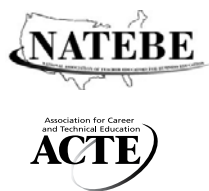


BUSINESS EDUCATION DIGEST

ISSUE XVII
MAY 2008



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The Gridiron, the Battlefield, and the Classroom: An Experiential Exercise to Teach Persuasive Communication
Teaching Financial Concepts to Undergraduates using a Simulation Game and Spreadsheet Tool
Service Learning Benefits and Opportunities for Business Programs

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Manuscripts submitted for consideration by *Business Education Digest* should focus on instructional philosophy, theory, or practice of business education. Comprehensive reviews of literature and reports of research and methodology are also published. All articles should relate to current issues, cite appropriate literature, and have direct implications for business educators. Manuscripts should not have been published or be under current consideration for publication by other journals.

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Notes from the Editor –

Over the past year, we have again seen turmoil on college campuses. We have witnessed gasoline prices hit an all-time high, and the housing boom turn into a housing bust with rampant foreclosures and significant financial woes among lending institutions and everyday American citizens. And yet, we persevere and move forward—one foot in the front of the other. Life goes on.

We now find ourselves caught in the throes of an electoral system that has us witnessing the first-time nomination of either an African American or a female as the Democratic Party's candidate for the 2008 Presidential race. What an exciting time in American history!

So, amidst the sorrow comes joy and from heartache comes hope

As I conclude my tenure as Editor for Business Education Digest, I want to thank you, the readers and authors, for your confidence in me and for your support of the Digest for the past four years. I would also like to convey my deepest gratitude to Dr. Bob Lahm for giving his time and energy to create and manage the website for Business Education Digest (<http://businesseducationdigest.com>). Thanks also go to all of the Editorial Review Board members for their support and to all authors who submitted manuscripts during my tenure.

I leave the Digest in capable hands as Dr. Cyril Kesten is assuming leadership as the new editor. I look forward to reading the Digest in the years to come and to seeing it grow under Cyril's direction. Thank you again for your continuing support of Business Education Digest.

The articles you will find in the May 2008 (Volume XVII) issue focus on a variety of topics in areas such as service learning, persuasive communication, student learning environments and the impact of physical facilities, and tools to teach financial concepts. These articles offer business educators information that might prove useful in making curricular modifications or in restructuring course content.

I hope you enjoy this issue of Business Education Digest. I continue to be appreciative of the support and assistance Jan Bray, Susan Emeagwali, Karen Mikosz, and their staff at the Association for Career and Technical Education (ACTE) are providing.

Enjoy the Digest!



Virginia

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The Perceived Impact of Physical Facilities on the Student Learning Environment

Peggy Brewer and Lana Carnes

ABSTRACT

A study was conducted at a mid-sized regional university to determine business students' perceptions of the impact of a move to a new, modern facility. This research was a follow-up study to one conducted a semester earlier involving business faculty at the same university. As student satisfaction seems to have an impact on recruitment and retention efforts of a university, determining a link between student satisfaction and the physical learning environment could provide useful information in the strategic planning process at universities. Results of a questionnaire indicated that students did indeed have positive perceptions concerning the impact of the new, technologically modern facility on student satisfaction and the overall learning process. Similar results were reported by faculty in the previous survey. Results of this study, if replicated, could serve as leverage when approaching planners and stakeholders of higher education. The funding required to build and update buildings and to acquire and upgrade equipment and technology might be easier to justify and obtain when direct, positive results can be documented.

Introduction

Attracting and retaining quality students is a constant ambition for colleges and universities. In an effort to attract and retain sufficient quality and quantity of students, schools give attention to the design of programs and curricula, to the provisions of financial assistance, for human resource management activities, scheduling, extracurricular activities, and to a wide array of other education-related decisions. Student's overall satisfaction with educational experiences is viewed as a key component in maintaining a long-term competitive advantage for an institution of higher education.

A study was conducted at one regional university in Kentucky to determine the potential impact that a brand new, modern facility may have on students' perceived satisfaction with their educational experiences. This research was a follow-up study to one conducted in the Fall 2006 semester involving faculty at the same institution (Brewer, Carnes, & Garner, 2007).

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Purpose

The purposes of this article are to examine research compiled on the topic of student satisfaction and performance in a university environment and to assess the perceived impact of the physical learning environment on student satisfaction and performance. The hypothesis is that a new, modern facility equipped with up-to-date technology will have a positive impact on students' perceptions of the overall quality of their educational experiences.

Review of Literature

Student attraction, motivation, and retention have been linked to overall student satisfaction, and student satisfaction is linked to a university's ability to identify and meet students' needs and expectations (Elliott & Shin, 2002; Chambel & Curral, 2005). One study identified several factors as having a key impact on student satisfaction: quality of education, student facilities, reputation of the institutions, marketability of their degrees, and overall perceived customer value provided by universities (Arambewela, Hall, & Zuhair, 2005). The same study indicated that student satisfaction is a key strategic factor in developing a global competitive advantage contributing to the long-term success of a university.

A study by Elliott and Shin (2002) noted a positive relationship between student satisfaction and an institution's ability to attract, motivate, and retain students. Fund-raising success (which has become increasingly important in an environment of unpredictable government funding) has also been linked to levels of student satisfaction. The increased emphasis on the importance of student satisfaction also comes as a result of the realities of declining student enrollments and increased demands for accountability from stakeholders.

Measuring student satisfaction presents the challenges of designing or purchasing valid and reliable instruments (Student Satisfaction Inventory (SSI) and Noel-Levitz Student Satisfaction Inventory, for example) and administering, analyzing, interpreting, and utilizing data correctly. Assessing overall student satisfaction involves more than a student's assessment of the "academic" experiences but also satisfaction with administrative processes, the social environment, the physical environment and other aspects of the university environment as well. Decisions must be made regarding which students to involve in the assessment and when the assessment(s) should occur. Senior exit interviews are often a university's answer as to "who" and "when," primarily due to convenience. Unfortunately, too often the assessment data are gathered and "sit on the shelf" rather than being used to effect change (Juillert & Schreiner, 1999).

At times, educators may approach the marketing issue as a necessary evil that has nothing to do with the higher purposes of education (Mai, 2005). The call to become more "consumer-oriented" as a remedy for stu-

dent turnover and failure rates may be resisted by academicians. Pertuzzellis, D'Uggento, and Romanazzi (2006), in a study involving Italian universities, recommended that universities adopt a customer/student-centric approach to improve performance. The reality is that education is a service industry made up of institutions competing for students and funds from the external environment, and student satisfaction can impact the competitive success in both areas. An extensive four-year examination of college/university student satisfaction levels resulted in the following recommendations: universities must focus on the needs of their students; they must continually work to improve the quality of the education experience; and, finally, they must use student satisfaction data to shape overall strategic direction (Low, 2000). Of course, student "needs" may not be universal. One study, for example, found that needs of "local" students may be more challenging to meet than needs of international students (Mavondo, Tsarenko, and Gabbott, 2004).

While cost, financial aid availability, academic reputation, and location are often among the top reasons listed as to why students choose a university (Noel-Levitz, 2007), some research indicates that the physical environment also plays an important role in attracting and retaining students and students' overall satisfaction levels with their educational experiences. For example, in a 2007 report compiled by Noel-Levitz, "campus appearance" was listed as an important or very important enrollment factor by 58.3 percent of responding students in four-year public institutions (Noel-Levitz, 2007). This study involved over 87,000 students at private and public institutions of higher education.

In a study involving the information technology learning environment, the physical workspace environment was found to have an impact on student learning (Zandvliet & Straker, 2001). While a rather weak association between student satisfaction and physical learning environment (spatial, visual, computer, workspace, and air quality environments) was reported, a strong association between physical factors and psychosocial factors (student cohesion, autonomy, and involvement, task orientation, and cooperation) was found, suggesting that the provision of an inadequate physical learning environment could negatively affect the achievement of learning goals.

One of the more thorough studies of the impact of the physical setting on student academic performance was conducted by Peter Jamieson and reported in the *International Journal of Academic Development* (2003). Jamieson studied the impact of the physical learning environment on the teaching/learning process and concluded that the traditional formal classrooms, while facilitating one-way instructional delivery, can impede the implementation of more flexible, versatile, individual and team learning experiences. In other words, many university buildings facilitate teacher-centered delivery but may inhibit more creative student-centered delivery. Traditional, formal classrooms should be re-

placed or augmented with more informal, flexible learning centers. Designing, refurbishing, and equipping educational settings, according to Jamieson, should be a “priority” for academicians. Four criteria are suggested for creating student-centered learning spaces: comfort level, aesthetic impact, electronic gadgetry (e.g. equipment, technology), and functional lay-out of space.

Accepting the assumption that levels of satisfaction have a direct impact on student learning and performance (see Jamieson, 2003; Chambel & Curral, 2005) and that student satisfaction can be influenced by the physical learning space (see Juillerat & Schreiner, 1999; Brewer, Carnes, & Garner, 2007), the authors of this article conducted a study to ascertain the perceived impact of a new learning facility on student learning and satisfaction at a mid-sized regional university.

Methodology

At the beginning of the Spring 2007 semester, faculty in the Department of Management, Marketing, and Administrative Systems at a regional university of 15,000+ students were asked to administer a 26-question survey to students to assess their perceptions of the impact that a recent move to a new, modern facility would have on the quality of and satisfaction with their education experiences (See Appendix A). A total of 14 business classes were surveyed, representing 234 graduate and undergraduate students. As in-class time was taken to have students complete and return the questionnaires, near 100 percent return rate was achieved. Care was taken to assure that students who had already completed a questionnaire in another class did not submit a duplicate set of responses by asking students if they had previously completed the questionnaire in another class; and if they responded positively to the question, they were not given another questionnaire. In addition to responding to the questions, students were asked to provide information concerning 1) major; 2) class rank; and 3) number of years attending the university. Demographics of the student sample are presented in Appendix B.

Most of the students in the survey had experienced the “before” and “after” move to the new facility, as the move occurred during the summer of 2006. The old building was located in the center of campus in a 1960s era structure that also housed the College of Education and other administrative offices. The authors intentionally timed the study to capture this before and after perspective. Faculty of the same department were surveyed during the Fall 2006 semester to assess their perceptions of the impact of the new facility on satisfaction and productivity. Results of that study were published earlier and will be used for comparison purposes in this study (Brewer, Carnes, Garner, 2007).

The student questionnaire was intentionally designed to nearly duplicate the faculty survey instrument used in the study referenced above. Several

research faculty members were consulted in designing the original faculty survey. Once the wording was adjusted using faculty comments and suggestions, the survey was administered to faculty members in the business program. Since only a few statements and words were altered in the student questionnaire to reflect “student” rather than “faculty” attitudes and perspectives, the authors were comfortable with the validity and reliability of the survey instrument.

SPSS was used to test for statistical differences between responses of students according to class rank (freshman, sophomore, junior, senior, and graduate), major (accounting, computer information systems, finance, insurance, management, marketing, corporate communications, general business, “other”, and MBA), and number of years at the university. Specifically, the Kruskal-Wallis Test and Mann-Whitney Test, using a .05 significance level, were used to test for statistical differences between responses. No freshman respondents were part of this study as business majors typically do not take “pre-core” courses (with the exception of micro- and macro-economics) until completing 45 hours. Additional comparisons were made between responses of faculty in a Fall 2006 survey to student responses in Spring 2007.

Limitations

This study involved students at only one university and represents perceptions of business students only. Replicating results from this study in other university settings and involving students with majors other than business would give broader insights as to the impact of the physical work environment on the educational process. Also, the long term impact of the new building, furnishings, and technology is unknown. This study captured the initial impact on students’ perceptions. After occupying the facilities for a while, students may begin to see some flaws in their perceptions or even become dissatisfied if expectations are unmet or change.

Another limitation of this study is the possibility of the halo effect on students’ perceptions. The perceived positive impact of the new facilities might have been skewed due to the fascination with and satisfaction of moving into a beautiful building where everything is new.

Results

Reporting of Means

Mean responses to the 26-question student survey are reported in Table 1 below. Numbers one through five were assigned to descriptors indicating students’ agreement with the statements on the questionnaire, with “1” being strongly disagree and “5” strongly agree. A “3” response indicated “no change” or “no opinion”; therefore, a decision was made to interpret any mean above 3.0 as an indication that there was some agreement with the statement in the questionnaire. For example, question two stated that “It ap-

pears that student needs were a primary consideration in planning for the new facility.” The mean score for this question was 3.68, and it was interpreted to mean that, overall, there was some agreement among students that indeed student needs were taken into consideration in planning the new facility.

Discussion of Mean Scores

Overall, the scores appear to indicate that students view the new facilities favorably and as having a positive impact on student learning and satisfaction. For example, students agreed with statements concerning the positive impact of the new facilities on satisfaction with their major areas (question 1) and the university’s commitment to student needs (question 3).

Students also reported that they felt student needs were taken into consideration in planning and building the new facility (question 2). They perceive their classes as being more enjoyable (question 4), studying and student teamwork facilitated (questions 5 and 11), and overall student morale improved (question 6) as a result of the new facilities. Motivation to learn (question 15) and participate in extracurricular and student professional activities (question 23) are also reported as being positively impacted by the new surroundings.

Table 1
Descriptive Statistics

| | N | Minimum | Maximum | Mean | St. Dev |
|-----|-----|---------|---------|------|---------|
| Q1 | 234 | 1 | 5 | 4.03 | .867 |
| Q2 | 234 | 1 | 5 | 3.68 | .923 |
| Q3 | 233 | 1 | 5 | 3.93 | .801 |
| Q4 | 234 | 1 | 5 | 4.06 | .781 |
| Q5 | 233 | 1 | 5 | 3.48 | .952 |
| Q6 | 233 | 1 | 5 | 3.50 | .783 |
| Q7 | 234 | 1 | 5 | 2.94 | .819 |
| Q8 | 233 | 1 | 5 | 3.41 | .852 |
| Q9 | 234 | 1 | 5 | 3.90 | .939 |
| Q10 | 234 | 1 | 5 | 3.58 | .665 |
| Q11 | 234 | 1 | 5 | 3.65 | .831 |
| Q12 | 233 | 1 | 5 | 3.42 | .916 |
| Q13 | 233 | 1 | 5 | 2.33 | .941 |
| Q14 | 234 | 1 | 5 | 3.60 | .764 |
| Q15 | 233 | 1 | 5 | 3.47 | .754 |
| Q16 | 233 | 1 | 5 | 4.03 | .681 |
| Q17 | 234 | 2 | 5 | 4.14 | .676 |

| | | | | | |
|-----|-----|---------|---------|------|---------|
| Q18 | 234 | 2 | 5 | 3.89 | .659 |
| Q19 | 234 | 1 | 5 | 3.67 | .717 |
| Q20 | 232 | 1 | 5 | 3.66 | .744 |
| Q21 | 233 | 1 | 5 | 3.43 | .757 |
| Q22 | 234 | 2 | 5 | 3.82 | .663 |
| Q23 | 234 | 1 | 5 | 3.09 | .748 |
| | N | Maximum | Minimum | Mean | St. Dev |
| Q24 | 230 | 1 | 5 | 3.46 | .709 |
| Q25 | 234 | 1 | 5 | 3.44 | .796 |
| Q26 | 234 | 1 | 5 | 3.53 | .824 |

Students rated their “feelings of belonging” (question 8) and seeing themselves as “professionals” (question 20) as also being improved. Students reported that they believed the overall quality of instruction has improved (question 14), as well as the overall quality of student advising (question 21). Students also reported that more of their teachers use technology in the classroom (question 17), and that the new technology has enhanced student learning (question 16). Students have observed a more positive attitude among faculty (question 19), greater collegiality between students and faculty (question 10), and that faculty/student interactions and communications (question 18) have improved. Also, the new surroundings have had a positive impact on students’ ability to receive important communiqués (question 25).

Students report that they believe the new facility will have a positive impact on their determination to complete their majors or minor (question 25) and will also cause them to be less likely to consider transferring to another university (question 26). Although students reported that the new facility was **not** a consideration in their choice of majors (question 13), they do report having told others about the new facility as an incentive to come to the university and major in business (question 12) and that they do believe the new facility will have a positive impact on the perception of the university as a college of choice for perspective students (question 22).

Question 7, “I am motivated to spend more time on campus as a result of the new surroundings,” received a mean rating of only 2.94, indicating that students probably do not plan to spend more time on campus even though they generally *like* the new surroundings. Typically, many business majors have jobs and/or co-operative/internship activities that could account for students’ unwillingness or inability to spend more time on campus. There are probably many other reasons why students believe that they cannot or will not spend more time on campus than they did before the move to the new facility.

Students agreed that the move to the new facility would hinder their involvement with other areas of the campus (question 9). The new facility is separated from the center of campus and is located in what is now considered a rather remote location. The university Student Services Building and Library, for example, are further away than many students wish to travel. Accessibility is made easier by recently added bus transports; but the culture has not yet embraced this mode of getting across what is still considered a reasonably small campus.

Comparison of Student Responses

The Kruskal-Wallis Test was used to test for statistical differences between student responses according to student class rank, student major, and number of years the student has been attending the university. Using class rank as the test variable, student responses to three of the twenty-six questions were significantly different. Question 9 on the survey indicated that students in different classes did vary in their perceptions as to whether the move to the new facility would impact their involvement with other areas of campus. Sophomores and graduate students perceived this move as being less of an issue than did juniors and seniors. This response could possibly be explained by the fact that the juniors and seniors were more familiar with the center of campus “before” location and would most recognize and experience the remoteness of the “new” location. Additionally, MBA students would possibly perceive less need for such interaction because all their classes and the MBA offices are housed in the one location.

Question 17 on the survey asked students to indicate whether the new facilities (with state-of-the-art technology) had resulted in the increased usage of technology in the classroom. Interestingly, sophomore respondents reported a lower mean ranking than any other class, indicating that more technology was not being used in their classes. Their ratings for this question were significantly lower than any other class ratings. Finally, the last question on the survey asked whether the new facility would be a factor in considering transferring to another school. Specifically, would the new facility cause a student to be less likely to consider transferring to another university? Responses varied significantly on this question, with graduate students reporting that the facility would be less likely to affect a transfer decision.

When comparing student responses according to majors, only one significant difference was found. Question 17, “more of my teachers use technology in the classroom in the new facility,” was rated differently by students with different majors. For example, Corporate Communications majors had a higher mean rank for this question than any other major and “other” majors had the lowest mean rank. “Other” majors would include business minors and students with majors that have a specific agreement with the business program to allow students to take a 300-level business course--aviation majors,

for example. No other significant differences were found when comparing student responses by major.

More significant differences between student responses were found when using the “number of years at the university” variable than any other. Students were categorized according to the number of years they had been attending the university—one to two years; over two to three years; over three to four years; and over four years. Using the significance level of .05, student responses were significantly different for five of the 26 questions. For question 7, “I am motivated to spend more time on campus as a result of the new surroundings,” students with one to two years at the university reported the highest mean rank and students with over three to four years reported the lowest. Students who have been in attendance for the shortest amount of time plan to spend more time on campus than those students who have been attending longer.

Student responses also were significantly different on the question stating “my involvement with other areas of the campus has decreased because of the move away from the center of campus.” Students with over three to four years and over four years tenure at the university agreed with this question more than those students with one to two and over two to three years. Students having attended the university for longer periods are more likely to recall the “convenience” of the center-of-campus location to student services, library, and other administrative offices.

Students with the least number of years in attendance at the university (one to two) were more likely to report that “the new facility was a consideration in choosing my major” than any other group of students. This choice may be an indication that the new facility is more likely to be a factor among “newer” students when choosing a major than students who have been at the university longer than two years. Students attending longer than two years would likely have accumulated 60 or more credit hours and would have already made the major decision.

In response to the question “the new classroom technology enhances student learning,” students who have been attending the university one to two and over two to three years reported higher means than the other two groups of students (over three to four and over four years). The fact that significant differences exist in responses to this question by students with differing number of years at the university indicates that students who have attended the university the longest period of time perceive that the new classroom technology will not enhance their learning experiences as much as students who have been in attendance for shorter periods of time. This difference in perceptions of the value of technology in student learning may be due to a number of factors including students’ previous experiences with technology.

From responses to the question “the new surroundings provide a conducive environment for receiving important student communications,” it

appears that, once again, student longevity has an impact on how students perceive the new facilities. As with the question discussed previously, students with more years' experience in the university gave lower ratings than students with one to two or over two to three years. Students who have been at the university for a longer period of time indicate less agreement with the statement that student communications will be enhanced. Several factors could explain this lower level of expectation on the part of "seasoned" students, including prior experiences and overall level of expectations. Since the administration of the questionnaire, digital screens have been installed in strategic locations in the building, providing a continuous loop of information about meetings, upcoming events, and other pertinent announcements concerning university and college activities.

Comparison of Student and Faculty Responses

As stated earlier, questions included on the student survey administered in the Spring 2007 semester were designed to capture student perceptions of those areas addressed in a faculty survey administered in the Fall 2006 semester (see Appendix C), with the questions changed to reflect student vs. faculty perspectives. For example, in the faculty survey, faculty members were asked to indicate their agreement with the statement "the move to the BTC (Business and Technology Center) will have a positive impact on my overall job satisfaction." The student survey worded the question: "The move to the new BTC has had a positive impact on my overall satisfaction with my major area." Similarly, the last question on the faculty survey, "My satisfaction with the new facility will make me less likely to seek alternative employment opportunities," was changed to read "My satisfaction with the new facility makes me less likely to consider transferring to another university" on the student survey.

The questionnaire wording did vary somewhat as some questions on the faculty survey had no direct correlation to an area with which students would identify. For example, one question on the faculty questionnaire addressed the likelihood of delayed retirement due to the new facility; and other questions addressed faculty productivity in teaching, service, and research. Seventeen of the questions on the student survey had a direct correlation with a question asked on the faculty questionnaire. Mean scores of faculty and student responses for comparable questions are presented below in Table 2.

Table 2
Mean Ratings of Students and Faculty Responses for Comparable Question

| Question Number* | Student Mean | Faculty Mean |
|---|--------------|--------------|
| Q1: overall satisfaction with major/job | 4.03 | 3.78 |
| Q2: physical facility planning process | 3.68 | 3.36 |
| Q3: university commitment | 3.93 | 3.44 |
| Q4: enjoyment of classes/job | 4.06 | 4.04 |
| Question Number* | Student Mean | Faculty Mean |
| Q5: studying/ job easier | 3.48 | 3.67 |
| Q6: morale higher | 3.50 | 3.67 |
| Q7: more time on campus | 2.94 | 3.26 |
| Q8: increased identity with business program | 3.41 | 3.77 |
| Q9: involvement with other campus areas | 3.90 | 4.04 |
| Q10: collegiality among students/ faculty | 3.58 | 3.52 |
| Q14: quality of instruction | 3.60 | 3.78 |
| Q15: quality of learning | 3.47 | 3.67 |
| Q17: technology use improved | 4.14 | 4.00 |
| Q18: interaction/ collaboration among students/ faculty | 3.89 | 3.48 |
| Q19: overall attitudes | 3.67 | 3.54 |
| Q21: quality of advising process | 3.43 | 3.11 |
| Q26: student/ faculty retention | 3.53 | 3.00 |

Table 3
Test Statistics for Comparison of Faculty and Student Responses to Questionnaires

| | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
|-----------------------|--------|-------|-------|--------|-------|-------|--------|--------|
| Z | -1.331 | -.195 | -.908 | -1.866 | -.427 | -.699 | -1.827 | -1.824 |
| Asymp. Sig (2-tailed) | .183 | .845 | .364 | .062 | .670 | .485 | .068 | .068 |
| | Q9 | Q10 | Q14 | Q15 | Q17 | Q18 | Q19 | Q21 |

| | | | | | | | | |
|------------------------|--------|-------|------|-------|--------|-------|-------|-------|
| Z | -1.912 | -.052 | -.09 | -4.23 | -1.479 | -.678 | -.577 | -.205 |
| Asymp. Sig. (2-tailed) | .056 | .958 | .363 | .672 | .139 | .498 | .577 | .837 |

| | |
|-----------------------|------------|
| | Q26 |
| Z | -.325 |
| Asymp.Sig. (2-tailed) | .745 |

One other difference in the student and faculty surveys was the fact that the faculty survey was designed to capture perceptions of the *future* impact of the new facility as the move had just occurred, while the student survey was designed to capture student perceptions of the *actual* impact of the new facilities as per their experiences of at least one semester.

Conclusions and Recommendations

From responses on both the student and faculty surveys, a definite conclusion can be made that the move to a new, technologically-modern facility is perceived to have an overall positive impact. Similar to the results of an earlier study involving business faculty at the same university, a new, modern, technologically up-dated learning facility was perceived as making a difference in attitudes and motivation levels. Students reported that satisfaction with their choice of majors in business, uses and benefits of technology in the classroom, and overall enjoyment have increased, for example. Faculty responses were very similar in the areas of satisfaction, enjoyment, and technological benefits.

Important conclusions, drawn from the results of the study reported here and the results of a previous study involving faculty concerning the perceived impact of a state-of-the-art facility and technology on teaching and learning include:

1. A positive impact on student and faculty overall satisfaction levels
2. A positive impact on student and faculty perceptions of the institution
3. A positive impact on enjoyment
4. A positive impact on productivity
5. A positive impact on professionalism
6. A positive impact on motivation
7. A positive impact on quality of teaching and learning
8. A positive impact on advising
9. A positive impact on collegiality/collaboration
10. A positive impact on student and faculty retention

If universities do conclude that student satisfaction is an important factor in the recruitment, retention, and overall learning process of students, attention needs to be given to the quality of the learning environment—to include the buildings, equipment, and technology. Educators and administrators should be aware of the potential effects of old, out-dated facilities on their success in attaining their goals. Institutions of higher education have a responsibility to impress upon supporters and stakeholders the importance of providing and maintaining a positive, productive learning environment and the potential costs of ignoring this mandate.

Results of studies such as the one reported here could be useful in making a case for expenditures for updates in technology and other upgrade expenditures. As stakeholders in higher education often find themselves competing for scarce dollars, the better the evidence of the expected return on investment of those dollars, the more likely a friendly ear can be captured. With both students and faculty members agreeing on the positive impact of a new, modern facility and state-of-the-art technology, a stronger argument can be presented for the necessity and expected return for investments.

Further research involving students in other universities is needed to determine if students in other universities have similar perceptions of the impact of the physical facilities on the learning process. Intuitively, one would assume that the physical learning environment could indeed have a positive or negative impact on the teaching/learning process, but results from further studies like this one might provide greater evidence to leverage decision-makers in providing funds for up-dating and/or replacing old, less than desirable physical facilities.

Another study involving students of the same university should serve as a follow-up study to assess the perceptions of students who have known the facility as the only environment for their majors. Perceptions of students who experienced the “before” circumstances in the older building may vary somewhat from those of students who have known only the “new.” Also, how long will satisfaction levels be high? Once students become accustomed to the facility and take it for granted, so to speak, will positive perceptions remain? Another issue that could be assessed in this follow-up study would be the possibility of the halo effect--the potential “newness” of the facility and technology--that could have had an undue impact on student perceptions of the overall quality of their educational experiences in the original study.

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Appendix A

Student Questionnaire

| | Strongly Disagree | Disagree | No Change | Agree | Strongly Agree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. The move to the new BTC will have a positive impact on my overall job satisfaction with my major area. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. It appears that student needs were a primary consideration in planning for the new facility. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. The new facility will positively impact my perception of the university's commitment to me and my needs as a student. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. My classes are more enjoyable in the new surroundings | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. Studying is easier in the new surroundings | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. My morale as a student has improved as a result of the new surroundings | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. I am motivated to spend more time on campus as a result of the new surroundings | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. My feeling of "belonging" has increased because everyone is located in one building. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. My involvement with other areas of the campus has decreased because of the move away from the center of campus. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. Collegiality between students and faculty has increased in the new facility. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. The new surroundings have provided a better environment for student teamwork. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. I have told others about the new facility as an incentive to come to ECU and major in business. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. The new facility was a consideration in choosing my major. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. The new facility has improved the overall quality of instruction in my classes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. I am more motivated to learn in the new surroundings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. The new classroom technology enhances student learning. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Appendix A

Student Questionnaire

| | Strongly Disagree | Disagree | No Change | Agree | Strongly Agree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 17. More of my teachers use technology in the classroom in the new facility. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18. The new surroundings are more conducive to faculty/student interaction and communication. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19. I observe a more positive attitude on the part of my teachers in the new facility. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20. I am more aware of my "professionalism" as a student in the new surroundings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 21. The quality of student advising has improved in the new surroundings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 22. The new facility has had a positive impact on the perception of ECU as a college of choice for prospective students. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23. I am motivated to engage in more extracurricular and student professional activities in the new surroundings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24. The new surroundings provide a more conducive environment for receiving important student communications. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 25. The new facility has had a positive impact on my determination to complete my business major or minor. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 26. My satisfaction with the new facility will make me less likely to consider transferring to another university. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Appendix B

Student Student Demographics

| Major | N |
|------------------------------|-----|
| Accounting | 42 |
| Computer Information Systems | 9 |
| Finance | 19 |
| Insurance | 8 |
| Management | 39 |
| Marketing | 45 |
| Corporate Communication | 9 |
| General Business | 32 |
| MBA | 12 |
| Other | 19* |

* Includes approved non-business majors and non-responses

| Class Rank | N |
|------------|-----|
| Freshman | 0* |
| Sophomore | 2 |
| Junior | 83 |
| Senior | 136 |
| Graduate | 12 |
| Other | 1** |

* Freshmen would not typically take business courses

* Non-response

| No. Years at University | N |
|-------------------------|-----|
| 1-2 years | 30 |
| Over 2-3 years | 55 |
| Over 3-4 years | 102 |
| Over 4 years | 38 |
| Other | 9* |

* Includes students who have been at the University less than one year and non-responses.

Appendix C

Mean Ratings and indicator Measured- Faculty Survey

| | Mean | S(satisfaction) P(productivity) |
|--|------|------------------------------------|
| 1. The move to the new BTC will have a positive impact on my overall job satisfaction | 3.78 | S |
| 2. Faculty input in planning for the new facility has increased my satisfaction with the physical facility and furnishings | 3.36 | S |
| 3. The new facility will positively impact my perception of the university's commitment to me and my professional needs | 3.44 | S |
| 4. My job will be more enjoyable in the new surroundings | 4.04 | S |
| 5. My job will be easier in the new surroundings | 3.67 | P |
| 6. Faculty morale will improve as a result of the new surroundings | 3.67 | S |
| 7. I will be motivated to spend more time on campus as a result of my new surroundings | 3.26 | P |
| 8. My identity with EKUBusiness will increase as all business faculty are in one building | 3.77 | S |
| 9. My involvement with other areas of the university will decrease because of our move away from the center of campus | 4.04 | P |
| 10. Collegiality between departments will increase in the new facility | 3.52 | S |
| 11. The new surroundings will promote a better working relationship with staff | 3.33 | P |
| 12. I will develop a more professional attitude in the new facility | 3.31 | P |
| 13. I may delay retirement plans because of the new building | 2.46 | S |
| 14. The new facility will improve the quality of my instruction | 3.78 | P |
| 15. The new facility will improve the quality of student learning | 3.67 | P |
| 16. I will increase the use of technology in designing my classes | 3.92 | P |
| 17. I will increase the use of technology in delivering my classes | 4.00 | P |

Appendix C

Mean Ratings and indicator Measured- Faculty Survey

| | | |
|---|------|---|
| 18. The new surroundings will be more conducive to faculty collaboration in teaching endeavors | 3.48 | P |
| 19. The new facility will have a positive impact on my teaching productivity | 3.54 | P |
| 20. My professional service commitment will be enhanced as a result of the new surroundings | 3.00 | P |
| 21. The quality of student advising will improve in the new surroundings | 3.11 | P |
| 22. The new facility will have a positive impact on my service productivity | 2.81 | P |
| 23. I will be motivated to engage in more research activities as a result of my new surroundings | 2.96 | P |
| 24. The new surroundings will be more conducive to faculty collaboration in research endeavors | 3.56 | P |
| 25. The new facility will have a positive impact on my research productivity | 2.96 | P |
| 26. My satisfaction with the new facility will make me less likely to seek alternative employment opportunities | 3.00 | S |

The Gridiron, the Battlefield, and the Classroom: An Experiential Exercise to Teach Persuasive Communication

Paul F. Rotenberry and Darrin S. Kass

ABSTRACT

Persuasion is a critical business communication skill that is very difficult to teach with traditional “chalk and talk” lectures. To help students better understand and develop these essential skills, Kolb’s (1984) experiential learning model was used to create a powerful learning assignment where clips of the popular film Remember the Titans (2000) serve as a foundation for group-based discussions leading to an experiential activity. Suggestions for using other movies, including documentaries, and television shows to teach persuasive communication also are included.

Introduction

Management education has long been criticized for not providing its students with the skills and competencies necessary for success in the business world (Pfeffer & Fong, 2002). Much of this criticism is directed at the lack of classroom emphasis on soft, interpersonal skills (e.g. Porter & McKibbin, 1988). Many authors have noted that written and oral communication skills, as well as people skills, are critical for success (Waddock, 1991); yet, recent studies have shown a significant gap between what managers consider important and what is actually taught in the classroom (Rubin & Dierdorff, 2007). Clearly, educators need to do more to emphasize these soft skills and prepare their students for future success.

The Skill of Persuasion

One important soft skill is the effective use of persuasive communication. Indeed, Cialdini (2004) argued that those persuasion professionals (e.g., sales professionals; advertisers) who do not master these skills may find themselves

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looking for new careers. Particularly relevant to management students, Yukl, Chavez, and Seifert (2005) noted that excelling in the skill of persuasion is especially critical in today's business environment where organizations are flatter and managers may lack formal authority.

Realizing that knowledge of the principles of persuasion does not simply assist someone, oftentimes called an agent, in his or her attempt to manipulate a person, referred to as a target, is important (Yukl et al., 2005). Jensen (2007), in his study of group-based influence, asserted that "Simply becoming aware of the various tactics can make a person a better decision participant because he or she can better understand influence tactics that are being wielded" (p. 225). Thus, a foundation in the methods of influence not only serves to assist the agent in obtaining his/ her desired ends, but also inoculates a target from being easily susceptible to such persuasion.

While some individuals have a natural command of the methods of persuasion, many must be taught how to effectively influence others (Cialdini, 2001). Several taxonomies exist (e.g., Cialdini, 2001; Kipnis, Schmidt, & Wilkinson, 1980; Yukl et al., 2005) that could serve as a basis for instructing management students in the art and science of persuasion (Jensen, 2007). The current study focuses on the research stream begun by Kipnis, Schmidt, and Wilkinson (1980), who derived and validated eight influence dimensions based on reports of upward, downward, and lateral influence attempts. These tactics included the following: assertiveness, ingratiation, rationality, sanctions, exchange, upward appeals, blocking, and coalitions. This taxonomy is frequently cited in the persuasion literature and was the focus of a recent meta-analysis examining the impact of influence tactics on work outcomes (Brennan, Miller, & Seltzer, 2001; Fu & Yukl, 2000; Higgins, Judge, & Ferris, 2003; Jensen, 2007; Kipnis et al., 1980; Sparrowe, Soetjijto, & Kraimer, 2006; Steensma, 2007; Yukl et al., 2005).

Yukl et al. (2005) noted that numerous researchers have examined influence using the Kipnis et al. framework and as a result, have modified their original list of tactics (Hochwarter, Pearson, Ferris, Perrewe, & Ralston, 2000; Schriesheim & Hinkin, 1990; Yukl et al., 2005; Yukl, Lepsinger, & Lucia, 1991). For instance, Schriesheim and Hinkin (1990) did not find support for Kipnis' sanctions and blocking tactics, and Yukl et al. (1991) argued that four additional tactics should be added: inspirational appeals, personal appeals, legitimating, and consultation. Ultimately, Yukl et al.'s (2005) confirmatory factor analytic study argued for eleven distinct influence tactics (Appendix A), which will serve as the foundation for this experiential exercise.

Experiential Learning Theory

In order for students to develop management skills such as persuasive communication, their learning must involve both theoretical concepts and the experience of applying these concepts. Kolb (1984) referred to this as

experiential learning, and developed the Experiential Learning Theory (ELT) that “remains one of the most pervasive theories of how managers learn from experience,” (Yamazaki & Kayes, 2004, p. 363). Over the last 30 years, nearly 2,000 studies have directly used or been influenced by ELT (Kolb & Kolb, 2004). In Kolb’s model (1984), knowledge is created through the transformation of experience. This knowledge creation occurs via a four phase process where the learner engages in four different modes of learning—experiencing, reflecting, thinking, and finally acting (Kolb & Kolb, 2005). These phases are briefly described below.

In the first phase, concrete experience, learners initially are exposed to the topic or subject matter at hand. This exposure provides the learners with information related to the learning objective and serves as a focal point for the second phase, reflective observation. The goal of this second step is to explore multiple perspectives in order to derive meaning from the experience. This can occur individually or in groups where participants actively reflect on what they observed and learned from the experience. In the third phase, abstract conceptualization, these multiple perspectives are integrated and synthesized into logically sound theories that can be generalized to other experiences. In the fourth phase, active experimentation, the learner actually applies these theories to everyday situations in an attempt to modify his/her behavior and the outcomes of that behavior. This active experimentation provides the learner with a new concrete experience, and the entire cyclical process begins anew.

Management courses provide excellent settings to implement experiential learning techniques. Students are presented with numerous terms that they attempt to memorize for an exam, but ultimately they may not grasp how these concepts can be applied outside of class. Coursework based on the experiential learning model gives students the opportunity to apply many of the theoretical concepts and further develop their management skills. The exercise that follows takes students through all four phases of Kolb’s experiential learning technique as they develop persuasive communication skills.

Part I: Concrete Experience

In the concrete experience phase, the authors utilized the film *Remember the Titans* (2000) as an initial point of reference for the concept of persuasive communication. Enns (1993) indicated that films increase active involvement in this phase of experiential learning; in addition, film and television are ideal teaching media because they present an excellent opportunity for observational learning for a media-savvy generation of students (Gioia & Brass, 1985). In fact, film and television have been effectively used to teach a variety of topics in the business classroom (e.g., Alvarez, Miller, Levy, & Svejenova, 2004; Bumpus, 2005; Champoux, 1999; Comer, 2001; Harrington & Griffin, 1990).

Film and television allow students to vicariously experience a wide array of situations in which the various influence tactics (Kipnis et al., 1980; Yukl et al., 2005) are used. For example, in the movie *Max* (2002), Hitler employs his own twisted version of the rational persuasion and inspirational appeals tactics to change a disinterested crowd into a screaming mob. In another poignant example, the speech given by Colonel Joshua Chamberlain in the film *Gettysburg* (1993) demonstrates savvy use of legitimating tactics and inspirational appeals to inspire a group of soldiers and turn the tide of the American Civil War.

We have found *Remember the Titans* to be an effective film for analyzing persuasive communication. The film includes numerous examples of the tactics supported by Yukl et al's (2005) analysis, and many students are familiar with this contemporary film. Many films and television shows may be integrated with Kolb's (1984) approach and used to teach persuasive communication. Appendix B highlights media that have been used effectively. Each of these may be framed using the existing assignment.

To initiate the concrete experience, students are expected to have studied in advance the assigned readings related to persuasive communication. Students arriving for class then are informed that they will be watching a film clip and a handout is distributed containing the following: the parameters of the assignment, questions they should consider while watching, a list of the major characters in the clip, and a brief synopsis of the film to facilitate learning (see Appendix C). For instance, the class is told that, "The film is based on the true story of desegregation in Alexandria, Virginia, in 1971, when two high schools are consolidated (all black George Washington High School and all white Hammond High School). The school board demotes Hammond's white head coach (Yoast) to assistant coach and replaces him with a black coach (Boone)." While the entire film can be shown, the authors have found it most efficient to use the first 47 minutes of *Remember the Titans* because this segment has some particularly powerful examples of persuasive communication (see Appendix A).

Part II: Reflective Observation

In the second phase of experiential learning, reflective observation, students are asked to reflect in groups on what they have seen and learned from viewing the movie. Following the viewing of the film, teams comprised of 4 – 5 students examine and identify examples of persuasive communication in the clip (see the 'group discussion' section of Appendix C). Many examples of different persuasive tactics are seen throughout the clip, and the discussion that ensues in the groups helps students to understand the theoretical concepts. The authors have found it helpful to lead a brief class discussion at this point about the different examples. This helps to further clarify the concepts and ensures that everyone is working from a similar conceptual framework.

Part III: Abstract Conceptualization

In the third phase, abstract conceptualization, the purpose is to evaluate and synthesize the information that has been presented thus far. The goal is for learners to develop a deeper understanding of the process of persuasion. To accomplish this, students reflect on the key moments in the film that exemplify the power of persuasive communication. This reflection goes beyond merely identifying examples of persuasive communication and requires that students reflect on why different tactics were successful or unsuccessful (e.g., Explain the strategy used by Coach Boone during training camp to get the white and black players to unify. *Why was this strategy successful?*) Again, the authors have found it effective to lead a discussion about these moments in the film to give students an opportunity to truly explore and synthesize multiple viewpoints. Several of these moments are summarized below.

The concepts of “collaboration,” when influence is achieved via providing someone with resources to accomplish a task (Yukl et al., 2005), and “rational persuasion,” convincing others with reason and logic (Kipnis et al., 1980), are illustrated in a key moment of scene 9 in *Remember the Titans*. During training camp, Gary Bertier (white player; captain) accuses Julius Campbell (black player; defensive standout) of not living up to his potential. Gary presents Julius with a ‘rational’ argument focused on the fact that Julius is neither performing the duties of his position nor listening to the black coaches. Julius retorts that his lack of effort is based on the fact that none of the white players are exerting any effort, and Gary is not holding them accountable. Thus, Julius argues that Gary is not collaborating and providing resources for the black players. Gary begins to realize he and the other white players must exert full effort if he wants to have the black players reciprocate.

In a second critical moment, scene 10, Coach Boone calls upon the notions of “inspirational appeals,” focusing on values and emotions (Yukl & Tracey, 1992), and “apprising,” informing the target how compliance will lead to specific benefits (Yukl et al., 2005), in an attempt to integrate the racially divided players. Boone initially was very autocratic and punitive in his coaching practices, but he is able to reach his players when he changes his approach. He takes the entire team to Gettysburg and begins his inspirational appeal by describing the horror of war and informing the team that, “If we don’t come together, right now on this hallowed ground, we too will be destroyed.” Boone continues by apprising, when he claims that racial tension is keeping the team back and that if the players respect one another and move beyond race, they might be able to learn the game. Physically and emotionally drained, the players begin to see that their coach may have a valid point as he puts team unity first and football a close second.

At another critical juncture, Gary and Julius demonstrate the power of a “coalition,” whereby an agent influences a target by obtaining the sup-

port of others (Kipnis et al., 1980). Gary and Julius come together for the first time in scene 11 and collectively stop the offense. When they celebrate by chanting, “left side! strong side!” the other players see Gary and Julius working together and begin to do the same. Gary and Julius’ collective influence as a coalition finally begins to transform the players from a group of individuals separated by race into a true team.

Once the students have finished analyzing the scenes, a discussion of the examples should follow. Key to success of the discussion is to get the class to give *specific* examples from the film and link them to *specific* concepts. Often, this discussion will reveal a lack of understanding if a concept is applied incorrectly. This opportunity to clarify the concepts and develop a shared understanding of what makes persuasion effective and why is important to the learning process.

Part IV: Active Experimentation

In the final phase, active experimentation, students get to apply their new understanding of persuasion. In this part of the assignment, the student teams apply their knowledge by creating and presenting a brief (1 – 5 minutes seems to be ideal) persuasive argument to the class. Topics can range from those that are relevant (Should our campus be a non-smoking campus?) to the creative and fun (Prepare a commercial for a new dating service in town.). In Appendix D, the authors present what has been a particularly effective topic: nominating a teammate and creating a speech for this nominee that will convince the class to vote for this person for president. The ultimate goal is for the teams to incorporate the persuasive communication methods learned via the readings and the movie analysis into their presentations. In the authors’ experience, topics that are relevant to the students are best for this exercise.

This part of the assignment can be made more powerful by having the teams provide brief, written feedback about the effectiveness of each presentation. Additionally, the teams can vote for a favorite by rank ordering the presentations. For example, in the exercise included in Appendix D, the students rank the candidates’ speeches to indicate which candidate would most likely obtain their vote. The students then provide comments on why one speech was most effective, and why the other speeches were less effective. After the votes are tallied and a ‘winner’ is declared, the instructor can lead a discussion about what made this particular presentation most effective. The goal is to create a conversation focused upon why certain tactics were more effective than others in influencing the class. This last step serves to resolve any remaining confusion and solidify the concepts of persuasion in the minds of the students.

Modifications and Suggestions

The authors have used this activity in its various stages of development with an audience of predominantly undergraduate management majors. Thus far, the students have reacted positively to the experience of using film to understand the topic persuasive communication. Students are very engaged throughout the activity and it facilitates lively and enlightening discussions. In addition, the task of developing a persuasive speech to actively experiment with the tactics has been well received. The student teams often find very creative ways to employ the tactics and attempt to influence their classmates.

With adequate preparation, this exercise can be conducted in a single 3-hour class period, although the authors have found that it works best separated into two class periods (75 minutes each). In the first class meeting, the movie clip can be shown and enough time reserved to cover the reflective observation and abstract conceptualization portions of the assignment. In the second class meeting, students can be given time to prepare and implement the active experimentation component. The authors also have used this activity successfully in classes meeting three times per week (50 minutes each). The first and second meetings are devoted to showing the film and beginning its analysis, and the third meeting can be devoted to the active experimentation portion.

If time is an issue, students can complete aspects of the assignment individually, outside of class and then share their thoughts with their teammates in class. Moreover, changes to the *Remember the Titans* viewing are made easily. For example, the authors often provide enough background so that the initial scenes can be skipped and the clip shown can begin where the team meets to go to training camp. Many of the persuasive communication concepts are illustrated in the 30-minute camp segment, and even shorter clips within that segment work to illustrate the concepts. This version of the assignment is recommended if class time is at a premium.

While grades can be assigned for this exercise, the authors have found it just as effective as an ungraded activity. The reason for this finding may be the fact that the authors' classes tend to be experientially oriented and comprised of permanent student teams. However, grading aspects of the exercise may be appropriate for courses with a more traditional format.

Copyright Issues

For those concerned with copyright issues, the copyright laws in the United States allow for the viewing of a portion or the entirety of copyrighted media during instruction in a regular classroom of a nonprofit institution. Legal copies must be used and fees cannot be charged for viewing. Additionally, students can watch rented or purchased copyrighted media as part of an assignment at home as long as it is not shown to the public (see Miller, 1988 for a review).

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Appendix A

Methods of influence^a as illustrated in *Remember the Titans*

| Tactic | <i>Remember the Titans</i> |
|---|---|
| <u>To persuade a target, use</u> | |
| Ingratiation by flattering others or causing them to see you in a favorable light. | Coach Boone attempts to soothe an argument by stating he could learn from Coach Yoast. (Scene 2, min. 4) |
| Rational Persuasion by using facts and logic. | A school board member explains that the town would be burned as Watts was burned if Boone was not given Yoast's job (Scene 2, min. 5) |
| Personal Appeals by emphasizing the need for loyalty or focusing on your friendship. | Dr. Day tries to convince Coach Boone to take the job because it would be good for the black community and Boone is a 'race man.' (Scene 2, min 6) |
| Coalition Formation by gathering a group of supporters. | The white students jointly pledge not to play football if Yoast is not head coach. (Scene 3, min. 9) |
| Exchange by trading desired goods for desired actions. | Gary tells Coach Boone that he is the only All-American player on the team. Gary says he will not play for Boone unless his demands are met. (Scene 5, min. 15) |
| Legitimizing by asserting your position in the organizational hierarchy. | Coach Boone asserts his authority over Gary by asking "And whose team is this? Is this your team or is this your daddy's team?" (Scene 5, min 16) |
| Pressure by using threats or constant reminders. | Coach Boone makes a speech about on-field mistakes and associated physical punishments. (Scene 6, min. 20) |
| Collaboration by providing someone with resources to accomplish a task | Julius implies that he is underperforming because Gary is not acting like a captain and providing resources (e.g., blockers) for the black players (e.g., the running backs). Thus, Julius is underperforming because Gary is not collaborating. (Scene 9, min. 32) |
| Inspirational Appeals by focusing on values and emotions. | Coach Boone refers to the horrors of the battle at Gettysburg to convince the players that their fighting due to race is wrong. (Scene 10, min. 35) |

| Tactic | <i>Rember the Titans</i> |
|---|--|
| Apprising by informing the target how s/he will benefit by fulfilling a request. | Coach Boone tells the players if they stop fighting over race and learn to respect each other, the players might learn to play football like men. (Scene 10, min. 35) |

^a Descriptions are based on Kipnis et al. (1980), Sparrowe et al. (2006), Yukl et al. (2005), and Yukl and Tracey (1992)

Appendix B

Methods of influence as illustrated in films and television

| Movie | Scene | Suggested Use |
|-------------------------|---|---|
| 12 Angry Men | Many scenes or entire movie can be used; it is best to use the whole movie | Without rank or position, demonstrates how one juror is able to slowly sway a hostile group of his peers (Tactics: Nearly every persuasive tactic is evident). |
| Dead Poet's Society | Scenes 2 & 3: The first two class meetings that John Keating has with his students. | Explore how a charismatic leader inspires intense, life-changing devotion among his poetry students (Tactics: Inspirational Appeals, Apprising). |
| Elizabeth | Scene 10: The Queen is able to win over an antagonistic parliament. | An example of how a leader is able to persuade/influence without relying on position power (Tactics: Rational Persuasion, Collaboration, Apprising, Consultation) |
| Gettysburg | Scene 8: Josh Chamberlain's Speech to deserters before marching to Gettysburg | Powerful example of how a leader uses influence to gain willing, rather than forced, followership (Tactics: Inspirational Appeals, Legitimizing). |
| Gandhi | Chapter 6: Gandhi's initial speech to his people about non-violent opposition to the British occupation | Explore how Gandhi is able to win over a hostile, angry crowd by appealing to basic human values (Tactics: Rational Persuasion, Apprising, Inspirational Appeals). |
| Glengarry Glen Ross | Scene 3: Alec Baldwin's character is called in to motivate the sales team. | An example of an ineffective approach to influence. Threats, intimidation, and shame are used. Successful in the short run, but at what cost? (Tactics: Pressure, Legitimizing) |
| "I Have a Dream" Speech | The entire speech can be utilized. | Allows for the exploration of how words, language, tone, and passion create an influential message (Tactics: Rational Persuasion, Inspirational Appeals). |

| Movie | Scene | Suggested Use |
|-------------------------------|---|---|
| Lean on Me | Scenes 5 & 6: Joe's discussion with faculty and students his first day on-the- job. | Allows for a compare/contrast of two scenes in which a leader uses two very different influence approaches (Tactics: Scene 1: Legitimizing, Pressure; Scene 2: Rational Persuasion, Inspirational Appeals, Legitimizing). |
| Max | Scene 22: Hitler's final speech in the crowded auditorium. | An extremely persuasive, and disturbing, speech that leads to violence in the streets afterwards. (Tactics: Ingratiation, Rational Persuasion, Personal Appeals, Inspirational Appeals, Coalition Formation, Exchange) |
| Norma Rae | Scene 9: Convicts Tar the Roof and Tim Robbin's character emerges as an influential prisoner | Without speaking a word, Norma gets every mill worker to shut off their machines. (Tactics: Collaboration, Apprising) |
| Shawshank Redemption | Scene 9: Convicts Tar the Roof and Tim Robbin's character emerges as an influential prisoner | Excellent example of how people in seemingly "powerless" positions (e.g., prisoners) use influence and persuasion to gain power (Tactics: Ingratiation, Rational Persuasion, Pressure, Legitimizing, Apprising). |
| Documentaries | | |
| The Corporation | Chapter 11: 'Basic Training' Chapter 13: 'Like a Good Neighbour' | Initiative Media studies how nagging by children influences their parent's purchases. Also, Pfizer helps make a town safer in the hopes of building relationships with the community. (Tactics: Pressure, Exchange). |
| Is Wal-Mart Good for America? | Chapter 3: 'Muscling Manufacturers' | Explore the keys to success, both on the task and when called into the boardroom. What makes someone persuasive when they are fighting for their job? (Tactics will depend on the episode.) |
| Television Shows | | |
| The Apprentice | Chapter 11: Any week; clips from the boardroom (when Trump has to decide who gets fired) are best. | Explore the keys to success, both on the task and when called into the boardroom. What makes someone persuasive when they are fighting for their job? (Tactics will depend on the episode.) |
| Survivor | Any week; shows earlier in season tend to have most robust examples as relationships develop. | Explore who it is that people tend to follow. Why is it that they have the most influence? (Tactics will depend on the episode.) |

Appendix D

Persuasive Communication and *Remember the Titans*

Background:

The film *Remember the Titans* (2000) is based on the true story of desegregation in Alexandria, VA in 1971. The school board decides to combine the white high school (Hammond) with the black high school (George Washington) into the newly formed T.C. Williams High School. Hammond's very successful, white Head Football Coach (Bill Yoast) is demoted to Assistant Coach/Defensive Coordinator. He is replaced by Herman Boone, a very successful black coach from North Carolina.

Group Discussion:

It may be a good idea to take some notes during the film. Afterwards, get into groups and discuss how the film demonstrates the various influence tactics. For example, where do you see the influence tactics of Rationality, Exchange, and Coalition formation used? Do you see any others?

Coaching Staff:

| | |
|-------------------|--|
| Herman Boone | (Head Coach; black) |
| Bill Yoast | (Defensive Coordinator / Assistant Coach; white) |
| Coach 'Doc' Hinds | (Offensive Line Coach / Assistant Coach; black) |
| Coach Tyrell | (Special Teams Coach; white) |

The Main Players:

| | |
|--------------------------|--|
| Gary Bertier | (Defensive All-American / Captain; white) |
| Julius "Big Ju" Campbell | (Defensive Standout; black) |
| Ronnie "Sunshine" Bass | (Quarterback; white) |
| Ray Budds | (Fullback; won't block; white) |
| Jerry "Rev" Harris | (Quarterback; black) |
| Petey Jones | (Running Back; black) |
| Louie Lastik | (Overweight Offensive Lineman; white) |
| Blue Stanton | (Lineman; starts most of the songs; black) |

Appendix D

Influence Tactics in Practice

You and your teammates need to create a short, 2-3 minute presentation. Nominate one teammate and, using the influence tactics from the chapter, create a speech for your nominee to give that will convince your classmates to vote for that person for president. You have 15 minutes to nominate your candidate and prepare the speech.

I will randomly determine which team's candidate goes first. After all the candidates have given their speeches, each person individually should rank order the effectiveness of the presentations. Further, provide some brief feedback as to what made this the most effective presentation relative to the others.

| Candidate | Reasons |
|-----------|---------|
| 1. | |
| 2. | |
| 3. | |
| 4. | |
| 5. | |
| 6. | |

Teaching Financial Concepts to Undergraduates Using a Simulation and Spreadsheet Tool

Nancy B. Sardone

ABSTRACT

Many research studies focus on secondary students' personal finance knowledge but few concentrate on college students. A qualitative research approach was taken in this study. The study began with a pretreatment survey asking freshmen students (n=53) enrolled in a required computer concepts course at a mid-sized New Jersey university about their exposure to personal finance at the high school level. A post-treatment reflective essay was completed by the participants. In addition, field notes were recorded as a measure of motivation to engage with the course content and instructional materials used to teach personal finance concepts. Over 94% of the participants had not taken a course in personal finance at the high school level. Results revealed growing awareness of personal spending and saving habits and high engagement with instructional materials.

Money is an important fact of life, providing both opportunity and access. As such, personal financial education has been at the forefront of discussion and effort at a national level for the past ten years (Mandell, 2007). Numerous organizations have provided funding to educate high school students to facilitate their understanding of financial concepts that results in informed consumers of financial services, able to manage their finances effectively (Fox, Bartholomae, & Lee, 2005). However, little evidence of learning exists in matters of money at the high school level based on a standardized exam (JumpStart, 2007). However, higher levels of self-reported thrift were present among students who took financial classes (Mandell, 2005). Two noted reasons for ineffective learning outcomes include lack of student motivation to learn and poor instructional materials and strategies used to teach personal finance courses.

Very little literature exists about the personal financial knowledge of college students. How many students have taken a personal finance course in high school? Would two lessons equating to five instructional hours in personal finance (a) invoke awareness of individual spending and saving habits and (b) persuade students to improve their spending and saving behaviors?

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Further, how do students react to active learning materials designed to motivate their learning about personal finance?

Purpose of the study

The purpose of this study was to determine how many college students lacked personal finance education and if the educational impact of two lessons (a) was sufficient to bring about awareness of individual spending and saving behavior and (b) could persuade students to improve their spending and saving behaviors. In addition, students were asked to reflect on the instructional materials used in the lesson activities. Gathering this information will be useful for designing personal finance curricula at the college level and for providing faculty-development opportunities to include instruction that incorporates active learning materials.

Literature Review

This literature review is divided into three sections: lack of financial knowledge, motivation to learn, and instructional materials.

Lack of Financial Knowledge

Lack of financial knowledge is reported by students and parents alike; both groups agreeing that college students are not well prepared to deal with the financial challenges that lay ahead (The Hartford, 2007). Fewer than half of U.S. high school and college students surveyed (n=1000) have a regular savings plan (KeyBank and Harris Interactive, 2006). Only one in five high school or college students has ever taken a personal finance course. Research indicates that most college students do not know the components that constitute a budget or how to construct one (JumpStart, 2007). Investment products, calculating the return on an investment, guidelines associated with acceptable rates of return, and inflation rate are also weak knowledge areas.

Students often make unwise financial decisions due to lack of financial knowledge. This deficiency appears to extend well beyond the college years. Studies indicate that although adults believe that personal finance topics are important, they are not knowledgeable about them, specifically in the areas of investments and estate planning (National Council on Economic Education, 2005; Volpe, Chen, & Liu, 2006). When students begin their adult lives without financial education, they fail to adequately save and invest (Danes, 2004). Credit cards often turn into unmanageable debt and bankruptcy, and poor purchasing decisions are made. A failure to calculate the real cost of products and services and vagueness about the effects of public policy are present (Danes, 2004). Yet, there is spending.

The number of college students with credit card debt continues to grow to an average \$3,000 by the student's senior year (Borja, 2007a; Jump-

Start, 2007), and 76% percent of undergraduates have credit cards (SLM Corporation, 2005). In addition, although familial wealth has been shown to positively influence students' financial literacy (The Hartford, 2007), the U.S. Commerce Department's Bureau of Economic Analysis has estimated that since April 2005, the American public has been spending more money than it has earned after taxes, an unprecedented development in the past half century (Pew Research Center, 2006). This statistic points to the growing need for personal finance education. According to the National Council of Economic Education (2005), the responsibility to teach financial literacy lies with educators because it is not intuitive; it is learned. Educators not only need to teach these concepts but to provide meaningful ways that empower young adults to become informed consumers.

Motivation to Learn

Perhaps low motivation to learn financial concepts at the high school level is related to course timing or quality of teaching. Learning about finance may be relevant when the context is authentic. College may be the more authentic environment to learn concepts and to practice financial decision-making than high school. Three recent indicators reveal why college students may be more motivated to learn about finance: increased consumerism, stagnant federal loan programs, and increased tuition rates outpacing inflation. These indicators have caused 80% of all U. S. college students to work at least part-time (Alaya, 2007; Bacdayan, 2004; KeyBank & Harris Interactive, 2006; Oblinger, 2003).

Stagnant federal loan programs have directed students toward private loan borrowing. In the 2005-2006 school year, U.S. college students borrowed \$17 billion in private loans, representing more than 12 times the amount of money borrowed a decade earlier. While the U. S. government sets rates for federal student loans, currently capped at 6.8 percent, private loans are unregulated and carry variable-interest rates, ranging from 7 to 20 percent. Recent graduates report falling victim to the danger of variable-interest rate loans, leaving some with loan payments as high as \$1500 per month. In addition, they reflected on being poorly informed about long-term loan impact. In hindsight, they wished for "rule of thumb" or guidelines to follow regarding interest rates and loan terms before they made such large and lasting financial decisions (Alaya, 2007).

Numerous research studies report no causal link between financial literacy education and improved financial behavior (Bernheim, Garret, & Maki, 2001; Mandell, 2005; Tennyson & Nguyen, 2001). Yet, higher levels of improved spending and saving behavior have been found among students who took financial classes at the high school level (Mandell, 2005). Current literature indicates that that this finding is not due to increased financial knowledge or skills but rather "increased comfort with financial transactions and concepts" (Bernheim, Garret, & Maki, 2001, p. 450). As such, current thought indicates

that perhaps teaching students guidelines of thrift, formally referred to as *financial norms education*, as an alternate model of personal finance education may result in greater instances of changed financial behavior (Willis, 2008).

Instructional Materials

Poor instructional materials and strategies used to teach finance courses have been cited as part of the reason for ineffective learning outcomes at the high school level (JumpStart, 2007). Investigating the learning preferences of current millennial students, defined as those born after 1987, could help educators select more meaningful instructional materials than those receiving poor reviews (Oblinger, 2003). Poor reviews have been awarded to the following methods: lectures, textbook readings, and traditional assessments involving quizzes and tests (JumpStart, 2007).

One of the learning attributes of incoming college students is described as resembling the approach used to master a Nintendo game, symbolizing a preference for the trial-and-error approach to problem-solving (Oblinger, 2003). This preference is echoed in the literature, indicating that people are most likely to learn when they are given a chance to fail, receive feedback, and try again before anyone makes a judgment of their work (Bain, 2004). In addition, literature indicates that current college students who have grown up surrounded by computers are strong supporters and regular users. The Pew & American Life Project states that 76% of respondents aged 18-29 use the Internet to conduct research for school, followed by using it for games, email, and instant messaging (Fox, Anderson, & Rainie, 2005). Learning via the use of active methods that both engage and motivate students may be a better fit for today's college students, indicating hands-on activities using technology tools (Oblinger & Hagner, 2005).

Technology tools that offer active learning strategies in finance content include virtual simulation and spreadsheet software. The appeal of simulations may be due to the placing of learners in an artificially constructed yet sufficiently realistic context for learning to occur (Bransford, Brown & Cocking, 2000; Foyle, 1993; Meyers & Jones, 1993; Smith & Escott, 2004). Simulations offer a way to avoid passivity by awakening natural curiosity and to provide a pathway to evoke involvement in learning via exploration. Such exploration includes the opportunity to try, fail, receive feedback, and try again—synonymous with research findings that promote deep versus surface learning (Bain, 2004). Software simulations model decisions associated with budgeting and money management while reinforcing the importance of setting personal financial goals. Spreadsheet software assists learning financial concepts such as fixed, variable, and discretionary expenses, income, investments, and rates of return on an investment by allowing students to perform and practice calculating financial equations.

Finding time to teach new topics in an already packed curriculum can be an issue. The National Endowment for Financial Education (NEFE) has determined that as few as ten hours of classroom instruction at the high school level can be enough to persuade students to improve their spending and saving habits (Danes, 2004). The current study was conducted in a freshmen computer concepts course that could allow a maximum of five hours of instruction to be dedicated toward personal finance education.

Research Questions

For the purposes of the study, the following research questions were evaluated:

1. How many college students lacked personal finance education?
2. Can two lessons in personal finance education (a) evoke awareness of spending and saving habits and (b) persuade students to improve their spending and saving behaviors?
3. Were the methods of instruction (online simulation games and spreadsheet activity) meaningful to students' learning?

Methodology

This section is divided into five parts: participants, materials, instruments, procedure, and data analysis.

Participants

At a mid-sized New Jersey university, freshmen teacher education students ($n=53$), aged 18 to 19, participated in the exploration of financial virtual simulation games and spreadsheet activities. Of the 53 participants, 13 were male and 40 were female. The computer concepts course where this research study was conducted is part of the education major core.

In this course, students were taught computer concepts and software applications. The study was conducted over two academic semesters, Spring 2007 and Fall 2007.

Materials

Three financial virtual simulations, computers with Internet access, and Excel spreadsheet software were the materials used. The three simulation games are all Web-based and free. They are (1) Get Real (Moneyville, 2005), (2) Escape from Knab (U. S. Bancorp, 2005), and (3) Lemonade Stand (Bored, Inc., 2003). The first, Get Real, is a career education life/work development simulation. This role-play enabled students to rehearse for, experiment with, and analyze how career choice, education, skills, economic conditions, and impulse buying affect income. The object was to reach all financial goals within a 12-month period. This simulation was developed by the Oregon Museum of

Science and Industry with support from the National Science Foundation, the James F. and Marion L. Miller Foundation, and The NASDAQ Stock Market Educational Foundation, Inc.

The second, *Escape from Knab*, took participants through a series of realistic financial decision-making experiences to find shelter, transportation, and jobs as they set up their interim home on the fictitious planet, Knab. The object of the game was to amass \$10,000 to buy a ticket off the planet in six months from arrival. It is sponsored by U. S. Bank. Last, *Lemonade Stand* is a business principles simulation. Players were immersed in small business decision-making where they learned what it meant to be an entrepreneur faced with market constraints that impacted profit. These Web sites were not specifically designed for college students; yet, they were chosen as an instructional fit for students lacking personal finance knowledge.

Instruments

Upon course entry and prior to treatment, students completed a survey to determine exposure to personal finance education at the high school level. Post treatment, a three-page reflective essay was completed by each participant. The essay was chosen to educe student learning and attitudes. Participants were instructed to write an essay that reflected on their learning of personal finance concepts and their attitude toward the instructional methods used. In addition, field notes were recorded by the researcher to collect real-time comments made by the participants as a measure of motivation to engage in lesson activities.

Procedure

The activity began with a 30-minute exploration of one of the three virtual simulations: *Get Real*, *Escape from Knab*, and *Lemonade Stand*. After the 30 minute period, the researcher asked students to think about the game contents and make comments or ask questions about game intention.

Students were then asked to list their short-term (weekend getaway, concert, etc.) and long-term financial goals (vacation, down payment on a car loan, etc.) on a sheet of paper. Using an Excel worksheet, students were guided in the beginning stages of budget creation based on their actual income and monthly expenses: fixed, variable, and discretionary. A personal budget was defined as a spending and saving plan based on expected income and expenses (Gitman & Joehnk, 2008). Budgets were explained as the vehicle for allocating income toward expenses (fixed, variable, and discretionary), savings, and any debt repayment. Further explained, budgets act as summary statements of plans expressed in quantitative terms and can act as a guide to reach predetermined financial goals, such as investing (Gitman & Joehnk, 2008).

The formulas for calculating total monthly income, total monthly expenses by category, and budget surplus or deficit are shown in Figure 1.

Students were asked to review their own budget to determine if their short-term and/or long term goal(s) could be reached by looking at their surplus or deficit. If they did not have surplus, they were asked to reconsider their discretionary expenses. An informal class discussion ensued while students were engaged in the budget construction.

Figure 1.
Sample Budget Structure

| Chrissy's Personal Budget | Monthly |
|----------------------------------|----------------|
| Income | |
| Net Wages Paid | \$500 |
| Parental Allowance | \$125 |
| TOTAL INCOME | \$625 |
| Expenses | |
| Fixed Expenses | |
| Car Insurance | \$75 |
| Total Fixed Expenses | \$75 |
| Variable Expenses | |
| Cell Phone | \$40 |
| Gasoline | \$60 |
| Groceries | \$30 |
| Laundry/Dry Cleaning | \$20 |
| Total Variable Expenses | \$150 |
| Discretionary Expenses | |
| Books, Magazines, CDs | \$5 |
| Personal Grooming | \$40 |
| Clothes | \$200 |
| Eating Out | \$20 |
| Total Discretionary Expenses | \$265 |
| TOTAL EXPENSES | \$490 |
| TOTAL INCOME | \$625 |
| TOTAL EXPENSES | \$490 |
| BUDGET SURPLUS OR DEFICIT | \$135 |

In the next class session, students were taught that reducing or eliminating one discretionary expense could help build an investment nest egg. An

investment was defined as money put into a bank or the market that earns interest, which may then be used to buy a real asset (Gitman & Joehnk, 2008). For example, if the student decided to drastically reduce his or her clothing expense from \$200 to \$20 per month, this would provide \$180 per month (\$2160 annually) to be invested. The certificate of deposit (CD) was explained as the investment product to be used as the basis for the investment exercise. CDs were explained to be time deposits, where money is deposited at a banking institution at a set interest rate and cannot be withdrawn for a predetermined period of time (Gitman & Joehnk, 2008). The rate of return on certificates of deposit changes with economic conditions and time period. As such, students were instructed to explore the Bankrate Web site for CD rates (Bankrate, 2007). Bankrate is a Web-based aggregator of financial rate information, posting survey results from approximately 4,800 financial institutions located in all 50 of the U. S. states.

Further explained, when the designated time period is over, the CD matures and the money can be withdrawn or held for another term. At the time of this exercise, the three-year CD rate of return without any required minimum deposit was 5.25%. Sample data of investment period (three years), rate of return (5.25%), and investment amount (\$2,160) were entered into Excel software using the built-in function argument, Future Value (FV). After three years, total amount is \$2518.37. Results appear in Figure 2 below.

Students were then exposed to the “Rule of 72,” a finance method for estimating an investment’s doubling time (Gitman & Joehnk, 2008). For instance, if students were to invest \$2,160 with compounding interest at a rate of 5.25% per annum, the “Rule of 72” ($72/5.25 = 13$) revealed that 13 years was the required amount of time needed for the investment to double (\$4,320).

Students were then directed to their homework assignment. Students were asked to (a) play one of the simulation games; (b) revisit the Bankrate Web site to find another investment product, determine terms, and use Excel to calculate a new investment outcome; and (c) write a three-page essay that reflected on their learning of personal finance concepts and attitude toward instructional materials used in lesson activities.

Data Analysis

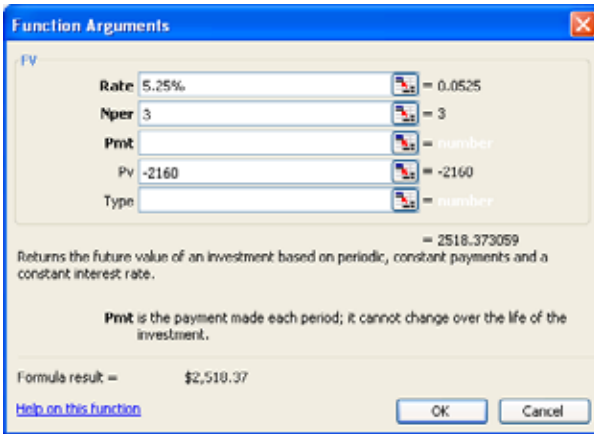
The study used a qualitative grounded theory approach. The open-ended nature of the reflective essay instrument was used to get at intangible constructs and, therefore, became the construct’s operational definition (Kratwohl, 1998). The reflective essay represented a theme that the researcher hypothesized would further develop the vague constructs of financial awareness and attitude toward instructional materials. The field notes were used to better understand the construct of student motivation toward learning. Participant

responses were examined for the emergence of themes, which were organized into categorical aggregations.

Essay results and researcher field notes were examined. All essays (n=53) were printed, read, and coded for emergent themes. The data were then grouped by theme. Throughout the analysis process, the researcher tested emergent understanding by continuously returning to the data to check for alternative explanations and negative instances in order to further reduce the data and identify central themes (Creswell, 1998). Findings are reported under the emergent themes derived from the analysis.

Data from the survey asking students if they were exposed to personal finance education at the high school level were analyzed. Responses indicated that 50 participants (94%) had not taken a personal finance course in high school.

Figure 2.
Function Argument Dialog Box in Excel



Findings

Rather than teach through lecture, reading assignments, anecdotes, or traditional assessment, the exploratory lessons enabled students to become immersed in a virtual simulation and budget construction and investment calculation. The exploratory activities were chosen so the learning experience might evoke personal reflection. Specific themes emerged from the data, including: financial awareness and instructional relevance. An examination of the themes and their relationship to the literature follows.

Financial Awareness

The theme of financial awareness was reported in three ways: cause and effect, personal reflection, and content knowledge. For example, related to cause and effect, students realized that differing interest loan rates affected monthly mortgage payments while playing *Escape from Knab*, while others who explored *Lemonade Stand* learned how variables (weather, inventory, customer tastes, and cash-on-hand) affected outcomes. Ten students (19%) indicated that they chose *Lemonade Stand* because they thought it was going to be an easy game to win as the game interface looked as if it were designed for young children. They revealed their collective surprise at how difficult they found making a profit while playing this game. One person further reported that upon graduation she planned to run her own music business. *Lemonade Stand* gave her a realistic view of the skills that would be required. The simulation games were vehicles for trial-and-error. Students realized that if they made different choices in the game, different results would emerge.

The second way financial awareness was reported related to personal reflection of spending habits. Sixty-six percent of respondents indicated that they lacked discipline when it came to buying, reporting that they never really gave any thought to the long-term consequences of their habits. Similar reports are found in the literature (JumpStart, 2007; KeyBank and Harris Interactive, 2006; The Hartford, 2007). The majority of students stated that they saw real value in the spreadsheet budget construction activity as many had never taken inventory of what they spent in a given time period. As a result, they said they spent too much money on non-tangibles such as entertainment and personal grooming.

Field notes indicated high female student-to-student engagement in the spreadsheet budget construction activity. Females appeared to be comparing expenses with each other, maybe to see what was considered socially acceptable to spend on certain items. A question of “How much do you spend on manicures?” followed by a comment of “Wow, that’s a lot” was recorded by the researcher. An interesting banter occurred with male participants commenting their recent realization of how much money they spent on their girlfriends, only to be countered with a few female responses of “we are worth it.”

Research field notes further recorded what appeared to be the emergence of increased interest in personal finance based on the type of questions asked during an informal class discussion while students were engaged in spreadsheet budget construction. For example, questions about which category (fixed, variable, or discretionary) items best fit emerged. Further, some students were puzzled about the income category indicating they didn’t have any income as they were full-time students. Interest was piqued when the discussion turned to the topics of tuition, food, and room/board.

During the spreadsheet investment activity, field notes revealed that students were surprised at how they could make their money work for

them. Full student engagement in the lesson activity was noted when working through the investment examples. Afterward, one participant revealed that she greatly appreciated the financial support her parents give her. However, because she had few financial burdens, she felt that it had created her dependency on them. In her words, “after college I am going to be pushed into the real world and I have no idea how to support myself and how to live off of my own salary.” This aligns with Oblinger’s (2005) research on millennial students indicating their desire to become independent of parents.

Essay responses also provided a glimpse of improved spending behavior. Fifteen (28%) participants indicated that after completing this assignment, a new dawning occurred as it made them more aware and careful of how they spent their money.

The third way financial awareness was revealed related to personal finance concepts learned through lesson activities. For example, four participants (7%) indicated that Escape from Knab reinforced their check writing skills. An additional five participants noted prior lack of understanding as to how credit was extended, stating Escape from Knab clearly explained the process through examples. The list of learned concepts identified by respondents’ essays is reported by type of lesson activity, Table 1.

Table 1
Learning Outcomes

| | Get Real | Escape from Knab | Lemonade Stand | Budget Construction |
|--------------------|----------|------------------|----------------|---------------------|
| Decision Making | x | x | x | x |
| Expenses | x | x | x | x |
| Market Conditions | | x | x | |
| Interest Rates | x | x | | x |
| Check Writing | | x | | |
| Mental Math | x | x | x | x |
| Fund Allocation | | | x | x |
| Profit/ Surplus | x | x | x | x |
| Inventory Control | | | x | |
| Tax Forms | | x | | |
| Payroll Deductions | | x | | |

| | | | | |
|-------------------|---|---|--|---|
| Down Payments | x | x | | x |
| Mortgage Payments | x | x | | |
| Buying on Credit | x | x | | |

Instructional Relevance

The overwhelming majority of participants qualified their essay responses regarding the instructional methods used in lesson activities as positive learning tools. A percentage (25%) of participants indicated that *Escape from Knab* was so appealing and engaging that they were not immediately aware of just how much learning was actually taking place. In the literature, this experience is described as *stealth learning*, where students are often unaware of how much they are learning due to their deep immersion in game tasks (Borja, 2007b). These comments may be pointing to comfort and familiarity with the very technology tools that millennial students have made their own.

Further, researcher field notes recorded excitement and interest while participants were engaged in the simulation games and spreadsheet activities. Student-to-student engagement was high during the spreadsheet budget construction activity with somewhat lesser engagement during the simulation games. However, immersion in game tasks was noted as intense, taking students more than five minutes to disengage to get ready for the whole group discussion. Clearly, students needed to converse with one another during spreadsheet budget construction. Their conversation and “checking in” with each other seemed important to increase their comfort with the task.

Responses about the methods of instruction used in the lesson activities of online simulation games and spreadsheet activities included the following: a realistic approach to financial management (25%), rich with personal finance content knowledge embedded in a fun approach (33%), and the wide appeal of immediate performance feedback (65%). Immediate performance feedback provided participants with the opportunity to make instant adjustments to their problem-solving approach and use the adjustments in future decision-making. This finding is confirmed in the literature (Bain, 2004; Oblinger & Hagner, 2005). Many students commented that the methods used in the lesson activities were unlike those of their high school experience, which were mostly textbook driven. They indicated high satisfaction with the engaging and interactive ability of the technology tools used in the lessons.

Conclusions

One of the failures in education is that students rarely say that they find learning to be intrinsically rewarding (Csikszentmihalyi & Larson, 1984). Malone and Lepper (1987) have defined intrinsic motivation more simply in terms of what people will do without external inducement. One factor that influences motivation is fantasy, where learners use mental images of situations that are not actually present to stimulate their behavior (Vockell, n.d.). The virtual simulations and spreadsheet activities are strong contenders in this category. Learning using engaging simulation tools that provide both fantasy and instant feedback may help students become more comfortable with personal finance concepts.

Ways to promote learning while effectively teaching life skills are of great interest to everyone in the academic community. Thomas Jefferson called for “enlightenment of the people,” meaning literacy achieved via compulsory education using existing models (Fuller, 2006). Today’s call for enlightenment in the area of personal finance has never been more critical. The future of once robust social support systems is in question. For example, longevity of the U.S. Social-Security program has long been debated. Corporate pension plans and benefit packages continue to be pared down, especially in industries subject to intense competition (Porter & Walsh, 2006). The recent housing issue in America has many families facing foreclosures, and the weakened dollar has many people concerned about the future (Diamond, 2008). Without personal finance education programs in place, only hope exists. What is needed is a plan. One might argue that for the cost of a bachelor’s degree averaging anywhere from \$25,000 (public) to \$90,000 (private), students should graduate empowered to make independent financial decisions (CollegeBoard, 2006).

Business and technology teacher examination of practice could lead to topics being taught with new methods that offer students meaningful and motivating learning opportunities. This study determined that learning personal finance concepts with awareness of financial behavior can occur in as little as five instructional hours in a computer concepts course. In addition, students enjoyed the instructional materials used in lesson activities. The lesson strategy and activities align with the current norms model of financial education (Willis, 2008). These findings offer a way to approach that much needed plan.

Recommendations

Based on the conclusions, the following recommendations are presented for action:

1. Requiring college students to demonstrate skill in personal finance upon graduation. This goal could be accomplished through the development of three one-credit courses or the inclusion

of numerous personal finance modules in required business/technology/numeracy courses. A further recommendation is that numerous opportunities be provided to students to gain comfort with financial concepts through practice.

2. Curricula in personal finance courses should include simulation games that provide fantasy and instant feedback and spreadsheet activities that teach budgeting construction and investment calculations. The spreadsheet activities should use authentic data and subsequent assignments should be meaningful, real-world experiences.
3. Additional research should be conducted to determine if differences in motivation to learn personal financial concepts are associated with instructional materials used to teach.
4. Further research is needed in the norms model of financial education.

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Service Learning Benefits and Opportunities for Business Programs

Dr. Mildred N. Wilson

ABSTRACT

Service learning has gained momentum across many academic disciplines, from liberal arts to the sciences. Faculties in these curriculum areas are seeing the value of integrating service learning projects into their course content. The purpose of this paper is to highlight the benefits of employing this type of pedagogical approach in higher education, based upon published literature. It will also provide supporting evidence for increasing the use of service learning in business courses, projects that have been successfully used in such courses, and offer suggested service learning projects for use in Introduction to Business courses.

Service learning has become a beneficial pedagogical approach to teaching college students both the concepts and social responsibility through civic involvement. It takes on an experiential learning approach by exposing the learner to self-reflection and synthesis. The extent of the students' learning moves from surface learning to a learning that is deeper, "longer-lasting, and more portable to new situations and circumstances" (Ehrlich, 2006). Service learning is defined as a form of experiential learning designed to engage students, faculty, and community partners in a mutually beneficial experience. More specifically, it said to be a credit bearing, educational experience in which students are involved in an organized service activity that meets identified community needs and reflects on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility (Bringle & Hatcher, 1996).

Unlike volunteerism, service learning activities are designed with the purpose of enhancing the learning of course content while also teaching citizenship skills and bringing benefits to the community (Burke, 2007). The difference is so eloquently stated through the example taken from a document of the National Service-Learning Clearinghouse. It states

[I]f school students collect trash out of an urban streambed, they are providing a service to the community as volunteers; a service that is highly valued and important. When school students collect trash from an urban streambed, then analyze what they found[sic] and possible sources[sic] so they can share the results with residents

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of the neighborhood [...] along with suggestions for reducing pollution, they are engaging in service-learning. (National Service Learning Clearing house [NSLC], what is Service-Learning, ¶ 2)

As the relevance of service learning becomes apparent, many institutions and faculty are embracing this pedagogical approach as a means for enhancing student learning. Many universities have introduced this outreach methodology “with the conviction that community service is an integral responsibility of leadership and that their students should cultivate a habit of service” (Gujarathi & McQuade, 2002, p. 144, ¶ 3).

Benefits of Service Learning

Supporters of service learning affirm that all participants involved benefit substantially from the experience. This includes students, university faculty, the university, the community partners, and society in general. For students, the experience cultivates leadership skills as well as encourages understanding of civic responsibility (Gujarathi & McQuade, 2002). In addition, it ignites a sense of confidence in their abilities to work and learn independently. It also provides students with knowledge and confidence for entering the real world, coupled with a sense of achievement, and “...insight to [their] personal strengths and weaknesses” (Peters, McHugh, & Sendall, 2006, p. 133, Table 1, 8).

Moreover, supporters assert that service learning develops skills such as communication, assertiveness, and problem solving. It aids students in developing synthesis incorporating practical learning with academic learning (Peters, McHugh, & Sendall, 2006). This moves the students into the higher order thinking of Bloom’s Taxonomy. Further benefits, as presented by Peters, McHugh, and Sendall, include creating a positive attitude toward academics through an enriched classroom experience, and outreach toward students’ different styles of learning whereby “some students may find practical experience more educational than their classroom study” (2006, p. 133, Table 1, 2). Astin, Vogelgesang, Ikeda, and Yee, (2000) found that

service participation [showed] significant positive effects on...
academic performance (GPA, writing skills, critical thinking skills),
values (commitment to activism and to promoting racial
understanding), self-efficacy, leadership (leadership activities,
self-rated leadership ability, interpersonal skills), choice of
a service career, and plans to participate in service after college.
(p. ii, first bullet)

For faculty, integrating a service learning approach into their courses can only enhance the teaching and learning experience for both the students and them. Engaging students to find relevance to what is presented from the textbook content and its real world application is an ongoing challenge for those teaching in academia. According to an associate professor of English,

Teresa Mangum, the implementation of service learning in her course enabled her to help her students' better link the relationship between "learning through reading and experiential methods" (Edsill, 2005, ¶ 15). Also present is the benefit of providing faculty with avenues for research and scholarly activities. For those who may be apprehensive about employing service learning into their courses, they should think of it as another method of supplementing the course content and enriching student learning (Gujarathi & McQuade, 2002).

While students and faculty accrue rewards from the pedagogical approach of service learning, it is equally as beneficial to colleges and universities as a whole. One of the most substantial assets to a university is the impact that service learning has on retention and persistence to college graduation. Levitz and Noel's study (as stated in Bringle, 2002) indicates that one-third of college freshmen drop out of the first college they attend. This statistic seems to support the ongoing concerns with which many universities are currently dealing. According to Bringle (2002), this has been relatively consistent for the past 20 years. This same research also states that

[a] campus environment that strategically focuses on freshman success, and at the same time takes seriously the importance of civic engagement, holds great potential for providing meaningful educational experiences that can improve retention. Students who are active learners both in and outside of the classroom are more likely to persist. (Bringle, 2002, ¶ 2)

As universities gravitate more towards community outreach as an approach to complementing their mission of teaching and learning, they are realizing the increased importance of solidifying relationships with communities as a whole. An underlying mission of universities is their civic responsibility to the communities they serve. Community service projects undertaken by students of universities enhance the relationship among all stakeholders.

Community partners ultimately gain dividends from the service learning endeavors. Through the projects, they have inherently contributed to the development of community involvement of the future workforce and social contributors to our society. These individuals (student participants) learn the importance of freely giving back to the community from which they receive much. The direct or tangible benefits to the community and community partners are evident in many examples. One example involved the use of Dr. Seuss stories in management and organizational behavior. Student participants of this teaching methodology donated their Dr. Seuss books, upon completion of the project, to local school children who could not have afforded them otherwise (Comer & Holbrook, 2005). (This project is discussed further in the Service Learning Projects and Suggested Projects section.) In this instance the young beneficiaries of the books may have relished the gifts, but they also

gained a joy for reading. In addition, the school increased its library resources at no monetary expense.

What transpires is a win-win relationship for all parties involved. Student contributors have an opportunity to see the impact of their giving. The community partners receive free service while contributing to the education process of participating students. They also gain a better understanding of the teaching and learning process. In addition, a stronger relationship is fostered among the community partners, the community citizens, and the university.

Service Learning in Business Curricula

Service learning seems to fit more neatly into the areas of study that are more associated with helping professions such as education, medicine, and social sciences. The business field of study tends to be one that focuses on business operations, where the implied or hidden agenda is profit margins. However, as the focus of corporate responsibility (corporate citizenship) comes full circle, many businesses in the United States are finding it necessary to juggle the obligation of being socially responsible, satisfying the shareholders, and maintaining profit margins.

Many consumers and investors, as well as a growing number of business leaders, have added their voices to those urging corporations to remember their obligations to their employees, their communities, and the environment, even as they pursue profits for shareholders. (Roger, 2002, p. 2 electronic file, ¶ 1)

Through the teaching and learning process, business colleges across the United States are charged with preparing students to successfully undertake the roles and responsibilities (upon graduation) within business organizations. The intent is that as students progress through the business program, they gain a greater understanding of the materials taught and their application to the world of business for which they are being prepared. Unfortunately, the one area that students tend to be unprepared for is the social responsibility component and the significant impact it can have on a community and ultimately the success of a business. The question becomes,

[H]ow can corporations be solely blamed for being socially irresponsible if business schools do not contribute to the advancement of the community and do not convey the importance of corporate citizenship to their students, who will be running corporations in the future? (Gujarathi and Mcquade, 2002, p. 149, ¶ 1)

With this said, we, as business faculty, have a responsibility for ensuring that our students have adequate knowledge of the importance of a business' corporate citizenship to society and their role in Corporate America. Thus, service learning, through the civic engagement component, seems to be the perfect pedagog-

ical method for entrenching business students with opportunities that will hone their learning of the course content as well as provide real-time applications.

Service Learning Projects and Suggested Projects

Although service learning is not as intuitive in the area of business studies, some business faculty are changing the fabric of teaching and learning in their discipline through the integration of service learning projects in their courses. One approach documented by Comer and Holbrook incorporated the use of Dr. Seuss stories. The basic thrust of the assignment related to concept matching, using what the authors refer to as nontraditional case analysis, to integrate literature into the teaching of management or organizational behavior concepts. Students were required to select course concepts that were presented in the courses, find application of them in a Dr. Seuss story or group of stories, define them in their required paper, and then make a relationship with specific elements of the story to the chosen concepts using relevant examples from Seuss texts (Comer & Holbrook, 2005).

As previously mentioned, the project was further extended into a community service activity whereby students, upon completing their analysis, donated their books to local school children. This was a credit-bearing component of the project. During this phase, students were “encouraged to adapt a stakeholder view in which the firm considers and strives to be responsive to the interests of all constituencies (...employees...customers, suppliers, and community groups, as well as shareholders),” as opposed to the view of stockholder where the emphasis is on creating wealth for shareholders (Comer & Holbrook, 2005, p. 874, ¶ 2). Students were encouraged to make the trip to deliver the books to the kindergarten classroom. Those who did, saw first hand “how thrilled the children [were] to receive their Dr. Seuss books and to interact with [their donors]” (Comer & Holbrook, 2005, p. 874, ¶ 3). During this trip, the adult students also read to and interacted in play with the youngsters (Comer & Holbrook, 2005).

The Dr. Seuss project fulfills the objective of civic engagement through the donation of books and students’ interactions with the kindergarteners. Further evidence of the fulfillment of another objective was provided in the students’ written comments about their experience. The following statements were presented as student reflections.

Many times we take little things like books for granted, but not everyone can afford the money it takes to buy such learning materials... Even though I wasn’t there to give books to the children, I feel good knowing my book went to someone who needed it. [It’s] important for those who gain from society to have society gain from them... The intrinsic reward I got from being a part of this project helped me recognize the importance of giving back to those less

fortunate than you... The joy came from donating and reading books to children that look up to me and made me feel as though I am making a difference. (Comer & Holbrook, 2005, p. 884, Appendix D)

At one university, several service learning initiatives were used. One initiative, used in an undergraduate marketing course, engaged students in assisting clients to evaluate business and market growth opportunities as well as in conducting marketing audits for small, local businesses. These same students were further involved in calling prospective clients for the purpose of generating sales and sales leads. A second endeavor involved the content area of law. Students were able to become certified mediators, which qualified them to then become volunteers as community mediators. The certification was enabled through a course in Community Mediation, offered by a non-profit community mediation service that partnered with the department of business law. Within this same content area, students in an Introduction to Law class attended several state district court sessions that heard cases relating to domestic violence. According to the research, the students worked with the local county-wide domestic violence/sexual assault program serving victims and their children, known as REACH. The students were required to complete an "Alliance Watch Evaluation" form, reporting their observations about issues relating to the way in which the proceedings were conducted, security issues for the victims, and due process and fairness concerns. In each of these aforementioned activities, students were empowered to engage in learning via a nontraditional method that enabled them to be involved in civic engagement, critical thinking, and reflection. Although specific reflection exercises for each initiative was not documented in the literature, evidence of reflective engagement of students who participated in the service project relating to REACH was included. These students were required to maintain a journal in which they chronicled their experiences and their reactions, as well as reactions of other participants. Class time was also allocated for the purpose of reflection and sharing the learning experience (Burke, 2007).

A common course such as Introduction to Business provides further opportunity to use service learning projects within a business program. This course offers a broad view of many areas within the business profession. The experience of the author, who teaches the course, is that students at this level generally have a narrow frame of reference when asked to apply the concepts being taught. For many of these students, business is a career path that they have chosen for themselves without knowing what specific area of business they desire. Quite often these students are freshman with some work experience but very little understanding of how it fits into the content to which they become exposed. These students also lack an understanding of the importance of businesses' role as a civic contributor to society or the community in

which they exist and operate. One way to foster such students' understanding would be through the implementation of service learning assignments in the Introduction to Business course.

Some suggestions for service projects in the introduction course relate to the following topics: What is involved in Starting a Business, The Dynamics of Competing in a Global Market, and The Importance of Ethical Behavior and Social Responsibility of Businesses Today. The first suggested project relates to the topic of starting a business. Students can prepare a brochure to provide information on the identification of stakeholders of businesses today and the dynamics of the business environment for prospective business owners. This information can serve as a pre-entrepreneurial tool for those who may have an interest in starting a business but don't know where to begin or what to consider. Another avenue to take with this brochure project is to create a brochure that provides information on what one needs to know before starting a business. It could highlight a host of information stemming from the question of why business ownership, do you have what it takes, types of small business ventures, and reasons why small businesses fail and why they succeed. On a broader scale, the brochure can be produced in conjunction with the city's chamber of commerce offerings.

A second initiative for an Introduction to Business class would be for it to help infancy small businesses within the college community to assess the customer demand for various orders or services over a designated period of time. Students can then produce a graph or chart that will provide for the owner(s) a clear picture of the peak times of business and the products or services that are in greatest demand at various time periods, thus helping them to better assess the customers' wants and needs while enhancing the business' inventory controls. Similarly, students can prepare a customer service survey, designed to gather information on customer satisfaction of goods and or services as well as repeat visits, for small businesses.

As globalization becomes a broader part of our business climate, many large and small businesses are finding that success is dependant on how competitive they become globally. For large firms, this is a more feasible endeavor. Conversely, small businesses tend to shy away from reaching out to global markets. Students in an Introduction to Business course can assist by providing such businesses with a list of ways in which the businesses can become a part of the global market. Students can engage in the research that would be involved and produce a small information sheet or booklet that would provide methods for entering global markets and the needed resources available for making this possible.

One final service learning project relates to ethics in the work place. The students can develop codes of ethics policies for specific small businesses within the community. An approach to accomplishing this would be to have

the students find out the values and basic policies of the business then begin to develop codes based upon the data and prior research. The topic of corporate ethics is an area that is much needed within many businesses today, particularly in light of corporate accountability and moral conduct within business operations.

Implementing Service Learning in a Course

In order for faculty and students to experience the benefits of service learning projects in a course, the project must fit within the context of the course, ensuring that the project is aligned with the course objectives. Equally as important is that the service activity and the skills, along with topics of the course, must connect (Gujarathi & McQuade, 2002). Students' skill level must also be considered when deciding on the service learning project. Students must have the technical skills necessary to undertake the task or tasks which they are to perform for the community participant. The process of selecting a project and a community participant and developing a partnership should be conducted carefully, taking into consideration initially selecting a small project, setting attainable goals for the partnership, and establishing roles for reciprocal cooperation characterized by mutual trust. Other considerations include maintaining open communication for the exchange of information and ideas, combining an appropriate mix of structure and flexibility in the relationship, conducting continuous assessment for improving the process, striving to understand the culture of all participants, knowing community issues, and celebrating achievements. Additionally, syllabus design, development of reflective projects, and assessment are critical to achieving the benefits of the service learning experience (Burke, 2007).

The syllabus should clearly explain the purpose of incorporating a service learning project into the course, the benefits of doing so, as well as the depth of the activity. The relationship between the activity and the course goals, plus expectations and evaluation methods should also be specified (Burke 2007). Basically, the syllabus should relay the importance of the service activity as an academic component of the course; hence the need to take it seriously and understand that the evaluation is based on meeting the course objectives. At the same time, the content contained in the syllabus should pique students' interest in the project.

In order for students to reap the benefits of experiential learning, they must be provided with opportunities to indulge in the reflection of their experiences and engagement in question and discussion sessions. An arsenal of activities is available that can be used to satisfy the learning objective of reflection. Some examples include writing a report on the experience, journalizing experiences based on a set of questions to consider, developing case studies, creating a portfolio of accomplishments and challenges, completing mini

projects centered around the community service, and giving a presentation to community activist or class participants (Burke, 2007; Gujarathi & McQuade 2002; Peters, McHugh, & Sendall, 2006; Zlotkowski, 1996). The opportunity for students to engage in questions and discussion can be conducted in conjunction with each of these projects within the classroom setting. To further enrich the students' reflection, guest speakers can be invited to make presentations that focus on students' particular topics (Burke, 2007).

Once the community project has been identified and development of the reflective assignment has been completed, the assessment tool must be identified. Within this process, consideration must be given to dissemination of the project and allocation of the assignment grade. The methods of two research studies will be juxtaposed to provide a limited view on how each approached the assessment of service learning projects.

In the first study, the authors decided to make the project optional. They believed community service involvement should not be forced upon students because the likely ramifications could surmount to "suboptimal benefits to students and the organizations that the assessments are supposed to help" (Gujarathi & McQuade, 2002, p. 146, ¶ 8). The researchers also documented the lack of knowing the appropriate number of service assignments available as reason for having made the project optional. One final reason cited was not to consider allowing students to select a service participant on their own due to the time it would require students to accomplish this task as well as the time required of the instructor to ensure the appropriateness of the assignments to the course (Gujarathi & McQuade, 2002).

In order for the assignment to meet one of the characteristics of a service learning activity, the authors had to make it a credit bearing assignment. Making such a decision increases students' motivation to want to participate in the assignment and gives credibility to the importance of community engagement. The study provided a breakdown of the grading scheme, taking into consideration that participation in the service learning activity was optional.

"For students not participating in service-learning, the components of the course grade were three exams (highest representing 30% of the course grade; lowest, 20%; and middle, 25%), two case write-ups (10% each), and class participation (5%). The service learning assignment carried 20% of the grade. Service learning participants needed to complete only one of the two case analyses, and their lowest exam would count for only 10% of the course grade instead of 20%. Alternatively, they could choose to do both of the case assignments, in which case their lowest exam grade would be dropped from the computation of course grade. (Gujarathi & McQuade, 2002, p. 147, ¶ 2)

The second research study approached the grade assessment component differently in that all students were required to participate in the service learning project. While this is not explicitly stated, evidence was present that led the reader to believe this to be the case. In the orientation phase of the implementation of service learning in this capstone Human Resource Management (HRM) course, students were assigned organizations and HRM project areas that matched their stated interest. This occurred after students completed a couple of interest gathering forms (Peters, McHugh, & Sendall, 2006).

The capstone course required students to complete four assignments with each accounting for a designated percentage weight of the overall grade. The assignments included a mid-term presentation and report worth 25%, an end-of-semester presentation and report weighing 40%, a take-home final examination equaling 25%, and classroom participation and on-site organizational professionalism worth a final 10% (Peters, McHugh, and Sendall, 2006).

The suggestions for implementation are by no means all inclusive. However, they do provide the framework from which to begin the process of incorporating civic engagement projects in a single course opposed to an institution-wide implementation of a service learning initiative.

Conclusion

The examples and suggestions documented in the previous section provide a framework from which to begin exploring the use of experiential learning in business curricula through the service learning methodology. Sufficient support is present in the literature for the use and benefits of this approach as a powerful pedagogical tool. Service learning does have a place in the curriculum, even if the primary goal of course work is to strengthen students' cognitive skills (Astin et al., 2000), whether in the social sciences or business.

The most compelling finding of the Astin et al. study relates to student interest in the course. These researchers found that a positive service learning experience is determined by the student's level of interest in the subject matter. This led them to suggest "strong support for the notion that service learning should be included in the student's major field" (Astin et al., 2000, p. iii, fifth bullet).

Additional studies need to be conducted in the area of qualitative and quantitative outcome measures of students' performance in meeting the objectives of service learning, however. The dynamics of students' participation as teams in service learning projects is also an area worthy of researching.

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