of the profile indicators for modules that had a $v > 10$ generate the following results:

- The average cyclomatic complexity is 17.9.
- The average essential complexity is 7.8.
- The average module design complexity is 16.2.
- The total executable lines of code are 10,435.
- The cyclomatic complexity density is .2090.
A simple visual comparison between the kfs-purap scatter plot, presented in FIGURE 7, and the other three application scatter plots shows that kfs-purap has noticeably more unreliable/un-maintainable modules (121 modules in quadrant one with \( v > 10 \)) than the other three applications.

FIGURE 7
SCATTER PLOT WITH A NOTICEABLE INCREASE IN UNRELIABLE MODULES

![Image of Scatter Plot]

Because of their high cyclomatic complexity numbers, Processing Taxes, Processing Encumbrances and Purchase Order Creation are high risk modules. As shown in FIGURE 8 which illustrates the module logic for Processing Encumbrances, these modules will likely prove to be problematic. Illustrated in this figure, Processing Encumbrances is a very high risk module with high cyclomatic complexity (\( v = 32 \)), high essential complexity (\( ev = 7 \)), and high module design complexity (\( iv = 30 \)).

FIGURE 8
FLOWGRAPH OF A POTENTIALLY PROBLEMATIC PROCESSING ENCUMBRANCES MODULE

![Image of Flowgraph]
ANALYSIS

The McCabe IQ parsing described above results in a metric profile for each of the four applications tested. These profiles are summarized in TABLE 2. Each profile includes averages calculated based on all of the parsed modules for each application. The relatively low averages are a result of the large number of modules that fall below the McCabe cyclomatic complexity threshold of 10. (McCabe Staff) In this case, the term threshold means the value of a metric above which there is an element of interest. Typically, below a threshold, metrics do not correlate with real effects, and code elements below threshold usually do not require code to be reviewed or modified. (McCabe Staff)

TABLE 2
APPLICATION PROFILE

<table>
<thead>
<tr>
<th>Static Metrics</th>
<th>kfs-cab</th>
<th>kfs-bc</th>
<th>kfs-cam</th>
<th>kfs-purap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Source Files</td>
<td>59</td>
<td>343</td>
<td>160</td>
<td>547</td>
</tr>
<tr>
<td>Number ofParsed Modules</td>
<td>868</td>
<td>6,266</td>
<td>2,221</td>
<td>5,778</td>
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<td>Design Complexity, S0</td>
<td>1,780</td>
<td>8,565</td>
<td>3,874</td>
<td>11,166</td>
</tr>
<tr>
<td>Integration Complexity, S1</td>
<td>913</td>
<td>2,300</td>
<td>1,654</td>
<td>5,389</td>
</tr>
<tr>
<td>Total cyclomatic complexity</td>
<td>1,888</td>
<td>8,809</td>
<td>4,065</td>
<td>11,811</td>
</tr>
<tr>
<td>Average cyclomatic complexity</td>
<td>2.18</td>
<td>1.41</td>
<td>1.83</td>
<td>2.04</td>
</tr>
<tr>
<td>Maximum - cyclomatic complexity</td>
<td>18</td>
<td>53</td>
<td>40</td>
<td>78</td>
</tr>
<tr>
<td>Average essential complexity</td>
<td>1.40</td>
<td>1.11</td>
<td>1.26</td>
<td>1.37</td>
</tr>
<tr>
<td>Maximum - essential complexity</td>
<td>13</td>
<td>30</td>
<td>18</td>
<td>43</td>
</tr>
<tr>
<td>Total module design complexity</td>
<td>1,780</td>
<td>8,565</td>
<td>3,874</td>
<td>11,166</td>
</tr>
<tr>
<td>Average module integration complexity</td>
<td>2.05</td>
<td>1.37</td>
<td>1.74</td>
<td>1.93</td>
</tr>
<tr>
<td>Maximum - module design complexity</td>
<td>16</td>
<td>46</td>
<td>39</td>
<td>76</td>
</tr>
<tr>
<td>Total executable SLOC</td>
<td>7,477</td>
<td>44,445</td>
<td>16,774</td>
<td>50,366</td>
</tr>
<tr>
<td>Average executable SLOC</td>
<td>8.6</td>
<td>7.09</td>
<td>7.55</td>
<td>8.72</td>
</tr>
<tr>
<td>Maximum - executable SLOC</td>
<td>122</td>
<td>205</td>
<td>306</td>
<td>602</td>
</tr>
<tr>
<td>Density Total v(G) / Total executable SLOC</td>
<td>0.252508</td>
<td>0.1982</td>
<td>0.242339</td>
<td>0.234503</td>
</tr>
<tr>
<td>Reported Errors (closed &amp; open)</td>
<td>8</td>
<td>3</td>
<td>86</td>
<td>153</td>
</tr>
</tbody>
</table>

The McCabe Risk Application Profile in TABLE 3 displays the profile of all of the high risk modules for each application (modules with a v > 10). This table accentuates the low quality of the kfs-purap code. Its average cyclomatic, essential, and module design complexities are higher than the other three applications. Based on the profile provided by TABLE 3, one could conclude that the least number of errors will be found in kfs-cab because its high risk modules have the lowest average v.

- Based on cyclomatic complexity, the quality of the applications from lowest to highest is: kfs-purap, kfs-cam, kfs-bc, kfs-cab.
- Based on essential complexity, the quality of the applications from lowest to highest is: kfs-purap, kfs-cab, kfs-bc, kfs-cam.
- Based on module integration complexity, the quality of the applications from lowest to highest is: kfs-purap, kfs-cam, kfs-bc, kfs-cab.
- Based on density, the quality of the applications from lowest to highest is: kfs-cab, kfs-cam, kfs-purap, kfs-bc.
### TABLE 3
McCABE RISK APPLICATION PROFILE- HIGH RISK MODULES

<table>
<thead>
<tr>
<th>Static Metrics</th>
<th>kfs-cab</th>
<th>kfs-bc</th>
<th>kfs-cam</th>
<th>kfs-purap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Parsed Modules with v(G)&gt;10</td>
<td>12</td>
<td>45</td>
<td>32</td>
<td>121</td>
</tr>
<tr>
<td>Total cyclomatic complexity-v(G)&gt;10</td>
<td>153</td>
<td>696</td>
<td>523</td>
<td>2,181</td>
</tr>
<tr>
<td>Average cyclomatic complexity-v(G)&gt;10</td>
<td>12.8</td>
<td>15.4</td>
<td>16.3</td>
<td>17.9</td>
</tr>
<tr>
<td>Maximum - cyclomatic complexity-v(G)&gt;10</td>
<td>18</td>
<td>53</td>
<td>40</td>
<td>78</td>
</tr>
<tr>
<td>Total essential complexity-v(G)&gt;10</td>
<td>92</td>
<td>270</td>
<td>180</td>
<td>951</td>
</tr>
<tr>
<td>Average essential complexity-v(G)&gt;10</td>
<td>7.6</td>
<td>6.0</td>
<td>5.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Maximum - essential complexity-v(G)&gt;10</td>
<td>13</td>
<td>30</td>
<td>15</td>
<td>43</td>
</tr>
<tr>
<td>Total module design complexity-v(G)&gt;10</td>
<td>131</td>
<td>582</td>
<td>454</td>
<td>1,961</td>
</tr>
<tr>
<td>Average module integration complexity-v(G)&gt;10</td>
<td>11.2</td>
<td>14.0</td>
<td>14.5</td>
<td>16.2</td>
</tr>
<tr>
<td>Maximum - module design complexity-v(G)&gt;10</td>
<td>16</td>
<td>46</td>
<td>39</td>
<td>76</td>
</tr>
<tr>
<td>Total executable SLOC-v(G)&gt;10</td>
<td>551</td>
<td>3,764</td>
<td>2,450</td>
<td>10,435</td>
</tr>
<tr>
<td>Average executable SLOC-v(G)&gt;10</td>
<td>45.9</td>
<td>83.6</td>
<td>76.6</td>
<td>85.7</td>
</tr>
<tr>
<td>Maximum - executable SLOC-v(G)&gt;10</td>
<td>87</td>
<td>534</td>
<td>229</td>
<td>491</td>
</tr>
<tr>
<td>Density Total v(G) / Total lines of code-v(G)&gt;10</td>
<td>.2778</td>
<td>.1849</td>
<td>.2135</td>
<td>.2090</td>
</tr>
<tr>
<td>Reported Errors (closed &amp; open)</td>
<td>8</td>
<td>3</td>
<td>86</td>
<td>153</td>
</tr>
</tbody>
</table>

### CONCLUSIONS

As articulated earlier, the objectives achieved by this project were a description of expanding role of Kuali enterprise software in universities and colleges and an analysis of the code quality produced by the consortium. Since it was conceived in 2004, The Kuali Foundation has successfully implemented six enterprise software modules for higher education on a timely, cost-effective manner including:

- **Financial System (2005):** Financial software that meets the needs of all Carnegie Class institutions
- **Coeus (2006):** Research administration for grants administration to federal funding agencies
- **Student (2007):** Business needs of students, faculty and institutions throughout the academic lifecycle
- **Rice (2007):** Middleware products that integrate products allowing applications to be built in an agile fashion
- **Open Library Environment (2010):** Integration of academic and research libraries for managing and delivering intellectual information
- **Mobility (2011):** Connect mobile devices to a variety of campus systems

Prior to this study, no research had been completed of the Kuali software analyzing the code quality. In this study four modules of the Financial System were analyzed for their quality attributes. McCabe IQ was used to determine the McCabe metrics including cyclomatic, essential, and module design complexities. Overall, the code quality was found to be good quality with about 98% of the software modules exhibiting cyclomatic complexities less than or equal to 10. Overall, the findings showed that risker software as a percentage of total software modules for the four studied modules is as follows:
• Budget Construction (BC) - 1.3%
• Capital Asset Builder (CAB) - 0.7%
• Capital Asset Management (CAM) - 1.4%
• Purchasing/Account Payable (PUR/AP) - 2.1%

The Kuali Foundation is serving the university community with enterprise software targeted specifically for university and college business models, and it is delivering cost-effective, quality processes to the higher education community.

REFERENCES


Teaching and Learning for Real-World Relevance in Management Education – Developing a Model

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Real-world relevance in business schools is even more important than ever. Focusing on undergraduate business degree programming, this paper explores practical issues and concerns around teaching for relevance. We present a conceptual model to outline some of the potential solutions for addressing problems of relevance in teaching and infrastructure within business schools. We discuss practical issues in teaching and learning for real world relevance and identify barriers to moving to relevance. We conclude that some fundamental changes are needed if schools are to be able to move to more relevant teaching and learning in management education.

INTRODUCTION

Since at least the 1970s, organizations have continued to hire an increasing number of business school graduates while, over the same time, there have been continuing concerns that graduates have been lacking real-world relevance in doing their management jobs. See, for example, Hall, 1986; Fortune, 1991; Hayes & Abernathy 1980; Doria, Rozanski & Cohen, 2003; Mintzberg 1989, 2004; Management Education at Risk, 2002; Bennis & O’Toole, 2005. Apparently, over all of this time, the steady increase in recruitment of business school graduates was unaffected by these continuing expressions of concern. Recently, however, corporate recruiters appear to be seeking graduates who are more real-world relevant, and this is causing top-ranked business schools to move towards more relevant programming (Business Week, 2006; Canadian Business, 2006). The current economic downturn also may mean that organizations will look for new graduates who can contribute effectively and immediately – their training and experience will become even more relevant to business models and organizations in the near future.

Business schools generally are being driven towards more relevant programming as graduate employers and prospective students are seeking some form of quality assurance for schools and their programs. To provide this assurance schools must seek accreditation from bodies such as the Association to Advance Collegiate Schools of Business International (AACSB). The accreditation and representative body for business schools in North America and, now, internationally. The AACSB Eligibility Procedures and Standards for Business Accreditation are aimed to cause accredited business schools to improve the real-world relevance of their programming.

Real-world relevance is even more important than ever. Events starting in Fall 2008, in the real-world of North American business corporations and their management, have become very relevant to everyone
and are likely to be powerful drivers for more pertinent programming in business schools (Business Week, 2008a). Another driver for change is the transformation in student expectations and demands. According to Business Week, (2008a), so-called Millennial applicants and students are demanding courses and pedagogy that are relevant to the real-world as they see it. As well, these Millennials expect individual coaching and tailoring of course requirements to their needs and career aspirations.

Increasing infrastructure support and the need for individual coaching lead to two major concerns for more real-world relevant teaching and learning. First, as students do more individual, real-world based learning assignments there will be new and increasing demands on a business school’s teaching and learning support infrastructure. Second, workloads for course teachers may increase significantly in more real-world relevant courses, as student work becomes further individualized. No longer can students simply be classified as a group, normalized and examined using content-based standards. If learning resources and support infrastructure are not in place, individual teachers will be left on their own to somehow fill this gap. The result may be a huge increase in workload unless the numbers of students that business school instructors teach are drastically reduced.

Focusing on undergraduate business degree programming, and based on our and others’ arguments (cf. Starkey and Tempest 2008; Lorange 2005; Selen 2001; Mintzberg 1989) and perceptions of what is needed for real-world relevant teaching and learning, this paper explores practical issues and concerns as well as teaching for relevance. Finally, we present a conceptual model to outline what we believe are some of the potential solutions for addressing problems of relevance in teaching and infrastructure.

TRADITIONAL AND NON-RELEVANT BUSINESS SCHOOL PROGRAMMING

An effective starting point for moving to more relevant programming is in making sense of the apparent historical contradiction between the continuing hiring of business school graduates and concerns for their lacking real-world relevance. Many authors (cf. Alvesson and Wilmott 1992a; Alvesson and Wilmott 1992b; Barley and Khunda 1992; Parker 2002; Ghoshal 2005) have argued that the corporate management agenda in reality always has been about the selfish exercise of power and money-making, and that this agenda has been a hidden agenda that must include the means of hiding itself, i.e., management discourse. Arguments have been put forward (cf. Reed 2002; Summers et al. 1997; French and Grey 1996) that the traditional role of management education has been to provide content for management discourse as a mask for power and, as such, management education always has been inherently unreal and non-relevant and largely dominated by teaching to the textbook. For example, Skipton & Gupta, (2006) classified graduates of traditional business school programs as “Spectators” who can only be lookers-on, and inherently non-relevant to real-world here-and-now situations.

Normative-illustrative knowledge in general-contextual application, and prescriptive-exemplary knowledge in type-situational application, is the basis of textbook theory content and learning for Spectators (Skipton & Gupta, 2005). Knowledge is seen as theory content that is of general application, or is applied to type-situations from the outside (Grant, 2008). Knowledge is not seen as process learning to be able to derive content and understanding inside here-and-now situational reality. Accordingly, the knowledge subjects and courses that constitute business school programs can be structured as a collection of self-contained “functional silos”. The result is that business schools have come to organize themselves based on these artificial functional ‘knowledge-based’ structures (Mintzberg 2004; Bennis & O’Toole, 2005). Where the knowledge is theory content and its application is outside situational reality (Pfeffer and Fong 2002) there is no incentive for cross-functional integration. Not surprisingly, it has been said that: “...the London Business School teaches manipulation. And part of that manipulation is to present the art of manipulation itself as truth – as knowledge (Saul, 1993, p.118).”

Traditional university business school organizations and culture, together with their subject content and classroom teaching and learning processes, have been significant barriers to students to learning for real-world relevance. We describe three of these significant barriers.
Barrier 1 - Textbook Rules for Tenure and Promotion

The first barrier has always been that faculty members must “publish or perish”. Now, it also is becoming important to obtain high scores in student evaluations for teaching - and with no student complaints! Teaching to the textbook is a straightforward and effective means to minimize time spent on teaching (so as to maximize time spent on research and publication), and to try to ensure good teaching evaluation scores from students. A “mainstream” textbook can be adopted, along with its instructor package containing classroom presentation material and multiple-choice examination questions, and used as the basis for the course. So long as students learn the theory content they will get the marks. Faculty members left on their own to teach their courses can hardly be expected to do anything else, and teaching to the textbook is what students in business school programs have come to expect. The lack of critical or reflective thinking becomes apparent when students graduate and must grapple with real-world situations (Markides 2007; Currie 2008).

Barrier 2 - Textbook Theory Divorced from Practice

The second barrier to enabling students to learn relevant content and thinking processes is the divorce of textbook theory from practice. For example, the business functional silo of Marketing Management has become an influential theory subject-area but the practical activities of actually identifying and selling to customers may be less and less subjects for discussion. In SWOT (Strengths, Weaknesses, Opportunities, Threats) analyses, students can be taught to say what should be done by the management (generally and normatively) and what the manager should do (type-situationally and prescriptively). Theory norms and prescriptions can simply be stated by students without their having any understanding of what is involved in doing things in reality (Weihrich 1982; Pitcher 1995; Ghoshal 2005).

As well, textbook approaches or theories can be given the status of undisputed facts. For example, there is only one “Organization Theory.” Students cannot know that there are other perspectives on, concepts of, and approaches to organizations and organizing because they are neither told nor required to find out for themselves. The lack of critical thinking results in a focus on memorization or regurgitation with less concern being placed on how the theory may apply in practice.

Barrier 3 - Textbook Cases and SWOT Pedagogy

Along with textbook theory, business cases and so-called SWOT Analysis have become important elements of orthodox pedagogy. As textbook cases already have been written, the situational critical thinking has already been done by the case writer - everything has been arranged and neatly packaged for students to read. Real world situations and what constitutes them are never pre-sorted – it is for the analyst to sort them! Case exercises, as traditionally written, appear to be vehicles for mostly contextual, normative or illustrative, or type-situational exemplary, interpretation by teachers and students (Hill and Westbrook 1997).

Case teaching usually is put forward as most relevant pedagogy (cf. Garvin 2007; Simms and Felton 2006), and it may be argued that SWOT Analysis has become the dominant pedagogical vehicle for discussion of case exercises by students in the classroom or in assignments (cf. Grant 2008). Unfortunately, the manner in which a SWOT Analysis discussion usually is carried out in the classroom demands neither real-world situationalization nor analysis. Students can take at face value what the case says, simply pick out of the case some words or phrases that illustrate or exemplify SWOTs, and simply list these items under what they see as appropriate headings. There is no need, and usually no expectation, for students to do any supporting situational investigation and analysis. For example, students can see the phrase “growing market” and they can then write this down in their “Opportunities” list, and if they see the phrase “market share” they can put this under “Strength,” and so on. At best, students might “eyeball” some of financial information but they can be allowed to largely ignore it. Students are sadly misled into believing that intuitively picking words and phrases out of the case and putting them into unorganized lists is situational analysis. Even worse, traditional SWOT Analysis pedagogy appears to be teaching students the processes of non-relevance while at the same time causing them to believe that they are being real-world relevant!
MOVING TO MORE RELEVANT BUSINESS SCHOOL PROGRAMMING

Significant barriers to real-world relevance – textbooks, theory divorced from practice and inappropriate pedagogy – have developed. Skipton & Gupta (2006) have offered a conceptual analysis of traditional, non-relevant management educational discourse. They argued that healthy skepticism and critical thinking would be expected to be mostly absent from traditional business school degree programs, simply because these things would involve explicit discussion of the powerful corporate management agenda, and this is taboo. For this reason also, students cannot be expected to develop a robust moral compass regarding the uses and exercise of power. (See also Reed, 2002.)

There are, however, means to overcome these barriers and make teaching and learning in business schools more real-world relevant. Fundamentally, real-world relevance in management education requires a skeptical, situational critical thinking approach (Elder & Paul, 2005; Currie 2008). This is so that students can become “Players” who can put themselves inside the here-and-now business or organizational management situational reality, where knowledge is derived in and of the situation at the time. As such, Players inherently must be real-world relevant Skipton & Gupta (2005).

Building on this conceptual argument, Skipton & Cooper, (2008) suggested a sequence of three required management courses for more real-world relevant undergraduate business programming:

1. Introduction to Business in Society (First year)
2. Managing in the Business Enterprise – Situational Factors and Integration (Mid-way)
3. Strategic Management – Contexts and Situations (Final year)

In these courses, there is a focus on the process rather than the content of learning. Specifically, the courses are focused on situations and incidents combined with critical thinking. Only situation-analytical knowledge derived in and of the here-and-now situation requires critical thinking in reality and is learning for Players (Skipton & Gupta, 2005). This demands real-world situational pedagogy and it follows that content and pedagogy of each of the three courses in the sequence from first year to final year would be increasingly real-world focused and situational. Student progression through the courses would increasingly require them to undertake their own self-directed work involving situational information search and critical, analytical thinking.

A Concept of Relevance in Student Learning

Based on the arguments of Skipton & Cooper, (2008), for business school students to be able to graduate as real-world relevant Players, they demonstrably must be able to:

1. Orient themselves contextually and situationally, i.e., in the real-world situational here-and-now, and think critically, including thinking investigatively, analytically, integratively and decisively (Skipton and Furey 2008).
   In our view, real-world-based, situational critical thinking must include:
   • A specific and meaningful subject vocabulary and set of knowledge structures and frameworks.
   • Explicit discussion of power in organizations and society – including types of power and examples of the normative impact of power.
   • A more societal and stakeholder-oriented approach, rather than simply taking for granted that the only things that matter are maximizing shareholder and manager wealth.
   • Corporate social responsibilities, including natural environmental sustainability and ecological issues.
   • Moral principles and ethical behaviors in the use and exercise of power.

2. Formulate research methodology and search orientation and direction, e.g., problem, opportunity, general situation, etc., undertake logical and directed information search and demonstrate information literacy. (cf. Rousseau 2006; Association of College and Research Libraries, 2008).
3. **Communicate their work** in well-researched, logically argued, well-written and professionally presented reports using good writing.

A textbook may be useful only for student learning of subject area vocabulary and basic knowledge structures and frameworks, as content. Every other item in the concept of relevance described above is process learning and must be learned by doing. Activities and assignments must be the vehicles of this type of learning.

We are aware that this list is in the context of management teaching and, as such, limited. The entire complement of so-called “soft-skills”, including interpersonal behavioral and communicative skills, teamwork and leadership skills, also is needed by students to become most effectively real-world relevant. Following Elder and Paul (2004), we would argue, however, that critical thinking in the real-world situational here-and-now must be fundamental to the development of powerful soft skills.

Unfortunately, a major impediment to moving to teaching and learning for real world relevance is how business students currently are taught in business schools.

**ISSUES FOR TEACHERS**

As traditional courses may be changed to become more student-centered and real-world-based we believe that teachers will be impacted by increasing work-load and qualitative changes in the nature of their teaching work. These quantitative and qualitative forces, left unaddressed, will cause a huge increase in the work effort requirements for individual faculty members traditionally left on their own to teach the courses they are allocated. This is a major reason for individual faculty members not to move to teaching for relevance – even if they want to do so.

From Student Group Work to Individual Learning – an Increasing Workload

Group-work is a characteristic of many business courses. The stated rationale appears to be the students should learn to work in groups because they will have to do so in their jobs after graduating. There is a less obvious downside for students, and this is that group work can encourage, and even intensify, individual functional specialization. For example, students who are concentrating in accounting subjects will do any accounting items in the group assignment, and so on for other business functions. The student who is already the best writer usually will do the final draft. Group-work therefore can lead students to not learn anything more than they already know. For some students, there is, however, an upside to group work in that they can “free-load” on the group and do little or no work, knowing that the other group members will do the work so as to get a good mark. Also, some other students may well contribute to the group but they are using the group mark, i.e. the efforts of others, to enable them to make up for low marks in individual assignments or examinations.

Ideally, learning activities and assignments should be done individually by students, for them to learn across specialist functional areas or core competences. In addition, individual learning activities and assignments enable individual learning to be properly assessed. It may be appropriate for some experiential or project learning activities to be done in groups. However, the expectations on what are student learning objectives (i.e. group dynamics or project management) may be much different and will need to be communicated.

In practice, the primary driver for group work may be that teachers simply do not have the time or resources to support and mark individual assignments. For example, in a class of 48 students, twelve submissions from groups of four students is a lot less student advising and marking than 48 individual assignments! To the extent that individual assessment is adopted the quantitative advisory and assessment workload for teachers must greatly increase, based on the size of the groups that were previously used. For example, if the size of groups previously used in a course was four students, and the course is revised to move to individual assessment, the advisory and assessment workload can be expected to increase four times.
From Controlled Content to Student Process Learning – an Increasing Teaching Effort

As suggested above, traditional business school teaching is text-book based and closely controlled by the teacher. Theory content material is bounded and self-contained, contextually normative-illustrative and type-situationally prescriptive-exemplary, and positioned outside any situational reality. Moving away from this, to more student-centered, process learning that is reality and situation-based and involves critical thinking and information search is explosive along a number of dimensions.

First, learning activities and assignments cannot be standardized so that students all do similar activities that are intended to produce the same results in varying degrees depending on student aptitude and effort. This means also that assignments cannot be standardized for marking. Each and every student assignment must be assessed on its own merits. Not only will workload increase significantly because all assignments will be individually done, the nature of the work contained in these assignments will extend and become more variable. One faculty member on his or her own is likely to have neither the time nor the breadth of knowledge and expertise to be able to advise on assignment content and to be able to assess the final results. This will be exacerbated with more integration between subjects.

A breadth of different subjects along with a requirement for integration brings some important considerations for teachers and for schools. For example, if in a more relevant management course an assignment requires students to undertake some analysis of financial reports, how is this to be handled? Should this analysis be part of the content for a finance course in the same semester? Should the more relevant course be team-taught so that a financial subject specialist can lead or advise students on how to do the required analysis? Should students be expected to know how to do the analysis or be left on their own to find out how to do it? Should students be provided with support “labs” staffed by teaching assistants, e.g., graduate students, to help and advise them on doing the financial analysis? As well, there is also not only a technical analysis component to be learned, but also the incorporation of this analysis into the overall investigative and search process relating to the situation or the problem under study.

Second, information search and analysis by students takes more time and effort in terms of support and advice than is required by bounded and self-contained materials such as case and other exercises. Indeed, a powerful reason for using such traditional materials is that they limit and direct students along standard routes to predetermined destinations. Students can be left alone to find their own way and the final results are similar and straightforward to mark.

Third, what should be the nature and amount of support that should be provided for undergraduate students carrying out real-world-based research? At one extreme, students can be told what is required, e.g., Identify and Critique the Strategy of a Major Corporation, and left to work out for themselves how to do it. At the other extreme, there can be more “hand-holding” of students through the research project, coupled with project management by the teacher, so that the student is progressed through various stages from scoping the research proposal to final report.

Fourth, what should be an appropriate level of process support for students? Provision of such support has academic considerations, e.g., students’ stage in the program, and pre-requisite knowledge, but also administrative operational considerations, such as availability of other faculty members to advise students on technical items, and teaching assistants for running student advisory “labs.”

Fifth, regarding research content support, should students simply be told that there is a library, an Internet and then left to their own devices? On the other hand, should students be provided with support and guidance regarding information sources, search techniques and information literacy? This again has academic content and administrative resourcing implications. For example, should students be provided with a list of useful databases and authoritative Internet sites that they can rely on as starting points for their research? If such a list is not provided to students, how are they likely to know where to go to find authoritative and reliable information? On the other hand, who is going to put together any such list of databases and websites for students to go to? As well, who is going to assess students’ information literacy, including validating the veracity of the sources that they obtain information from? Because they are subject-specific, providing authoritative and reliable information sources, validating student sources, and assessing students’ information literacy appear not to be responsibilities of the library. Will faculty members teaching more relevant courses be required to assume these responsibilities?
Finally, standards for good writing are well known. For example, expectations and standards for good writing at one university are included in the institution’s Academic Regulations. According to the regulation, “Regardless of the method of evaluation, good writing skills are required for effective communication...Students are, therefore, expected to demonstrate proficiency in logical organization, clarity of expression and grammatical correctness in their writing”. The regulation characterizes good writing according to the following categories: Content, Organization, Style and Mechanics. In practice, however, teachers cannot assess good writing if they are given neither the time nor the support resources to do so – but will faculty members teaching more relevant course be required to assess student writing anyway? (The point has already been made that, in group submissions, the final report usually is drafted by the group member who is already a good writer. The other group members simply remain as they are – from the less good to the very bad.)

**ISSUES FOR BUSINESS SCHOOLS**

Traditional university business school organizational custom and practice appears to be based on individual faculty members who are left to be responsible for teaching on their own the courses that they are allocated. Any resources are provided to the faculty member, rather than to the course. As little or no resources may be provided to individual faculty members, they have every incentive to teach to the textbook. Doing so also enables faculty members to minimize time spent on teaching (to be able to spend more time on research). Faculty members also can use teaching to the textbook to try to maximize student evaluations of teaching, as students seem to like the neat packaging and presentation, and easy regurgitation of textbook theory content.

To be able to move to more relevant courses and teaching, business school resource allocation and operational processes likely will need to recognize and, ideally, be determined by course requirements for pedagogy and student learning. This would be a big change in academic and administrative practices in many university business schools, and may be resisted by administrators (who are likely to be jealous of their powers) and by academics (who are likely to be jealous of their freedoms).

One element of business school organizational custom and practice is the manner in which faculty members are viewed by the school’s administration. Many schools are searching for local relevance by establishing so-called outreach institutes such as technological innovation and enterprise development incubators; enterprise and small business advisory and assistance units; community and economic development advisory and assistance units; and employee and management training and development units. Are such units effectively part of the administrative core of the business school so that faculty members effectively are excluded from them or are faculty members involved? Is any involvement of faculty members on a casual and individual basis or is this involvement formally part of a school’s overall operational activities? Where faculty members are effectively excluded from local outreach activities they, and the students they teach, are not likely to become relevant to the local real-world of the business school.

**Resources Are Not for Courses**

For schools where organizational custom-and-practice has maintained, and even solidified, the traditional gap between academic matters versus administrative concerns, including resource allocation and teaching operations, closing the academic versus administrative divide will not be easy. To the extent that a business school’s culture is individualistic, each and every faculty member can be expected to object to more resources being given to individuals who are teaching more relevant, and more resource-intensive, courses. Moreover, any resources that may be obtained from, or allocated by, the Dean’s Office to those faculty members who are teaching more relevant courses are most likely to be perceived by others as simply resulting from favoritism or political ‘pull’.

Traditionally, as faculty members are individually responsible for the courses that they teach, i.e., they are the only resources, it has not been necessary for business schools to have developed mechanisms for considering resources for courses. Perhaps so much so that resourcing has come to be seen as ultra
vires to collegial discussion of academic matters. As well, and for obvious reasons, no individual faculty member is likely to question the administration’s allocation of resources!

Questions emerge as to whether faculty members can be expected to spend time designing and obtaining collegial approval for the academic components of courses with more relevant pedagogy. This is especially so where resource and operational requirements required to support these academic components cannot be talked about because they are administrative items. If it should happen that more relevant courses do become incorporated into academic programs, but the resources and support required for their more relevant pedagogy simply do not exist because they could not be talked about, what are individual faculty members to do? Some options are: they can try to avoid teaching such courses; they can simply do non-relevant teaching; or, they can grieve under their collective agreement, to try to get resources that they need in order to be able to teach the approved course content and pedagogy. Faculty members are left on their own to teach, coupled with no mechanism for allocating resources to courses, appears to be a significant organizational roadblock to relevance.

Problems with Copyright

As contemporary subjects, teaching and learning of business and management can be made more effective by using current materials that are real-world based. It appears, however, that publishers of business information, Canadian copyright law and its associated jurisprudence, as well as university administrative policies and procedures, militate against instructors using such materials in the classroom. While it is possible to obtain reprints of articles for incorporation into course packages, reprints are not the most effective means of bringing current issues or information into the classroom, or into course websites. More relevant pedagogy is likely to bring a requirement to use current, real-world materials in classroom presentations, either by the teacher or by students. It appears, however, that it is difficult, if not impossible, for individual teachers to obtain written permissions for using published materials in classroom presentation equipment, and this is a barrier to teaching for relevance.

As far as we are aware, written permission must be obtained from the copyright holder to put any paper or electronic copy of any printed or downloaded material into classroom projection equipment and project it on a screen in front of the class. If prior permission is not obtained it is a violation of copyright because it is not an approved use of the material. This also raises the question of copyright fees and whether the school has any budget to pay such fees for instructional copyright permissions. University business school administrative policies and procedures generally include a prohibition against illegal acts, so that teachers may be concerned that they may be subject to administrative discipline for violating copyright. Teachers also may be concerned that they may be personally sued by a copyright holder for any violations. There is also the question of whether instructors can be held liable for any violations of copyright by students in their classroom presentations. Although there may be a “workaround” that allows classroom use if the university library has contracted with a provider of an electronic version of the article, this may depend on the specific terms of the contract.

University business schools need to establish clear guidance and protections for individual faculty members regarding copyright, and specifically the use of copyright materials in classroom presentation equipment. Until then, sensible faculty members will stick to the textbook and avoid using any current, real-world material in their presentations.

Problems with Real-World Research by Students

One effective means for leading students to become more real-world relevant is for them to carry out research in or for real companies local to the business school. This may be known as “student consulting” and can be beneficial for the students and for the sponsoring company. It brings with it, however, some issues for teaching and administration. These include:

- Who is to be responsible for making contacts, connecting student consulting teams with prospective company clients, and for scoping projects?
Who is to be responsible for managing the project and for its results? Is the faculty member being left to be personally responsible, or is the business school putting its name on the consulting project?

What administrative and financial support is to be provided for the students and the faculty member?

What are the work administrative arrangements for the students? For example, are the students insured against accident or injury while they are carrying out the project?

How does the student conform to, and the business school comply with, guidelines on ethics and, specifically, free and informed consent?

Written consent and information sheets are necessary for compliance with most university guidelines. If it is necessary to obtain written consent from everyone who is spoken with on a student consulting project (since they are human subjects), how is this relevant to real-world consulting engagements? (Practitioners do not present an information sheet and ask for written consent before asking a person within an organization a question.) Compliance with university guidelines appears to be a barrier to relevance but, nevertheless, schools must put proper procedures and people in place. These guidelines also mean that schools must require that secondary research be undertaken by students before moving to gathering primary information.

In summary, we believe that there are a number of barriers to teachers enabling students to learn for real-world relevance, and to business schools enabling teachers to teach. In Exhibit 1 below we outline some key barriers and some potential solutions for addressing relevance.

**EXHIBIT 1**

**BARRIERS TO RELEVANCE IN UNIVERSITY BUSINESS SCHOOLS**

- **Teaching Barriers to Relevance**
  - Textbooks
  - Theory
  - Organization Silos
  - Pedagogy

- **Infrastructure Barriers to Relevance**
  - Resourcing Policies
  - Copyright
  - Administering Real World Research
  - Curriculum Development – Lagging vs. Leading

**Barriers to Relevance in Business Schools**

**Addressing Relevance**
- Focus on Context and Situation
- Formulate Research Methodology
- Communicate Expectations
FINDING SOLUTIONS

There are a number of potential solutions to addressing the issues of relevance, enabling teachers to teach and students to learn, and these are outlined below.

**Context and Situation** - Theory divorced from application leads to non-relevance for most students. The best way to ensure relevance is to ensure that context and situation lead learning in the classroom – not the theory.

**Formulate Teaching Methodology** - A consistent and robust teaching methodology that is shared by teachers and students within a business faculty will be of much benefit in promoting relevance. Consistent with the *Association of College and Research Libraries* (2008), this approach will have at its heart logical and directed information searches with the need for students to demonstrate information literacy.

**Expectation Management for Group and Individual Learning** - We believe that there is a need to set expectations and ensure that students understand the different learning processes and outcomes for group versus individual learning. Treating them the same can cause issues for both fairly evaluating the work of individual students as well as for ensuring relevance.

There are also a number of tactical approaches that business instructors can undertake to address relevance. These include:

**Time** - We believe that students are not really in a position to judge whether the content they studied was relevant until at least a number of years after they graduate. At this time, they will better understand the application of the theories and concepts in the ‘real-world’. We would propose the business schools undertake a systematic survey on a group or individual school basis to see what graduates believe that they really learned.

**What Works and What Doesn’t** - Engaging students and graduates on what theories worked – i.e. contributed to their career progression, made them better individuals or opened their mind to critical thinking – is a vital way of ensuring relevance. This engagement can be done in focus groups, surveys or interviews. Using this methodology, as well as published academic research, should mean there will be enough empirical evidence on what theories have more applicability and how they should be taught. This information can be made available to business school teachers and can be used for assessing teaching effectiveness as part of accreditation.

**Infrastructure Resources** - The traditional model of resource allocation from an administrative standpoint is to maximize teaching efficiency by classroom size (How many students will the room hold?) as well as the number of students who need the course to graduate (Is this a core course or an elective?). Perversely, this can lead to core courses that must contain the most essential learning having the most students and the highest student/teacher ratios. We propose that a more relevant approach to resourcing would be to resource on a pedagogical process basis rather than on student numbers. For example, if the process of learning requires individual coaching and extensive research/critical thinking, then this course should be resourced different from a course which focuses more on understanding the vernacular of a subject area or a mechanistic approach to learning.

**Curriculum Development** - It is the responsibility of business schools to stay current and relevant, and schools can ensure that they undertake continual curriculum development to ensure this. At the very least, a curriculum development committee should be established, that is well
resourced and engaged with faculty members in the development process. Examining the curriculum only periodically, or when it is time for accreditation, is not relevant to the real-world, due to many and changing challenges and management drivers that are out there. Questions for the curriculum include: How do we teach corporate governance and responsibility after the events of 2008? How do we address corporate level strategy when the focus may have switched from growth to stability – or survival? The examples of Enron and other companies and executives, one year lauded for their strategic brilliance and then, not so long after, pilloried for their failures in integrity or, even, illegal acts demonstrate the need for continual curriculum development (Gioia 1990; 2002; Ghoshal 2003; 2005).

**Change the Model** - Teaching across the different management functional areas will contribute to more relevant student learning. Essentially, (even if somewhat crudely) we believe that there is a need to move from teaching business management as English Literature to teaching business management as Engineering. Students must be moved away from simply reading books, going to the library and describing and critiquing various books and author’s point of view. Instead, students must be moved to critical thinking and investigative work, examining situations and processes for using subject theory content to find situational information, and interpreting the findings and deriving conclusions and recommendations.

**CONCLUSION**

In this paper, we have discussed practical issues in teaching and learning for real world relevance, and we have identified barriers to moving to relevance, and offered some solutions. For reasons described above, we can expect business school program and course designs on paper to be made more real-world relevant, especially where they must be included in schools’ documentation for AACSBI accreditation. In this paper, we have argued that, in this drive for real-world relevance, there are a number of practical issues that are likely to be left unrecognized and unaddressed. In particular, if students are expected to be more self-directed and expected to gather real-world information and carry out situational critical thinking, learning assignments cannot be standardized for marking and must be assessed on their own merits. More relevant teaching and learning will require more individual coaching and assessment, and this will lead to requirements for quantitative and qualitative increases in teaching effort and infrastructural support.

We conclude, however, that some fundamental changes in business school academic and administrative practices are needed if schools are to be able to move to more relevant teaching and learning in management education.

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Engaging the Tea Party Through Pedagogy

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This paper describes the difficulties and rewards found by a cohort of undergraduate researchers as they engaged local Tea Party chapters. While gathering data as part of a research methods course, students found themselves in complicated territory, confronted by research subjects who were wary of higher education, and thus the students’ motives and demographics. Our engagement with the Tea Party highlighted a number of challenging issues related to researcher perspectives and roles, and the relationship between higher education and community. Ultimately students benefitted by being placed in a situation in which they had to justify their presence and engage members.

INTRODUCTION

When used as a teaching tool, community engagement can be a productive part of the learning process. It opens options that would be difficult to simulate within a traditional classroom environment, but in certain contexts, it can also pose a challenge for both students and educators. In this paper I explore the dilemmas as well as the potentials involved in community engagement, specifically with local Tea Party movement organizations, part of an emergent social movement of the political right. Such an approach illuminates a number of issues related to student and educator perspectives, and the role of researchers. It also reveals the relationship between higher education and community, and the deficits in students’ educational foundations.

One aspect of a broader conversation about higher education and the political right involves the rights’ critiques of higher education. While the right often frames higher education as a problem (due to its ‘liberal’ leanings), and while professors are able to speak to their experience, students have their own perspective, but they can lack the ability to respond as they might wish. This interplay between higher education and right wing communities reveals broader deficits and inequities of K-12 education. Many students do not understand, for instance, what the political right is, much less know how to conceive of what it means to have a political spectrum within which the right is located. Students in the U.S. can have substantial limitations in their ability to perceive complex social relations, undertake analysis of discourse, or even to formulate political positions. One of the issues to consider with regard to higher education is this: how do students make sense of right wing spins of their context, and what do they experience if they attempt to engage the right as an educational process? What does the process of engaging conservative communities reveal about higher education and student roles and socialization?

In 2010, I initiated empirical research focusing on the intra-organizational structures and the ideology of the Tea Party movement. A preliminary effort to recruit student research assistants quickly developed into a collaborative research effort that we formalized in an undergraduate seminar. The participants engaged in participant observation within local Tea Party movement chapters, and developed narratives
through which to examine the Tea Party generally, and to reflect on their own institutional locations as students in New Jersey.

Here, I will contrast some of the representations of higher education I documented during my research on the Tea Party movement in Northern New Jersey with the experiences of my students in investigating the movement. I should qualify that the project did not begin as an intentional effort to consider Tea Party portrayals of higher education, but as we proceeded through the process of developing our research collaboration, it became apparent that our seminar was using pedagogy and collaborative research to engage with a young social movement which—among other things—takes the legitimacy and structure of the current U.S. higher education system as a target. This included, by extension, our activities. Thus, the seminar became a space for students to engage in an exploration of social movement politics that complicated their understanding of their own educational processes; specifically, they came to grips with an agenda that understands the form of their education as an affront to the public good. Within this context I pose two research questions: What analytics are achievable through studying the right, as a pedagogical practice, that might not be so effectively realized only through other forms of learning or classroom activities? What are the obstacles and challenges educators should anticipate in using this type of pedagogical model?

The Tea Party and the Battle over Knowledge and Education

Part of the Tea Party movement agenda involves critiquing educational institutions. For Tea Partiers, including conservative critic Mark Levin, the project of salvaging America is an educational one that begins at home: “Parents and grandparents by the millions can counteract the [liberal] indoctrination of their children and grandchildren in government schools…simply by conferring their knowledge, beliefs, and ideals on them over the dinner table, in the car, or at bedtime” (Schmidt, 2011, p. 217). Similarly, Glenn Beck and other popular Tea Partiers compel parents and grandparents to take over their children’s education (Schmidt, 2011, p. 217).

The suspicion of intellectual elites is strong among Tea Party participants, and they avoid relying on professionals outside of the movement for information. In fact, participants argue it is ordinary people, not the intellectual elite, who should make decisions that impact their lives (Skocpol & Williamson, 2012; Goldstein, 2011). The Tea Party is especially contemptuous of “experts” who claim to possess pertinent knowledge that isn’t easily accessible to those who do not have specialized education (e.g., Skocpol & Williamson, 2012; Carbone, 2011; Levinson, 2011). Likewise, in their recent and seminal social scientific study of the Tea Party movement, Skocpol and Williamson (2012) heard many expressions of contempt directed at educated people who attempt to develop plans for or advise ordinary citizens. A number of members believe the nation’s crisis can be traced to people being “duped” into supporting foreign ideas by liberal elites, such as those housed in the academy (Goldstein 2011, p. 831). These attitudes were all consistent with the experiences of my students; however, it is worth noting that the budding Tea Party scholarship was published within the two years after the course.

The Tea Party and Generational Tensions

Though of course there is some demographic variation among Tea Party participants, the movement skews older, and this is especially the case in suburban and rural regions (e.g., Skocpol & Williamson, 2012). Skocpol and Williamson (2012) found that Tea Party participants did not seem bothered that they are older; this is a noteworthy departure from their older counterparts on the left, who have been known to fixate on the issue of expanding to include younger generations, sometimes even attempting to cultivate youth leadership (with varying degrees of energy and success).

Part of the reason Tea Party participants take the lack of younger participants in stride is their belief that as older people, they have special wisdom and knowledge that needs to be cultivated and preserved (Skocpol & Williamson, 2012). These ideas are coupled with a deeply rooted skepticism of young people and their concerns; there is a widespread belief among them that younger people have poor priorities, are overly entitled, and irresponsible neophytes.

Tea Party members identified young people as freeloaders: undeserving recipients of government
spending (as young people in general, and students in particular). This was often coupled with personal anecdotes of young relatives whose lack of success, in their perception, incited larger generational reflections. Tea Party participants’ critiques of the younger generation ran the gamut from crude language to bad handwriting (Skocpol & Williamson, 2012).

**Negotiating Research with Undergraduates**

Involving students in research is a potentially mutually beneficial endeavor; the research of faculty members might be enhanced by student involvement and students get a rare opportunity to play a role in research projects (e.g., Swigert et al., 1993). This type of intensive undergraduate research training can give students an edge in traversing the current knowledge based global economy, and enable faculty to provide a critical component of the charge of universities to prepare them for these conditions (Gonzalez, 2001). Prior research has documented the way in which faculty headed research collaborations benefits students, especially those on the margins. For example, research mentoring programs for undergraduates of color have helped students to clarify professional goals, increase research and technical skills, and to help gain admittance into graduate programs (Crawford et al., 1996).

Despite the fact that research collaboration occurs most frequently in the natural sciences, social science and business students can learn research methods and their discipline more effectively by engaging in real research (Swigert et al., 1993). This is especially the case for fieldwork, in which the best way to learn the methodology is to ‘do it’ (Bogdan, 1983). By engaging in the community, students can learn more comprehensively about the social and practical experience of doing research, including its complex demands, negotiations, and rewards (Swigert et al., 1993).

Though there are benefits of including students in research that engages communities, the challenges inherent in doing so often provokes instructors to separate the methodological instruction from the actual research process (Schmid, 1992). One stumbling block for this type of research collaboration is the issue of uncertainty that arises. By analogy, we can examine health care instruction. In his article on training in the health professions, Donald Light (1979) argues that although uncertainty abounds in the context of providing health care, professional education centers on training for control. Uncertainty permeates social life, and it is manifest in the context of field work. In the face of new situations, people feel tense and try to reduce uncertainty as much as possible, something that might not be desirable or realistic in research with communities. There are other obstacles to structuring field work activities as part of a classroom experience. Schmid (1992) comments that this process typically amplifies all of the problems confronted by researchers under typical circumstances, since it enmeshes students with minimal training in local communities, which can create potential problems with legal liability, student safety, and breaches of research ethics.

**THE SEMINAR: RESEARCH PRACTICUM ON THE TEA PARTY MOVEMENT**

My interest in the Tea Party movement piqued in 2010, given their increasing popularity and widespread claims of being “leaderless.” My research questions coincided with on-going research examining the way in which social movements on the left leverage the Internet to sustain participant involvement. I extended this inquiry via a cross-regional study of New Jersey and Florida Tea Party chapters in order to fill a lacuna in the social movement scholarship related to leadership formation (Aminzade et al., 2001; Morris, 1999; Melucci, 1996). By examining diverse forms of leadership that arise in the context of Internet driven Tea Party movement activity, it becomes more evident that the Internet not only affects participation across movements with vastly different goals and approaches, but also shapes the structure, experience and role of leaders in a contemporary social movement.

The course was upper division and had thirteen students. Twelve of the thirteen students are female. Eight of them are white, while two of them are Puerto Rican, two are of African descent, and one is racially mixed. Eleven students were Sociology majors or minors, while the other two students had Catholic Studies and Anthropology majors.

The structure and content of the course (and the data we collected that term) changed, given the fact
that I had thirteen students to negotiate, each with a different skill level and interest in the project. I ran the course as an applied research methods and Tea Party special topics course hybrid. Students understood at the outset that they would receive a partial survey of the social movement literature, and also get some background information specifically on the Tea Party movement. They engaged in a variety of projects so they could have some first-hand experience with multiple research methodologies. Students documented Tea Party websites, blogs, and Facebook sites, compiled a year’s worth of Tea Party related major newspaper stories and radio and TV transcripts, transcribed a five minute excerpt of Tea Party rallies or brief interviews from a rally, and all but one of them attended and wrote field notes for at least one of the three Northern New Jersey Tea Party chapter meetings occurring throughout the term.

The research had Institutional Review Board (IRB) approval prior to the start of the class, and I consulted the head of the board about the addition of Tea Party meeting attendance and the students’ involvement. Though researchers attending public events do not need special IRB clearance, she recommended the students be required to complete an approximately two hour Internet-based National Institute of Health certificate tutorial on the protection of human research subjects. They all provided the certificate by the beginning of our second class. Later in that second class period, I supplemented the information provided by the tutorial by discussing aspects of the content that seemed especially appropriate for our research project and activities.

For the last course assignment, I had them reflect on their experiences by writing responses to a series of questions related to how they dealt with any lack of “cultural competency,” the benefits and disadvantages of being an unfamiliar outsider, what they found most and least satisfying or enjoyable about the research process, and how they dealt with any challenges they confronted while engaging in the research. I discussed with them the possibility that with their approval, I would excerpt their final reflection papers as part of an exploration of this fairly rare pedagogical experience. All thirteen students agreed to let me use their writing in constructing this article, as part of the research field notes and documentation produced by our research team. Some Tea Party meeting field note passages are also peppered throughout.

By engaging Tea Party communities, students revealed members’ ideas about public knowledge, education, and educators. Considering this aspect of Tea Party ideology is worthwhile; not only did this depiction relate to the students directly, but it was especially relevant in the context, since they were attending meetings as college students and as young people engaging in the research enterprise as part of their higher education experience.

The Encounters

During the meetings, students and Tea Partiers needed to make sense of one another’s roles and behaviors. From the perspective of Tea Party members, the students occupied multiple prospective roles, all of which are fairly objectified (e.g. pawn of some professor, potential recruit, young sidekick or sex object). The moments of engagement students had with the membership was often strained, and students attributed this to a generational gap, and what they perceived as a suspicious or paranoid attempt by the membership to assess what potential role or roles they might play. The attention they received was pronounced and a little surprising, given that the meetings they went to were just before local elections, and were thus very well attended (students approximated between fifty-five and eighty people at all meetings).

Students discussed the way their status as youth was pronounced for Tea Party members. Often this recognition of their age was coupled with nervousness. One student commented on the way their youth was noted: “Walking in we actually overheard people talking about how young we were, which is something they didn’t need to highlight considering that the next youngest person…was around 33.” Some acknowledgment of their status as youth (and potentially college students) was, in every case, followed up with an aggressive attempt to place the students. Another student elaborates: “As soon as we walked into the meeting we were bombarded with an enormous amount of questions by several different people. A lot of the questions pertained to our age…if we had simply been young people interested in the movement, their aggression would have been enough to scare us away.” Another student attending this
meeting elaborated, “A few people approached us and jokingly said they hoped we were not here for a class project, which put us in an awkward situation from the get go. I told them that...we were here...for a research project, and we wanted to understand who they are and what they were fighting for from them rather than the media. They seemed fine with that response, but...the majority of [the] people were suspicious of us being at the meeting regardless.”

Students attending almost every meeting mentioned that their status as students in particular created a pronounced anxiety for Tea Party members. In her field notes one student recorded that a man approached them “immediately and nervously” and commented on their note taking. He wanted to know why, “namely was it for an assignment.” Once she explained that they were attending for an assignment, he further inquired about their political beliefs, and as the student puts it, “he seemed as though he did not trust us and was constantly firing questions at us to find out who we were.” The summer before this seminar, one student happened to purchase a dog from an ardent Tea Party supporter, who tried to recruit her to the movement. She made it clear to the dog seller from the onset that she was going to be taking a class in the fall in which she would be helping with a professor’s on-going research project on the movement. This student attended a meeting the summer before our seminar with her father, and we discussed her experiences during the first class meeting. When she attended her second meeting during the seminar term, she commented that “a woman immediately approached us and asked us if we were here for a class project and hoped that we didn’t have to report back to our ‘wacky teacher’.” Interestingly, the dog seller, who was present at both meetings the student attended, “silenced” this woman, “introducing me as her ‘young Tea Party supporter’.” When the student shared the incident in our classroom debrief, she said that she didn’t respond to the comment, since it was the dog seller’s characterization, and not her own. The student did follow up with the dog seller subsequently, and she made sure to re-articulate her status as a student in the class.

Students were sometimes antagonized by members of the Tea Party movement. One student commented that the membership is very “distrusting of us” and that students were not approached “respectfully.” She states further “they were not open to a Sociology student who was curious to know more, especially one who wasn’t waiving a flag and screaming ‘for liberty and justice for all’ during the pledge.” In response to some of the initial unfriendliness one student confronted, she concluded that she “could not see the older leaders of the movement giving up power for a younger person, or listening to the advice of someone younger. I think the older generation would be threatened that the younger generation would take over, and they are not willing to give up the stake that they hold in this movement.”

Given the negative reactions some Tea Party members had to their presence, students used various strategies to make the encounters as “normal” and “useful” as possible. One student explained that their anonymity “gave us an opportunity to ask some questions without having to commit to the party.” Though another student acknowledged that she “was very nervous that I would not know what to say if the people asked me questions, and thought that it would be very uncomfortable for me” her strategy was to be “as honest and vague as I could.” She was also one of many students that commented on the benefit of having other classmates there as backup: “It also helped that I was with a few other girls...If there was a question I was not sure how to answer, I would look to the other girls to help me out.”

Despite the fact that ethical issues in doing research was a developed component of the course prior to their encounters, their preparation still proved inadequate given the tremendous pressures students confronted because of the Tea Party movements’ conception of higher education as a political threat. To members of the Tea Party, their role as student researcher was inherently suspect and students often found themselves unable to negotiate a dynamic that involved multiple older people aggressively confronting them in an unfamiliar public setting. Though we spent time in class on the importance of being honest about our motivations for attending, one student divulged that she lied in response to members’ “overwhelming concern” with their presence at the meeting: “… When asked what we were doing at the meeting, I quickly said that we were with the republican student group at [our campus] and were eager to attend our first tea party meeting…” When she explained this in the following class period, I verified that this was an ethical breach while validating her anxiety about the position she was in. Given that the student attended only the second Tea Party meeting during the term, the scenario helped prepare us for the
likelihood that students would be approached at these big public meetings about why they were there. It also highlighted a tension between the vulnerability of students and their need to assume a role that is accountable as responsible researchers.

The encounters with Tea Party members illustrated the way in which female students were at risk in this setting. At the end of the term a student accompanied me while I interviewed a white sixty-seven year old Tea Party member who spoke at a rally. She arrived twenty minutes into the interview, and the member immediately began to direct all responses to her, though I was the only person conducting the interview. Towards the end, he began to discuss unrelated issues about the difficulties of dating in his situation, and then asked the student if she would be willing to date somebody much older than her. We both hastened her quick departure, and although after debriefing, she was not regretful about having participated, it underscored the troubling complexities of young women entering this unfamiliar space.

Despite the fact that to varying degrees eleven of the twelve students experienced scrutiny and skepticism while attending meetings, interestingly, many of them simultaneously faced forceful attempts to recruit them. One student commented that she had “whiplash” from the meeting she attended, since they approached her with considerable “contempt” and suspicion, which was interjected with moments of “cult-like recruitment.” Likewise, another student wrote that an older man (she estimated his age to be mid-seventies) who “sat next to us and talked to us throughout the entire meeting” wanted to introduce them to the executive board. She explains: “He was persistent to get us to commit to future projects, and wanted all of our information.”

Most of the female students in the class referenced that, to some degree, they received unwanted and unsolicited attention. For some, this meant that they encountered Tea Party members who were interested in socializing with them extensively, or having discussions that felt personal, and heavily inflected with traditional heterosexual gender roles. One student reflected on the incident with the man who tried to recruit her and another student, explaining that he discussed issues with them that were unrelated to the Tea Party movement: “By the end of the meeting, he was even giving us advice that had nothing to do with the Tea Party. He told us that we had to pick our sister in laws before we picked our husband, because the relationship a brother and sister have is very telling to how the guy treats women.”

Though there was some variation in how Tea Party movement knowledgeable or aware students were (based on their level of engagement with the course material, as well as prior knowledge), all of them negotiated an outsider status, and encountered a bevy of unknown group norms. As discussed, the dynamic context of their encounter with the movement meant that they needed to think ‘on the fly,’ and make decisions and choices brought on by the often unpredictable circumstances. One of the bigger challenges students confronted was a relative lack of familiarity with the language or reference points of the Tea Party movement. This sometimes made it difficult for students to gather information, or even to understand what was transpiring on a basic level. The challenge was persistent despite their immersion in existing, albeit nascent, studies of the Tea Party. The “language barrier” reflected movement jargon and customs, many of which had not yet been thoroughly documented in existing scholarship, and were simply inaccessible to outsiders not yet socialized into the Tea Party movement.

The students’ field notes often revealed basic confusion, often coupled with surprise, about the norms of the movement. One student carefully documented the unfamiliar processes at the meeting she attended: “She holds to the agenda but allows people to interrupt occasionally with their opinions, as was the case with a white man in his 50s that stands up in the middle of the meeting. He rambles on about something and makes several animal references and at one point even howls. The people seem to know what he is talking about and nod their approval.” Another student commented on the content of the movie “Battle for America” in her field notes from a meeting: “There was TONS upon TONS of seemingly irrelevant imagery that didn’t [appear to] match the topic in discussion (e.g. talking about an unfair partisan majority yet there’s bizarre imagery of a white, blond woman with pastries, about to eat a cupcake).”

The only male in the class attended a meeting without another classmate. He dutifully explains the “surprising” historical re-enactment that occurred, along with his attempts to proceed as if he was expecting this:
The first speaker is an individual dressed as a Colonist from the 18th century, a historical re-enactor. As he is introduced (by someone else who seems to be a part of whatever act this is) fog rolls out from a fog machine and the lights were also set to dim. Needless to say, I was completely taken aback by the presence of this historical re-enactor as the original speaker...As hard as I tried, I couldn’t mask a smile at what I saw to be the sheer absurdity of the situation.

It is worthwhile to note that the student feels compelled to explain why he is thrown by these events, “I believe the sheer absurdity was not so much out of any personal bias, but more out of complete and utter surprise at the presence of the re-enactor.”

Not having pre-existing fluency with Tea Party group language and customs (despite their preparation) created stress for students, and sometimes this was coupled with a thoughtful consideration of who they were in this new setting. One student reflects on her experiences:

I consider myself very good at speaking up for myself and others, yet in this environment, I was the quietest in the room. A good example occurred when we were reciting the pledge. There was an extreme over-emphasis on the part ‘with liberty and justice for all.’ I did not put extra emphasis on this part and it felt like the whole room turned and looked at me, wanting to know why I didn’t emphasize that phrase.

Students expressed frustration at not understanding basic Tea Party rhetoric, even for coursework that didn’t involve the pressure of interacting with Tea Party members. One student describes her experience transcribing: “The transcribing was difficult mainly because they used so much insider terminology that made no sense to me, so I often felt like I was transcribing an interview that was in a different language. Most of it was useless to me in terms of getting a better understanding of the movement, or [for] following a dialogue.” Students presented to the class all materials distributed during the meeting(s) they attended, which often included documents that were challenging to decipher. These occasions provided opportunities to explain to the class that not understanding is a typical part of the outsider researcher dynamic, especially true of participant observation. We dedicated part of our class period to a collective experience of translating the movement’s rhetoric. Students began to recognize this attempt to decode as a normal research process, and some embraced it. One student enthusiastically created a “glossary of Tea Party terms” that she would add to as we proceeded.

Considering Knowledge and Intelligence

Students were able to unveil messages about how the Tea Party understands intelligence, and what signifies it or the lack thereof. As mentioned, the public is often posed as uninformed, and people who disagree with them as lacking intelligence. Both the intelligence and morality of liberals is attacked, as are educational systems, which are thought to be run by liberals with problematic agendas. It is important to note that students had their own schemas for evaluating whether Tea Party ideology is valid or ethical. The process of engaging in original research in some cases stimulated their desire to understand or learn, and they communicated that this stimulus differed from what they experienced in traditional classroom environments.

Students were surprised by the degree to which Tea Partiers quickly labeled anybody who disagreed with their political perspective as unintelligent. On student commented in her field notes that “the public” was referenced in condescending and fairly derisive terms, highlighting that they are “uninformed and uneducated.” The seeming contradiction between attacking people for being uneducated, and also attacking education, was one that we unpacked in class. Students conveyed the sense that outsiders to the movement are regarded as being duped or improperly educated according to Tea Party member perceptions of “truth” and “fact.”

Members of the Tea Party movement attack education and educational institutions as unethical and a source of blame for the nation’s troubles. This theme was pronounced in students’ field notes. The
student’s description of the historical reenactment includes a comparison of King George III to Barack Obama on the abuse of federal authority by the “Ghost of America Past.” He explains, “after exclaiming how he feels sympathy for us, he then states that this ‘damage was caused by highly educated individuals with no moral fiber.’” During the brief Q & A after the re-enactment, he describes the first question as “a slight at the left.” The question is, “Why are the left portrayed as intellectuals?” which “received quite the laugh from the rest of the audience.” The student then relayed that “the response was that the perception was fabricated by the Left to make up for their moral deficiencies.”

Students referenced that they had never quite experienced such “anti-school” sentiment in any setting as they did at Tea Party meetings. One student’s field notes reference that a major agenda items was “political correctness spread by liberal schools.” Another student’s field notes reflect a similar sentiment at her meeting: “There is group agreement in the hostility toward academics. The crowd would collectively snicker when academics and public schools were mentioned.” One student mentioned that a middle aged Russian immigrant newcomer tried to discuss an educational policy, and admitted to working with Democrats on the issue previously. The membership responded with aggression: “The crowd was clapping with the attempt to have him leave the microphone, and the leader asked him to wrap it up. There was a joke made at his expense and rumbling from the crowd.”

Again, universities are posed as the headquarters for spreading liberal ideology. One student referenced the critique of higher education that emerged at her meeting: “Overall, they preached for the hour and 40 minutes I saw about how excellent conservative ideals are, and how hysterically awful liberals/socialists/communists are, as one group, and hiding in places like universities.” Another student noted a similar sentiment on the blog site she monitored:

The video of the young African American men learning the ‘I am an Obama Scholar’ inspirational chant in their school was supposed to be something positive to encourage young black men to stay in school because they have the capability to do great things if they get an education. The Tea Party Patriots, because of their feelings towards Obama, thought that it was the most horrifying thing that children in school systems could be exposed to…they saw it as evidence of a socialist school system brainwashing students.

After attending meetings, students often linked Tea Party movement skepticism of young people to their negative assessments of educational systems in the U.S. One student reflected on this phenomenon: “They want to know our agenda in being ‘involved’ and showing up at meetings. They do not fully trust the younger generation, as they explained, we are the people seen to be affected by liberal politics in our education and cultural outlets (media, music, etc).”

Perhaps Tea Party skepticism of students is warranted; a few students found themselves calling Tea Party ideology into question, both in class and in their write ups. Students mostly refrained from editorializing in their field notes, however one student included this reaction to a film: “It stated AFL-CIO, NAACP, and a particular Latino organization were not virtuous or for the public good, and its affiliates aren’t American people (which makes you question who are the American people in their eyes? Obviously not minorities, or the working class).”

Though I did not prompt students to do so, some of them included in their final reaction paper explicit disagreement with the Tea Party ideology to which they were exposed. In her discussion of the “I Am an Obama Scholar” clip, the student identified what she perceived to be a core contradiction, “To me, it was a positive clip, and I didn’t understand their criticisms until I read the commentary members wrote below it.” She argued against their assessment, “I felt that they were letting their disapproval of Obama cloud their judgment on how a simple saying like that could really encourage the hearts and minds of the children they claim they’re doing this movement for, and how while they say they are fighting for a better government for their children, they’re still not really doing much to help their children succeed.”

Some students revealed that they felt personally attacked or offended by Tea Party ideology. Indeed, this was far more likely to be the case for students with defined political beliefs in opposition to the Tea Party movement (though it should be noted that this would not characterize most of the students in the class). One student responded to the meeting:
I was a little offended by some of the comments they made about President Obama, democrats, higher education and young voters. They didn’t hesitate to refer to our president as ‘the socialist in the white house,’ and the general consent was that he wasn’t doing his job right…they also talked about how ‘misinformed young people’ were making bad political choices that were hurting everyone. They made reference to the ‘brainwashing’ of young people, who were some of Obama’s biggest supporters. I don’t think we were ‘misinformed,’ I think we were excited about new ideas from someone who in the political world was indeed relatively young.

Another student echoed these sentiments as part of a discussion about her “bias”: “Their genuine belief that our current presidential administration is responsible for all of our national problems, dismissing or ignoring any conservative wrongs, came across too delusional, skewed, and misleading for my tastes, even more than I reckoned it would.” This student was very self-reflexive about her anti-Tea Party movement bias, and she mentioned that it might have limited her effectiveness as a researcher, writing “I’ll need to keep it in mind for future reference, to be aware of my personal convictions with subjects researched.”

Many students perceived their lack of familiarity with the movement as an asset in the abstract because from their perspective it meant that they did not have any prejudices and they could be impartial. One student argued that the students’ lack of cultural competency was an advantage “because we started the research with a ‘tabula rasa,’ or a completely blank slate. We did not have any opinions or bias dealing with the group and its platforms. This allowed us to be influenced by the meeting alone and what they had to say…” Another student communicated this viewpoint:

When I first started this class I was unaware of most of the belief systems of the movement. I think this allowed me to study the movement and the members as well as attend the meetings with an open mind and without bias. It protected me from any preconceived notions and allowed me to make judgments on the direct arguments of the movement by myself rather than through the explanation of others.

The Process of Becoming Researchers

Students struggled to think of themselves as researchers, and this brought a number of challenges to the fore. In some cases, the experiences they endured made them decide they wanted to learn more, so that the initial challenges and frustrations yielded productive interests. As they became researchers they recognized that they were able to understand the Tea Party movement in ways that they might not have through an exclusively classroom based experience.

In light of their status as researchers, some students had to endure unpleasant situations in order to collect data. One student revealed that “there were points I flat-out wanted to leave, yet I stayed for the sake of acquiring data, and not coming off rudely…” Similarly, another student explained the hard work she needed to undergo in order to engage in the research process: “…I was in a position of needing to close an age gap in order to…proceed with the research. I did a lot of work to connect with these people because I was committed to the research process. Had I fewer or different motivations, I would have been exhausted and headed for the door immediately.” One student explained that doing this research “taught her the art of patience” in order to compile potentially relevant and important information: “I learned I will not always find something immediately interesting and eye catching, and that the research process might seem boring, but patience is more than half the battle.”

Students’ orientations to the Tea Party movement shifted along with their deepened understanding of the role of researcher. One student explained that in order to get a handle on the Tea Party movement, she first made sure she probed beneath the surface of their perspective:

I found I had to develop a certain level of cultural competency when studying…the Tea Party, which is a reaction to specific ideas and actions in society. It makes it easier to
understand their actions and their grievances if you understand where their anger and uneasiness lies…They are angry because they believe that the government has overstepped its bounds in society. Many people do not see current politics in this light, and so it is important to try to understand where they see that government has failed.

Likewise, engaging in the research made another student “look at my world differently”: “When my sister and I persuaded our parents to get us a dog, little did I realize that this would lead me to creating a connection with someone that would help our Tea Party research…She was a great contact…All of a sudden, all roads led to the Tea Party.”

For some, the course ignited an interest in the Tea Party movement and in the research process. A student explained that the course “proved” to her that “research is not only dry and boring. Research can be informative and exciting.” She continues that the class also piqued her interest in the movement: “Even though I had very little interest in the tea party before this research experience, I ended up developing a passion for it, even though they don’t exactly have my political beliefs. I enjoyed (and continue to enjoy) reading up on the tea party and watching related stories on the news.” For another student, the course sparked an interest in politics, “Honestly, I’ve never really been interested in politics at all before this course. Therefore, I did not previously know anything about the Tea Party. This may be an asset to me now so that I can know what is going on in the world. I feel like this opened my eyes to the whole political thing.” Yet another student described what she found intriguing while taking the class:

It was interesting to watch the momentum that the movement gained while we were studying it, both in the media and on the local level. Watching the efforts of the movement and their overall success during the elections in November was interesting. Obviously, the movement has something to offer the people of America, who are taking them seriously and getting involved on a local level.

For some students, engaging in this research was deeply personal or they considered in-depth the ramifications of Tea Party policies for them as individuals. One student referred to this aspect of doing the research as “one of the biggest challenges to overcome”:

…I felt that their misrepresentations and doomsday scenarios were extremely troubling. I thought a lot about what would happen if what they ask for does get passed…Therein lay the main issue, as the research somewhat became a conflict of interest, in the sense that with each increasing exposure to the legislation and petitions which they were championing, I faced a gloomier and gloomier personal future.”

This student also wrote about how he “overcame this challenge” by “rationalizing” that he couldn’t know for certain what the impact would be if the Tea Party movement gained power, and he also thoughtfully considered why the Tea Party members have these viewpoints. He employed an approach that enabled him to go back and forth between Tea Party ideology and his own personal reactions and opinions. In the end, the student ponders that approaching the research in this way “is unlike any process I’ve had to undergo in all of my other courses—everything we did was so anchored in a direct day-to-day reality that the significance to my life was always something I contemplated.”

For another student, the research was also personal, since her parents had Tea Party involvement. She discussed the way the course shifted her relationship with her family:

Researching the Tea Party Movement has not always been easy, but it has proven to be a rewarding experience. My parents, especially my mother’s involvement in the movement, has often annoyed and even irked me as I have always sloughed it off as a band of overly-zealous rioters who would get nowhere in their efforts. Obviously I was wrong in gauging the movement’s impact, and I have come to almost enjoy (at times and in small
my parents’ political banter at the dinner table. Discussions with my parents and other people in the movement, as well as reading a vast array of articles from both sides has widened my viewpoint even further.

Experiences with the course also provided a prompt to learn more. One student in particular conveyed this sentiment: “To be asked about my political views and my stance on certain topics was difficult because I don’t have a high interest or even understanding of politics. I guess a challenge for me was overcoming a situation that I couldn’t really talk my way out of. It has made me want to learn more about politics so I can at least pretend to know what I’m talking about.” Students that don’t have developed political perspectives or commitments aren’t often challenged to develop them as part of their traditional educational curriculum. The experiences provided by the class, especially attending the Tea Party meetings, played a critical role in inspiring them to understand the political world. Some students expressed appreciation for the increase in awareness of and familiarity with U.S. politics that the course sparked.

Students’ experiences enabled them to recognize the value of going into the community to collect data. One student wrote: “I think that the atmosphere of the meetings and the issues discussed are something that other research simply cannot provide…[The fieldwork] allowed me to see that there are other ways to do research rather than just through the internet and books.” Another student discussed the particular value of attending the meetings to gain vital insights about the movement: “…Meetings seem to be where the movement gains its power and sway among local voters who are dissatisfied in some way with the government. This movement claims to be about the local people and so I think it is at this level that those involved feel most connected and powerful, which is why it’s so important we attended.”

Partly because students attended different meetings, their impressions and assessments of the movement varied. One area in which they had diverging observations was with respect to the level of grassroots democracy practiced at the meetings. One student thought that the meetings reflected an inclusive, non-hierarchical structure: “People genuinely respected and cared for one another, and quite honestly, small, town hall, meetings such as this felt a lot more like Democracy than pulling on a lever based upon 5 second sound bites…” However, another student had a very different sense of the level of democracy present at the meeting she attended:

Although they call themselves a ‘grass roots’ movement, from the meeting I attended, this is clearly not true. There was a leader of the meeting and…they assigned an executive council that would lead the organization…While they allowed people to talk at the end of the meeting, there was no real power given to these people, as it seemed that they were more venting and everyone was waiting for them to stop talking.

Not only did this student recognize the benefit of attending meetings to get a first-hand sense of the dynamic, but she also discussed the importance of being an “outsider” who is explicitly attending an event to pay attention to group processes: “For someone inside the movement, they may be oblivious to this point, but being an outsider, especially somebody attending to pay attention to these things, this seemed incredibly obvious.”

By attending meetings, students could identify more subtle aspects of the movement and its members that surprised them. A student discussed the way in which she was “shocked” that people were expressing particular beliefs in a public setting, “…I wasn’t surprised that there were people that had these views, but I am surprised that they displayed them so blatantly…I feel that a lot of their beliefs are very radical, and that many people who hold them would rather not have their neighbors know that this is what they believe, but apparently I was wrong…People were very outspoken in this setting.” Another student commented on the disjuncture between sources of information. In particular, he noted a different characterization of the movement found in the media and at meetings: “The Lexis Nexis assignment gave me a sense of the way they were portrayed in the media, and it didn’t really line up with what I witnessed in the meetings. In that sense, skimming newspaper articles called up on the database ended up telling me..."
more about the media then the Tea Party movement.” In class we discussed the limitations of the media in accurately or sufficiently informing people about the Tea Party movement. One of the main observations students had in relation to media coverage was that the same handful of spins and information appeared time and again, so that even though they were downloading hundreds of thousands of related articles, very little information was present. On the one hand, this emphasizes the point that not enough was known about the Tea Party movement to really prepare students for this experience. On the other hand, it also underscored for some students a sense that the data they collected was foundational to any outsiders’ understanding of the movement, and this made them feel their research was a particularly important contribution.

FINAL REFLECTIONS

Bringing students who have often been short changed by their K-12 education into direct intellectual and interactive engagement with a social movement community is not unlike trying to fly a plane while still in the process of building it. Although the seminar, as indicated, included some intensive immersion in Tea Party literature, Tea Party media coverage, and in social theories of the political right, the classroom curriculum that was attainable within a focused time period could never have been fully adequate to prepare students analytically and emotionally for the encounters. In hindsight, I would have extended both the length and breadth of students’ preparatory period before introducing them to fieldwork in this particular setting. Educators attempting to replicate the seminar model relative to other populations that might be skeptical of students and young people would need to plan carefully for the psychological strain of the encounters and their differential demographic effects. This imperative, as noted, is inextricable from the necessity of training students for the ethical considerations involved in being simultaneously demographically and circumstantially vulnerable, while still having responsibilities and at least some power corresponding to the role of researcher—a challenge I only partially anticipated at the seminar onset.

There are a few additional features of the seminar construction and content that are useful to consider for those attempting to or interested in advancing similar pedagogical plans, especially for agendas that involve challenging communities. Despite the fact that their hands on research experience was the foundation of the course, what transpired in the classroom was the cornerstone of any pedagogical or research success. The collective process in the classroom helped us all navigate and negotiate the seminar. From the students’ perspective, having the opportunity to process their experiences that week, or hearing about other students’ encounters in the field made them feel connected to the project and part of a research team. It also served to help combat the isolation they felt from being outsiders to the Tea Party movement. It was in this space that students could take a step back and process and analyze what was transpiring, as well as get some clarification on Tea Party communication. It was also the place in which we could strategize to address any challenges that emerged. For instance, we discovered that we needed to use class time to develop individualized “raps” that were genuine and anticipated Tea Party member anxiety at meetings.

Initially, I underestimated the degree to which the students felt compelled to perform for adults. They grasped, intellectually, the benefits of admitting ignorance in a research context, but getting them to feel comfortable enough to follow through and admit it was a struggle. This is something likely to emerge by having students engage communities in the role of ‘researcher.’

As I addressed above, student experiences were demographically variable. There are ethical issues for educators to consider in sending female students into such sites–related to possible emotional safety and differences in readiness. Luckily, the student educational outcomes in this case were positive. For instance, we discussed claims of racism within the Tea Party movement prior to their community engagements. But, if replicating the seminar, I would generate more formative dialogue related to how this might translate for them at a meeting. For students grappling with vulnerable identities, this was also eventually an empowering experience, as learning to successfully navigate knowledge, communication, and critical investigation in spaces that are predicated on racial and gender hierarchy can build critical
social and intellectual skills, and generate a sense of capability.

With these qualifiers and concerns attended to, engaging in a similar course plan is worthwhile. The fact that the seminar often revealed to the students that their educational processes to date had poorly prepared them to navigate social movement politics, political rhetoric, and active citizenship was its greatest success. It would be difficult to imagine much more effective pedagogical tools that might demonstrate to students that knowledge—and the capacity to deploy and articulate it—is a valuable resource, without which one will remain under-equipped in important collective contexts and political moments. Several of my students were expressive on this point, coming out of their encounters with Tea Party communities with the sentiment that they needed to know, needed to understand, and needed to prepare to engage the political right in ways that spoke to their varying and compelling (and in some instances newly discovered) political priorities.

Despite prospective challenges, the value of taking the leap of heading students directly into fieldwork should not be discounted; as many anthropologists and sociologists will attest, much of the best methodological training requires the holistic experience of the research process. Social psychologists, particularly those who examine social learning theory, also certainly have established that some aspects of learning occur best enactively, rather than through acquisition and performance. The seminar research process ultimately realized several of the valuable elements of university-community engagement, in bringing an educational process into a fascinating community setting, and allowing students to fuse the processes of sociological analysis with preliminary development of political affinity and identities outside of the classroom. However, I would also be remiss if I did not acknowledge that any academic attempting to guide students through this type of encounter must necessarily be prepared for a complex array of challenges not limited to variations in student skill sets or intellectual orientation. For my students, engaging the right pushed them to think deeply about power, political participation, and ideological authority in ways that implicated their relationships to work, family, education, race, gender, and their status as students and youth. In addition, students were challenged to develop a conception of their own and alternate moral and political schemas. That is, confronting Tea Party rhetoric and being challenged to adhere to and embrace it disrupted several of my students’ senses of their ability to be either apolitical or politically ignorant thereby stimulating their sense of the responsibilities of citizenship and personhood.

NOTE

1. Given the malleability and subjectivity of political designations, I do not present a singular or wholesale definition of conservative, right wing, right, liberal, left wing, or left in this article.

REFERENCES


Leadership in Higher Education
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The purpose of the study was primarily concerned with exploring the major issues that are confronting presidents of higher education and the transformational leadership practices and concepts warranted in addressing today’s issues. A Delphi technique was used with a broad-based panel of 52 experts who were university presidents in the United States. The expert panel provided input to 41 distinct indicators that included a list of concerns, issues, management practices and concepts, and effective leadership qualities. These indicators were force rated through three rounds to determine levels of agreement and consensus determined from medians and interquartile ranges for each indicator. Specifically, the study determined the following: 1) The major issues confronting college/university presidents; and 2) The major issues confronting college/university presidents are susceptible to transformational leadership practices and concepts.

INTRODUCTION

Institutions of higher education can become the central player in reshaping the quality of leadership in America. The focal point of this transformation would begin with college/university presidents setting the tone. They could begin with rethinking their roles, practices, and beliefs, by implementing transformational practices and concepts with the explicit goal of producing future generations of effective leaders.

Research Questions
The following research questions provided foundation data for this study and for decision makers of higher education as they seek to improve the environment for institutions of higher education.

1. What are the major issues confronting college presidents?
2. Are the major issues confronting college presidents susceptible to transformational leadership practices and concepts?

Overview
Higher education is at a crossroads where it must redefine its mission accompanied with measurement standards as to how it is going to meet the needs and obligations to citizens demanding higher education in the 21st century. Higher education is facing the impact of globalization/internationalization, the development of information and advance communicative technologies, rapid change in demand in employment, economic challenges to funding, and the critical need for highly qualified educators who have practical experience in their discipline.
Accordingly, these factors will create a need for a partnership atmosphere with educators, state governments, and businesses as higher education continues to realize enrollment expansion. This can begin only with effective leaders as presidents of institutions of higher education employing transformational concepts and practices who comprehend the situation and provide visions of the changes and directions that will be necessary to achieve this atmosphere.

This study is significant because the beneficiaries from the delivery of this study process will be the citizens and society, as education and knowledge are the cornerstone of society’s growth, development, evolution, and continuance. The providers of this delivery are the presidents, and the effectiveness or notoriety of the university falls upon the president. This study provides additional understanding of the traits, management practices, and concepts found in an academic leader.

This Delphi study was designed to determine the expressed acumen, traits, and characteristics common to the expert panel, who may be considered transformational leaders and are presidents of institutions of higher education. A three-round Delphi technique of inquiry was used to survey a panel of presidents of higher education institutions who may be considered transformational. Findings included a ranking of opinions as to the acumen and characteristics that are reflected in these presidents’ leadership and decision making.

Procedures
The communication channels were postal service, email, and telephone. The instrument was questionnaires that require numerical forced ranking of statements. The instrument was tested by obtaining the forced ranking from the expert panel. Questionnaires had formulated inquiries as to the building of relationships reflecting the interactive, mutual, and shared nature of transforming leader behaviors. Questionnaires were structured for anonymity, and communication to the expert panel was by mail. The population was presidents of accredited higher education institutions in the United States as listed in the 2007 Higher Education Directory®, the 25th anniversary edition as published by Higher Education Publications, Inc. This is a directory of accredited postsecondary, degree-granting institutions in the United States recognized as accrediting bodies by the U.S. Secretary of Education and by the Council for Higher Education Accreditation. This directory includes both public and private higher education institutions.

The names of presidents associated with these institutions of higher education who were selected as expert panel members came from this directory. An institution was chosen utilizing a random numbering selection criterion from the Random Number Generator in Excel™ software. The president listed as associated with this random selected institution became the targeted prospective expert panel member.

Results
The summary results of the three invitations were a total of 300 offerings with an expert panel of 52. Each member was assigned a unique number for researcher accounting and tabulation responses. This unique number was used throughout all three of the rounds of ranking which allowed for ease in the summarization of data. Beyond the individual’s willingness to participate in the study, he/she also met the following qualifications:

1. Current position as a president of an institution of higher education.
2. President of an institution of higher education in the United States.

Conclusions
Based on the findings of this study, the following conclusions were drawn:
- The distinction between transactional and transformational leadership practices and concepts in higher education may not be as clear as traditionally believed.
- University presidents recognize the critical need for devoting time in providing all stakeholders of their higher education institution with a vision, purpose, and with values that result in a clear and consistent direction.
University presidents recognize that establishing an environment of excellence in the performance of their institution for higher education inspires trust in their leadership as well as energizes the complete organization including faculty, staff, and students.

University presidents realize that their major challenge in introducing change at their institutions of higher education is the traditional and historical structures of culture with its accompanying policies and procedures.

Both transactional and transformational leadership practices and concepts will have to be applied at an institution of higher education to ensure change due to the reluctance of tenured faculty and staff to consider changes due to personal impact.

The situation and environment of reduction in state and/or government funding to higher education will require critical application of transactional and transformational leadership practices and concepts to ensure that an institution of higher education succeeds in its purpose of learning.

For an institution of higher education to be successful, its president must have the individual quality of commitment demonstrated with passion, intensity, and persistence which will supply the energy to momentum, and motivate and stimulate the stakeholders to strive toward a group effort.

A university president’s competency in knowledge, leadership skills, and technical expertise is necessary to ensure the successful completion of a transformational effort.

The attribute of authenticity must reside within the university president’s acumen so that there is consistency between his/her actions and most deeply felt values and beliefs.

The climate and relationships with an atmosphere and environment of both transactional and transformational leadership within higher education requires further research.

Limitations

The following limitations pertain to this study:

1. Research did not include management theory, as presented in business colleges by educators or by management practitioners or theorists, prior to 1965.
2. Restrictive boundaries were placed by the researcher on phenomena relating to institutions of higher education whose purpose is the development of technical skills, commonly referred to as technical schools, even though many of these have now become accredited and offer both bachelor and master’s degrees.
3. Restrictive boundaries were placed by the researcher on training schools developed by corporate America whose programs may have become accredited to offer degrees.

REFERENCES


A Five-Year Retrospective Analysis of Student Learning in a University Diversity Course

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This paper reports the results of a qualitative study of seven students from the United States who completed a diversity-oriented university course with us in Spain in the summer of 2003. Analysis of student work and interviews conducted five years after the course provides insight into student’ most significant learning experiences.

STUDENTS’ LONG-TERM RESPONSE TO A UNIVERSITY DIVERSITY COURSE

A common goal of university education is to prepare students for today’s culturally diverse world (Ference, 2006; He & Cooper, 2009). Accordingly, students need to develop cultural knowledge and awareness (Hopkins-Gillispie, 2009). Cultural immersion experiences are one way to support this objective. Despite recent interest in educating immigrant students (Olmedo & Harbon, 2010) and contentions that international experiences best foster understanding of cultural difference (Marx & Moss, 2011), university programs have incorporated a range of local through international experiences to help students become more culturally competent.

To become more culturally sensitive students and advocates for social justice, it is important to step outside of one’s comfort zone and experience what it feels like to be the “other” (Hopkins-Gillispie, 2009; Marx & Moss, 2011; Woodward-Young, 2008). Marx and Moss (2011) hold, “It is the feeling of not fitting into the dominant culture that creates the need for pre-service teachers to examine and consider the ways culture influences school contexts and interpersonal relationships” (p. 44). Cross-cultural experiences in university courses, from classroom simulations to more authentic local through international experiences–along with structured self-reflection–are commonly recommended to facilitate this professional growth (e.g., Ference, 2006; He & Cooper, 2009; Hopkins-Gillispie, 2009; Marx & Moss, 2011). Field experiences are given high priority (e.g., He & Cooper, 2009). Ference (2006) asserts, “There is no substitute for experience in multicultural teacher education” (p. 12). However, the challenge is to find effective ways to incorporate reflective cultural experiences into university education (He & Cooper, 2009).

Marx and Moss (2011) note that research on study-abroad courses is limited because we as a field often do not know the long term impact of such courses on student learning. Accordingly, the purpose of this paper is to report the results of a qualitative study of seven undergraduate and graduate students from the United States who completed a diversity-oriented university course with us (the authors) in Spain.
during the summer of 2003. This study is unique, however, because we engaged in follow up interviews with all of the students from the course five years after their course experience. Analysis of student work, including written reflections, and interviews conducted five years after the course provide insight into students’ retrospective reflections on course content and experiences. The following research questions guided this investigation: What did course participants learn about cultural difference during a university diversity course? How did students describe various course-related experiences about issues of diversity five years after course completion?

BACKGROUND

We establish a conceptual context for our study by reviewing related literature that coalesces around three themes: scholarship on the purpose and types of cross-cultural experiences, student response to cross-cultural experiences, and characteristics of effective cross-cultural experiences. After reviewing relevant literature on cross-cultural experiences and discussing how our study relates to other work in the field, we introduce the theoretical lens—embodied cognition—that we use to frame and interpret our work.

Purpose and Types of Cross-Cultural Experiences

According to Marx and Moss (2011), “Teacher educators must challenge pre-service teachers’ ethnocentric worldviews and prepare them to teach culturally diverse student populations” (p. 36). To achieve this important goal, both pre-service and in-service teachers must develop knowledge and awareness of cultural and linguistic similarities and differences, as well as empathy, flexibility, and adaptability founded on venturing beyond one’s comfort zone to experience feelings of “otherness” and communicative frustration (Keengwe, 2010; Olmedo & Harbon, 2010; Santamaria, Santamaria, & Fletcher, 2009; Sharplin, 2010; Woodward-Young, 2008). Cross-cultural experiences can help develop this important foundation and afford students an opportunity to apply classroom learning (Keengwe, 2010; Sharplin, 2010). Some promote the specific importance of raising global intercultural awareness by providing international immersion experiences, such as study-abroad programs, that can build broader insights than domestic experiences alone (Marx & Moss, 2011; Olmedo & Harbon, 2010).

Efforts to provide prospective and practicing teachers with cross-cultural experiences intended to enhance professional ability to work with diverse students range from classroom simulations to local or international immersion experiences. Although the “gold standard” seems to be immersion experiences, in-class cross-cultural simulations may also help students gain insight and sensitivity into cultural difference. Woodward-Young (2008) uses a nonverbal simulation game called the Dot Game, which she says results in a powerful, transformational experience that helps participants understand outsider status and discrimination. This is one of many in-class simulations among classics such as BaFá BaFá (Simulation Training Systems: www.simulationtrainingssystems.com). Progressing farther along the continuum toward more authentic cross-cultural experiences is working or conversing one-on-one for an extended period of time with students whose backgrounds differ from one’s own (e.g., Conner, 2010; He & Cooper, 2009; Keengwe, 2010). Finally, immersion experiences involve participation in an unfamiliar cultural setting that can be domestic or international, short-term or long-term, and of varying degrees of intensity and comfort. Wiest (1998), for example, had students individually complete a local experience of at least one hour in a setting where they were cultural outsiders. Lengthier domestic and international cross-cultural experiences, some of which involve living with a local host family, range from several days to several months and include such experiences as classroom observation and teaching, university study abroad, and seminars on relevant topics or presentations by “locals” (Brock et al., 2006; Ference, 2006; Kambutu & Thompson, 2005; Marx & Moss, 2011; Olmedo & Harbon, 2010; Santamaria et al., 2009; Sharplin, 2010).

Student Response to Cross-Cultural Experiences

Interviews, observations, surveys, and reflective writing have been used to investigate the influence of various types of cross-cultural experiences. Results show that before participants embarked upon cross-
cultural experiences, many displayed lack of knowledge of and experience with other cultures, as well as apprehension, anxiety, and fear (Conner, 2010; Ference, 2006; He & Cooper, 2009; Kambutu & Thompson, 2005; Keengwe, 2010; Owen, 2010; Santamaría et al., 2009; Wiest, 1998). They experienced uncertainty about what to expect and made assumptions about what they would face (He & Cooper, 2009; Keengwe, 2010). They worried about the effects of poverty, such as the availability of instructional resources, as well as proper protocols for their own behavior (Kambutu & Thompson, 2005; Keengwe, 2010). They anticipated possible hostility, aggression, and even violence (Kambutu & Thompson, 2005; Santamaría et al., 2009). Further, Owen (2010) notes, “Some had little or no understanding of their need to see the world from another perspective” (p. 18).

During cross-cultural field experiences, participants have been shown to exhibit culture shock and feelings of displacement and outsider status, resulting in some discomfort (Brock et al., 2006; Ference, 2006; Keengwe, 2010; Wiest, 1998). They tend to gain insight into their own stereotypes and biases (Keengwe, 2010). However, the experience helps them move beyond awareness; they develop greater intercultural knowledge and understanding, as well as improved attitudes and beliefs, such as less negative stereotype- or fear-based perspectives and greater acceptance of and respect for the students, families, and teachers with whom they come into contact (Conner, 2010; Ference, 2006; He & Cooper, 2009; Kambutu & Thompson, 2005; Keengwe, 2010; Marx & Moss, 2011; Santamaría et al., 2009; SharpLin, 2010; Wiest, 1998). For example, 24 pre-service and credentialed teachers in a month-long, study-abroad program in Mexico progressed from initial journal entries that tended to be negative and focused on superficial descriptors (e.g., physical features of the country) to more positive descriptions addressing more substantive characteristics of people and culture (Santamaría et al., 2009). Others in urban settings expressed surprise to see a rich learning environment (e.g., dedicated staff and available resources) and strong intellectual potential in students (Conner, 2010; Kambutu & Thompson, 2005).

Participants in these cross-cultural experiences gained confidence in their ability to teach in a culturally different environment and better understanding that culture provides an important context for learning (Kambutu & Thompson, 2005; SharpLin, 2010). They developed greater acceptance of and sensitivity to marginalized and disadvantaged students, better instructional skills, and enhanced knowledge of how to connect with students’ families (Brock et al., 2006; Ference, 2006; Keengwe, 2010; Santamaría et al., 2009; SharpLin, 2010; Wiest, 1998). Further, they reported greater inclination to want to reach out to and help marginalized students and schools (Ference, 2006; Santamaría et al., 2009; Woodward-Young, 2008).

Despite the largely favorable results of participating in a cross-cultural experience, some participants display ethnocentricity by evaluating what they see in relation to their own cultural background or exhibiting an “us-them” perspective by, for example, seeing themselves—but not their American Indian hosts—as Americans or talking of “regular/normal” schools in comparison with their host sites (Kambutu & Thompson, 2005; Santamaría et al., 2009). Others consider their placement school to be atypical of such schools (e.g., urban) in general (Kambutu & Thompson, 2005). Kambutu and Thompson (2005) concluded from their research that participants who had some previous experience with cultural differences in schools seemed to gain the most by being able to build from that experience.

**Effective Cross-Cultural Experiences**

Maximally effective cross-cultural experiences include a number of key elements. One is first-hand experience with a context in which a participant is the “cultural other” and experiences some cognitive dissonance (Conner, 2010; Ference, 2006; He & Cooper, 2009; Marx & Moss, 2011; Wiest, 1998). In other words, it is an “inside-out” versus “outside-in” experience, the latter involving more removed experiences such as use of articles and films (Woodward-Young, 2008). Ference (2006) recommends experiences that take place in rural locations where students have personal contact with local people. Before participating in cross-cultural experiences, which should be carefully planned in advance to promote desired educational outcomes, students should have some type of explicit cultural diversity training (Ference, 2006; Kambutu & Thompson, 2005; Keengwe, 2010).
An essential aspect of an effective cross-cultural experience is critical self-reflection, which might be guided to some degree (Connor, 2010; Ference, 2006; He & Cooper, 2009; Kambutu & Thompson, 2005; Marx & Moss, 2011; Olmedo & Harbon, 2010; Wiest, 1998). This element includes explicit individual reflections and group discussions that take place during and after the experience and address personal cultural learning as well as connections to future students and classrooms. Participants should be provided appropriate support and guidance in a safe setting to process their cultural experiences (Kambutu & Thompson, 2005; Marx & Moss, 2011). To some degree structural supports for making sense of cultural content are already in place when immersed in an unfamiliar culture where “the desired cultural knowledge, skills and dispositions are in practice” (Kambutu & Thompson, 2005, p. 8). Nevertheless, students need someone who can translate local culture (Marx & Moss, 2011) and “home culture ‘anchors’ such as the security of small groups and a professor who will be there to guide reflections” (Ference, 2006, p. 23). This support is not intended to alleviate culture shock but rather to use it as a springboard to develop greater cultural competence and sensitivity, which includes analyzing similarities and differences among cultural groups (Kose & Lim, 2010; Marx & Moss, 2011). Finally, efforts to develop intercultural knowledge and awareness should include multiple and varied structured experiences over time to avoid an artificial short-term episode (Keengwe, 2010; Kose & Lim, 2010; Owen, 2010; Sharplin, 2010; Wiest, 1998).

Our work relates to the body of diversity-related scholarship in several ways. First, it supports the general call for more research to understand how cross-cultural experiences shape and influence students’ understanding of issues of diversity (e.g., Marx & Moss, 2011). Second, like other university educators who have conducted cross-cultural immersion experiences, we built critical reflection into the cross-cultural experiences we designed for our students. However, our work adds several unique perspectives to the body of work pertaining to cross-cultural courses and experiences. For example, while many scholars have studied student response to cross-cultural experiences before, during, and after the experience (e.g., Kambutu & Thompson, 2005; Marx & Moss, 2011), we did not find studies that examined student response five years after the experience had ended. In our work, we re-connected with all of the students in our course five years after they engaged in the cross-cultural course/experience with us. Finally, our work draws on a unique theoretical lens (i.e., the work on embodied cognition) to sort out and sort through our students’ retrospective perspectives on their cross-cultural course and experiences.

THEORETICAL LENS: EMBODIED COGNITION

We investigated participants’ mediated meaning-making experiences about cultural and linguistic diversity in the 2003 diversity course they took with us. We structured the course so that students physically engaged in culturally and linguistically diverse experiences (i.e., they participated in a cultural immersion experience in the U. S. before living in Spain for a month). They then critically reflected on those experiences. We thus frame and interpret our work from an embodied cognition perspective (e.g., Johnson, 2007). The work pertaining to embodied cognition reflects the age-old dilemma about relationships between mind and body. As far back as the Greeks and Romans, scholars have argued that rational thought is “head knowledge” that should be separated from feelings and emotions (Marrone, 1990).

Current scholars argue that meaningful knowledge cannot be separated from embodied experience. Recent work in cognitive science and psycholinguistics reveals important links between mental images and motor processes (e.g., Gibbs, Beitel, Harrington, & Sanders, 1994; Wexler, Kosslyn, & Berthoz, 1998). Philosophers (e.g., Johnson, 2007; O’Hear, 1998) argue that any thorough account of meaning must consider the human body. Johnson (2007) holds, “Meaning grows from our visceral connections to life and the bodily conditions of life. We are born into the world as creatures of the flesh, and it is through our bodily perceptions, movements, emotions, and feelings that meaning becomes possible and takes the forms it does” (p. ix). He further asserts that meaning and mind are embodied at the biological, ecological, phenomenological, social, and cultural levels. Thus, in our work, we take into account the central role that critical reflection on bodily experiences had on students’ long-term thoughts about, and
understandings of, course concepts.

CONTEXT AND METHODS

The work we report here is a case study. According to Stake (2005), a case is a bounded system. In our work, the bounded system was the course we taught in Spain in the summer of 2003. In this case, we sought to understand our students’ perceptions of their experiences during the course and their retrospective perceptions of their learning about issues of diversity five years after the study-abroad experience.

The 2003 Course

The focus course for this investigation (cross-listed as an undergraduate/graduate course) was a diversity course that focused on literacy and mathematics instruction. It included both online and face-to-face components. The online component occurred in June 2003. Each week for four weeks, the students read one-fourth of Gay’s (2000) text on culturally responsive teaching, wrote a paper reflecting on their reading, and discussed it online with their peers and us (their instructors). Additionally, each student completed a cultural immersion project during the month of June. The goal of the project was to help students develop greater understanding of other cultures by briefly experiencing what it means to be a cultural minority. For this assignment, students were asked to participate in a new (for them) cultural experience and write a paper that provided background details about the experience, their personal reaction to it, and how what they learned applied to teaching and learning.

The face-to-face component of the course took place in July 2003 in San Sebastián, Spain. The students and instructors lived in San Sebastián and met for an entire afternoon twice weekly for four weeks. During the month, students read, wrote about, and discussed books and articles pertaining to literacy and mathematics education for students from culturally diverse backgrounds. Students also participated in various class activities geared toward helping them learn to provide effective, culturally responsive literacy and mathematics instruction for elementary children. Part of the class sessions were devoted to discussing how the students’ own experiences living in a different culture, where they were language minorities, impacted their thinking about teaching U.S. children who do not come from White, middle-class, monolingual English backgrounds. At the end of the course, students took an essay exam with questions focused on assessing their understanding of culturally responsive literacy and mathematics instruction.

Participants

Seven students were enrolled in the course. Selected participant characteristics appear in Figure 1. Two students (Kelly and Sam) were practicing teachers. Ashley was a pre-service teacher majoring in elementary education. The remaining four students (Andy, Helen, Pat, and Vince) were undergraduates majoring in business or accounting.

<table>
<thead>
<tr>
<th>NAME</th>
<th>RACE/AGE</th>
<th>MAJOR/DEGREE LEVEL</th>
<th>RESIDENCE TYPE</th>
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<tr>
<td>Andy</td>
<td>White: 20</td>
<td>Business: Undergrad</td>
<td>Suburban Midwest</td>
</tr>
<tr>
<td>Ashley</td>
<td>White: 21</td>
<td>Education: Undergrad</td>
<td>Suburban West</td>
</tr>
<tr>
<td>Helen</td>
<td>White: 20</td>
<td>Business: Undergrad</td>
<td>Suburban Midwest</td>
</tr>
<tr>
<td>Kelly</td>
<td>White: mid-30s</td>
<td>Education: Grad</td>
<td>Rural West</td>
</tr>
<tr>
<td>Pat</td>
<td>White: 19</td>
<td>Accounting: Undergrad</td>
<td>Suburban West</td>
</tr>
<tr>
<td>Sam</td>
<td>White: 50</td>
<td>Education: Grad</td>
<td>Urban West</td>
</tr>
<tr>
<td>Vince</td>
<td>White: 20</td>
<td>Business: Undergrad</td>
<td>Suburban West</td>
</tr>
</tbody>
</table>

FIGURE 1
PARTICIPANTS ENROLLED IN 2003 COLLEGE DIVERSITY COURSE
Two characteristics of the students stood out to us as course instructors. First, two students were considerably older than the other five. Kelly had been teaching for over a decade and was the mother of two elementary-aged children. Sam had taught for several decades. His wife accompanied him on the trip to Spain. Second, the students were from a variety of locations, and their majors were diverse. Students were from rural, urban, and suburban contexts as well as the West and the Mid-west. Both Kelly and Sam were working on master’s degrees in education. The course was an out-of-discipline elective for four of the five younger students. Thus, students brought different backgrounds, experiences, and perspectives to class sessions.

Data Sources and Data Collection Procedures

We saved all course- and student-related artifacts from the 2003 course. These included the course syllabus, course materials (including handouts), course lesson plans, class notes, submitted student assignments, and course grades. We archived and printed all online discussions pertaining to the course. Finally, we saved copies of all online and face-to-face course work. In 2008-09—five+ years after students had completed the course—we contacted the students, all seven of whom agreed to be interviewed about their 2003 course experiences. All interviews were transcribed.

Data Analysis

We analyzed the content of the interviews that we conducted over five years after the students participated in the course. In general, during the retrospective interviews, we asked students what they believed they learned about issues of diversity during the course and what they considered their most significant course-related experiences that shaped and impacted their learning. We read the interviews multiple times and identified and labeled themes and issues pertinent to each informant’s learning about diversity as well as their perceptions of course-related experiences that impacted their learning. After analyzing each interview, we read and analyzed each student’s course-related work and online discussion comments. We compared students’ perceptions of what they learned with the course work they had produced five years earlier. Thus, we used each student’s retrospective interview to direct our foray into that student’s course-related artifacts. We created analytic memos (Denzin & Lincoln, 2005) as we analyzed students’ interviews and course-related work to discern common threads across informants’ course-related experiences while simultaneously identifying what was unique about each informant’s experiences.

RESULTS

We examined students’ perceptions of different course-related experiences and how those experiences impacted their learning about issues of diversity. According to participants, three primary experiences were most significant with respect to their learning about diversity. These experiences included living in Spain, the cultural immersion activity, and class-related activities. Figure 2 presents an overview of the experiences students considered most salient, as well as the order of salience for each student. In the remainder of this section, we discuss each of these experiences in turn beginning with all students’ most significant experience: living in Spain.
Most Significant Course-Related Experience: Living in Spain

All students found that their experience of living in Spain most influenced their understanding of diversity. When asked about the nature of their learning while living in a different culture where Spanish was the primary language, the two teachers (Kelly and Sam) immediately related their experiences to their students. Sam said, “It helped me to see what my students may feel like (left out, different, confused).” Kelly stated, “The experience [of living in Spain] gave me an understanding of my students’ struggles trying to communicate in a new language, and being frustrated, exhausted, and overwhelmed.” Although she did not relate living in Spain to any of her intern teaching experiences, like Sam, Ashley, the pre-service teacher in the group, believed that the cultural immersion experience helped her understand what it is like “being an outsider, not speaking the language, not knowing the culture.” Thus, both the practicing and pre-service teachers reported how living in Spain helped them to empathize with challenges cultural outsiders may face. In fact, Sam stated explicitly that living in a different culture where people spoke a different first language showed him “the importance of empathy.”

The four business/accounting majors all suggested that living in Spain made them more open, adaptable, and tolerant. Vince talked about the opportunity to “experience new people, culture, and language.” He said this was his first time outside the United States. Both Helen and Pat emphasized that they learned “new and different perspectives” as a result of living in a different culture. The trip to Spain was also Helen’s first time to travel outside the United States. Helen stated that living in Spain helped her learn to be “more tolerant of others” and to be “less judgmental, less egocentric, and have greater sensitivity and cultural awareness.” Andy said that he was “more open-minded regarding other languages and cultures.” He thought he became more “patient and open to communicate with others—especially those who are different from me.”

In essence, then, all seven students—regardless of major—explained that they gained sense of “otherness” as a result of living in Spain for a month. Regarding the importance of “otherness,” Palmer (2007, p. 38) notes:

As long as we inhabit a universe made homogeneous by our refusal to admit otherness, we can maintain the illusion that we possess the truth about ourselves and the world—after all, there is no “other” to challenge us! But as soon as we admit pluralism, we are forced to admit that ours is not the only standpoint, the only experience, the only way, and the truths we have built our lives on begin to feel fragile.

Palmer (2007) elaborates on the fruits of understanding otherness: “Otherness, taken seriously, always invites transformation, calling us not only to new facts and theories and values but also to new ways of living our lives” (p. 39). These “new ways of living our lives” can bear much positive fruit—especially with respect to teachers working with children. That is, when we, as teachers, can draw on our own transformed understanding of “otherness” in our work with children who enter U.S. classrooms from
diverse cultural and linguistic backgrounds, we are in a better position to facilitate our students’ learning (Au, 2006; Howard, 2006).

Course participants discussed other benefits of living in Spain for a month. Four of the seven students said that living in Spain influenced their desire to learn and travel more. Vince and Pat said that traveling to, and living in, Spain gave them “the travel bug.” Both Sam and Andy stated that they wanted to actively pursue “learning Spanish.” Additionally, Sam said he wanted to “learn more about my Basque heritage and Spanish culture.” Finally, both Vince and Pat talked about how living in Spain influenced their thinking about their careers. Vince became interested in “directing his academic work towards international business,” and Pat became interested in “international law in Latin America.”

Looking back on their course experiences five years after the fact, all students strongly perceived that living in Spain had the greatest impact on their learning about diversity. Further, each student had much to say about what she or he learned as a result of living abroad. Along similar but more limited lines, five of the seven students strongly expressed that their second most significant learning experience in the course was engaging in a cultural immersion activity.

**Second Most Significant Experience: Cultural Immersion Activity**

As shown in Figure 2, five students (Andy, Kelly, Pat, Sam, and Vince) reported that the cultural immersion activity in which they engaged was the second most significant learning experience in the course. Ashley considered this experience her third most significant experience. (Helen only reported her top two, which did not include this activity, so she is excluded from this discussion.) The goal of the cultural immersion activity was to help students develop greater understanding of another cultural context by briefly experiencing what it meant to be a minority in that context (Wiest, 1998). Students were asked to spend at least one hour participating in a different (for them) cultural experience and then to write and submit a paper providing background details about the experience, their reactions to the experience, and what they learned. Students were asked to engage in the experience individually. We gave students examples of experiences they could select, including—but not limited to—attending a cultural event, spending time in a gay bar (if they were straight), and attending a church service for an unfamiliar religion or which might be conducted in a foreign language. Students could propose other ideas. The key, however, was that students were asked to attend an event in which they were clearly a minority.

Interestingly, there was little variation in the events students chose. Ashley, Kelly, Pat, and Vince all opted to attend Catholic Masses in Spanish in their respective hometowns. Most parishioners at these masses were Latinos. Sam attended a Catholic Mass in Basque while in Spain, and Andy attended Catholic Mass in Spanish in Spain. All students except Pat—who said he spoke some Spanish but was not fluent—were monolingual English speakers, and none of the students were Catholic. All self-identified as White.

In addition to the fact that the students chose very similar cultural immersion experiences, we found it fascinating that they had vivid memories of their experiences five years after engaging in them. Some of their vivid recollections coalesced around the theme of being an outsider (Dilg, 2010). For example, Vince stated, “Being the minority [in terms of being White, monolingual English-speaking, and non-Catholic] rather than the majority was the strangest feeling I’ve ever had. I’ve never been the minority in anything.” Ashley shared that she “felt completely alienated from this group of people…. I had feelings of not belonging and being different.” Pat said, “I felt uncomfortable during the service. Members of the church would turn and stare at me as if I was an alien. This assignment…made me realize how hard it is to be a minority anywhere.” Finally, Pat reflected, “This experience was something I will remember for a very long time because it was such a different experience.”

Several students described how being outsiders made them feel extremely uncomfortable. For example, Ashley discussed how she was “intimidated, scared, nervous, and…completely alienated from this group of people. I had feelings of not belonging and being different.” Similarly, Kelly said, “I was overwhelmed and trying too hard to understand all the time, and it was just overwhelming and exhausting.” Ashley and Kelly do not stand alone in their experiences. Second language researchers have
documented the complex, intense, and exhausting process of striving to understand an additional language to which Ashley and Kelly allude (cf. VanPatten & Williams, 2007).

Kelly said the cultural immersion experience “opened my eyes to seeing different cultural events and experiences in my own local community.” Kelly’s insightful comment reveals that she now knows she could experience different cultures and languages in her own home community in the United States. In a related observation about how different cultural groups of people can live in the same urban neighborhood yet engage in no interactions, Hornberger (1992) suggests that, in some cases, the salience of social networks may transcend the importance of geographical location. Over two decades ago, Hornberger argued that individuals can live in the same community but be a part of such different social networks that barriers to potential interactions may be as great as actual physical location and distance. Unfortunately, this distance between races [Whites and Latinos in Kelly’s case] is still prevalent in U.S. communities over two decades later. Dilg (2010) asserts that even as the U.S. “moves steadily toward a minority majority population [i.e., Whites are becoming the minority], many students have little opportunity to know each other across racial or cultural lines in their largely segregated neighborhoods and schools” (p. 11).

Andy—struck by how his lack of knowledge of Spanish impacted him during his cultural immersion experience—said, “I felt uncomfortable…mostly because of the language barrier. Mass took about 45 minutes, and in those 45 minutes I understood about two words!” Like most of the other students, Sam stated, “I was not invited into community with others. No one approached me…I was frightened, and I didn’t know what to do during Communion.” Describing the Communion experience in more detail in his cultural immersion assignment, Sam explained:

The frightening part came after a time the priest showed us a cup and some bread. He told us many things about them, and he drank and ate from them. But then people began getting out of their seats and walking down the center aisle to the front. Most, some didn’t. What was this…? They were receiving something from the priest, then returning to their seats. What do I do? Would I be found out? Would I be exposed, questioned? Others were not choosing to go forward. They were not being questioned. I would remain seated trying to appear safe. (Sam’s cultural immersion paper, July 2003)

In previous examples, Andy, Ashley, Kelly, Pat, Sam, and Vince refer to the important social and cultural context of language use that impacts—positively or negatively—students’ learning experiences (Garcia & Kleifgen, 2010). In short, the way the language learner is treated in particular contexts and the efforts put forth by knowledgeable others in the context to scaffold the language learner’s experiences significantly impacts her or his opportunities to learn (Au, 2006; Garcia & Kleifgen, 2010). This, of course, has significant implications for our work with English learners in school contexts. When English learners are made to feel comfortable and welcomed in school contexts and when their learning is scaffolded effectively, they learn more about both language and academic content (Au, 2006; Casanova, 2010).

Only one of the seven students didn’t perceive his cultural immersion experience as primarily challenging and stressful. Unlike his classmates, Vince’s experience at the Catholic mass in Spanish was more positive. Even though Vince had “never been a minority” and “had no idea what was going on,” support from those around him positively influenced his cultural immersion experience. Vince stated, “This was a very different experience, but those around me were very kind and understanding…. This…helped me to relax…rather than dread sitting there another minute.” Providing a specific example of how those around him helped, Vince said, “The lady next to me gave me a little tug on the shoulder indicating for me to follow her.” Vince’s experience highlights the powerful role that cultural and linguistic mediators can play in facilitating an “outsider’s” experiences in new (for them) contexts (Casanova, 2010; Garcia & Kleifgen, 2010). Further, part of what made Vince’s experience more positive was the empathy those around him showed to him as an outsider. Clearly, this is a powerful lesson for monolingual, English-speaking White teachers who work with children from different cultural and
linguistic backgrounds (Au, 2006). Empathy and effective scaffolding can positively mediate learners’ experiences (Garcia & Kleifgen, 2010; Vygotsky, 1978).

**Third Most Significant Experience: Class-Related Activities**

As shown in Figure 2, five course participants (Andy, Kelly, Pat, Sam, and Vince) considered class-related activities to be their third most significant experience in the course. Two participants (Ashley and Helen) considered class-related activities to be their second most significant experience. We asked the students what class-related activities they found most salient. Answers varied. We were again surprised at the students’ ability to remember specific course-related activities five years after the course.

Two students, Kelly and Ashley, recalled that we (Cindy and Lynda) modeled various literacy and mathematics activities during the onsite portion of the course. Ashley said, “In Spain, both professors shared experiences about teaching math and literacy to English learners.” Kelly described “face-to-face discussions in Spain where there was modeling of math and literacy.” Pat, an economics major, recalled our instructional style: “Class in Spain wasn’t lecture. It was a round-table thing. This was a foreign approach to me as an economics major.”

In terms of the literacy aspect of the course, Ashley, Kelly, Pat, and Sam recalled Book Club activities (Raphael, Pardo, & Highfield, 2002) that Cindy led in class. Book Club is an instructional framework for using quality children’s literature in the classroom. A central goal is to engage students in meaningful reading, writing, and talking about children’s literature. The Book Club instructional framework first includes a whole-group instruction component during which the teacher provides instruction in some aspect of literacy (e.g., language conventions, comprehension, or literary elements). Second is a reading component that may include a read-aloud, silent reading, or partner reading. Third, students write in their Book Club logs about what they read for the day. Fourth, students get into small, peer-led discussion groups to discuss what they read and wrote about. Finally, the class reconvenes as a large group and debriefs about the small-group conversations.

We present a brief overview of two lessons when the students engaged in Book Club, an approach we used for both children’s literature and expository text. In early July, the students came to class having read chapter 1 in *Book Club: A Literature-Based Curriculum* (Raphael, Pardo, & Highfield, 2002). In class, Cindy enacted the Book Club instructional framework using the children’s book *The Story of Ruby Bridges* (1995). Two days later, the students read the second chapter in *Book Club: A Literature-Based Curriculum* (Raphael, Pardo, & Highfield, 2002). They also read a chapter in a forthcoming book (Lapp, Flood, Brock, & Fisher, 2007) that focused on literacy instruction for English learners in mainstream elementary classrooms, highlighting one English learner named Deng—a Hmong child from Laos (cf. Brock & Raphael, 2005). During that same class, Cindy read aloud the children’s book *Dia’s Story Cloth: The History of the Hmong People* (Cha, 1995). (Note that some children’s literature was also used for mathematics in relation to cultural difference.)

We suspect that Ashley, Kelly, Pat, and Sam recalled Book Club-related activities for different, but related, reasons. Sam taught many Hmong children in the Central Valley of California. Thus, it made sense that he remembered activities and readings related to the Hmong. In his interview, Sam stated: “There are a lot of Hmong people in Fresno, and I’ve had a number of Hmong students in my classroom. So, that discussion kind of really hit home for me, and I really liked that part.” Thus, it was likely that Sam recalled Book Club because the discussion topic during Book Club was one with which Sam had a great deal of experience. Like Sam, Kelly and Ashley were also in the field of education. Kelly was working on her master’s degree and she had been a teacher for more than a decade. Ashley was a preservice teacher near the end of her program. Unlike Ashley, Kelly, and Sam, however, Pat was not in education; he was a business major. One reason these students from different backgrounds may have recalled Book Club is that their experiences were embodied. That is, rather than merely lecturing to the students about Book Club, Cindy and Lynda asked students to participate in the Book Club instructional framework numerous times during the course and to critically debrief about their experiences. In short, the manner in which the students experienced Book Club as grounded through simulation and situated action made it a significant experience that these students recalled years later (Bartlett, 2008).
Three of the seven students (Andy, Helen, and Vince) discussed a specific type of mathematics problem—partial-quotients division, sometimes called the ladder or scaffold division method—that Lynda modeled in class near the end of July. Vince stated, “I think that one thing that sticks out in my head that we talked about...[was] the math system that they use in Scotland. And I just remember learning that and seeing how it was done in a different place and, I guess, questioning how we do it here.” Andy stated that “she [Lynda] had us do it...both ways [the way long division is done in Scotland and the United States] and see which way we like better, and I perhaps liked better the way the other country [Scotland] was doing their long division.” Interestingly, all three students were able to connect this specific example to a bigger conceptual idea. For example, Andy stated that he is working as a builder with people from different cultural backgrounds. He said he now realizes that people from different cultures may not view mathematics concepts, such as ratio, the same way he views them. Both Helen and Vince noted that this example illustrated how people in different cultures do things differently.

As brief background, Lynda taught the students about partial-quotients division, an alternative to the standard U.S. algorithm for long division. (See example in Appendix A.) Lynda introduced this activity as follows: First, she displayed a completed example of a partial-quotients division problem and told the class this is how long division is done in some other countries, including Scotland. Second, she asked students to work with a partner (one group of three) to see if they could figure out the procedure for completing the problem. After discussing students’ ideas and confirming the solution method, Lynda asked the class to complete a long-division problem using the partial-quotients method as well as the standard U.S. method. The students then discussed which method they preferred and why. They also addressed the fact that mathematics is a human-constructed activity that differs cross-culturally, in other words, mathematics is culturally embedded (e.g., Greer, Mukhopadhyay, Powell, & Nelson-Barber, 2009). This was one exercise among several Lynda used to illustrate this point.

DISCUSSION AND CLOSING COMMENTS

In this paper, we describe a study that makes a unique contribution to the professional literature on how diversity courses and cultural immersion experiences can influence student learning about diversity. Our research combines data collected during a 2003 diversity course with interview data from all seven course participants five years later. The two most significant experiences students named long after the course had ended were ones that engaged them fully outside of the classroom: living in Spain for a month and participating in a cultural immersion experience in the community. The students reported retrospectively that these two dominant authentic (or at least semi-authentic) experiences had caused them to feel “othered.” They were outsiders who experienced confusion and discomfort but ultimately greater sensitivity to and acceptance of cultural difference. This response mirrors that which has been found in similar cross-cultural course experiences (e.g., Ference, 2006; Keengwe, 2010; Wiest, 1998). However, what is striking is how memorable and influential a course experience can be in the long run. The fact that students retained some essential learnings and recalled their emotional/psychological state five years after the experience is encouraging for the field of higher education.

Previous research conducted during or shortly after students had participated in diversity activities shows the importance of first-hand experience for furthering cultural sensitivity and understanding (e.g., Connor, 2010; He & Cooper, 2009; Marx & Moss, 2011). First-hand, cross-cultural experience was the most salient factor in the long-term effect our course had on our students. Longitudinal student insights would probably have been less powerful with only in-class simulations as the dominant diversity-oriented activity. We thus return to our theoretical framework that suggests deep, lasting learning occurs within comprehensive physical experiences that merge cognition with emotion; in other words, well integrated learning is best promoted through embodied cognition (e.g., Johnson, 2007). Our instructional style with this course was also memorable. This seemed to be, at least in part, because the approach included high student engagement through participating in active tasks and class discussions. In a more limited sense, this again supports the idea of embodied cognition (through student active engagement, in particular) as a major influential factor in student learning.
Use of specific examples also seemed important to the course experience. Years after the course, our former students vividly recalled culturally embedded book characters and mathematics tasks. It may have also been beneficial that we explored cultural diversity through two specific subject areas, including one often not associated with cultural contexts (mathematics). In short, perhaps students needed concrete images upon which to build broader understandings; they did indeed connect the micro- to the macro- in processing course experiences. However, in line with other research on cross-cultural experiences (e.g., He & Cooper, 2009; Marx & Moss, 2011; Olmedo & Harbon, 2010), we contend that structured reflection helped foster the types of insights students developed. This reflection was built into class discussions and student writings.

All participants in our course developed greater knowledge of and sensitivity to cultural and linguistic diversity in general. However, the two practicing teachers took this a step farther by relating their cultural immersion experiences to that of cultural minorities in U.S. classrooms, similar to what other research has found (e.g., Ference, 2006; Keengwe, 2010; Santamaria et al., 2009). They understood the cultural and linguistic challenges, as well as associated affective responses, that students face when their cultural background does not match that of the instructional setting. Guided critical reflection may be important to help make this connection, especially for inexperienced educators, such as pre-service teachers. This reflection should include self-evaluative sharing among course participants in order to learn from each other. For example, in our research, Vince’s experience with his cultural immersion assignment differed from that of his classmates. His was more positive because some surrounding individuals shepherded him through the experience to some degree. This can help other course participants gain insight into the important role of insider assistance for making sense of, navigating, and feeling comfortable in an unfamiliar setting.

Despite our students’ retained learning about cultural and linguistic diversity, we concur with others in the field (e.g., Keengwe, 2010; Owen, 2010; Sharplin, 2010) that students need multiple and varied first-hand cross-cultural experiences over time to promote broader and deeper learning. These types of experiences can occur within one’s own community or an international setting. It is interesting that for their cultural immersion assignment all students in our course chose to attend a church service where they were cultural minorities. Was this because they lacked creativity in choosing an experience, found this choice most practical, or opted for what they considered a relatively “safe” experience involving a structured, audience-like setting that would require little to no interaction? Perhaps the broad array of possibilities for cross-cultural experiences that offer rich professional opportunities for students should be examined and ordered from those that offer the least to those that offer the most degree of culture shock. This way, students could be scaffolded appropriately along this continuum in experiencing cultural difference for the purpose of becoming more culturally responsive citizens.

**REFERENCES**


APPENDIX A

Partial-Quotients (or Ladder or Scaffold) Division

<p>| | | |</p>
<table>
<thead>
<tr>
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<td>12</td>
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</tbody>
</table>

Answer: 126 remainder 5.
Interesting Times: Relation between Test Times and Student Performance in Online Courses

Hedayeh Samavati
Indiana University Purdue University Fort Wayne

Carolyn Fabian Stumph
Canterbury School and Indiana University Purdue University Fort Wayne

David A. Dilts
Indiana University Purdue University Fort Wayne

Many instructors are now using online technology for the assessment of student learning. However, there are still relatively few empirical studies of the technology’s implications for student learning. In this study, the authors use student performance data from over two hundred students in principles of microeconomics to assess the correlation between student performance and the duration of an online exam. Conclusions were drawn regarding the “optimum” time allotted for multiple-choice, computer-based course examinations. The results should be of interest to all educators who are involved with distance learning programs generally, and those instructors who administer non-proctored online exams, specifically.

INTRODUCTION

Online course offerings in many academic disciplines, in general, and economics in particular, have experienced enormous growth over the last decade. According to one research report (Allen and Seaman, 2006), in the fall 2005, over 2.6 million students in the United States were taking at least one online class. Using the results of two different surveys, Harmon and Lambrinos (2008) reported that in the interval from 1997 to 2000 the number of institutions offering online economics courses increased 400% and the number of economics courses offered increased by 373%. The explosion of number of courses offered through distance learning is not limited to the United States. Course offerings in Canadian, British, Australian, and many other countries’ universities follow a similar trend. For example, based on the 2005 Canadian Internet Use Survey, McKeown and Underhill (2008) concluded that, “Just over one-quarter (26%) of those going online for education-related reasons reported doing so for distance education, self-directed learning or to take correspondence courses. The rapid growth of internet-based courses, which has occurred over a relatively short period of time, has left many instructors puzzled regarding various aspects of online teaching. Given the short time since the emergence of online course offerings, there is a paucity of research concerning effective teaching methods and appropriate assessment techniques in an online environment.
An important aspect of online course offerings is the assessment of student learning. One major concern is whether online exams are given in a proctored or a non-proctored setting. Given that in many cases proctored exams are not an option, non-proctored exams have frequently been used. A particular question that arises regarding non-proctored online exams concerns the “optimum time” for the duration of such exams. This is an interesting question because it is generally observed that, in a traditional classroom setting, high-performing students who arrive well prepared for a closed-book exam often finish well ahead of the stop time. However, students who arrive poorly prepared have also been observed to finish early because they have no resources from which to draw to answer the questions. Of course, exceptions exist for both groups of students regarding the time needed to complete the test. One can conjecture that the same dynamic operates when testing is conducted over the internet. The dilemma of the “optimum” exam time is exaggerated in an online environment, however. That is, on the one hand, if too little time is allocated for finishing the test, it can increase student’s anxiety level and thus hamper performance. On the other hand, an instructor may be concerned that allowing too much time for an exam or placing no time limits on an exam at all may foster inappropriate behavior of some sort or another. For example, in the case of non-proctored exams, there remains concerns regarding misconduct where, all other things the same, the longer exam time makes it easier to engage in inappropriate activities. While different cheating schemes are of major concern, other activities such as “quiz-to-learn,” which is not cheating per se, but nevertheless has detrimental effect on student learning and thus is also of concern. “Quiz-to-learn” is defined by Brothen and Wambach (2004) as attempting assessments without good preparation. This practice contradicts a basic tenet of the learning literature which suggests that the best approach for learning is for students to use a “prepare—gather feedback—re-study” strategy (Thomas and Rohwer, 1986).

Testing hypotheses regarding the relation between test score and length of an exam in a traditional face-to-face course environment where examinations are paper-based are nearly impossible due to lack of suitable data. However, for online courses which take advantage of computer-based testing, the relation between exam duration and performance is, fortunately, a testable hypothesis. This is because a computer-based testing environment facilitates the collection of precise data regarding the duration of the test and performance.

It is the purpose of this study to investigate the relationship between student performance and the time spent to complete the test. Online learners were separated into high-performing and low-performing groups. Length of time spent taking timed online examinations was then analyzed in order to discover whether a significant difference existed in the time used for these groups of students. Conversely, students were divided into fast and slow finishers according to the amount of time used to complete a test. Performance of these groups in terms of test scores was then examined. Conclusions are drawn regarding the “optimum” time allotted for multiple-choice, computer-based course examinations. The results should be of interest to all educators who are involved with distance learning programs generally, and those instructors who administer non-proctored online exams, specifically.

LITERATURE REVIEW

Investigating the relation between the time-limit for online quizzes and student learning, Brothen and Wambach (2004) compared performance of students in an undergraduate psychology course. The students were divided into two groups: one group took their online quizzes with no time-limit imposed and the other had a 15-minute time limit on such quizzes. The quizzes in the study were used to prepare students for in-class examinations. One reason to be concerned with the time-limit for online quizzes was the “quiz-to-learn” behavior. In other words, according to Brothen and Wambach, students may use the quiz time to look up answers in an online glossary or textbook just to complete the quiz. Their findings indicated those students who took online quizzes with no time-limit did poorer on exams. The authors concluded that time-limit may have reduced usage of the “quiz-to-learn” strategy and convinced students of the need to learn in order to be able to answer questions on their own. Therefore, they recommended that, “instructors set reasonable time-limits on computerized quizzes” (Brothen, and Wambach, p. 64,
emphasis added). Once again, it is important to discern the “reasonable” amount of time for an online quiz or test.

Online quiz time-limit has been of concern to other scholars. Daniel and Broida (2004) found that when supplementing instruction with quizzes, if the time-limit for a 10-item exam was reduced from 15 minutes to 7 minutes, then the incidence of students looking up answers during the quiz using a glossary declined. Other undesirable student behaviors that fall under the category of cheating which occur when students have no time-limits on quizzes or have more time than they really need to take the quiz were also of concern to the authors. In their research, Daniel and Broida (2004) asked their students to anonymously self report this sort of behavior. Technologically savvy students reported a variety of strategies for cheating including printing and sharing of quizzes and working in groups. These authors found that assigning questions from a larger test bank and decreasing the amount of time allowed for quizzes were effective at discouraging this behavior.

When it comes to assessment, of course, there are those academics whose chief concern has been the possibility of cheating in an online environment. As a result, the proctored exam is determined to be the best approach (Edling 2000; Rovi 2001; Deal 2002; Harmon, and Lambrinos 2008). In support of this conclusion, there is an increasing body of literature that points to the presence of some level of cheating for the un-proctored online exams (e.g., Harmon and Lambrinos 2008). Other research, however, found that the majority of students prefer online exams and quizzes to the paper ones (Barkley 2002). These findings will undoubtedly give rise to further research concerning the costs and benefits of proctored versus non-proctored exams and many universities may well conclude that all online exams should be proctored. But the costs of doing so in terms of time, inconvenience and expense, while potentially manageable, are still significant. Therefore, efforts to improve the experience and outcomes of non-proctored exams for faculty and students are certainly worthwhile.

While there is evidence in the literature that shorter time periods for quizzes and exams may improve learning outcomes, there is still a concern that short exams will frustrate students and could be deleterious for the achievement of learning objectives. Therefore, the question described above regarding how much time will allow the students enough time to fully demonstrate their knowledge while discouraging the undesirable behaviors is examined here.

DATA AND METHOD

Data were collected from an online section of principles of microeconomics course in the fall of 2008 at a single public four year university in the Midwest. There were 78 students registered in the course who, as part of requirements of the course, had to take three online exams. These online exams constituted 75 percent of course grade. In-class exams at the institution are traditionally seventy-five minutes in length for these courses. The instructor had designed the distance learning course so that the online students also had seventy-five minutes to complete their exam. All exams were multiple choice although the number of questions for each exam varied somewhat—exams consisted of fifty-five to fifty-seven questions. Students were allowed only one attempt for each exam and online exams were administered through the university’s course management system, Blackboard Vista 4. The two variables of interest were the student’s score and the time it took the student to finish his/her exam. While collection of this data is difficult to obtain in a traditional course setting, the submission times for the online exams are recorded to the second (by Blackboard in this case). There were 217 observations because some students missed their tests. The exams were non-proctored so the students were free to use any resource such as textbooks, lecture notes, or any other material they chose. In addition, while seventy-five minutes was the maximum allowable time, the students could finish and submit their exam any time prior to that. Table 1 presents the descriptive statistics for the two variables, exam score, or Grade, and Time, which is the time used to complete and submit the test.
TABLE 1
DESCRIPTIVE STATISTICS FOR GRADE AND TIME

<table>
<thead>
<tr>
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<th>Introduction to Microeconomics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade</td>
</tr>
<tr>
<td>Mean</td>
<td>74.14</td>
</tr>
<tr>
<td>Median</td>
<td>75.5</td>
</tr>
<tr>
<td>Mode</td>
<td>75.5</td>
</tr>
<tr>
<td>Q1</td>
<td>65</td>
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<tr>
<td>Q3</td>
<td>85.48</td>
</tr>
<tr>
<td>Minimum</td>
<td>31.5</td>
</tr>
<tr>
<td>Maximum</td>
<td>100</td>
</tr>
<tr>
<td>Sample size</td>
<td>217</td>
</tr>
</tbody>
</table>

The mode shows that many students took the entire seventy-five minutes to complete the exams. The mean (57.4 minutes) and the median (62 minutes) finish times are smaller than the mode of 75 minutes which provides support for the observation that the distribution of finish time is negatively skewed. The results show that the majority of students used over an hour to complete their test.

Given the data and using the variable Grade, students were divided into two groups—high-scorers and low-scorers. Next, using variable Time, another two groups of students, fast-finishers and slow-finishers, were identified. Following the approach used by Ferguson et.al (2002), high-scorers were defined to be those students who scored above the median grade and low-scorers were those whose grades were below the median grade (75.5% in this case). On the other hand, fast-finishers were defined as the first 25% of students who finished the exam. For example, this group would consist of students who finished the exam in less than forty-nine minutes (the first quartile for Time). While slow finishers were those who were the last 25% of students to finish their test. In other words, this was the group of students who took seventy-one minutes (third quartile for Time) or longer to complete the exam.

To ascertain whether students used their allotted time of 75 minutes in an “appropriate” manner while taking an unproctored online exam, we test for the evidence of a relation between grade and the time students used to complete the test. Both correlation analysis and t-tests were used to do the statistical analysis of the data. Using correlation analysis, we seek the answer to the following questions. 1) Is there any relation between Time and Grade for all students? 2) Do high-scorers tend to finish early or do they take more time to complete their test? 3) How about the low-scorers? Using the t-test procedure, we test to discover whether there exists a significant difference between the average grades of fast-finishers and slow-finishers. Similarly, a t-test will be used to examine if there is a difference between average amount of time used to complete the test by high-scorers and low-scorers. Statistical findings are reported in the next section.

RESULTS

The results of correlation analysis for all students, the high and low-scorer groups, as well as for fast and slow-finishers are reported in Table 2.

Findings reported in Table 2 show that there is a significant relation between grade and the amount of time students took to complete their test. This is true irrespective of how students are grouped together. While this result may not be remarkable in and of itself, it is interesting to note that the results presented in Table 2 show that for all students, low-scorers, as well as for fast-finishers this correlation is positive, but the correlation is negative for the high-scorer as well as the slow-finishers group. This result suggests that for the group of students who spent the least time (49 minutes or less) to complete and submit their test, scored higher, the more time they used. This makes sense because even when a student is well-prepared and is generally a fast reader and thinker, he/she needs to take the time to analyze in order to
correctly answer the questions. In other words, the finding shows that rushing through an exam does not payoff even for the best students. Also, those students who were at the bottom of the grade distribution scored higher when they used more time to complete their test. The more interesting result though is the observed negative correlation for the group of high-scorers and slow-finishers. That is, those students at the top 50% of the grade distribution tended to take less time to finish their tests. In addition, those students who took the most time to submit their tests --slow finishers--(71 minutes and more), scored lower. This result is inconsistent with inappropriate behaviors during the allotted time for un-proctored online exams (i.e., prolonging the test-time to pursue potential cheating strategies). This is true because those who did use extra time to finish their tests tended to score lower. Also, the evidence showed that the high scorers tend to take less time to submit their test.

### TABLE 2
**CORRELATION BETWEEN GRADE AND TIME USED TO COMPLETE A TEST**

<table>
<thead>
<tr>
<th></th>
<th>Observations</th>
<th>Corr. Coeff</th>
<th>t-statistic</th>
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</thead>
<tbody>
<tr>
<td>All Students</td>
<td>217</td>
<td>0.135</td>
<td>1.997**</td>
</tr>
<tr>
<td>High-Scorers</td>
<td>55</td>
<td>-0.304</td>
<td>-2.32**</td>
</tr>
<tr>
<td>Low-Scorers</td>
<td>62</td>
<td>0.473</td>
<td>4.16*</td>
</tr>
<tr>
<td>Fast-Finishers</td>
<td>57</td>
<td>0.414</td>
<td>3.37*</td>
</tr>
<tr>
<td>Slow-Finishers</td>
<td>56</td>
<td>-0.316</td>
<td>-2.45*</td>
</tr>
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</table>

Note: * indicates significant at the 1% level  
** means significant at the 2.5% level

In addition to the correlation analysis, the mean finish time for the high and low scorers was calculated and a t-test was performed in order to determine if there was a statistically significant difference between the average finish times of the two groups. Those results are presented in Table 3.

### TABLE 3
**COMPARING AVERAGE TEST TIME FOR HIGH AND LOW SCORERS: T-TEST RESULTS**

<table>
<thead>
<tr>
<th></th>
<th>High scorers</th>
<th>Low scorers</th>
</tr>
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<tbody>
<tr>
<td>Mean</td>
<td>55.71</td>
<td>52.71</td>
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<tr>
<td>Variance</td>
<td>214.03</td>
<td>388.01</td>
</tr>
<tr>
<td>Observations</td>
<td>55</td>
<td>62</td>
</tr>
<tr>
<td>Pooled variance</td>
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<tr>
<td>t statistic</td>
<td>0.925</td>
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<tr>
<td>P value one-tail</td>
<td>0.178</td>
<td></td>
</tr>
<tr>
<td>t critical one-tail*</td>
<td>1.290</td>
<td></td>
</tr>
</tbody>
</table>

* Critical value for t with 115 df and 10% significance level

Table 3 indicates that even though the high scorers took an extra three minutes, on average, to finish their tests, this observed difference in exam completion time was not statistically significant at any reasonable level (p-value for the upper tail test is nearly 18%).

The results for the fast and slow finishers are reported in Table 4.
<table>
<thead>
<tr>
<th></th>
<th>Fast finishers</th>
<th>Slow finishers</th>
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<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>72.12</td>
<td>73.62</td>
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<tr>
<td><strong>Variance</strong></td>
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<tr>
<td><strong>Observations</strong></td>
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<td>56</td>
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<tr>
<td><strong>Pooled variance</strong></td>
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<tr>
<td><strong>t statistic</strong></td>
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<td><strong>P value one-tail</strong></td>
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<tr>
<td><strong>t critical one-tail</strong></td>
<td>1.290</td>
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</table>

* Critical value for t with 111 df and 10% significance level

**CONCLUSIONS**

The results of the study analyzing the relation between the test-time and test-score in an online course environment provide some answers to the questions posed earlier in this study. The correlation analysis yielded interesting results. It showed that the high scorers’ time and score had a negative correlation. This may indicate that the high scorers came prepared to the exam and did not necessarily need the extra time. In addition, for the group of students who took the full time or close to it to complete their exam (slow-finishers), the test score was negatively correlated with the time. This suggests that, in an online environment, merely taking extra time to complete a test does not help improve one’s grade. In fact, it tends to result in a lower grade. On the other hand, the low-scorers showed a positive correlation between their scores and test time. This suggests that for the group of students who were not prepared for the test, their score went up the longer they take to finish the exam. However, even though these students, by using extra time, increased their score, they did not succeed to improve their score to the degree where they can avoid ending up at the bottom of the grade distribution. Also, the results of the t-test analyses revealed no significant difference between the average grades of those students who used additional time (slow finishers) and those who used less time (fast finishers) and neither was a significant difference between average time used for high and low scorers. Thus, these findings cast doubt on the conjecture that the unproctored online exams are grounds for cheating. More accurately, the results show that even if the students used extra time in order to engage in any misconduct, the effort did not produce any meaningful advantage to merit much professorial concern.

Also, to improve the online assessment outcomes, our findings support the recommendation that one may consider reducing the time allotted for an online exam to 65% to 75% of that which is allowed for a comparable proctored in class test. For example, for an exam that would have been allowed seventy-five minutes as a proctored in-class exam, should be allotted a maximum of one hour for a non-proctored online exam. This suggestion is also in line with that used by Daniel and Broida who shortened the quiz time by approximately 47% from fifteen to seven minutes.

**REFERENCES**


A university’s organizational culture influences students’ overall educational experience. One critical aspect of a positive campus cultural experience is the strong sense of community largely established by a constructive working relationship between faculty and staff. The current study focuses on sources of potential conflict in faculty-staff relations that could negatively influence this organizational culture, and thus, inhibit positive student educational experiences. The study uses 272 questionnaires collected from faculty and staff at a private Midwestern university. Findings indicate that greater staff involvement in decision-making, clearer communication of roles and responsibilities, and an adequate rewards system can reduce faculty-staff tension.

INTRODUCTION

Students’ satisfaction with their overall educational experience is contingent on a university’s organizational culture (Elliott & Healy, 2001; Nishii & Dominguez, 2000). Therefore, to remain competitive, both public and private universities must examine their institutions and adjust policies to ensure a healthy organizational culture, as this may have an impact on student retention (Del Rey & Romero, 2004; Van Vaught, 2008). A strong sense of community among employees is critical to achieve a strong campus culture (Biggs, 1981; Florenthal, Tolstikov-Mast, & Yılmazsoy, 2009). This sense of community is largely created by positive working relations between faculty and staff (Florenthal et al., 2009). Research shows that when the two groups feel content with their working environments, the institution is productive and students feel drawn to it (Kusku, 2003).

When examining college campuses, previous research has focused on student and faculty populations (Szekeres, 2006; Volkwein & LaNasa, 1999). Yet over the past decade, staff have grown more central to the university’s effective operation, with their role receiving only limited attention (Fuller et al., 2006; Szekeres, 2006; Volkwein & LaNasa, 1999). Moreover, as universities adjust both to rapidly changing educational environments and market demands (e.g., increased use of technology), the employees most likely to implement any necessary changes are staff (Szekeres, 2006).

Implementing new policies requires effective interaction between faculty and staff, since the two groups’ differing perspectives may contribute to creating a conflict of interests. The debilitating effects of interpersonal conflict lead to employee dissatisfaction and indicate a weak organizational culture (Fuller et al., 2006; Martin, 2002; Volkwein & LaNasa, 1999).
Therefore, this study focuses on sources of potential conflict in faculty-staff relations and looks for solutions to help reduce or eliminate those sources. Social and functional sources of faculty-staff relations are examined. Faculty and staff perceptions of these two types of sources are compared to identify discrepancies that can lead to potential conflicts of interest. The two groups’ perceptions of solutions are also compared to determine which strategies and policies the university should implement to resolve and reduce potential conflicts in faculty-staff relationships.

LITERATURE REVIEW

Increasingly, as universities have recognized the importance of productive faculty-staff relations for organizational success, enquiry into faculty-staff relations has grown more popular both inside and outside the United States (Helmes & Price, 2005; Krebs, 2003; Szekeres, 2006; Whitchurch, 2007). Existing faculty-staff research reveals that both faculty and staff agree on the importance of constructive workplace relations to provide the best educational experience for students (Helmes & Price, 2005; Szekeres, 2006; Florenthal et al., 2009). The objective in establishing constructive workplace relations is that faculty and staff will treat one another with mutual respect in order to accomplish organizational goals (Florenthal et al., 2009).

Typically, the work environment influences (a) the amount of work employees complete, (b) attitudes toward the work place, and (c) employees’ sense of community (Biemiller, 2008; Florenthal et al., 2009). In addition, instances of poor communication (e.g., perceived differences over roles, responsibilities, or organizational goals) coupled with a lack of respect for nonteaching staff lead to faculty-staff tensions (Briggs, 1981; Florenthal et al., 2009; Krebs, 2003; McCluskey-Titus, 2005; Whitchurch, 2007). When they feel appreciated and engaged, nonteaching staff express a greater commitment to university goals and exhibit a more positive attitude (Florenthal et al., 2009; Houston, Meyer, & Paewai, 2006).

Current studies reveal that when tension exists in faculty-staff relationships, it becomes a main source of staff dissatisfaction with their respective work environments. This paper examines faculty-staff relations to determine each side’s perceptions of (a) causes for faculty-staff tension and (b) possible strategies to resolve or reduce such tension. This research is of particular importance, because physicians and psychologists have found increased work-related stress negatively affects employee health. Research shows that occupational stress weakens employees’ immune systems and can increase the rate of infection and cardiovascular disease, affecting their overall sense of well-being (Hapuarachchi et al., 2003). Concerning universities specifically, physicians and psychologists argue that if university staff become burned out (particularly at early stages in their careers), new, talented personnel will be reluctant to apply for positions at these institutions (Houston et al., 2006; Johnsrud, Heck, & Rosser, 2000). University staff experiencing significant work pressure will be less satisfied with, and committed to, their jobs and experience lower morale, resulting in increased turnover (Houston et al., 2006; Johnsrud, Heck, & Rosser, 2000).

Thus, reducing and managing relational tension between employees is critical to establishing a successful organizational culture (Martin, 2002; Schein, 1992). Organizational culture is the organization’s personality, expressed by its members through their behavior (Martin, 2002; Meyerson, 1991; Schein, 1992). Faculty/staff tension will communicate a culture of confrontation and create an unfavorable image of the university for existing or incoming students.

HYPOTHESES GENERATION

Perception of Relations

Universities are considered highly stratified environments in which employees are categorized into one of two “castes”—faculty or staff (Henderson, 2005). This stratification is referred to as rankism, typically an important, necessary tool of organizational management (Ingram, 2006). However, rank-based mistreatment in the workplace can result in disrespect, inequality, discrimination, ridicule, and exploitation of the lower-ranked members (Ingram, 2006).
Typically, top-level university administrators and faculty are perceived to be more capable at executing administrative decisions compared with staff (Blackmore et al., 2010; Henderson, 2005). As a result, staff frequently report feeling unappreciated and unheard as regards their concerns. In addition, relations between faculty and staff can be mostly strained or nonexistent when faculty attempt to control staff workloads (Blackmore et al., 2010; Ingram, 2006; Olson, 2006). According to Duggan (2008, p. 47), despite serving the college, “and its faculty and students, nonteaching staff are often marginalized, [and] their experiences and inputs, frequently discounted.”

Previous research suggests that faculty-staff relational tension can be attributed primarily to poor communication (Biggs, 1981; Florenthal et al., 2009; Krebs, 2003; McCluskey-Titus, 2005; Olson, 2006; Whitchurch, 2007). For example, at one university, tensions between faculty and librarians were reported, due to miscommunication and perception issues (Biggs, 1981). “Communication, cooperation, and mutual planning are needed and must be initiated by librarians, but faculty need to listen and participate with as much energy and as broad a view as possible” (Biggs, 1981, p. 196).

Studies report that poor communication also can be attributed to staff when its members feel underinformed (Florenthal et al., 2009), lack understanding of faculty’s job responsibilities (McCluskey-Titus, 2005), and/or lack clarity about their own job responsibilities (Davies & Owen, 2001). Another reason for faculty-staff communication-related conflicts is confusion on both sides concerning which elements might constitute an effective faculty-staff partnership (McCluskey-Titus, 2005).

The importance of salary and other benefits as motivators to work in a university varies between faculty and staff. Although faculty mentioned that pay and compensation issues influence their job satisfaction (Galaz-Fontes, 2002), their commitment to the organization was attributed more to intrinsic motivators (e.g., satisfaction with the academic components of their jobs) rather than extrinsic factors such as salary and working condition (Fuller et al., 2006). Staff, however, place more emphasis on salary satisfaction (Kusku, 2003). They place the highest importance on dissatisfaction with salary, followed by relations with university management (Kusku, 2003). This discrepancy in motivational factors has the potential to influence faculty and staff task-related priorities and thus leads to relational tensions.

Tremblay, Sire, and Balkin (2000) argue that, in general, employee perception of the organization’s approach to pay distribution is a good predictor of feeling satisfied with the pay, the job, and the organization. At the same time, employee perception of the organization’s approach to benefit distribution is attributed to standards of organizational practice (that includes policies, structures, and actions of a particular organization; Tremblay, Sire, & Balkin, 2000). Therefore, to assess faculty and staff perceptions regarding causes for mutual relational tensions related to poor communication, and concerns over salary and benefits, the following hypothesis was generated:

\[ H_1: \text{University faculty and staff differ in their perceptions regarding the causes for tension in their reciprocal relationships. In particular, staff believe more than faculty do that} \]
\[ (a) \text{poor communication about being valued and assigned responsibilities creates tension between the two groups, and} \]
\[ (b) \text{unequal hiring conditions, such as salary and benefits, are causing tension in relationships.} \]

Perception of Solutions

The following strategies have been suggested in the literature to improve the effectiveness of faculty-staff relations (McCluskey-Titus, 2005): (1) better understanding of faculty/staff schedules and organizational responsibilities by both faculty and staff, (2) conducting a workshop for faculty and staff (attended together) to form collaborative partnerships, (3) including faculty in the university administrative staff hiring process (Barden, 2005), (4) providing more opportunity for staff and faculty to work together (Davies & Owen, 2001; Szekeres, 2006), and (5) providing clearer communication of organizational strategies and goals.
In terms of benefits, many universities provide developmental opportunities to motivated and committed staff as a means of demonstrating appreciation and increasing employees’ long-term commitment. Funding developmental workshops off campus and providing resources to improve the work environment (e.g., regular renewal of office equipment) are some of the strategies universities have used to nurture and maintain job satisfaction among staff (Blackmore et al., 2010). Such benefits help staff achieve career goals and ensure a healthy work-life balance (Blackmore et al., 2010).

University strategies used to improve faculty-staff relations can be categorized into administrative and social activities. Barden (2005), for example, argues that staff should participate in the hiring process for top administrative positions. Staff may be better suited to assess whether a candidate has the necessary administrative qualifications to lead colleges and departments successfully. Conversely, faculty are more focused on the teaching and research qualifications of candidates for top administrative jobs and may not be as suitably adept at assessing administrative skills (Barden, 2005; Rhoades, 2005).

The staff voice is under-represented in many institutions (Barden, 2005; Rhoades, 2005; Whitchurch, 2007), but staff are usually highly capable professionals who should be more engaged in the university decision-making process “to expand academic democracy beyond tenure-track faculty and senior administrators” (Rhoades, 2005, p. 5). For example, lower-ranked employees can suggest improvements to a committee process or bring a complementary perspective to committees and task forces (Ingram, 2006).

The importance of staff engagement in organizational decision-making is supported in the literature. According to Fuller et al. (2006), university prestige is less important as a reward to staff and administrators than the way they are treated within the organization. Staff place a high value on the institution exhibiting a caring stance toward their well-being, valuing their contributions, and respecting their opinions. In contrast, faculty place a high value on the university’s prestige, which influences their loyalty and commitment to the institution. Consequently, Fuller et al. (2006) suggest the following human-resource strategies: involvement in decision-making, procedural justice, pay for performance, and opportunities for training. Based on the above conceptual differences of faculty and staff, the following hypothesis was formulated:

\[ H_2: \text{Staff believe more than faculty do that greater staff involvement in university administrative activities will reduce tension in relationships}. \]

**METHODOLOGY**

A two-step process for data collection was used. The first step was exploratory and included in-depth interviews with faculty and staff (Florenthal et al., 2009). Based on the themes that emerged from the in-depth interviews, a questionnaire was designed. The questionnaire consisted of five-point scale questions and was distributed to faculty and staff. The final sample included 272 completed questionnaires. The sampling method used was quota, controlling for equal gender distribution and a proportionate distribution of faculty and staff, according to the university ratio. In addition, a proportionate representation across colleges and departments for both faculty and staff was ensured during the data-collection process. Definitions of who should be considered faculty, staff, or administration were included in the questionnaire to reduce ambiguity in self-categorization of participants.

Table 1 summarizes the descriptive characteristics of the sample. The sample corresponds to the proportionate distribution of faculty and staff in the university, which employs significantly more staff than faculty, the ratio being about two-thirds staff to one-third faculty. Gender is represented fairly equally, with females represented at a slightly higher share (54%). The sample is skewed toward faculty and staff hired less than 6 years ago. This group represents about half of the sample. The staff in the sample have worked at the university on average for fewer years (M = 7.0, S.D. = 6.75) than have the faculty (M = 10.7, S.D. = 8.97). Finally, the sample participants interacted significantly with each other, but on average, more faculty-to-staff interactions occurred (M = 2.8, S.D. = 1.36) than did faculty-to-faculty interactions (M = 1.5, S.D. = 0.92).
TABLE 1
DESCRIPTIVE CHARACTERISTICS OF THE SAMPLE
(N = 272)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (%) or Mean (S.D.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position at the University</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td>Faculty</td>
<td>36</td>
</tr>
<tr>
<td>Staff</td>
<td>61</td>
</tr>
<tr>
<td>Administration</td>
<td>3</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
</tr>
<tr>
<td>How long have you worked at the University?</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td>Less than 6 years</td>
<td>52</td>
</tr>
<tr>
<td>6–10 years</td>
<td>17</td>
</tr>
<tr>
<td>11 or more years</td>
<td>31</td>
</tr>
<tr>
<td>How long have you worked at the University?</td>
<td>Mean (S.D.)</td>
</tr>
<tr>
<td>Staff</td>
<td>7.0 (6.75)</td>
</tr>
<tr>
<td>Faculty</td>
<td>10.7 (8.97)</td>
</tr>
<tr>
<td>On a weekly basis how often do you interact with:</td>
<td>Mean (S.D.)</td>
</tr>
<tr>
<td>(scale: 1 = often; 5 = rarely)</td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>1.5 (0.83)</td>
</tr>
<tr>
<td>Faculty</td>
<td>2.3 (1.35)</td>
</tr>
<tr>
<td>On a weekly basis how often do you interact with staff: (scale: 1 = often; 5 = rarely)</td>
<td>Mean (S.D.)</td>
</tr>
<tr>
<td>Staff with staff</td>
<td>1.4 (0.79)</td>
</tr>
<tr>
<td>Faculty with staff</td>
<td>1.5 (0.91)</td>
</tr>
<tr>
<td>On a weekly basis how often do you interact with faculty: (scale: 1 = often; 5 = rarely)</td>
<td>Mean (S.D.)</td>
</tr>
<tr>
<td>Staff with faculty</td>
<td>2.8 (1.36)</td>
</tr>
<tr>
<td>Faculty with faculty</td>
<td>1.5 (0.92)</td>
</tr>
</tbody>
</table>

DATA ANALYSIS

Table 2 summarizes the results of a one-way ANOVA performed to reveal differences in faculty and staff perceptions concerning causes and solutions for relational tension. Both faculty and staff agree that relations had remained almost the same over the past two years. Faculty (M = 3.5, S.D. = 0.84) marginally differ from staff (M = 3.3, S.D. = 0.70) in perceiving that relations improved slightly over the past two years. However, when comparing faculty and staff who have worked at the university two years or more, no significant perceptual differences can be discerned.

The significant sources of tension between faculty and staff can be attributed to unequal benefits, not being valued, and poorly understood roles. For these sources of tension, staff perceived them as significantly greater contributors than did faculty. In presenting solutions to reduce tension, social activities were perceived to have been less successful or helpful by staff than by faculty. Faculty (M = 3.4, S.D. = 0.88) perceived past social events to have been significantly (p < 0.05) more successful than did staff (M = 3.0, S.D. = 0.09). Faculty (M = 3.5, S.D. = 1.05) had significantly (p < 0.05) greater confidence in the ability of more social events to strengthen relations between faculty and staff than did
staff (M = 3.3, S.D. = 0.91). Finally, faculty expressed significantly (p < 0.05) higher inclination than did staff to participate in mutual lunchtime social activities (M_{faculty} = 3.3, S.D. = 1.29; M_{staff} = 2.6, S.D. = 1.11) and a marginally (p < 0.10) higher inclination to participate in a mutual book club (M_{faculty} = 2.4, S.D. = 1.33; M_{staff} = 2.1, S.D. = 1.21).

Staff (M = 3.7, S.D. = 0.90) perceived committees that involve faculty and staff as marginally (p < 0.10) more helpful than did faculty (M = 3.5, S.D. = 0.99). The marginal difference could be explained by staff interacting on average significantly (p < 0.05) less with faculty than faculty interact with other faculty (M_{faculty} = 1.5, S.D. = 0.93; M_{staff} = 2.8, S.D. = 0.92). In addition, staff expressed a significantly (p < 0.05) higher inclination than did faculty to attend intramural sports (M_{staff} = 2.6, S.D. = 1.26; M_{faculty} = 2.0, S.D. = 2.0) and off-site community service events (M_{staff} = 3.0, S.D. = 1.12; M_{faculty} = 2.6, S.D. = 1.31).

### TABLE 2
ONE-WAY ANOVA RESULTS
(N = 265)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean (S.D.) Faculty</th>
<th>Mean (S.D.) Staff</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past two years faculty/staff relations have…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(scale: 1 = significantly worsened; 3 = neither; 5 = significantly improved)</td>
<td>3.5 (0.84)</td>
<td>3.3 (0.70)</td>
<td>0.062</td>
</tr>
<tr>
<td>If there is tension between faculty and staff, how much can be attributed to:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(scale: 1 = not at all; 5 = very much)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal benefits</td>
<td>2.5 (1.05)</td>
<td>2.9 (0.99)</td>
<td>0.005</td>
</tr>
<tr>
<td>Not being valued</td>
<td>3.1 (1.26)</td>
<td>3.5 (1.04)</td>
<td>0.012</td>
</tr>
<tr>
<td>Poorly understood roles</td>
<td>3.0 (1.21)</td>
<td>3.4 (1.11)</td>
<td>0.011</td>
</tr>
<tr>
<td>How successful were past social events? (scale: 1 = very unsuccessful; 5 = very successful)</td>
<td>3.4 (0.88)</td>
<td>3.0 (0.09)</td>
<td>0.002</td>
</tr>
<tr>
<td>Indicate whether you agree or disagree with the following statements:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(scale: 1 = strongly disagree; 5 = strongly agree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social events including both faculty and staff outside of work would strengthen relationships</td>
<td>3.5 (1.05)</td>
<td>3.3 (.91)</td>
<td>0.041</td>
</tr>
<tr>
<td>• Committees involving more faculty and staff working together would be helpful</td>
<td>3.5 (0.99)</td>
<td>3.7 (0.90)</td>
<td>0.099</td>
</tr>
<tr>
<td>How likely are you to attend the following staff/faculty events?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(scale: 1 = very unlikely; 5 = very likely)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book club</td>
<td>2.4 (1.33)</td>
<td>2.1 (1.21)</td>
<td>0.094</td>
</tr>
<tr>
<td>Lunch time socializing</td>
<td>3.3 (1.29)</td>
<td>2.6 (1.11)</td>
<td>0.000</td>
</tr>
<tr>
<td>Intramural sports</td>
<td>2.0 (1.18)</td>
<td>2.6 (1.26)</td>
<td>0.000</td>
</tr>
<tr>
<td>Off-site community service</td>
<td>2.6 (1.31)</td>
<td>3.0 (1.12)</td>
<td>0.004</td>
</tr>
</tbody>
</table>
Faculty and staff did not differ significantly \((p > 0.10)\) on several issues (Table 3). On average, both perceived communication to be effective \((M = 3.8, \text{S.D.} = 1.04)\). Unfair pay was not perceived as a high-tension contributor \((M = 2.9, \text{S.D.} = 1.10)\). Lack of communication was perceived on average as a contributor to tension between faculty and staff \((M = 3.6, \text{S.D.} = 2.17)\), although the standard deviation around the mean is high.

**TABLE 3**

**DESCRIPTIVE STATISTICS FOR QUESTIONS IN WHICH FACULTY AND STAFF DO NOT DIFFER**  
\(\text{\textit{N = 265}}\)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean (S.D.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How effective is the communication between faculty and staff within your college/department? ((\text{scale: 1 = highly ineffective; 5 = highly effective}))</td>
<td>3.8 (1.04)</td>
</tr>
<tr>
<td>If there is tension between faculty and staff, how much can be attributed to: ((\text{scale: 1 = not at all; 5 = very much}))</td>
<td></td>
</tr>
<tr>
<td>Unfair pay</td>
<td>2.9 (1.10)</td>
</tr>
<tr>
<td>Lack of communication</td>
<td>3.6 (2.17)</td>
</tr>
<tr>
<td>Indicate whether you agree or disagree with the following statements: ((\text{scale: 1 = strongly disagree; 5 = strongly agree}))</td>
<td></td>
</tr>
<tr>
<td>• More than one faculty/staff forum per year would be helpful</td>
<td>3.4 (0.87)</td>
</tr>
<tr>
<td>• Improved communication between faculty and staff would be helpful</td>
<td>3.9 (0.81)</td>
</tr>
<tr>
<td>How likely are you to attend the following staff/faculty events? ((\text{scale: 1 = very unlikely; 5 = very likely}))</td>
<td></td>
</tr>
<tr>
<td>Holiday party</td>
<td>3.6 (1.23)</td>
</tr>
<tr>
<td>Picnic</td>
<td>3.6 (1.11)</td>
</tr>
<tr>
<td>Athletic event</td>
<td>3.3 (1.36)</td>
</tr>
</tbody>
</table>

Some solutions that both faculty and staff agreed on were more forums that include faculty and staff \((M = 3.4, \text{S.D.} = 0.87)\) and improved communication between faculty and staff \((M = 3.9, \text{S.D.} = 0.81)\). In addition, faculty and staff were both somewhat likely to attend holiday parties \((M = 3.6, \text{S.D.} = 1.23)\), picnics \((M = 3.6, \text{S.D.} = 1.11)\), and athletic events \((M = 3.3, \text{S.D.} = 1.36)\).

**CONCLUSIONS**

The first hypothesis stated that in contrast to faculty, staff place a higher importance on hiring conditions and quality of communication as sources contributing to faculty-staff relations. This hypothesis was partially supported. Staff perceived unequal benefits, not being valued, and poorly understood roles as being more important in contributing to relational tension than did faculty. Even so, the two groups did not differ significantly concerning two sources of tension—perception of unfair pay and lack of communication. Both faculty and staff believed that both sources somewhat contribute to relational tension.

In terms of solutions, some were perceived as more attractive by faculty, whereas others were perceived as more attractive by staff; several were similarly attractive to both groups. Thus, the second
hypothesis was also partially supported. In terms of administrative activities, staff thought it would be helpful if faculty-staff committees were formed. On the other hand, faculty perceived that both groups’ participation in social events would be more helpful to reduce tension. Further, faculty were more likely to participate in two social events, book club and social lunch. These results support the second hypothesis.

Staff expressed higher interest than faculty in participating in intramural sports and off-site community service. Both groups perceived an increase in faculty/staff forums and improved communication as strategies that could reduce relational tension. These results are not consistent with the second hypothesis.

The findings in this study suggest that certain communication strategies and hiring conditions contribute to faculty/staff tension. According to some faculty suggestions, such tensions could be minimized if the hiring process were revised: for example, allowing staff participation in evaluating a candidate’s administrative qualities. As hiring conditions cannot be easily changed, communication strategies should be improved. In particular, message dissemination from top administration regarding staff contributions and their responsibilities should be significantly improved. Moreover, the results indicate that social events are important to both groups but should be carefully chosen, as some are more attractive to faculty (e.g., lunch) and others are more attractive to staff (e.g., intramural sports). Both groups, however, expressed the wish to participate in athletic activities, picnics, and holiday parties.

To conclude, organizational culture is the personality of an organization (Budd, 1996; Schein, 1992). It encompasses values, beliefs, and norms that are expressed by organizational members through their behavior within the organization (Martin, 2002; Meyerson, 1991; Schein, 1992). As research shows (Florenthal et al., 2009; Martin, 2002; Meyerson, 1991), members do not always agree on all organizational practices, because they hold multiple identities or positions, have diverse value systems, and apply different meanings to organizational manifestations (Florenthal et al., 2009). At the same time, if disagreements lead to relational tensions, administrators should intervene to create a supportive environment in which organizational members can work toward accomplishing organizational goals. Clear communication reduces employees’ sense of ambiguity over peers’ responsibilities. Engaging university staff in decision-making processes enriches decision outcomes and increases socialization opportunities between faculty and staff. Finally, fair benefits enhance employee job satisfaction and morale (for staff, in particular), thereby increasing their commitment to their institution, which ultimately strengthens the organizational culture.

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This paper explores the role of the college service-learning experience as a driver of future volunteering decisions. Utilizing the service-learning context and a sample of 157 business students, the TMI is used as a pre-post functional motivation measure. Perceived attitude change and satisfaction are examined as mediators of the relationship between TMI and future volunteering behavioral intentions. The hypotheses are tested using PLS-SEM for the analysis. The findings indicate that perceived attitude change and satisfaction are mediators, and the service learning experience, as well as perceived attitude change and satisfaction, are drivers of future volunteering intentions.

INTRODUCTION

In order for nonprofit organizations to continue to meet the needs of those they serve, they must both obtain funding and volunteers in an increasingly competitive environment (Bussell and Forbes 2002). As a first step, nonprofits must increase their visibility in order to increase donor and volunteer awareness. Increasing awareness requires branding, marketing and targeted messages (Wymer et al. 2006). An additional tool for nonprofits to generate volunteers is collaborating with higher education institutions.

According to (Collett and Morrissey 2007), generosity is “freely giving of one's financial resources, time, and talents, [including], for example, charitable financial giving, volunteering, and the dedication of one's gifts for the welfare of others or the common good”. They also contend that it is “unique in that it is the habit of giving, or the quality of being ‘generous’ (i.e. willing to share and give, not selfish, characterized by a noble, forgiving, and kind spirit, magnanimous).” This differentiates it from pro-social behaviors based on the temporal reference. Pro-social behaviors are short term and specific, generosity is a lifelong endeavor. Included in generosity behaviors are the donation of time (volunteering) money (donations) other donations (services, blood, organs and goods).

In addition to being explored within the pro-social and generosity literatures, both volunteering and donating to nonprofit organizations have been explored as consumer behaviors themselves (Pho 2004; Wymer et al. 2006; Wymer and Starnes 2001). The reason this is the case is because volunteering takes from time spent on other consumer activities such as recreational activities or other leisure activities (Fisher and Ackerman 1998). Volunteering itself has been considered a leisure activity (Pho 2004).
Regardless of the underlying motive to volunteer, increased trust and norms of reciprocity (social capital) are benefits of volunteering behaviors which help society function better (Stukas et al. 2008). So even as the work of the nonprofit sector increases (Weerawardena and Mort 2008), the number of volunteers (people actually donating their time) is not growing at the same rate (Bussell and Forbes (2002). In a call for research, Bussell & Forbes (2002) further note that the process of deciding to volunteer either as a new behavior or the reactivation of former volunteers have not been examined in detail.

A form of business partnership adopted by many non-profit organizations is alliances with universities. A specific form of these alliances is the service-learning experience where nonprofit organizations form alliances with colleges and universities through service learning programs. Through these programs, the non-profit organization gains labor (service learning students) and develop a brand image with a sector that may not have not been exposed to their other marketing messages. The students in return gain experience volunteering and the opportunity to see the civic responsibility benefits volunteering has in society.

As a means of developing future generosity and citizenship behaviors, universities and colleges have developed service learning programs that provide the nonprofit organizations with volunteers who receive course or college credit for their efforts. Service-learning is touted as a means for students to gain hands on application of classroom theories while simultaneously developing citizenship behavior (i.e., giving of themselves for a greater good, demonstrating pro-social behavior/generosity) (Berger 2004). While research has considered the efficacy of the applied learning experience (e.g., in service-learning projects where students perform meaningful public service and on student understanding of course concepts, Kaye Berger 2004; Kezar and Rhoads 2001; Strain 2005), a gap exists. The gap relates to how required service-learning experiences (hereafter, SLEs) shape student’s attitudes, satisfaction, and future volunteering intentions (for model, see Figure 1 below).

In the service-learning context, student populations are studied at all grade levels including college. The NSSE Yearbook (National Society for the Study of Education) has even dedicated a whole chapter to service-learning in higher education (Schine 1997). While studies have looked at outcomes of college student volunteering (e.g., Marta and Pozzi 2008), the focus has largely been on reflection, applied learning experiences, and curricula (for a summary, see Astin et al. 2000). Taking a functional approach to college-based service-learning, this study focuses on the importance of managing the match/mismatch between students’ expectations regarding SLEs and their actual experiences in order to maximize both the pedagogical outcomes of volunteering. The contribution to the higher education literature thus rests in using the functional approach to study college-based SLEs where students gain by matching their volunteer experiences with their expectations/motives.

There is a body of research exploring generosity behaviors and behavioral intentions including what motivates people to volunteer (Clary et al. 1998; Davis 2003; Omoto and Snyder 1995; Penner 1998).
However, there is much less research on the impact of the SLE on the future generosity behavior of volunteering (Tomkovick et al. 2008).

HYPOTHESES

Functional Approach to Volunteering

The functional approach to volunteering posits that certain aspects of volunteer work attract certain groups/types of volunteers. Operationalized using the Volunteer Function Inventory (hereafter, VFI), the functional approach examines what volunteers want to get out of their volunteer experiences (Clary et al. 1996). In other words, the VFI explores the extent to which volunteer experiences align with and drive their volunteer goals/motives. As an extension of the VFI, the Total Match Index (hereafter, TMI) measures the match/mismatch between motivation and experience (Stukas et al. 2009) (for an explanation of how the TMI is calculated, see the Measures section).

TMI $\rightarrow$ Future Volunteering Intentions

While previous research has shown that one can predict future volunteering intentions by considering the extent to which volunteer experiences align with volunteer goals/motives (for use of the VFI, see Clary et al. 1998; Van Vianen et al. 2008). In a recent study, the TMI was found to be a better predictor of future volunteering intentions than either motives or environmental affordances (i.e., experiences) alone (Stukas et al. 2009). Based on this evidence,

\[ H1: \text{The TMI is positively related to students' future volunteering intentions.} \]

Perceived Change in Attitude as a Mediator

In studying the antecedents of volunteering, Omoto and Snyder (1995) found that volunteer motivations predicted volunteers’ change in attitude. Using the VFI, Okun and Sloane (2002) also showed volunteer motivations to be a good predictor of attitude change. Since the VFI affects volunteers’ change in attitude, and the TMI is an extension of the VFI, the TMI will also be a good predictor of attitude change. The positive impact of attitudes on volunteer intentions is further supported by Okun and Sloane (2002). Hence,

Perceived change in attitude will mediate the relationship between the TMI and students’ future volunteering intentions. In particular, H2a) change in attitude is positively related to students’ future volunteering intentions and H2b) the TMI is positively related to perceived change in attitude.

Satisfaction as a Mediator

Several researchers have demonstrated that the greater the motive congruence, the greater the satisfaction with volunteering (Clary et al. 1998; Davis 2003; Van Vianen et al. 2008). In other words, the extent to which volunteer experiences align with volunteer goals/motives is a good predictor of satisfaction (Clary et al. 1998). Since the VFI impacts satisfaction, the belief is that the TMI will do the same. Drawing upon Marta and Pozzi (2008) who demonstrated satisfaction with volunteer experiences positively affects future volunteering intentions, the following is further suggested:

Satisfaction will mediate the relationship between the TMI and students’ future volunteering intentions. In particular, H3a) satisfaction is positively related to students’ future volunteering intentions and H3b) the TMI is positively related to satisfaction.

METHODOLOGY

The data were collected in the school of business at a private, northeastern university, which, as part of graduation requirements, requires 30 hours of service-learning volunteer experience toward the completion of their Student Engagement Transcript (SET). To collect the data, a pre- post-experience design is used. For both the pre- and the post-experience data collections, online surveys were e-mailed to
~1400 undergraduate business students. Upon completion of both the pre- and post-experience online surveys, students earned one-credit hour toward their SET requirement. Responses used for this study include only those business students who volunteered during the semester examined resulting in 157 usable pre- and post-experience survey responses. The pre-experience survey assesses the students’ motivations to participate in the SLE. The post-experience survey assesses their satisfaction with the volunteer experience, perceived attitude change (PAC) as a result of the SLE, as well as a generosity behavioral intention measure of future volunteering intentions (FVI).

Measures

Adapted from Clary et al. (1998), the VFI is a 29-item measure of the six motivations of volunteerism (i.e., motivations of volunteering): values, understanding, enhancement, social, career, and protective. Linked to these six motivations, environmental affordance (hereafter, EA) is measured using a 12-item scale adapted from Stukas et al. (2009). The independent variable, TMI, is calculated by multiplying the VFI score on a given motivation by the EA score (i.e., experience score) on the same construct. The scores for these constructs is then summed creating one formative index score used as the TMI motivation indicator.

Perceived change in attitude vis-à-vis the volunteer experience, one of the mediating variables, is assessed in the post-experience survey using the Omoto and Snyder (1995) three-item, 7-point scale. Assessed in the post-survey, the second mediating variable, satisfaction, is adapted from Omoto and Snyder’s (1995) 9-item, 7-point scale which captures satisfaction with the volunteer experiences.

The dependent measure, future volunteering intentions, is assessed using an adaptation of the Stukas, et al. (2009) scale. This two-item scale is anchored by 1=not at all likely and 7=extremely likely. The items include (1) “How likely is it that you will be volunteering for this organization in one year?” and (2) “How likely is it that you will be volunteering for a different organization in one year?” Additional volunteer intention measures included these same questions based on how likely it is that participants will be volunteering for (3) “this” and a (4) “different” organization after graduation. This creates a four-item future volunteering intention measure.

Analysis

Partial Least Squares structural equation modeling (PLS-SEM) is used for the analysis. The data were cleaned, examined for outliers, skewness, kurtosis, and other anomalies. While skewness was found, the PLS-SEM algorithm is robust and readily handles non-normally distributed data (Hair et al. 2011).

When estimating this type of model both the measurement and structural components must be assessed simultaneously (Hair et al. 2011). The key goals of this study are to predict target constructs and to identify key “driver” constructs. The model in Figure 1 is not that complex in terms of structural equation models. The ratio of the number of indicators to the number of constructs and to the limited size of the sample is 42:8:157. One construct, the TMI, is comprised of one indicator and is a formative construct. Based on this assessment, the covariance based structural equations modeling (CB-SEM) approach is not appropriate (Hair et al. 2010; Hair et al. 2011). Additionally, this research is exploratory in nature in that it is looking at the drivers of FVI a future generosity behavioral intention. This study uses a relatively small sample size (but still meets the minimum requirement of over 10 times the largest number of structural paths directed at a one latent construct in the structural model). Additionally, the desire is to estimate simultaneously the factor loadings of the measurement model and path coefficients of the structural model. All of these factors indicate the use of partial least squares path modeling (PLS-SEM) (Hair et al. 2011).

Results

The model shown in Figure 1 is analyzed using SmartPLS (Ringle et al. 2005). PLS-SEM uses a predictive modeling approach to maximize the explained variance of the dependent latent constructs. The data is analyzed using the Hair, et al. (2011), “Rules of Thumb.” The PLS inner model is evaluated after the outer model as follows. In the assessment of the reflective measurement model, the composite
reliabilities, shown in Table 1, are all above 0.5 and are acceptable. While the Cronbach’s Alphas are all above 0.45 and are included in Table 1 below, they typically are not used as reliability indicators for this research because they tend to underestimate internal consistency reliability (Henseler et al. 2009).

### TABLE 1
ASSESSMENT OF THE MEASUREMENT MODEL: OVERVIEW REPORT

<table>
<thead>
<tr>
<th>Construct</th>
<th>Average Variance Extracted (AVE)</th>
<th>Composite Reliability</th>
<th>R Square</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future volunteering intentions</td>
<td>0.645</td>
<td>0.783</td>
<td>0.412</td>
<td>0.454</td>
</tr>
<tr>
<td>Perceived Attitude Change</td>
<td>0.805</td>
<td>0.971</td>
<td>0.407</td>
<td>0.965</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.609</td>
<td>0.922</td>
<td>0.324</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Internal consistency reliability (indicator reliability) is used to assess whether measures consistently represent the same construct and, to be considered for retaining, need to have cross-loadings greater than 0.40. All items greater than 0.70 were retained, one item, Satis1_Boring, was retained based on face and content validity (Hair et al. 2011). However, one item (Satis1_Dissappoint, 0.36) was deleted because it was below the 0.40 threshold (Hair et al. 2011).

Convergent validity assesses the extent a construct is positively correlated with the other indicators of the same construct. Convergent validity is evaluated using the average variance extracted (AVE). An adequate degree of convergent validity is demonstrated with AVEs of 0.50 or higher (Hair, et al., 2011). As shown in Table 1 above, all the reflective measurements have AVEs higher than 0.50. To assess discriminant validity, cross-loadings are examined and the Fornell-Larcker criterion is used (Fornell and Larcker 1981). The squared correlation matrix, including AVEs (shown on the diagonal) for each reflective measure, is shown in Table 2 below. The AVE for each latent construct is greater than each of the latent construct’s highest squared correlation with any other latent variable. In assessing the cross-loadings, one indicator warrants closer examination. While Satis1_Boring is lower than some of its cross-loadings, it is again retained based on face and content validity. Regarding the formative measurement model, since the TMI is a formative construct with only one indicator, a VIF analysis to assess multicollinearity is not warranted. The number of cases used for bootstrapping is 157 and the number of bootstrapping samples is 5,000 (Hair, et al. 2011). An examination of the bootstrapped factor loadings of the indicators indicates all had t values >1.96 and are significant at the .05 level. Since the measurement model is found to be satisfactory, the structural model can be evaluated (Hair et al. 2011). A discussion of the structural model results used to test the hypotheses follows.

### TABLE 2
TEST FOR DISCRIMINANT VALIDITY: FORNELL-LARCKER CRITERION*

<table>
<thead>
<tr>
<th></th>
<th>Future Volunteering Intentions</th>
<th>Perceive Attitude Change</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Volunteering Intention</td>
<td>0.645</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Perceived Attitude Change</td>
<td>0.301</td>
<td>0.805</td>
<td>0</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.322</td>
<td>0.458</td>
<td>0.61</td>
</tr>
</tbody>
</table>

* Squared correlations with the diagonal representing the AVE
Structural Model Assessment and Path Estimates of the Model

The structural model is examined using the $R^2$ measures and path coefficients. The $R^2$ (shown in Table 1 above) for the constructs are 0.32 for satisfaction, 0.41 for PAC, and 0.41 for FVI and are considered to be just under moderate in a marketing research context (Hair, et al., 2011). Regarding drivers of FVI, the TMI, PAC and satisfaction hypotheses, H1, H2a and H3a are found to be significant and positive drivers of FVI as hypothesized and are included in Table 3 below. Furthermore, TMI is found to be a significant and positive driver of both PAC and satisfaction (H2b and H3b) as hypothesized and shown in Table 3 below.

<table>
<thead>
<tr>
<th>H</th>
<th>Driver</th>
<th>Endogenous Variable</th>
<th>$\beta$</th>
<th>Standard Error</th>
<th>T Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TMI $\rightarrow$ FVI</td>
<td></td>
<td>0.55</td>
<td>0.069</td>
<td>7.934**</td>
</tr>
<tr>
<td>2a</td>
<td>PAC $\rightarrow$ FVI</td>
<td></td>
<td>0.179</td>
<td>0.096</td>
<td>1.868*</td>
</tr>
<tr>
<td>2b</td>
<td>TMI $\rightarrow$ PAC</td>
<td></td>
<td>0.638</td>
<td>0.046</td>
<td>13.797**</td>
</tr>
<tr>
<td>3a</td>
<td>Satisfaction $\rightarrow$ FVI</td>
<td></td>
<td>0.293</td>
<td>0.089</td>
<td>3.303**</td>
</tr>
<tr>
<td>3b</td>
<td>TMI $\rightarrow$ Satisfaction</td>
<td></td>
<td>0.569</td>
<td>0.047</td>
<td>12.005**</td>
</tr>
</tbody>
</table>

*Sobel tests for mediation revealed that PAC mediates the relationship between TMI and FVI with a score of 1.78 and a one-tailed p-value of 0.037. Additionally, PAC also mediates the relationship between TMI and future volunteering intentions with a score of 2.8 and a one-tailed p-value of 0.002.

IMPLICATIONS AND FUTURE RESEARCH

Based on the results presented in this study, in order for universities to drive FVI as a result of the SLE, they should use the TMI and emphasize match between students’ expectations/motivations and the SLE--especially since this match is positively related to both satisfaction and PAC.

The TMI significantly predicted satisfaction, PAC, and FVI demonstrating its importance as a construct of interest for future research. Further, the implied mediated relationships are fully supported with both satisfaction and PAC serving as mediators between TMI and FVI.

This research builds a theoretical model that captures the impact of college SLEs as drivers of perceived attitude change because of the volunteer experience as well as the impact of the SLE on satisfaction and FVI. It highlights the need for matching the motivations for volunteering with the experience. Higher match scores did predict future volunteering intentions as well as higher positive attitude changes and higher satisfaction. In order to achieve generosity and citizenship behaviors, attention should be paid to the motivations of the students volunteering.

Future research in the area of which motives are the most important drivers for future volunteering in a service-learning setting would contribute to this stream of literature. Research into volunteering motivations would benefit from new decision theories such as behavioral reasoning theory (Westaby 2005). Finally, longitudinal research examining the impact of the service-learning experience five, ten, or even more years would validate the model.
LIMITATIONS

As is the case with any research study, there are some limitations. The sample is from the business school of one private university requiring a SLE limiting its generalizability. Because of this, a university-wide or multi-university study could be considered. For greater generalizability, this study could be extended to include a national sample and include universities that do and do not require college-level SLEs. As with any survey requiring pre-/post-matching of surveys, the nature of the participant attrition limited the number of useable surveys since only completed and matched pre- and post-experience survey responses were used.

CONCLUSION

This paper explored the drivers of future volunteering and found that the TMI predicted future volunteering decisions, satisfaction and perceived attitude change. From a theoretical perspective, the research further demonstrated the importance of the match between the underlying motivations to volunteer and the experience. The results also demonstrate the mediated relationship between the TMI and future volunteering intentions with both satisfaction and perceived attitude change as mediators. The results also serve as a warning to service-learning programs to ensure there is a match so the goals of the program (increased citizenship and volunteering behavior) are met. If not, quite the opposite may happen.

REFERENCES


Strain, CR (2005), "Pedagogy and practice: Service-learning and students' moral development," New Directions for Teaching and Learning (103), 61-72.


The Sophomore Scholars Program (SSP), an innovative program for the delivery of core business courses to select sophomores at a university in the Northeastern United States, is discussed. The SSP required integration of discipline-specific subject matter and featured student-centered learning approaches such as site visits, cases, exercises, consulting projects, and large-scale simulations to enhance the educational experience. Each of these experiences focused on the environment. The results of the assessment of the SSP’s impact on student learning as well as differences in SSP and non-SSP students’ Chronic Regulatory Focus are discussed. Suggestions for program improvements are also presented.

INTRODUCTION

Evidence of the need for, and benefits of, integrated business education programs in which students are actively involved is substantial and growing (Berry, 2009). Therefore, business educators today strive for effective ways to integrate information from multiple business disciplines in their course offerings. They also seek effective ways for students to participate actively in the educational process. The Sophomore Scholars Program (SSP), an innovative pilot program for the delivery of core introductory business courses to select sophomores at a university in the Northeastern United States, was designed as a means of achieving these goals. In keeping with current trends in business education, the SSP required integration of discipline-specific subject matter and featured student-centered learning approaches such as site visits, cases, consulting projects, and large-scale simulations to enhance the educational experience. While others have presented ideas for integrating discipline-specific subject matter at more senior levels (e.g., Basile & Knopik 2011), the SSP was designed for introductory business courses. An environmental theme was featured in each of these experiences. The SSP was offered to students in both semesters of
their sophomore year.

We were particularly interested in the characteristics, performance, and perceptions of students who successfully completed introductory core business courses as part of the SSP program. Therefore, a study of the impact of the second-semester SSP is presented here. One concern of an interdisciplinary approach to the delivery of core business subjects is that some technical knowledge of individual functional areas may be sacrificed. This is a particular concern for introductory courses which are intended to be foundational for later discipline specific courses. Jocums, Puri, and Latif (2010) however, find no difference in functional knowledge of students participating in an experimental interdisciplinary program, as compared to students taking core business courses in the traditional manner. To assess if functional area knowledge was preserved in our program, we measured and contrasted student learning in the interdisciplinary program with that of a control group of students who completed the same courses delivered in the conventional manner during the second semester of the academic year. Student satisfaction with the class projects was also measured. We also tested whether the Chronic Regulatory Focus (CRF) (Higgins et al., 2001) of students who were attracted to and remained in the program differed from that of a control group of non-SSP students.

The paper begins with the theoretical justification for an integrative SSP that features active learning methods. This is followed by a discussion of Regulatory Focus Theory (Higgins, 1987). A detailed description of the SSP and the analysis of its effectiveness are then presented. The paper concludes with a review of lessons learned and suggestions for others who wish to implement integrative programs to deliver core business subjects.

THEORETICAL BACKGROUND

Trends in Business Education

Over the past several decades, there has been a persistent trend in business education, both at the graduate and undergraduate level, to make programs more integrative (e.g., Basile & Knopik, 2011). This represents a distinct departure from the traditional functional approach to business education and is motivated partially by the evolving needs expressed by employers. According to Miles (1985, p.66), commencing in the mid 1950s businesses started the shift away from seeking employees with straight functional specialization to those with “skills needed by the general manager to address broad organizational and business needs.” This has further evolved, according to Aurand, DeMoranville, and Gordon (2001, p. 22), as companies such as Boeing, Ford, Hewlett-Packard, Coca-Cola, Xerox, Harley-Davidson, and Waste Management utilize “cross-functional teams and/or individuals with cross-functional skills to achieve business success.” These findings suggest that employers need graduates with the skills necessary to thrive in a cross-functional environment. So compelling is this need that in 2000, AACSB implemented standard C 1.3.E that the curriculum should integrate the core areas and apply cross-functional approaches to organizational issues. Regrettably however, when polling AASCB accredited undergraduate programs, DeMoranville, Aurand, and Gordon (2000, p. 27) find that fewer than five percent “had developed a comprehensive program that formerly addressed the need for cross-functional integration of business principles.” The authors’ personal observations and experience lead us to believe that little has changed since then.

Barber, Borin, Cerf, and Swatz (2001) characterize existing approaches to integrative business education on the basis of both span (across disciplines, across functions, within a function) and degree of integration (sequential functional modules to fully integrative team-taught experiences), as well as teaching methods to implement integration (cases, simulations, etc.) and the level that the program is offered (junior level core or senior capstone). Berry (2009) offers advice on designing and delivering integrative courses and recommends the use of enterprise resource planning as a method of integration, while Stephen, Parente, and Brown (2002) recommend the use of large-scale simulations where students have the opportunity to engage in role-playing. Each of these approaches provides opportunities for students to work on cross-functional teams, providing the experience and exposure that is sought in the job market.
As discussed in Saraoglu, Yobaccio, and Louton (2000), the seminal work of Kolb (1984) laid the theoretical foundation for the role of active learning in the educational process. According to Kolb (1984), learning takes place in a repetitive cycle that consists of concrete experience, reflective observation, abstract conceptualization, and active experimentation. Ideally, each iteration leads to higher levels of awareness and understanding. Proponents of active learning methods are motivated by the belief that learning occurs best when students are actively involved with concrete experience (Adler & Milne, 1997; Foggin, 1992; Hill, 1997; Walters & Marks, 1981). Business simulations, case study competitions, and consulting projects with existing businesses all provide students with the opportunity to be involved in active learning.

**Regulatory Focus Theory**

Given the uniqueness of the SSP experience as compared to the traditional, stand-alone method of delivering core business subjects at this university, we were interested in exploring the characteristics of students that applied for, participated in, and completed the SSP as compared to those that received the business core in the traditional manner. As Regulatory Focus Theory suggests that individuals display chronic differences in the goal-pursuit strategies they prefer (Higgins & Spiegel, 2004), one of the participant characteristic we explored was regulatory focus.

Regulatory Focus Theory (RFT) is a theory of motivation that suggests that individuals differ with respect to the means by which they prefer to pursue goals (Higgins, 1987). According to the RFT, some individuals regulate their behavior to become their ideal self; they focus on becoming and being the person they would ideally like to be. These individuals pursue their goals in an eager manner and are considered to have a promotion regulatory focus. A promotion focus is reflected in a concern for positive outcomes and a desire to avoid missing opportunities to make progress toward a goal (Higgins et al., 2001). Conversely, other individuals are concerned with becoming and being the person they think they ought to be. A prevention focus is evident in a concern for negative outcomes and a desire to avoid making mistakes as goals are pursued.

Promotion and prevention focused individuals differ with respect to their propensity to take risks (Crowe & Higgins, 1997). Promotion-focused individuals are risk takers; they are willing to make mistakes in pursuit of their goals. Prevention-focused individuals, however, are risk-averse; they are less willing to take risks to achieve their goals. Rather, prevention-focused individuals take a more vigilant, cautious approach in pursuing their goals. They exhibit a ‘conservative response bias’ (Crowe & Higgins, 1997), preferring to avoid making mistakes.

These risk-propensity differences between promotion and prevention-focused individuals have been demonstrated with a variety of contexts. For example, promotion-focused individuals are more likely than prevention-focused individuals to own the latest high-technology consumer products (e.g., the most sophisticated cell phones) (Herzenstein, Posavac, & Brakus, 2007). They are also more willing to choose a product whose ability to satisfy has not been clearly established. Similarly, individuals whose promotion-focus is made salient are more likely to choose a risky, hedonic (e.g., cake) versus a healthy, less risky snack, e.g. fruit; (Sengupta & Zhou, 2007). Regulatory focus has also been shown to influence an individual’s willingness to take on new behavioral challenges (Fuglestad, Rothman, & Jeffery, 2008). Fuglestad and his colleagues (2008) found that promotion focus predicted behavior initiation; promotion-focused individuals were more likely than prevention-focused individuals to initiate either a weight loss program or a smoking cessation program.

**PROGRAM DESCRIPTION**

The second semester SSP program enabled students to apply knowledge from three additional core business functions: finance, marketing, operations management. Delivery methods for the pilot SSP courses were quite different than the delivery structure of all other core business classes at the university. Students were divided into three groups (cohorts) and attended a five-hour block of classes with their cohort each Monday, Wednesday, and Friday morning. The block of time allowed for out-of-classroom
experiences (e.g., field trips, competitions) without creating conflict with other classes. Although class time was used to focus on a specific discipline (i.e., finance, marketing, operations management), the instructors communicated frequently with each other and made an extra effort to link what was being taught in their own class to what was being taught in the other classes.

Each student was assigned to a team within the cohort based on their grade point average, personality type, and gender. Students remained with their teams throughout the semester. Team members frequently worked together during class time and group projects were completed with the same group of team members. Because the group projects required integration of knowledge from each of the business disciplines, we expected the team work to foster learning of discipline-specific knowledge as well as development of the ability to integrate discipline-specific knowledge to solve problems.

The teams of students competed against other student teams within and across the cohorts. Judging these competitions were other university professors (in addition to the three course professors), administrators, and professionals from the business community. This provided external validation of grading as team rankings and subsequent student grades were influenced by the opinions of professionals other than the course professors. Grades on the integrative group projects weighed heavily in final grade calculation for each of the individual courses.

One of the challenges for the SSP was to recruit and retain students who valued and would benefit from the SSP. A promotional flyer outlining the features and benefits of the new program was distributed during class visits and by email to eligible students (i.e., those who had completed the necessary prerequisite introductory courses; Appendix A). Because the program added an additional layer of activity and involvement, we expected only those students with mid to high GPA’s to be able to handle the demands of the program. We encouraged students with strong academic credentials to apply and virtually all applicants were accepted. It is possible that students who applied were more motivated to take ownership of their education, and more willing to take risks to achieve their academic goals than the average student at the university. No attempt was made, however, to recruit students based on their tendencies to be chronically promotion, or prevention-focused.

PROGRAM OBJECTIVES

Our primary goal was to enhance academic performance of SSP participants. Specifically, we wanted students to demonstrate mastery of discipline-specific knowledge and to demonstrate the ability to solve problems by applying their discipline-specific knowledge in an integrated manner. We sought to achieve these academic learning goals through i) integration of subject matter, ii) application of active-learning teaching methods, iii) involvement of students with members of the business community, iv) focusing on oral and written communication skills, v) providing opportunities for team participation and leadership, and vi) the development of strong relationships between peers and professors.

Although the SSP was introduced as a pilot program and initially offered to less than 15% of sophomore students, it was expected that after some modifications, in subsequent semesters the program would be made available for all sophomores. Therefore, our second goal was for students to enjoy their participation in the program as we expected that enjoyment would foster a good reputation for the SSP on campus.

One of the main challenges of a program such as the SSP is the recruitment and retention of appropriate students; it is important that participants in a program such as the SSP are well suited to it to reap the rewards that such a program has to offer. For example, some students may find it difficult to both i) manage the time demands of a more active and involving program and ii) succeed academically. Therefore, the third goal was to gain an understanding of some of the characteristics of students who successfully complete, innovative programs such as the SSP.

SECOND-SEMESTER SOPHOMORE SCHOLARS PROGRAM

Fifty-eight students approximately balanced by gender (53.4% male) participated in the second
semester of the SSP. Majors varied across the business disciplines (19% finance, 13.8% marketing, 8.6% management, 43.1% accounting, and 15.5% undecided).

For comparison purposes, a control group was also tracked during the second semester. The control group consisted of 39 students (64.1% male) enrolled in finance and marketing courses that were delivered in the conventional manner (i.e., non-integrated). The control group did not include students who were enrolled in operations management as it was not possible for non-SSP students to enroll in operations management, finance and marketing at the same time. Control group majors were as follows: 28.2% finance, 7.7% marketing, 10.3% management, 35.9% accounting and 17.9% undecided.

Professors worked together to establish learning objectives (see Program Objectives), to establish a master calendar and master syllabus for structuring the delivery of the classes, and to integrate course materials across all three classes. In addition, one hour of the five-hour time block each day for ten weeks was allocated as a lab for a simulation project, or team meetings with faculty regarding a consulting project.

The integrated out-of-class group-project assignments were developed around the “green” theme and included a case competition, a large-scale simulation, and a set of consulting projects with a local recycling company. The “green” theme was chosen as faculty had observed that students in previous classes often chose to focus on the environment when given the opportunity to select their own project topic. Although each project required students to apply knowledge from all of the disciplines, the finance professor was responsible for managing the large-scale simulation, the marketing professor organized and oversaw the case competition, and the operations management professor coordinated the consulting projects.

Grades for the projects were based on a team’s overall analysis and recommendations and the extent to which issues from each of the business disciplines (i.e., finance, marketing, and operations management) were addressed (See Appendix B for a sample grading-rubric). Each group project included a written component, the quality of which had a significant impact on the grade awarded for the project. The student writing policy (Appendix C) encouraged students to make every effort to ensure that their individual and group written work was of the highest quality. The three instructors worked together to arrive at a consensus grade for the team which was then credited to each of the discipline-specific courses. Since all of the project work was team based, peer evaluations of each team member were used to foster a fairer assessment of individual student grades.

The case competition focused on a company that was struggling with their efforts to attain enterprise sustainability. Teams within each cohort prepared a written report and an oral presentation of their analysis and recommendations. A panel of judges selected a winner from each cohort to advance to a final round of competition. In the final round, winning teams from each of the three cohorts competed with each other before another panel of judges. Faculty and judges alike were impressed with the quality of the team presentations, especially in the final round. Both the professors and external judges believed the degree of professionalism exhibited compared favorably to that of MBA students.

The business simulation, a modified version of a Business Policy Game (Cotter & Fritzche, 1995) was included as part of the SSP program. It was chosen for the SSP because Snow et al. (2002) found the business policy game to be especially beneficial when integrated into the course instruction. In addition, Ammons and Mills (2005) provide a successful example of integrated undergraduate programs using business simulations for experiential learning.

The Business Policy Game provided an opportunity to build on integration, the green theme, and team building. Each team produced a virtual consumer durable product and marketed it in virtual domestic and foreign markets in one of two virtual industry worlds. Products chosen were required to be environmentally friendly. A one-hour lab time three days a week at 8:00 in the morning during most of the semester was used for orientation to the simulation, instruction, decision-making and debriefing. Functional area specialization was encouraged within the teams, but ultimately the entire team was responsible for relative team performance. Although all functional specialists were not specifically required to attend each lab, because of the joint responsibility for relative team performance, all team members generally attended all labs.
Teams submitted sets of quarterly decisions for the third year of their company’s life. Their decisions spanned the functional areas of business (i.e., financial management, marketing, operations management, and human resource management). Relative company performance in each industry world was assessed using a Z-score based on a weighted average of several cumulative company performance measures.

Teams also submitted a strategic business plan for years four to seven. The goal of the strategic business plan was to draw on insights and experience gained from running the company for year three, along with insights gained from analysis of data from the first two years of operation, to offer guidance that would propel the company forward and lead to development of a sustainable competitive advantage. Each team presented their strategic plan to a mock board of directors. Strategic plans were evaluated based on the team’s critical assessment of their company’s performance relative to historic and competitor performance, the suitability of their proposed strategies, and their understanding of the likely impact of their proposed strategies on company performance over the next four years. Four winning teams were selected to advance to a final competition. Several faculty and administrators played the role of mock board of directors during both the preliminary and final phases of activity, adding the element of realism.

The consulting project began with a tour of the participating corporation, a recycling business. Following the tour, key personnel from the corporation presented four projects for which they sought advice. Student teams acted as consultants for the corporation’s four projects and during the semester, student teams worked closely with the corporation’s top leadership team to develop recommendations. Each team in a cohort selected a different project, thus ensuring that all projects were addressed within each cohort. Student teams were expected to identify the scope of their project, develop a plan for communication with the instructor and corporation personnel, and prepare a written report of their recommendations. In addition, students were expected to present their findings orally. Teams who worked on the same project presented their findings to a panel of judges who selected one team to advance to a final round of competition. Three winning teams participated in a final competition at the corporation headquarters where the corporation’s top management team served as judges.

PROGRAM ASSESSMENT

Student Learning

Because the SSP program featured a focus on integration across functional areas, we wanted to assure that this enhancement did not negatively impact the attainment of knowledge in the specific functions. Specifically, we used pre- and post-testing for the purpose of measuring the attainment of finance and marketing knowledge. The marketing questions were adapted from questions in the McGraw-Hill/Irwin test bank that accompanied the textbook assigned for the course (i.e., Kerin, Hartley, & Rudelius 2010). We attempted to assess operations management knowledge as well but because of problems with collecting data we were unable to conduct this analysis. The beginning-of-semester test (Appendix D) was administered approximately three weeks after the beginning of the semester as part of a battery of other tests. The end-of-semester test, consisting of the same questions as the beginning test, was administered approximately three weeks before the end of the semester. It was also administered as part of a battery of other tests. Students were unaware that the beginning and end-of-semester knowledge tests they completed were in any way related to their involvement in the SSP. Results were compared to the control group of non-SSP students.

Integration of discipline-specific knowledge for problem solving was assessed through assessment and grading of the three class projects. Grading rubrics provided for each class project indicated that mastery of knowledge from each of the disciplines was expected for successful completion of the project (e.g., Appendix B).

Achievement of learning objectives was also assessed by asking students to report their perceptions of what they had learned on a 19-item questionnaire that was administered on the last day of classes. Perceptions of the discipline-specific learning gained from participating in the SSP were assessed with three items (I learned a lot about marketing, I learned a lot about finance, I learned a lot about...
operations management) anchored with strongly disagree (1) and strongly agree (7). Similarly, perceptions of the discipline-specific learning gained from participating in the class projects were assessed with three items for each of the three projects (I learned a lot about marketing, I learned a lot about finance, I learned a lot about operations management) anchored with strongly disagree (1) and strongly agree (7) assessed attitudes about each group project.

Student perceptions of their learning about integration of discipline specific knowledge were assessed with four measures (Participating in a cohort program helped me learn how business disciplines (i.e., marketing, finance and operations management) fit together and The case competition/business simulation/consulting project helped me learn how the marketing, finance and operations management course content fit together) anchored with strongly disagree (1) and strongly agree (7).

Satisfaction
Given that our goal was to expand the SSP and given that student satisfaction would enhance positive word-of-mouth promotion of the SSP, we believed that it was important for SSP students to enjoy their learning experiences. Therefore, learning enjoyment was measured with three items (I enjoyed the case study, I enjoyed the consulting project, I enjoyed the simulation) anchored with strongly disagree (1) and strongly agree (7).

Chronic Regulatory Focus (CRF)
Although we did not recruit students to the SSP based on their CRF, we did expect some CRF differences in those who chose to participate in and complete the SSP versus those who chose not to. Participation in the SSP involved a certain amount of risk, and certainly more risk than participating in the same courses delivered in the conventional manner. The SSP required heightened interaction between students, between students and instructors, and between students and members of the business community. Thus, while it afforded students an enhanced learning experience, it also demanded more time and energy than the same courses taught in the conventional manner. For example, to set expectations for the pilot, the students were required to attend a one-day program orientation that focused on building team skills, case analysis skills, and report-writing and oral-presentation skills. The orientation program also stressed the degree of student effort needed and the significant change in culture necessary to be successful (Aurand, DeMoranville, & Gordon, 2001). Furthermore, the SSP was a pilot program and consequently, neither students nor faculty could fully predict the outcomes of the program.

Given that participating in the launch of the new SSP involved some risk, and given the evidence that promotion-focused individuals are greater risk takers and more willing to initiate behavior change than prevention-focused individuals, we expected that students who applied for the SSP would be more promotion-focused than those who chose to enroll in courses delivered in the traditional manner. Thus, we measured the regulatory focus of members of the SSP and the control group.

Chronic Regulatory Focus was measured with the Regulatory Focus Questionnaire (RFQ) (Appendix E) that was first introduced by Higgins and his colleagues (2001). Frequent reports of its use can be found in the literature (e.g., Herzenstein, Posavac, & Brakus, 2007; Hong & Lee, 2008) and evidence of its validity and reliability have been reported (Higgins et al., 2001). The RFQ attempts to capture an individual’s feelings of pride regarding their preferred means of achieving goals. Six 5-point items measure preferences to pursue goals with a promotion focus and five five-point items measure preferences to pursue goals with a prevention focus. Thus, each individual has both a promotion and a prevention score. Consistent with previous work on CRF, each individual’s prevention score was subtracted from their promotion score, resulting in a difference score (Zhao & Pechmann, 2007). Higher difference scores are indicative of a tendency to be relatively more promotion-focused whereas lower difference scores are indicative of a preference to relatively more prevention-focused.
RESULTS

Student Learning

Separate ANOVAs with program (i.e., SSP/non-SSP) as the independent variable and end-of-semester marketing knowledge and finance knowledge as dependent variables revealed that SSP students scored marginally higher than non-SSP students on marketing knowledge. SSP students also scored higher than non-SSP students on finance knowledge but the difference was not significant (see Table 1).

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>END-OF-SEMESTER KNOWLEDGE SCORES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SSP students</td>
</tr>
<tr>
<td></td>
<td>Mean Standard Deviation</td>
</tr>
<tr>
<td>Marketing</td>
<td>9.23 1.80</td>
</tr>
<tr>
<td>Finance</td>
<td>3.23 1.91</td>
</tr>
</tbody>
</table>

*p < .10

Results of a paired-samples t-test shown in Table 2 revealed that participants in the SSP showed significant increases in finance knowledge scores from the beginning to the end of the semester. Results showed however, that marketing knowledge scores did not increase significantly from beginning to end of the semester.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>SSP STUDENTS’ KNOWLEDGE SCORES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning of Semester</td>
</tr>
<tr>
<td></td>
<td>Mean Standard Deviation</td>
</tr>
<tr>
<td>Marketing</td>
<td>9.28 1.75</td>
</tr>
<tr>
<td>Finance</td>
<td>2.33 1.22</td>
</tr>
</tbody>
</table>

**p < .01

Student self-reports of their learning of discipline-specific knowledge gained from participating in the SSP were analyzed using one-sample t-tests with the mid-point of the scale (i.e., 4) as the test value. The results shown in Table 3 revealed that students reported that they had learned a lot about finance, marketing, and operations management. Results were significantly greater than the scale midpoint for finance (p < .05), marketing (p < .001), and operations management (p < .001).

Responses to the comments/suggestions question provided further evidence that students perceived that participation in the SSP was beneficial although they also reported that it was a very demanding program. Comments included: “a lot of work →BUT IT WAS WORTH IT, created amazing work methods, prepared us for real world situations”; “I think it was a very challenging experience that really helped me understand material outside of the classroom. Although I was very overwhelmed at times I do feel I learned a lot.”
TABLE 3
SSP STUDENT SELF-REPORT ON LEARNING

<table>
<thead>
<tr>
<th>I learned a lot about ...</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>4.45</td>
<td>1.55</td>
<td>2.13</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Marketing</td>
<td>5.53</td>
<td>1.19</td>
<td>9.38</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Operations Management</td>
<td>4.85</td>
<td>1.52</td>
<td>4.06</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

Student self-reports of their learning of discipline-specific knowledge gained from participating in specific class projects were also analyzed using one-sample t-tests with the mid-point of the scale (i.e., 4) as the test value. Students reported that they gained a lot of marketing knowledge by participating in the Case Competition ($M_{marketing} = 5.11, SD_{marketing} = 1.28; t(1,52) = 6.33, p < .001$). The results showed however, that students were neutral with regard to learning about marketing gained from participating in the Consulting and Simulation Projects; reports of marketing learning for these projects were not significantly higher or lower than the mid-point of the scale (all p’s > .10). Similarly, reports of learning of finance and operations management were not significantly higher or lower than the mid-point of the scale for any of the class projects.

Student self-reports of their learning regarding integration of discipline-specific knowledge gained from participating in the SSP and from participating in the class projects were also analyzed using one-sample t-tests with the mid-point of the scale (i.e., 4) as the test value. The analysis revealed that students believed that participation in the SSP helped them learn how to integrate information from different disciplines ($M_{introduction} = 5.36, SD_{introduction} = 1.18; t(1,52) = 8.39, p < .001$). Participation in the class projects, however, was not perceived as beneficial for learning how to integrate knowledge from the different disciplines to solve a problem (all p’s > .10).

Although students reported that participating in the SSP had helped them learn how to integrate subject matter from the different disciplines, their ability to do so was not evident in the work they submitted. For example, grading of the Case Project revealed that students were able to apply marketing concepts in their analysis of the case ($M_{marketing} = 10.4$). Their scores for applying financial and operations management concepts however, were much lower ($M_{finance} = 3.73, M_{operations} = 3.73$). Only one of the eleven teams scored equally well in the application of marketing, finance and operations management concepts in their case analysis.

Satisfaction

Student self-reports of their satisfaction with specific projects were also analyzed using one-sample t-tests with the mid-point of the scale (i.e., 4) as the test value. The results shown in Table 4 indicate that students were satisfied with the group interaction on each of the integrative projects. The results also show that students were satisfied with the application of marketing concepts in the Case Competition and dissatisfied with the application of marketing concepts in the Simulation project. Satisfaction scores for the application of discipline specific knowledge in the other projects were not significantly higher or lower than the midpoint of the scale. Similarly, satisfaction scores with the integrative aspects of the projects were not significantly higher or lower than the mid-point of the scale.

Anecdotal evidence based on conversations between faculty and students revealed two areas of student dissatisfaction. Students did not like to spend extra time on labs for the simulation project. Many students reported that the workload was already very heavy without adding a requirement to attend a one-hour lab each week. Secondly, although the satisfaction scores indicate that students were satisfied with group interaction, students told instructors that they did not like having team members assigned by the professors. They believed that this process unfairly advantaged some teams and disadvantaged others.
**TABLE 4**

**SSP STUDENT SATISFACTION WITH INTEGRATIVE PROJECTS**

<table>
<thead>
<tr>
<th>Satisfaction with:</th>
<th>Case Competition</th>
<th>Consulting Project</th>
<th>Simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std Dev</td>
<td>t value</td>
</tr>
<tr>
<td>Group interaction</td>
<td>5.91</td>
<td>1.36</td>
<td>10.18***</td>
</tr>
<tr>
<td>Application of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>5.11</td>
<td>1.28</td>
<td>6.33***</td>
</tr>
<tr>
<td>Finance</td>
<td>3.96</td>
<td>1.52</td>
<td>-0.18</td>
</tr>
<tr>
<td>Operations Mgmt</td>
<td>4.72</td>
<td>4.66</td>
<td>1.12</td>
</tr>
<tr>
<td>Integration</td>
<td>4.22</td>
<td>1.33</td>
<td>1.17</td>
</tr>
</tbody>
</table>

**Chronic Regulatory Focus**

Analysis of Variance (ANOVA) with membership in the SSP as the independent variable and CRF difference score as the dependent variable revealed that the difference scores of members of the SSP were marginally higher than those of members of conventional sophomore classes. This suggests that SSP students are more promotion-focused than non-SSP students ($M_{SSP} = .80$, $SD_{SSP} = .82$, $M_{nonSSP} = .44$, $SD_{nonSSP} = .82$; $F(1,76) = 3.60, p = .06$). As expected, further analysis of our data showed that CRF scores did not shift over the semester. Results of a paired-sample $t$-test revealed no changes in CRF scores from the beginning of the semester to the end ($M_{T1} = .62$, $SD_{T1} = .84$, $M_{T2} = .54$, $SD_{T2} = 1.00$; $t(1,77) = 1.09, p > .10$). Interestingly, while participants in the SSP differed from those in the conventional program with respect to CRF, CRF did not predict knowledge scores. Regression analysis revealed no differences between individuals who are dominantly promotion- or prevention-focused individuals with respect to marketing ($\beta = .02; t(1,77) = .21, p = .83$) or finance knowledge scores ($\beta = .01; t(1,77) = .10, p = .92$). This is consistent with RFT in that RFT suggests that individuals differ with respect to how they pursue their goals. RFT does not suggest, however, that promotion- and prevention-focused individuals differ with respect to which goals they choose to pursue, or with respect to their success in achieving them (e.g., good grades).

**LESSONS LEARNED**

**Learning Outcomes**

The specific learning goals of the SSP were to enhance student discipline-specific learning and to enhance their ability to integrate knowledge from a variety of disciplines when solving problems. Student self-reports were positive; SSP students reported that they learned a lot about finance, marketing, and operations management and that participation in the program had allowed them to learn how the business disciplines fit together. Anecdotal evidence also suggested that the SSP was successful in this regard.

Objective measures of learning revealed only partial achievement of the learning goals for SSP students, however. SSP students’ finance scores were significantly higher at the end than the beginning of the semester while marketing knowledge scores did not improve significantly from the beginning to the end of the semester. Marketing knowledge scores at the end of the semester were higher for SSP students than for members of the control group whereas the SSP students’ finance scores were not significantly higher than those of the non-SSP students’ at the end of the semester.
It is noteworthy that SSP students’ beginning- and end-of-semester marketing scores both exceeded 70% correct whereas neither the beginning- nor end-of-semester finance scores exceeded 30% correct. These differences between marketing and finance scores may be due in part to more care being taken to ensure that the finance questions addressed knowledge that would be acquired during the semester. The differences may also be due to the heavy emphasis placed on marketing in the students’ introductory business course. It is possible that sophomore students have already attained a good understanding of marketing because of participation in previous classes.

Because our goal of providing enhanced learning was only partially achieved, we sought to identify strategies that could be employed to strengthen and improve the program. Following are suggestions that others may consider in their attempts to implement integrated business education programs.

1. **Provide explicit information about the relevance of discipline-specific knowledge for each class project.**

   All professors agreed that better integration of course work and projects was needed. For example, although each group project assignment clearly specified that material from finance, marketing, and operations management should be integrated, many student teams failed to do this when conducting their analysis and making recommendations. Explicit information about the pertinence of each of the disciplines for each project may assist students in understanding the need to integrate material from all of the disciplines. Reminders to the students to consider and apply information from all of the disciplines in each of the group projects could also assist in achieving this goal. This may be especially true when working with sophomore students who are less than half way through their business education program. The decision to assign responsibility for project coordination to one of the faculty members may have contributed to students’ inability to integrate discipline specific subject matter. We managed group projects in this manner, believing that having one instructor in charge of each project would ensure consistency in information students received about the project. While this did occur, what also occurred is that students thought about the Simulation as a finance project, the Case Study as a marketing project, and the Consulting Project as an operations management project.

2. **Classroom space should be large enough to accommodate all students at one time.**

   Integration of subject matter could also be facilitated by having large classrooms where all students could gather and instructors could team teach the material. Regrettably, this was not the case with the current SSP; no classrooms large enough to accommodate all of the SSP students were available. Consequently, professors provided instruction independent of one another and students did not have the opportunity to observe all three professors simultaneously teach material from their respective disciplines. A classroom large enough to accommodate all students would allow professors to team-teach, thus increasing the possibility of integration of subject matter and decreasing their workload. Large classrooms would also permit greater coordination of lectures and activities and afford more opportunities for guest speakers.

3. **Appoint a program coordinator.**

   Having a program coordinator to coordinate activities and communications would also contribute to greater integration of subject matter. Professors coordinated the SSP as well as delivering course content. Consequently, the time demands of coordinating the program impinged on the time available to focus on integrating course content. A program coordinator, who relieved faculty of coordination responsibilities, would allow professors to focus on assisting students to understand interrelationships between disciplines. A program coordinator could also strengthen student/faculty relationships. A program coordinator could plan social activities that could assist in strengthening relationships between students and between students and faculty. Although it was hoped that social activities would be incorporated into the SSP, this did not occur. The time demands of coordinating and delivering course material prohibited faculty members from assisting students to plan and carry out these activities.
Satisfaction

Our second goal was to ensure that students enjoyed the program. While responses indicated that students enjoyed the case competition and the consulting project, they were less enthusiastic about the simulation. Students also reported dissatisfaction with the method by which student teams were formed. Following are suggestions to foster enjoyment of programs such as the SSP.

1. Ensure that the student workload is manageable.

The workload of the SSP was heavy by design, but it is possible that satisfaction was impeded by the course workload, specifically the work required by group projects. As previously mentioned, students were expected to attend many extra meetings outside normal class time for the simulation project. Students viewed this as having the workload of an additional class without getting additional course credit for it. This perception of the extra time required by the simulation project probably contributed to lower student satisfaction with the simulation than the other integrative projects. In addition, students were required to meet with members of the business community off campus for the consulting project and the simulation and consulting projects were both due close to the end of the semester. While our goal was to enhance learning by providing additional learning activities, it became evident that students found these extra learning activities very demanding and difficult to manage. Careful attention to the workload and scheduling of group projects is needed to ensure effectiveness of such assignments in enhancing learning. In addition, since the traditional stand-alone business core classes were running in parallel to the SSP, students frequently compared challenges faced in the SSP to those of the path not taken. Although the SSP was promoted as being different, and students received extensive orientation to the specific differences, they seemed to be constantly surprised that they were receiving something different than non-SSP students received. Thus the ‘curse’ of the pilot program may have mitigated the level of student satisfaction with the SSP.

2. Allow students to select members of their teams rather than having team members assigned by the professor.

We made the decision to assign students to teams that would work together for all group projects. This decision was made with the expectation that this would allow students to develop strong relationships with peers and enjoyment and learning would be enhanced. We also expected that this would allow students to develop their team participation and leadership skills. Surprisingly however, some students complained about being assigned to teams (versus choosing their own teams) and about being stuck with the same team members for the entire semester. It is unlikely that learning is enhanced or that team participation and leadership skills are developed in teams where team members are unhappy with their team. Thus, future programs should consider allowing students to form their own teams. This would be especially effective if, early in the semester, students were given opportunities to get to know one another by working with a variety of classmates on small team projects. They would then be equipped to select their own teammates. We expect this would yield greater student satisfaction and more effective teamwork, which in turn would contribute to enhanced learning and the development of team participation and leadership skills. Interestingly, despite this apparent dissatisfaction with the team assignment process, group interaction consistently received the highest satisfaction scores for the projects as shown in Table 4.

3. Allow students to change teams during the semester.

Inevitably, some students will be more desirable as teammates than others, so it is possible that even when students choose their own teammates, some discontent may arise. There could therefore, be some advantages to having students work on different teams during the semester. Real-world business demands the ability to work with teams of changing membership and to form working relationships in short time frames.
Chronic Regulatory Focus

Our final goal was to gain some understanding of the types of students who would be most likely to participate in a program such as the SSP. Our results show that, as expected, the SSP attracted and retained students who were more promotion-focused students than their counterparts in conventional programs. These results suggest that promotion-focused students are more willing than prevention-focused students to take the risk of embarking on and remaining with a new and innovative program such as the SSP to achieve their academic goals, whereas prevention-focused individuals are more likely to forego the opportunity to participate in such a program. This is consistent with Regulatory Focus Theory that suggests that promotion-focused students would eagerly try to become their ideal selves and would be willing to take risks to do so. Conversely, prevention-focused students would be more cautious in attempting to become the person they think they ought to be. Thus, we offer the following suggestions for encouraging participation of both promotion-and prevention-focused students in a novel program.

1. Manage risk perceptions of prospective students through carefully crafted recruitment messages if the goal is to attract both promotion- and prevention-focused students.

In spite of increasing appreciation of their benefits, it is recognized that integrative programs are not yet the norm for business courses. Consequently, there is greater uncertainty associated with participating in integrative programs. Therefore, if the goal of an integrative program is to attract all types of students, risk perceptions must be carefully managed. If the risks of participating in the program are perceived as being too high, our results suggest that prevention-focused individuals will not participate and will not reap the benefits that integrative programs have to offer. If, however, the risks are perceived as being too low, it is possible that promotion-focused individuals may not be attracted to such programs. In this case, promotion-focused individuals would miss opportunities for enhanced learning.

Careful crafting of messages about the integrative program could alleviate this problem. There is evidence that individuals attend to and are persuaded by information that is congruent with their CRF (e.g., Aaker & Lee, 2001). It is possible therefore, that the SSP program attracted more promotion-focused students because the recruitment message had a promotion focus (i.e., used phrases like ‘a fresh approach to learning’). Different recruitment messages, therefore, that are designed with either a promotion or a prevention focus (e.g., focus on the challenges and excitement of the program [promotion] or focus on the soundness and security of the program or the risks of not joining the program [prevention]), may encourage participation of both promotion and prevention-focused students in newer, integrative programs such as the SSP.

2. Ensure that there is an appropriate and consistently applied risk-reward structure built into the program.

One of the reasons that individuals are willing to take on risk is that they believe they will be rewarded for doing so. Therefore, although the SSP attracted students who were willing to take risks, students expressed dissatisfaction with the program because it did not yield any special rewards. Honors students who completed both semesters successfully would get honors credit for courses in the second semester, but non-honors students who faced the same challenges did not receive honors credit for any course. This disparity led to more dissatisfaction among the non-honors students. Building appropriate and consistently applied rewards into higher risk programs will increase the probability that all students will be satisfied with the outcomes.

CONCLUSION

There is plentiful evidence that integrative business education programs are necessary to prepare students for the demands of business today. Graduates of business schools need to demonstrate ability to integrate and apply knowledge from a variety of disciplines in addition to demonstrating mastery of discipline-specific knowledge. This paper has described the application and analysis of a program that utilized active learning approaches while offering much-needed integrative skills to sophomore students.
The evidence provided is encouraging; it suggests that integrative programs enhance students’ understanding and appreciation of the need to integrate knowledge from a variety of business disciplines. The evidence also suggests that integrative programs can be effective in teaching core business knowledge. Integrative programs are not the norm however, and while some students may choose to participate in courses delivered in an integrated fashion, others may not. The evidence presented here suggests that students who are chronically promotion- versus prevention-focused are more likely to participate in innovative integrative programs such as the SSP. Efforts to manage the risks associated with involvement in innovative integrated programs will ensure that all students reap the benefits of these important programs.

REFERENCES


APPENDIX A
SPECIAL SOPHOMORE BUSINESS YEAR LEARNING EXPERIENCE

A distinctive, world-class, undergraduate learning experience will be launched in 2009.
In fall 2009 and spring 2010, sophomore students will have an opportunity to participate in the launch of
a distinctive, world class, undergraduate learning experience: 2009-2010 Sophomore Experience.
Students seeking a fresh approach to learning about the world of commerce during their sophomore year
are encouraged to apply to this program.

In this program, each semester three required business courses will be delivered as a single
integrated block to a cohort of up to 35 students who will work together throughout the experience.
Professors will utilize teaching approaches that are highly interactive and supplement classroom activities
with co-curricular experiences.

Why would you want to participate in the 2009-2010 Sophomore Experience?
The sophomore experience will provide you with the opportunity to set yourself apart,
and to be part of a group that will set itself apart. Joining the 2009-2010 Sophomore Experience will provide you with the
opportunity to:
- Enjoy a heightened learning experience with people who share your passion for excellence and
  for being successful business professionals.
- Learn core business concepts in an integrated manner by engaging in cases, projects, simulations,
  and exercises that that require cross-disciplinary analysis and solutions.
- Network with each other and with business people in the community.
- Learn and practice business skills in a supportive environment.
- Become better acquainted with great professors who can make business concepts come alive.
- Participate in active learning through site visits, case analysis and discussion, guest speakers,
  social events and more.
- Refine those much sought-after interpersonal skills associated with team participation and
  leadership activities as well as advance your oral and written communication skills.
- Demonstrate your ability to lead as an entrepreneur as you participate in the launch of this bold
  new program.

Program Features
- Selective admission.
- Integrative and experiential learning exercises and events.
- Extensive use of cases, simulations, & real-world applications, including guest lectures, site
  visits, etc.
- Close student-professor relationships, including open-door office hours, podcasting, and faculty
  participation in co-curricular events.
- Schedule that includes co-curricular and social activities that reinforce classroom experiences.
- Prominent involvement of students as course “delivers,” participants, and designated leaders with
  respect to being mentors, serving as “gurus,” and acting as classroom observers.

Key Program Ground-Rules
Participants should be 1) committed to an interdisciplinary approach to business learning, 2) committed to working on the development of their communication, leadership, and team skills, and 3) prepared to make a yearlong commitment to learning in a heightened learning environment.

Program Building-Block Elements
“Block scheduling” from 9 a.m. to noon (with students prohibited from scheduling classes in the
8 and 12 time slot) of three core courses each semester—to allow for out-of-the-classroom events,
field trips; opportunity for faculty to plan for extended in-the-classroom learning events.
Team: ____________________________________________________

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APPENDIX C
SOPHOMORE SCHOLARS PROGRAM WRITING POLICY

Business students are expected to practice professional standards in writing. Therefore, all written
assignments must meet minimal standards to be acceptable. These standards address 1) spelling 2) grammar and 3) punctuation.

The term Fatal Flaws refers to technical English errors and errors of form. Specifically, the following are Fatal Flaws:

1. Misspelled words and/or misused words (e.g., there, their)
2. Misuse of the possessive case (e.g., ‘many firm’s employees’ should be ‘many firms’ employees’)
3. Confusion of the plural with the possessive (e.g., ‘the firms employees’ should be ‘the firm’s employees’)
4. A run-on sentence (e.g., he went to breakfast then he went to class he went to lunch and then he went back to class.)
5. A fragment sentence (e.g. that helped him to achieve his goal)
6. An error in verb tense or lack of subject/verb agreement (e.g., students come back to class last week; the students is back to class now)

Papers with more than three fatal flaws marked by the instructor are unacceptable. The instructor will stop reading when there are more than three fatal flaws and will return the paper to the student without a grade. Papers returned because of Fatal Flaws must be corrected and resubmitted to the instructor by the date specified in order to receive a grade. Papers due the last week of class and during the final examination period. Grades on papers returned because of Fatal Flaws will be reduced by 10%. A re-submitted paper that fails the policy will receive a grade of 60%.

Assistance in meeting the writing standards

One way to avoid these errors is to seek the advice of the staff at the Academic Center for Excellence (ACE) or find a friend who has competent proofreading skills. You will also find The Elements of Style, Fourth Edition, by William Strunk, Jr. and E. B. White to be extremely helpful in writing your papers. You should own a copy. In addition, you should use the proper form of citation for references in papers designated by your instructor. RefWorks, a software package, can found in Bryant Library’s Electronic Resources if you have questions on the proper format.
APPENDIX D
EXAMPLES OF FINANCE AND MARKETING KNOWLEDGE QUESTIONS

Finance
1) A company expects sales to increase during the coming year, and it is using the Additional Funding Need equation to forecast the additional capital that it must raise. Which of the following conditions would cause the AFN to increase?
   a) The company learns that it has excess capacity.
   b) The company increases its dividend payout ratio.
   c) The company begins to pay employees monthly rather than weekly.
   d) The company’s profit margin increases.
   e) The company decides to stop taking discounts on purchased materials.

2) Which of the following would be most likely to occur in the year after Congress, in an effort to increase tax revenue, passed legislation that forced companies to depreciate equipment over longer lives? Assume that sales, other operating costs, and tax rates are not affected, and assume that the same depreciation method is used for tax and stockholder reporting purposes.
   a) Companies’ after-tax operating profits would decline.
   b) Companies’ physical stocks of fixed assets would increase.
   c) Companies’ cash flows would increase.
   d) Companies’ cash positions would decline.
   e) Companies’ reported net incomes would decline.

Marketing
1. The process of _________ consists of dividing a market into distinct groups of buyers on the basis of needs, characteristics, or behavior that might require separate products or marketing mixes.
   a) market targeting
   b) market segmentation
   c) product differentiation
   d) market positioning
   e) market profiling

2. _________ factors are the most popular bases for segmenting customer groups due to their ease of use and measurability.
   a) Life cycle
   b) Demographic
   c) Psychographic
   d) Behavioral
   e) Situational
APPENDIX E
REGULATORY FOCUS QUESTIONNAIRE (MODIFIED)

1. Compared to most people, how often are you able to get what you want out of life? (promotion)

2. Growing up, how frequently would you cross the line by doing things that your parents would not tolerate? (prevention, reverse scored)

3. How often have you accomplished things that motivated you to work even harder? (promotion)

4. How often did you get on your parents’ nerves when you were growing up? (prevention, reverse scored)

5. How often did you obey the rules and regulations that were established by your parents? (prevention)

6. Growing up, how often did you act in ways that your parents thought were objectionable?

7. How often do you do well at the different things you try? (promotion)

8. How often have you gotten into trouble because you were not careful enough? (prevention, reverse scored)

9. I find that I don’t perform as well as I would like to, when it comes to achieving things that are important to me. (promotion, reverse scored)

10. I feel like I have made progress toward being successful in my life. (promotion)

11. I have found very few hobbies or activities in my life that motivate me to put effort into them. (promotion, reverse scored)
Increasing Global Awareness with Team-based Learning

Patricia Wallace
The College of New Jersey

This paper describes utilizing team-based learning to present global concepts in an Information Systems course, MIT 310, in an AACSB Business School to help instructors design and revise courses and programs that increase students’ global awareness. Drawing on teamwork and globalization literature, this paper reviews key themes in teaching/learning as it relates to both business school curricula, and, more specifically, information systems and technology courses. The paper concludes by discussing the implications for fostering global literacy via team-based learning and provides a framework that instructors may utilize in their revision of teaching materials in both business and information systems courses.

INTRODUCTION

Background
This paper describes utilizing team-based learning to present global concepts in an Information Systems course in a School of Business that is accredited by the Association to Advance Collegiate Schools of Business International (AACSB). The course, Managing Information Technology (MIT) 310—Business Information Systems and Technology—requires students to become members of a team that researched the use of Information Systems in a business organization within an international country. Each team member researched a company within an assigned country. Team members synthesized their results and made a group presentation to the class as well as an individual report for the professor on their international company findings. Employer and student surveys were conducted to determine the importance of global IT education to various stakeholders.

Significance of the Study
Information Systems faculty need to utilize pedagogical tools that enhance teaching/learning in information systems courses. Due to the prevalent use of teamwork in business and industry, business school faculty are expected not only to deliver relevant content but to also prepare students to work effectively in teams. Therefore, this paper seeks to combine instruction in globalization concepts through team-based learning. This, this paper illustrates the success of combining globalization with team-based learning to enhance the teaching/learning process in Information Systems courses.

Course Description
Managing Information Technology (MIT) 310: Business Information Systems and Technology engages students in the study of information systems and development concepts, information technology,
and business application software. MIT 310 is one of several breadth courses in Information Systems that School of Business majors can elect to complete their program requirements.

MIT 310 is an upper-level business course that students generally elect during their junior year. MIT 310 fulfills various learning objectives for Business majors. First, MIT 310 requires students to work in teams and demonstrate team leadership. Second, MIT 310 requires students to demonstrate decision-making skills by applying quantitative and qualitative reasoning in analyzing a problem or opportunity. Third, MIT 310 requires students to analyze actual business processes and problems and design practical solutions that achieve individual, group, and organizational objectives. Fourth, and most important, MIT 310 requires students to demonstrate an understanding of the structure of an information system and its associated architecture, the methodologies for developing information systems, and the use of information systems to support organizational goals.

MIT 310 builds upon the knowledge gained in the Introduction to Information Systems course. In MIT 310, students further extend their study of information systems and technology, and its impact on organizations by investigating information systems at a macro organizational level. In particular, students are exposed to international information systems and global business environments through a team-based learning team that is the focus of this paper.

LITERATURE REVIEW

Drawing on both teamwork and globalization literature, the literature review is presented in four sections to illustrate the need to present globalization concepts in various formats in colleges and universities including liberal education, but more specifically, business school and information systems curricula. In particular, the literature review notes that teamwork enhances the learning experience and provides critical skills when compared to a traditional learning environment.

Education and Globalization

The Association of American Colleges and Universities (AAC&U), one of the leaders in the call for a renewed look at how universities truly help prepare students for life, cites a need for global learning, to ensure that students receive "an education of lasting value." AAC&U wants students to become "intentional learners who can adapt to new environments, integrate knowledge from different sources, and continue learning throughout their lives." AAC&U states that colleges and universities should prepare students to live and work in a diverse global community. (Greater Expectations, 2002)

Business Schools and Globalization

Critics of business education point out that new skills are required for managing diversity, globalization, downsizing and restructuring; skills that are lacking in today's graduates (Mason, 1992). Business schools have long been criticized for not addressing the needs of today's global competitive business environment. Globalization, entrepreneurship, environment, change management, ethics, and human resources are all listed as critical areas of study for business school students to insure a solid and diverse academic background. (Mason, 1992)

Business schools have also been criticized for omitting training in skills necessary to developing the ability to function as a generalist rather than a specialist in business (Chanko & Roberts, 1996).

Likewise, Morris cites the importance of an international curriculum that is challenging as well as rewarding is essential to developing globally competent students and future managers trained to thrive in the increasingly diverse global economy. The development of new and innovative courses ensures that students are receiving leading business knowledge to make them globally competitive. (Morris, 2003)

Research also cites the importance of utilizing hands-on, experiential approaches in business courses to help students with little or no organizational experience to develop a better understanding of the connections between themselves and business (Lamb, Lee, & Vinton, 1997). Thus, team-based learning as described in this paper follows this model of providing experiential learning while gaining knowledge of working with global companies and countries.
Likewise, other business schools are educating students on international technology. In fact, Carmel and Mann (2003) describe an “IT Landscape Repository” that MBA students utilize to conduct research on Information Technology in various nations. In addition, at Old Dominion University in Norfolk, Virginia, the business school has made internationalization a major focus of its mission by offering a course titled, “Information Systems for Global Business.” (Carmel, 2003)

**Information Systems and Globalization**

Information Systems (IS) is not exempt from this movement. According to Yellin, there are few university courses which deal solely or even largely with the issues of global IS. There is also a lack of shared knowledge about suitable content and pedagogy for instruction in this area. His research addresses this deficiency by describing a model course in global IS aimed at MBAs majoring in Information Systems. Furthermore, his research cites that both practitioners and government officials clearly believe that “international business is the wave of the future and that global IS is what makes this wave possible.” (Yellin, 1998)

Klein states that the challenges inherent in developing, implementing, and supporting information systems in organizations with global operations have led to an increased focus on the incorporation of global issues in information systems curricula. Klein utilizes a spreadsheet team to integrate global issues in the introductory MIS course. After completing the assignment, students used a cooperative learning technique to examine global issues in information systems. Klein’s research supports the need to cover global issues in business school curricula and, more specifically, to the importance of incorporating global issues in information systems curricula. (Klein, 1999)

Finally, the MSIS 2006 Curriculum Preview Committee concurs with the need to strengthen the emphasis on globalization in information systems curricula in its preview report. In addition, they recommend the development of courses that teach students how to apply information systems and technology to facilitate innovative, competitive, and global business solutions. (Gorgone, 2005)

**Teamwork and Learning**

The literature on teamwork is extensive and notes that the increase in teams in corporations has been dramatic over the last two decades (Applebaum & Blatt, 1994). Likewise, the use of teamwork in business schools has expanded to provide the skills that businesses seek from their new hires. Teamwork develops skills such as communication, collaboration, problem solving, and time management (Tarricone & Luca, 2002).

Numerous learning benefits accrue from group projects. Specifically, researchers note that greater learning through retention of information, improved student motivation, and development of critical reasoning skills occurs in teams as compared to traditional learning environments (Ashraf, 2004).

While the literature notes that faculty have incorporated teamwork and group projects into their curricula, it also suggests that business and professional schools need to train students on teamwork skills to maximize the learning experience (Deeter-Schmelz, Kennedy, and Ramsey (2002). In particular, Hansen reveals that when introducing student team projects, faculty need to emphasize the importance and relevance of learning teamwork and leaderships skills (2005). In addition, he notes that assigning reasonable workloads and clear goals, requiring assigned roles, requesting multiple feedback points, and using peer evaluations are critical for successful teamwork learning to occur (Hansen, 2005).

**Research Methodology**

Two sections of the course, Business Information Systems and Technology were chosen to participate in this research study. Both classes were taught by the same professor during the 15-week Spring semester of the 2005 academic year. All 56 students in both sections of the course were randomly assigned to a team comprised of four or five students. Students were introduced to a unit on globalization and information systems by the professor and were asked to participate in a team-based globalization project as part of the course requirements. To determine the effectiveness of teaching global concepts in a
team-based approach, a student evaluation instrument was developed and completed by all students at the end of the semester to rank learning outcomes.

In addition, a random telephone survey was conducted of potential employers as identified by the Office of Career Services. Employers with ten or more employees who had hired one or more graduates of the School of Business were randomly selected to participate in the survey. A total of 30 calls were made to employers to determine their interest in students acquiring knowledge of international information systems by utilizing team-based projects.

Team Description

All enrolled students in Managing Information Technology 310 during the 2005 academic year were randomly assigned to a team comprised of approximately four or five students during a typical 15-week semester at the college. Teams are introduced to the team by the professor and shown completed teams by students from previous semesters to gain an understanding of the depth and detail of the team as well as the team’s time constraints. The team’s first assignment is to identify a country that they would like to investigate in the area of Information Systems. Teams are advised to do some preliminary research to insure that all team members are in agreement before submitting their international country choice for the team. In the event that another group within the class selects the same country, groups are requested to reconsider their selections to insure that each group researches a unique international country. Typical international countries that have been selected for this team include Germany, Australia, Italy, France, England, Japan, Canada, Ireland, and Brazil.

Each team member of an international country (Team France, Team Germany, etc.) is required to select and investigate an individual company—using library and internet resources—within the country to synthesize their findings with other members of their team. Teams can opt to tailor their research to one industry, such as automotive, or to select a different industry for each team member. While the majority of students enrolled in MIT 310 have had prior experience working in teams, students reactions to the international assignment were generally positive although many admitted to having some initial reservations based on the uniqueness of the team.

Team Deliverables

Each international country team is required to organize a group presentation to the class on their international country findings. The team is required to prepare a PowerPoint presentation that includes web-based company research to illustrate their findings to the class. The group oral presentation requires all team members to participate in the group presentation. Typical format for group presentations include an introduction to the international country, individual company presentations, and a summary of the information systems in the international company that was researched.

While all team members are required to present their individual company findings, international teams are encouraged to select various individuals within their group to present the introduction and summary sections of the presentation to the class. Team members are instructed to select those students who are most effective in oral reporting to lead and summarize the international team’s presentation. Group presentation vary in time but typically last anywhere from 30 minutes to 60 minutes in length. Finally, the team’s PowerPoint presentation is required to be submitted to the professor on a disk for review and grading purposes.

In addition, each team member submits an individual paper to the professor on their company findings. The individual report requires students to present their own research in a structured research paper format that is assigned by the professor. A summary section in the individual report requires that students synthesize their research findings with other team members. Such a synthesis includes a summary of the country’s information systems detailing the strength/weaknesses and similarities/differences with other team members’ companies in the selected international country. This required individual report insures that the student has completed their individual contribution to the team and allows the professor to assign an individual grade to the student contribution to the team effort.
Thus, two distinct team deliverables are required: a group presentation of the information systems in the assigned international country and an individual research paper of the specific company researched within the international country. In addition, all group members complete peer reviews of their team members which provide important feedback to the professor when determining team contribution grades.

**FINDINGS**

**Employer Survey**

To ascertain if employers felt that graduating business students should study international information systems, a random telephone survey was conducted of potential employers. Employers with ten or more employees who had hired one or more graduates of the School of Business were randomly selected to participate in the survey. A total of 30 calls were made to employers to determine their interest in students acquiring knowledge of international information systems. Seventy percent (70%) of the employers felt that knowledge of international information systems was essential. In addition, all the employers (100%) remarked that any study of international business and global concepts would provide students with an edge in today’s global marketplace. In particular, employers commented that they liked the use of teams to learn globalization concepts. Thus, the employer survey concluded that both Information Systems students as well as Business School majors benefit from learning global concepts in a team-based environment in an Information Systems course.

**Student Survey**

Upon completion of their International Teams, students were asked to rank the learning outcomes they attributed to the assignment. Using a rating scale of Most Important, Important, and Least Important, MIT 310 students were asked to rank the learning outcomes they acquired from their participation in the international team teams. The learning outcomes included in the survey were Changing Requirements, Cultural Awareness, International Information Systems, and Team Dynamics. MIT 310 students ranked Cultural Awareness and International Information Systems knowledge as “Most Important,” Team Dynamics as “Important,” and Changing Requirements as “Least Important.” Further discussion with students regarding their ratings revealed that, in general, students are required to work in teams in various business courses and thus, team dynamics is viewed as “Important” rather than “Most Important” because of their increased team work experiences. In addition, the designation as “Least Important” to Changing Requirements appears to match their perspective on change, i.e., it is a fact of life and does not really faze them as much as older adults who are typically more resistant to change. Figure 1 below presents the student learning outcomes. The following section describes the learning outcomes attributed to the international teams in more detail.
Learning Outcomes

Cultural Awareness

International Information Systems teams enable students to experience the culture, language, economic, and political realities of an international country without the expense of traveling abroad. Groups become immersed in the culture of a country and present their findings to other class members. Students learn about the people, their occupations, lifestyle, and the corporate culture of the various international companies that they investigate. Culturally diverse workforces have the potential to solve problems better because of the different perspectives that are brought to bear on an issue (Carr-Ruffino, 2003).

International Information Systems

In addition to the cultural awareness, students learn that information systems in foreign countries contain both similarities and differences to comparable United States companies. Student reports include descriptions of the international companies’ hardware, software, network, communications, and intranet and internet architecture. Descriptions of the corporate mission, policy, procedures and organization are typically included in the team teams. In addition, student reports provide a detailed look at a company’s products and services as well as their financial condition. Employment requirements in information systems, position descriptions, and end-user support services are typically detailed and compared with American organizations.

Team Dynamics

Team work is an integral part of today’s organizations. Employees are required to work in team teams and learn the essentials of team dynamics which include interpersonal, communications, and problem-solving skills. Thus, students working in team teams gain experience in team dynamics which are a
requisite business skill. At various times, team members are faced with uncooperative or autocratic individuals that must be dealt with. Dealing with difficult situations in team teams is an experiential learning situation. Members of the group learn how to deal with unusual situations and/or difficult individuals as part of the learning experience. Occasionally, difficult or uncooperative individuals require team members to make decisions regarding individual group members.

Dealing with unusual situations requires both problem-solving and interpersonal skills of team members. Teams are encouraged to seek the advice of the professor should intolerable situations present themselves. Teams are given the power to “fire” an individual should their performance warrant that action. However, teams are advised to provide adequate notification to an individual in the event that the team deems an individual’s performance to be lacking.

**Changing Requirements**

Another valuable aspect acquired by students working in teams is the experience of dealing with changing or fuzzy requirements. Changing requirements can refer to any changes that occur in the team due to group dynamics, limited resources, or instructor directives. Fuzzy requirements include unclear or changing conditions that often exist in the workplace. Learning to deal with changing conditions and/or unusual circumstances is another desired experiential learning skill that students acquire when working with team teams. For example, students encountered difficulty in websites that were in foreign languages and had to use translators and other resources to decipher the information. Harris and Moran (2000) report that leading business schools are now rushing to include international and intercultural education in their curriculums because learning to manage people from different cultures is attractive to both business students and recruiters.

**CONCLUSIONS**

Globalization literature illustrates the importance of educating the next generation of graduates to perform successfully in global markets and societies. Furthermore, the literature on globalization emphasizes the need to increase multicultural awareness and global-mindedness in business schools and information systems curricula. Overall, the literature review concurs that preparing business students and IS students for an era in which information systems are largely oblivious to national boundaries is critical to future employment success. Finally, coverage of global issues is also mandated by AACSB standards for the accreditation of Schools of Business.

Due to curriculum requirements that limit course offerings, a separate course in International Information Systems is not always feasible in many graduate and undergraduate business schools. However, knowledge of international information systems can be incorporated in Information Systems courses via team-based learning.

Utilizing team teams and student research to learn international information systems is a valuable educational tool. Teamwork provides students with essential experiences that will benefit them in their future employment. Learning interpersonal, problem-solving, and communication skills—both written and oral—are vital ingredients for successful employees.

Learning how to deal with change while working in a global marketplace are essential elements students can offer to future employers. Employers stated unanimously that any instruction in international business and global concepts provides students with an edge in today’s global economy. Likewise, students ranked the learning outcomes of cultural awareness and international information systems as “Most Important” while also ranking team dynamics as an “Important” learning outcome acquired from the international teams. The end of the semester assessment provided additional anecdotal information that provided insight into the success of students taking Business Information Systems and Technology.

Information systems students gain confidence in the knowledge acquired from the international teams. The similarities and differences and strengths/weaknesses analyses of the team’s international companies provide a rich reservoir of information for all class members. Providing such experiential learning teams in an information systems course enables students to compete in a global workplace.
REFERENCES


