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Participatory Action Research for School-based Management and Teacher Professional Development

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Abstract

The new five-year curriculum for a bachelor's degree in education with more than one year internship at a school site has provoked Thai educators' concerns about the qualification of cooperative teacher professional development schools (CTPDS). These two successive studies were conducted at a primary school in order to look for the patterns of school development and to find out the influential factors of teaching and learning in the school. One of the research projects was to set general standard for the eligibility of CTPDS. The other focused on one specific aspect of teacher development. Both research projects were qualitative participatory action research (PAR); the collaboration of school's personnel and university's faculty members. Each project took one year to be completed. Data were collected via supportive group discussions, individual interviews, classroom visitations and documentations. For the first project, eight standard criteria of CTPDS were proposed as the results. In the second project, findings revealed the patterns of the development. Specifically, the success of these two studies revealed the effectiveness of utilizing PAR process to develop school-based management and teacher professional in Thai educational context.

Key words: School-based Management, Teacher Professional Development

Introduction

The extension of one year in-service duration of internship at schools is the new five-year curriculum for bachelor's degree in education in Thailand. It is part of Thai Educational Reform (the 1999 National Acts of Educational Reform) that emphasizes the importance of teacher professional development. It is also to assure the competency of the new generations of teachers to be able to work in relevance to educational reform policy. This change casts the burden on the host schools of the interns to get ready for such educational environment. It is also the responsibility of higher education institutes to look for the highly qualified schools suitable for their students' internship and help the cooperative teacher professional development schools (CTPDS) to meet the requirements.

Many higher educational institutes have launched research-based projects at their proposed CTPDS for similar purpose which was to empower teachers' potential in classroom management and in professional development in general (See Rajabhat Ban Somdejchaopraya Institute, 2001; Rajabhat Chankrasem Institute, 2001; Rajabhat Kanchanaburi Institute, 2001; Rajabhat Suan Dusit Institute, 2001; Rajabhat Suan Sunantha Institute, 2001). Most of the projects adopted participatory action research (PAR) model for the research and found it most effective. The methodology they employed was based on the Plan, Do, Check, Act (PDCA)

steps of action research. In these studies, PAR process was proved to transform the daily practices of teachers.

This article presents two successive studies conducted at one school site. One study was to find out the possible model of school-based management in order to set standard criteria for other CTPDS. The other focused on one specific aspect of teacher development, which was teaching English as a foreign language. Both research projects were qualitative participatory action research; the collaboration of the school's personnel and the faculty members of Nakhon Ratchasima Rajabhat University.

The School Site

Ban Lak Roi is a public elementary school located within a short distance from Nakhon Ratchasima Rajabhat University. This school is one of the University's CTPDS based on the notification of Ministry of Education. There are sixteen teachers including the administrator and 410 students reigned from kindergartens to sixth graders. The number of students in each class is from 25 to 30. Like all other elementary schools in Thailand , classes are categorized into two levels--first, second and third grades are in Level 1 and fourth, fifth and sixth grades are in Level 2. In Level 1, only one teacher is assigned to handle each particular class in all subjects for the whole academic year, while in Level 2 a group of teachers rotate to take part in one specific subject for an hour each day. Similar to all other public schools in Thailand, each teacher has clerical errands to take care of besides teaching.

1st Study

The first study (Pimolbunyong et al., 2004) was aimed at the development of the whole school in order to set general standard criteria for the CTPDS. Five principles of school-based management; decentralization, participation and involvement, returning power to people, self-management and checking and balancing (Boonprasert, 2000) were reviewed in this study along with the roles of people involved.

Research procedure started with introducing the project to school personnel at teachers' meeting by the research team. After each party got familiar with each other, another meeting was held for the revision of school action plan. In the meeting, SWOT Analysis was applied and the analysis of previous information from the school survey about parents and community's need and related documents were discussed in order to investigate the school's baseline. The next step was the cooperation among the research team, the school administrators, and teachers in developing the school development planning.

Using the SWOT analysis and the brainstorming of all teachers, four development strategies were set in response to this analysis; 1) the development of teaching English for communication , 2) the integration of learning and teaching activities, 3) the development of the teachers in manipulation of learning process, and 4) the development of teaching materials and technology. For the rest of the project time, the school manipulated the developed plan with the help of experts in the area. The research team visited, supervised and followed up the school as planned. Finally, criteria of CTPDS were developed. Content analysis was used to analyze the data.

As the results, model of school-based management and criteria of CTPDS were constructed based on the best practice of research process. They were as follow;

1. The development process

The development process for criteria of CTPDS was clarified as the following four steps:

1.1) Study related documents and manage an experts' interview to specify framework for criteria construction;

1.2) Manipulate some workshops for criteria drafting;

1.3) Synthesize and develop criteria and indicators for CTPDS;

1.4) Hold public criticism of the criteria constructed.

2. Criteria of cooperative teacher professional schools

The criteria consisted of three important components--criteria statements, indicator statements, and criteria for considerations. The total of eight criteria and twenty-eight indicators were as follow.

2.1) School readiness

Criterion statement 1 The CTPDS are ready for in-service internship of teacher-to be-students.

Indicator 1 The schools volunteer to participate in teacher professional development partnership.

Indicator 2 The ratio of teachers per students is proper and the number of facilities provided is appropriate.

Indicator 3 The schools' personnel are qualified according to their academic proficiency and their teacher professional efficiency.

Indicator 4 The schools are located within transportation reach community.

Indicator 5 The schools are situated in safe environment for teacher professional practice.

2.2) Schools' administration and management

Criterion statement 2 The schools' administration and management are consistent with the goals of the Nation's Educational Acts.

Indicator 6 There is a specific plan for academic administration, budgeting, personnel administration, and general administration that provides students the utmost benefits.

Indicator 7 The administration is decentralized and involves stakeholders' participation in decision-making.

Indicator 8 Team-based work culture, knowledge construction and systemic problem-solving oriented are encouraged.

Criterion statement 3 The schools' administration is based on moral principles.

Indicator 9 Administrators and schools' committee enable to be the role model for students, teachers, parents and community members.

Indicator 10 The schools' administration and management is legal- and moral-based, transparent, and recheck able.

Indicator 11 There is the ability to handle the education effectively and economically with the limited resources.

Criterion statement 4 The schools' administration and management allows the access of quality and efficiency inspection.

Indicator 12 Quality assurance system is available for inspection both by the assessors and by the community.

Indicator 13 Information technology system for the administration is available for the sections of academic administration, budgeting, personnel administration, and general administration.

Criterion statement 5 The schools' development plan is provided.

Indicator 14 There is the school's plan or strategic plan for development.

Indicator 15 Actions are thoroughly practiced according to plan.

2.3) Learning management

Criterion Statement 6 The schools focus on learner-centered based.

Indicator 16 There is the up-to-date school's curriculum which is in relevance to the need of the students, community, and society.

Indicator 17 Curriculum management is systemic and continuity.

Indicator 18 Learning activities are varying, flexible, and suitable according to the nature and needs of students.

Indicator 19 Facilitation, follow up system, and supervision of teaching and learning quality are emphasized and conducted regularly.

Indicator 20 There is the effective use of teaching materials and technology.

Indicator 21 Both outside and inside database and learning resources are available for teaching and learning.

Indicator 22 The assessment processes are varying, appropriate, and in relevance to learning process and contents.

Indicator 23 Classroom research for teaching and learning development is encouraged.

2.4) Personnel care taking and professional development

Criterion statement 7 There is the encouragement of personnel care taking and professional development for the benefits of students.

Indicator 24 Teacher professional development is encouraged systemically and continuously.

Indicator 25 The administrator and teachers satisfy with their job and royal to it.

Indicator 26 There are teacher networks and organizations available in the community for the educational benefits.

2.5) Community relations system

Criterion statement 8 The schools provide the opportunities for the stakeholders' involvement in school administration and management.

Indicator 27 Parents' and community's involvement in school administration and management is encouraged.

Indicator 28 Parents and community participate in school's activities continuously.

It was noted that the success of this research project was also due to the administrator's supports and sincerity. The administrator took roles in providing opportunities for the teachers to share and propose ideas, facilitated the teachers in working, and followed up supportively and regularly.

2nd Study

This latter study (Jogthong et al., 2006) focused on the development of the teachers' potential in teaching and learning English as a foreign language. Similar to the first study, it was primarily an attempt to look for patterns of teacher professional development and, more specifically, to find out the influential factors which affect the potential of teaching and learning

English in the school. This was also to set a development model for other schools and for this cooperative teacher professional development school itself to be the host of in-service training. Study reviews had indicated that participatory action research worked well in many educational contexts (see Gudjonsdottir, 2000; Lemelin, 2003; Ryan, 2001; and Vanosdall, 2004). This study, thus, utilized participatory action research principles in working with the school personnel.

Similar to most of the elementary schools in Thailand (Luanganggoon, 2001), there was not any English teacher at Ban Lak Roi School who received a certificate or a degree in English teaching or in related fields. However, English had practically been taught in every class at this school, as well as at all other schools, and the demand of English teaching for young learners was getting high. Based on the group discussions and the school's documentations, school curriculum which integrated English into other learning contents was proposed by the group of teachers in this school.

The main activities employed for this research and development were planning for English integrated learning and teaching, fostering learner centered-based classroom practice, and conducting classroom action research. According to English integrated learning and teaching management, all teachers in the school were trained to enhance their language skills competency and to integrate English into their everyday lessons. Workshops and seminars in English teaching and learning including classroom research were held regularly mostly after school and a few times outside the school when appropriate. The duration of this research was one academic year, starting from April, 2005 to March, 2006. The results of this research and developments were as the followings.

1. Patterns of the development

Findings revealed patterns of the development in three areas.

1.1) Pattern of research cooperation development. As for the administrator, cooperation was based on the role taken in participation for this research, funding, and academic promotion. For the teachers, cooperation could be enhanced by encouraging understanding, supervision, participation in all activities, and promotion opportunities.

1.2) Pattern of procedure for development. The process began with problems and needs analysis, then looking for the possible solutions, taking actions, evaluation and conclusion, and dissemination if satisfied, otherwise, restarting by analyzing problems and needs.

1.3) Pattern of supervision. The supervision styles varied due to situations. They were formal, semi-formal, and informal--with whole group, small groups, group representative, and one-by-one supervision. Notably, supportive and friendly styles worked best with all said types of supervision.

2. External and internal factors for development

External and internal factors were found affect the development.

2.1) External factors. The external factors were:

2.1.1) Learning resources for teachers and students;

2.1.2) Community and parents supports;

2.1.3) Supervisor and consultant networks;

2.1.4) Promotion opportunities; and

2.1.5) Funding.

2.2) Internal factors. As for the internal influential factors, they were:

2.2.1) Administration factors, which comprised of facilitation, cooperation, participation, encouragement, and supervision;

2.2.2) Working culture factors, which were identified as age, years of teaching, knowledge and working experience, and working environment; and

2.2.3) Teachers' workload which were classified as the job of teaching, doing school's supplementary tasks, and monitoring school activities.

3. Positive changes in the development

The results of the development at Ban Lak Roi School also revealed changes within students, teachers and the administrator.

3.1) Students' attitude towards English learning. The students became more open-minded, enthusiastic, and interested in studying English. They were able to use more English words naturally, developed the habit of self-study, and showed good relationship towards their teachers.

3.2) School personnel's attitude towards teaching and learning. Teachers and the administrator accepted that they had learned along with their students and were more confident and open-minded in learning new things. They believed in the students' ability to learn. Their English skills had improved. They also had the opportunity to develop the skills of teaching English across the disciplines and were able to conduct their own research. Cooperation, acceptance in each other and in changes, and learning to work systematically were achieved procedures for these personals resulted from this research. The satisfactory of research participation was at the high level and there was a tendency of professional development continuity of participants.

4. Standard criteria of English teaching and learning in schools

Finally, standard criteria of English teaching and learning in schools had been proposed as follow;

4.1) Schools' policy or strategic planning for the development of English teaching and learning has been stated clearly;

4.2) Effective patterns of teaching and learning English management are encouraged and; adequate, modern, and usable technologies are available;

4.3) Teachers show good English skills, employ the student-centered teaching skills, and have undergone classroom or action research and;

4.4) Systemic and regular supervision and supports from the community and parents are encouraged.

Concluding remarks

In order to serve the urgent need to enhance teachers' potential of teaching and learning management in schools, due to the 1999 Thai Educational Reform Acts, participatory action research may be the solution for the development. The results of these two studies have confirmed that in Thai educational context, participatory action research yields effectiveness and positive results in the development of school-based management and teacher professional. The cooperative nature and supportive environment of this research type process allow participants to work with the researchers spontaneously, resulted in positive changes within the organization.

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Think Twice Before You Speak: Using effective praise in the early childhood and university setting

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Abstract

Most educators agree that students need supportive environments at any academic level. Well meaning educators have been taught to consider praise to aid in fostering self esteem, student achievement, and motivation for learning. In spite of research showing the use of traditional praise as counterproductive, teachers continue to use ineffective praise within their classrooms.

A study was conducted with early childhood and university, teacher education students revealing similar findings for both age groups. The implementation of effective praise produced greater behavioral gains than within the group receiving traditional praise.

Educators need to be given the knowledge and supporting research to make praise more effective within their classrooms. Within this session, the authors will identify the problem, share current research as well as data from their study, and discuss implications for educators.

Keywords: Effective Praise, Higher Education, Early Childhood, Student Achievement, Student Motivation

Introduction

Educators agree that students at any academic level need supportive environments. Although research states that using praise may be counterproductive to this effort, teachers continue to utilize ineffective praise within practice. Well-meaning educators have been taught to consider self-image and esteem as well as student achievement and motivation for learning. Many offer positive reinforcement in the form of verbal praise in order to progress toward these goals. However, research states some common uses of praise have negative effects in some or all of these areas. Teachers need to be given the knowledge to become more effective and consistent with the goals and standards of appropriate early childhood development.

Brophy (1981) defined praise as "to commend the worth of or to express approval or admiration." There are many problems with its use within the classroom setting including its use to aid in student motivation, self esteem and classroom management. Statements beginning with the phrase, “I like the way,” place the onus for the behavior on the instructor. Words such as “great” or “good job” are not specific. Young children do not always have the interest to please their teachers. As they age, this motivation greatly diminishes. Esler (1983) revealed that correlations between teachers' rates of praise and students' learning gains are at times negative. When correlations are positive, they are most often too low to be considered significant.

Many educators consider praise to be an important component of their classroom management system. Kounin (1970) found that teachers' use of praise did not play a role in effective classroom management. The ability to maintain an appropriate momentum of classroom instruction and activities was the most effective classroom management variable. Brophy (1981) discovered using praise as a systematic reinforcer within classrooms to be impractical. His research disclosed much teacher praise to be non-deliberate reinforcement elicited by students.

Educators utilize praise to promote student self esteem. Studies have shown some statements of praise to lower students' confidence in themselves. Rowe (1974) found that praise in the traditional sense lowered students' confidence as well as their verbal participation. Further, students exhibited many characteristics including doubtful tone during responses and low participation risk-taking which are indicative to low self esteem. They also had a higher incidence of looking to the teacher for reinforcement -- answers, approval, and disapproval.

Praise has also been used within classrooms to foster student motivation when it has been actually found to be a weak form of reinforcement. Green and Lepper (1974) learned that once teachers began praising preschool children for engaging in an activity, the children became less motivated to do the activity. Praise has also been found to lessen self-motivation and cause children to become reward-dependent (Martin, 1977; Stringer and Hurt, 1981). Meyer (1979) discovered praise led recipients to have low expectations of success at difficult tasks which decreased the risk taking and personal task intensity.

Ineffective praise can stifle students' natural curiosity and desire to learn by focusing their attention on extrinsic rewards rather than the intrinsic rewards that come from the task itself (Brophy, 1981). Epstein (2003) states,

> Use encouragement rather than praise. Another way to support planning is to avoid praising children's ideas. If you say "great idea" on one day or to one child, you may inadvertently convey disapproval if you forget to say those words to another child or on the following day. Praise also tends to end the conversation, cutting off the possibilities for children to elaborate their plans. Instead, use the other strategies listed here—listening, asking questions, commenting, recording their ideas—to encourage children to think about and follow through on their intentions.

Teachers not only need the research knowledge to assist them with the use of effective classroom encouragement, but they also need the tools needed to help with delivery. Jane Bluestein (2004) offers a quick, effective guide. She suggests:

- Use positive reinforcement to strengthen already existing behaviors
- Watch for a tendency to praise. These statements can appear manipulative to students.
- Avoid praising one child to motivate others.
- Avoid using teacher approval as a means to reinforce desired behavior. Use behaviors such as a wink, smile, touch, to indicate that you are pleased.
- Phrase reinforcements as affirmations or acknowledgments
- Describe desirable behaviors in specific terms
- Look for the positive! (81)

Based on the review of the relevant literature it was hypothesized that effective praise needs to be addressed at all levels. This study examines the impact effective praise has on

graduate early childhood and elementary teacher education students' attitudes and performance. Specifically, the study addressed the following research question:
What is the effect of praise within a graduate early childhood course?

Methods

Beginning the winter of 2006, this study was initiated. It was further theorized that if our graduate students, mostly inservice teachers, were placed in a situation where they were not only given information about effective praise but also receiving various forms of praise, they would have a better understanding of its effectiveness for use within their classrooms.

One hundred thirteen graduate students within five course sections enrolled in a Midwestern university early childhood or elementary course were included in the study. The study was concluded within a one-year period of time. Within the semester time frame, half of the students enrolled within each course were randomly selected to receive effective or non-effective feedback on course assignments submitted to their instructor. The effective feedback consisted of specific statements addressing their performance. This included comments regarding each point from the assignment rubric. The other half received brief, non-effective feedback such as "Great work" or "Super job."

Using a Likert scale and open ended responses, students were asked their thoughts and feelings about the assignment and course as well as the feedback they had received. Specifically they were asked questions dealing with motivation, self esteem, management of the course, and quality of the instructor.

Near the close of the semester, students were assigned to analyze literature which addressed the use of effective and non-effective praise in the classroom setting. The instructor discussed the study with all students and gave those students who had received the non-effective feedback their formal assignment sheets. These sheets contained the specific, effective praise addressing each rubric point given to the effective praise group. Students discussed their thoughts and feelings about the feedback and class and related it to their assigned literature as well as their performance within their own classrooms.
The students' narrative comments are found within Table 1.

Data Analysis

The preliminary data was drawn from the surveys of 113 students. The students ranked their responses to questions about motivation, self esteem, management of the course, and quality of the instructor using a four-point Likert scale and were given space to provide open-ended responses.

Weighted averages were calculated for the student's responses from each assessment. Table 1 shows the preliminary data for each of the categories. A correlation was completed between the four weighted totals: There was a strong correlation of .972 between effective praise and student motivation. There was a strong correlation of .941 between effective praise and self esteem. There was a strong correlation of .952 between effective praise and course management. There was a strong correlation of .931 between effective praise and instructor effectiveness.

Discussion

The analysis supported the hypothesis that effective praise needs to be implemented at various levels. The analysis shows that there is a strong relationship between effective praise and student motivation, self-esteem, course management, and instructor effectiveness. The student comments (Appendix) support the analysis of the preliminary survey data. This study indicates that the use of effective praise in the university graduate-level setting is a powerful learning intervention.

Limitations

The results from this study are based on self-reporting data. The students reported hypothetical data points which are not based on observed data. Tracking these teachers within a longitudinal study to seek evidence of actual use of feedback within their classrooms may allow for greater confirmed data.

This study did utilize a control group and the subjects were randomized in their selection process. The authors felt that each student should be afforded the highest level of instruction within the courses and given appropriate feedback. They were all given effective feedback on every assignment by the completion of the course.

Conclusion and Implications

The reviewed literature suggests that effective praise is not being widely used. Educators need to be given the information about the impact of effective and non-effective praise as well as tools needed to utilize effective praise within their classrooms. Institutions at all levels need to take a critical look at their programs to evaluate the use of feedback and the implications to students' motivation and performance.

One of the participant responses sums up the importance of effective praise. This student speaks to the effective praise she had received within her graduate-level course: "I am glad to get specific feedback. I have worked hard and feel that my professor values my efforts. It makes me want to try my hardest to do the best I can on the remainder of the assignments. It is making me also see that I am not always giving this gift to my students, and I need to try harder to be sure to do this."

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Appendix

Students' Narrative Comments

In addition to responding to the questions dealing with motivation, self esteem, management and instructor effectiveness, graduate students were given the opportunity to give open-ended comments.

The following comments were written by students within the effective praise group:

- "I am glad to get specific feedback. I have worked hard and feel that my professor values my efforts. It makes me want to try my hardest to do the best I can on the remainder of the assignments. It is making me also see that I am not always giving this gift to my students, and I need to try harder to be sure to do this."
- "I never knew getting words on my assignments would be important to me. Now that I'm thinking of it, it really makes a difference as to how I feel about my work and how hard I try on my next assignments. When a professor takes the time to give strong feedback, that means a lot. I need to be sure to do the same with my little ones at school."
- "As a teacher I try to encourage my students to do the best that they possibly can. I try to tell them in more then one or two sentences that they are doing a great job or keep up the good work. I know when I give them this positive feedback that is encouraging them to do their best and also to achieve something that they think they can't. It is important as a teacher to make or students feel like the best. My professor is modeling this for me, and it is good to feel first hand."
- "I give my students both short and long feedback. On daily assignments, I write quick notes, stars, smiles, stickers, redos, this wasn't your best work, etc. On writing assignments, I give them a form with my 2 stars and my 2 wishes. I'm seeing how I am feeling about the feedback I am getting, so I'm going to give more to my students."
- "The best part of feedback is learning from mistakes and seeing what I did right. Did my work express my effort? Did my point get made? Even if it takes a few extra days to grade

the papers, I think there should always be constructive comments attached and something positive to acknowledge the efforts."

- "I believe that it is simply human nature to crave praise from others. Indeed, we all like to hear that others are noticing our hardwork, triumphs and achievements; however, in most cases we simply are doing the work solely for the betterment of ourselves or just because it is our responsibility."
- "As a student, I complete tasks regularly because I want to further my education and be the best professional that I can possibly be. Although, my education is for "me", I still like to get feedback from my instructors. I like to get positive notes so I know I am headed in the right direction, and I like to receive constructive criticism because it gives me ideas on how I can improve my work and it can direct my thinking. When an instructor takes the time to evaluate my work, it shows that he or she values who I am and the work that I produce. Now, I do not think that professor needs to spend hours grading each assignment; however, I do appreciate the time and efforts that are taken to grade those major assignments."
- "Now, as an elementary school teacher, I believe that it is essential to give children immediate feedback. At a young age, children need to see that teachers value their work and thoughts, and that we appreciate all the hard work that they put in. Moreover, the children need to be guided in their learning experiences, and I think that feedback is one of the ways in which we can do this."
- "Giving students feedback on their performance is more than grades. As an elementary art teacher I am not required to give my students grades and I know it is important to give them each feedback time with their project. I should write more. I feel it is so important to put on an art show at my school each year. Every student in the whole school gets at least one piece of art work in the show. The students get such a thrill from seeing their art work hanging in the show. I try to hang up art work all year long. This gives students more motivation to try their best. I will find the time to give the students some kind of feedback especially since I do not give grades. I see how important it is now."
- "As a student, I like to know how I am doing. On a large assignment, I like more than a 1 or 2 word answer. I like the instructor to tell me what I did well, and where I can make improvements. On smaller assignments, a quick response is fine. As a teacher, I like to give me students feedback right away. Most of the time, on morning work I will give a word, smile, sticker, or some other "quick" response. When it comes to their writing or other subjects, I like to let them know how they are doing. I will take the time to either have a conference, or write it out with more details."
- "I have had a few teachers who only wrote a grade or a few words. I never really thought much about it but it affected how I felt about the course and them. I have had several teachers here who have given very thought provoking responses. I could tell that they had actually thought about what I had written. I loved reading their comments and suggestions!"
- "As a third grade teacher, I don't give many long assignments. I do take time to read what students have written in their journals. I try to provide more than just a few words. Next year I am going to let the students select one writing assignment each month for me to respond to in writing at length. I frequently have author share time so that they can read something to the class. Then we allow for 3 student comments and something from me."
- "I teach 2nd grade and some of my students don't read as well as others. I end up writing something brief on their work. I can now see how this might not the right approach. I used to think a one word remark like "Great" or two words such as "please re-do" were sufficient.

I should take a few minutes to talk with the student to offer better feedback. If I want a parent to understand in depth what my concerns are with the childs work, I would call his/her parent and have personal conversation with them. I do remember when I was in grade school, teachers using rubber stamps with messages on them. The boy that sat behind me used to get a sad face that said "poor work" all the time(I know this because he sat behind me and we always had to pass papers behind us in the row)I cannot imagine how this effected the young boy. We couldn't have been much older then 2nd grade. In cases such as these I definitely think a personal conversation with encouraging words rather then a negative message from a rubber stamp would be better."

- "Some of the professors here are really good about giving feedback. It is a good way to let the students know their strengths and weaknesses, rather than slapping just a grade on paper. In my own classroom, I give feed back and rubrics on projects that they do, along with books that they write. They enjoy reading the feedback because it is individualized, rather than receiving feedback as a whole group."
- "I like knowing how I am specifically doing. How else am I going to learn and improve? I wish I would have thought about this with my own classroom. I thought it was OK to give short responses. I can see how it's not."

The following comments were written by students within the non-effective praise group:

- "As a student, I don't mind the one or two word comments next to the paragraph or sentence that is good. If there is something that I did wrong, then I like the more specific feedback. I am not looking at my classroom, and I do this. I am seeing how my students might think I'm slacking or it might affect their motivation."
- "As a student I would feel as if my instructor did not value all the time and effort that I had put into the project that I was doing. As a student I like to know exactly how I am doing and sometimes one or two sentences is not enough. I work hard on everything that I did because I want to show my professor the best quality work that I can do. Sometimes I get so stressed out because I don't know how I am doing. I feel that way when I have classes that meet half in class and half on blackboard. I feel that I am doing well but I have not received any feedback from the professor so I really don't know. I know if I feel this way just imagine the way a student in our classrooms feels. We as educators need to give more than one or two sentence comments."
- "I do not even know if my professor even read the paper. It might make me feel less inclined to work so hard next time. It is important to know my teacher's thoughts on my work, and I look forward to her responses. I am not looking for red ink (ha, ha). I appreciate any input that my teacher may give me. I didn't realize that was so important to me, and I feel kind of silly about it. My students are looking for immediate feedback in regards to their work completed. I do believe it is as important for myself as an educator to acknowledge my students work and give lots of praise as well as commenting on their performance. I also like to build my students self esteem on a daily basis."
- "Feedback to your students is crucial, especially in elementary school. When I give students feedback to their writing I have a checklist and a comment section. I always write in the comment section something like "I like how..." to instill confidence in them. When I give them "constructive criticism" I do this face to face in our conference meetings. Sometimes when students are unsure of something and they make mistakes, the last thing they want to

do is read about it. Conferences help with that dilemma because I can joke around and model it for them."

- "Without feedback, you are hindering your students' growth and not only frustrating them, but also you! Does that make sense? I hope so!"
- "I think everyone likes to have validation for the work they accomplished. If I put weeks into a paper and received nothing more than a "good job", I would be disappointed and wonder if anyone even really bothered to read it."
- "I think that in professional level classes such as these, the prompt one or two word responses are appropriate. If I have questions about what was written I generally go and ask. Time is precious. I would feel more valued as a student however to receive more feedback. I am self-motivated, so I'm not as affected. I can see how my students would be though."
- "I spend the time and put in the energy to do good work on projects, papers, etc. and like to receive feedback of more than just a few words. For a fill in worksheet, a short phrase is enough, yet for those papers and projects that take the time at home or in school, students need more than a simple good job. A sentence or two outlining what they did well and any areas for improvement would contribute to the success that a student would feel regarding their work."
- "It shouldn't matter what my instructor puts on my paper. I should be able to not be affected by it. I have found that I am and now know that I need to be sure to do this with my students."
- "I can see how I need to be better at giving specific feedback to my kids at school. We should all do this at any level for many reasons."
- "Positive reinforcement is a good thing but I can see how it needs to be specific. I don't really give an idea to my students how they are doing if I put a one or two word grade on their assignment."

Risk Theory and Student Course Selection

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Abstract

Risk theory is the study of the impact of possible outcomes on the process and consequences of decisions. Students make course selection (CS) decisions with varied return expectations, but also with a perception of the risk that those expectations will not be realized. This study presents the findings of an empirical analysis measuring the relative magnitudes of risk perceptions in four major categories that students consider in selecting upcoming courses – subject matter, professor, course environment, and grading. Participants were undergraduate and graduate students in a Business school and an Arts and Sciences school in a private liberal arts university. The results indicate that undergraduate and graduate students place importance on the surveyed risk elements in an inverse fashion. Results also show that course selection risk perception differs among students according to class standing but are similar between students in both Business and Arts & Sciences schools.

Keywords: Risk, Course Selection, Uncertainty, Perception, Exams, Course Environment, Professor, Grade

Introduction

Students make decisions throughout their college career, and decision-making is an important element in the learning process. F. Yates, Veinott, & Patalano (2003) define a decision as "…a commitment to a course of action that is intended to produce a satisfying state of affairs." Decisions are normally considered deliberatively or quickly or impulsively or even subconsciously in the context of a risk/return tradeoff. Both return and risk are situation-based variables, with their definitions a matter of context. The literature is extensive in its treatment of this tradeoff in a business context. However, little has been written on this tradeoff in an educational setting, specifically with respect to the student's decision on selecting upcoming courses when a choice exists among various courses or even alternative sections of the same course.

The course selection (CS) decisions of students are among the most defining in the success of their learning. The key (compound) question related to the course selection decision is: What are the expected returns/benefits this course will give me, and what is the risk that I will not receive those expected returns/benefits?

Throughout a student's college career, the CS process takes on many forms. At the beginning of that career, selection of courses is limited as required courses predominate in the student's schedule. There is, however, some selection latitude, as most required courses are offered in multiple sections and likely taught by more than one professor. As the student advances in the curriculum, the CS decision becomes more complex as elective courses and section decisions must be made. In CS situations, among the students' return expectations are 1) personal interest level of the course subject matter, 2) intellectual challenge and rigor, 3) demand

on time, 4) grade potential, 5) assistance in achieving career goals, 6) enjoyment of the classroom experience, and 7) performance in the learning environment.

Yet no selection can be made based solely on return expectations. Return and risk are interrelated decision variables, both requiring consideration. All decisions result in consequences which occur in a future which is normally uncertain, thereby making few decisions risk-free. Within decision theory, decision-makers are assumed to be risk averse, which means they try to reduce the risk inherent in their decisions, although some decisions, such as buying a lottery ticket or paticipating in games of chance with adverse odds, exhibit risk-seeking tendencies. Students making CS decisions expect certain return elements to result, yet realize that risks exist that their expectations from taking the course may not materialize. They attempt to manage that risk by speaking with the professor who will be teaching the course, previewing the syllabus, reviewing information provided by the school such as the course description from the school bulletin or course evaluation scores from previous semesters, and tapping into the student network of positive and negative course referrals. This effort is made by the student prior to the CS decision in order to reduce the risk associated with that decision by either increasing the probability that their return expectations will be met or reframing their expectations based on a reassessment of the future.

The empirical research, described below, addresses the course selection decision within the context of the Decision Making under Risk and Uncertainty field of study (i.e., W. Edwards, Miles, & Von Winterfeldt, 2007; Schneider & Shanteau, 2003), focusing on the perceived elements of risk that students consider in their CS decision. Empirical results provide insights into the importance of the key risk factors in four major categories that students consider in selecting upcoming courses – Subject Matter, Professor, Course Environment, and Grading.

Course Selection

In the past, researchers on student course selection have identified linkages between course selection and various elements within the student environment. Babad (2001) examined differential considerations for selecting elective First Course and Last Course. She found that first courses were selected for their prospective intellectual level, expected quality of teaching, and students' potential learning and occupational gains. She also found that last courses were selected on the basis of comfort and ease and that quality of teaching was the only dimension separating satisfied and dissatisfied students in both first and last courses. In a follow-up study, Babad & Tayeb (2003) studied three dimensions of course selection – learning value, lecturer's style, and course difficulty – in the sequential decision-making process of course selection in a hypothetical choice situation. They concluded that students "chose to avoid hard work, giving strong preference to easy and moderately difficult courses." They also found that students gave high importance to the learning value and lecturer style dimensions.

Feather (1988) found support for the hypothesis that course selection decisions for students in mathematics and English courses are related to their self-concepts of ability in these subjects. Kerin, Harvey, & Crandall (1975) investigated the course selection process in a single non-requirement program. They found "Personal Interest in Subject Area", "Course Content", and "Compatibility with Major Field" of primary importance and "Friends" the most significant source of information in selecting courses by a wide margin (62%) of respondents.

Babad, Darley, & Kaplowitz (1999) analyzed the content of student course guides as it related to course selection. Specifically, they measured the correlation of that content with post-

course student ratings of teaching for different level courses. From their findings, they argue that students have specific information (somewhat different for different levels of course) that will guide them in their course selection, and they search out that information in the student course guide.

Researchers also have studied the impact of professor/course reputation on course selection. Coleman & McKeachie (1981) found that courses with high ratings were selected more frequently by those who had reviewed the ratings. Leventhal (1976) studied section selection in multi-section courses and found that students using information on teacher reputation selected courses based on that information (also see Martin, 1989; Marsh & Yeung, 1997).

Student Perceptions

Risk in the context of course selection is predominantly a matter of perception. Students' perceptions have been the subject of various research efforts. Ramsden (1979) examined the perceptions of students in six departments of a British university and concluded that perceptions are important in the way in which students see themselves in a learning environment as well as their approaches to learning. Church, Elliot, & Gable (2001) studied the relationship among three factors - undergraduates' perception of their classroom environment, their adoption of achievement goals for the course, and their graded performance and intrinsic motivation - revealing that each of the three factors demonstrated a distinct antecedent profile. Lizzio (2002), Case & Gunstone (2003), and Struyven, Dochy, & Janssens (2005) conducted similar studies.

Another branch of perception research relates to students' perception of evaluation and assessment. Goldstein & Benassi (1996)) found that students' perceptions about assessment significantly influence their approaches to learning and studying and prefer multiple-choice format exams to essay type questions. They note, however, that in comparison to more innovative assessment methods, students question the "fairness" of both multiple-choice and essay exams. Students' perceptions of teaching style also have been studied by Kember (1997) and Kember & Wong (2000).

Self-efficacy perceptions represent a more inward look by students. Boud & Falchikov (1989) provide a review of the literature in this area as it relates to the comparison of student-generated marks with those generated by teachers. Zimmerman & Bandura (1994) used path analysis to study the role of self-efficacy beliefs related to the academic attainment and regulation of writing, academic goals, and self-standards on writing course achievement for college freshman. They found that perceptions of self-efficacy in the student's writing influenced perceived academic self-efficacy and personal standards in the quality of writing that was considered self-satisfying. Marsh & Yeung (1998) also investigated self-concept in course-specific settings.

An area where students attempt to mitigate the risks perceived in course selection is with information provided through networks to which they have access. Perceived quality of the source of information influences the interpretation of the message. Hilton (1995) presented an attributional model of conversational inference and showed how manipulation of relevant source and message attributes affect respondents' judgments. Borgida & Nisbett (1977) found that face-to-face comments about a course have a substantial impact on course choices among undergraduates, while mean course evaluation scores of courses have little impact.

Wright, Luus, & Christie (1990) tested the hypothesis that group discussion moderates the tendency of attributors to under-use consensus information and found confirming results

(also see Vinokur & Burnstein, 1974). Krosnick & Sedikides (1990) demonstrated that self-monitoring regulates the use of consensus information. They found that "[h]igh self-monitors are more responsive to complimentary consensus information than are low self-monitors, and low self-monitors are more responsive to threatening consensus information than are high self-monitors." Solomon, Drenan, & Insko (1981) studied the impact of consensus information as it relates to the mode in which the information is received and found a significantly weak effect of consensus when the information from a target-person was videotaped or the "other-people" information was written.

Students as Consumers

Another course selection research track investigates students as consumers of education and whether treatment, by the institution administration and professor, of the student as a consumer will provide benefits to the student and educational institution. The concept of risk has an important role in the decision-making process of consumers (i.e., Conchar, Zinkhan, Peters, & Olavarrieta, 2004; Mitchell, 1999). This conceptual framework, as applied to student decisions, has generated controversy and varied research conclusions. Pereira & Da Silva (2003) studied the teaching and research processes in higher education institutions. They concluded that the "education" process is divided into a teaching process and a learning process with the student an external customer in the teaching process and an internal customer in the learning process. Singh (2002) argued "that the practice of student evaluation of teaching or student ratings of teaching is clearly designed to position students as consumers." Modell (2005) studied the "student as consumer" issue by examining the political and institutional processes surrounding the construction of consumer-orientated performance measurement practices in the Swedish university sector. He concluded that a more consumer-oriented performance measurement had difficulty emerging due to its incompatibility with a more dominant incumbent power base and institutional inconsistencies. (Also see Conant et al., 1985; Conant, Brown, & Mokwa, 1985).

Other researchers, however, have expressed concern over the "student as consumer" perspective. Baldwin & James (2000) argue that the attempt by government agencies in Australia to enhance the quality of higher education is based on the misplaced "assumption that students are informed consumers making rational choices of higher education courses and institutions." Schwartzman (1995) warns that "the unreflective transfer of language from business to education" is misplaced and may have negative consequences (also see McMillan & Cheney, 1996; George, 2007; Freeman & Thomas, 2005). The crux of the argument researchers have against the view that institutions of higher education should treat students as consumers is that it places the student outside the process of creating the learning environment and considers them strictly as a user, whereas students more accurately should be viewed as being an integral part of that creation.

Risk Theory

The present purpose of the empirical results presented below is not to extend the traditional CS research track or "student as consumer" inquiry, but to take the research into the direction of risk theory in the context of decision-making under risk and uncertainty. The development of risk theory has an interesting background, spanning six centuries, and has found application in the fields of mathematics (Escobar & Seco, 2008), philosophy (Schrader-

Frechette, 1991), psychology (Plous, 1993), finance (H. Markowitz, 1952; H. M. Markowitz, 1959), economics (Friedman & Savage, 1948), banking (Cetin, Jarrow, Protter, & Yildirim, 2004), and insurance (Beard, Pentikainen, & Pesonen, 1984) as well as providing combinations of fields leading to a common line of research (Kahneman & Tversky, 1979a; Hansson, 2006).

Risk theory as we know it today started in 1491 with Luca Pacioli, a Franciscan monk, who posed the question, since known as "Pacioli's Puzzle": When a two-player game of chance is stopped before completion, how do you divide the stakes if one player is ahead of the other? That question remained unanswered for 163 years until Chevelier de Méré, a French nobleman, challenged the great French mathematician, Blaise Pascal, to solve Pacioli's Puzzle. Pascal accepted the challenge and with the aid of his colleague, Pierre de Fermat, solved the puzzle - the stakes should be divided based on the probability of each player winning the game - thereby introducing the calculation of probability and, thus, a theory of probability, which is the essential tool necessary for the development of the theory of risk.

The next fifty years saw significant activity in the development of tools used in risk measurement, culminating with the Swiss mathematician Jakob Bernoulli's (1713/1968) Law of Large Numbers, published eight years after his death. His work was the first attempt to measure uncertainty. This was followed quickly by de Moivre's (1718/1967) formulation of the Law of Averages and Daniel Bernoulli's (Jakob's nephew) mathematical expression of utility theory (1738/2005). The final pre-20th century development underpinning risk theory was the 1885 discovery by the English scientist, Sir Francis Galton (1886): of regression to the mean.

Frank Knight (1921), in his seminal book on Risk, Uncertainty, and Profit, was the first to make the important distinction between risk and uncertainty:

> "…Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated. The term "risk," as loosely used in everyday speech and in economic discussion, really covers two things which, functionally at least, in their causal relations to the phenomena of economic organization, are categorically different. … The essential fact is that "risk" means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character; and there are far-reaching and crucial differences in the bearings of the phenomenon depending on which of the two is really present and operating. …It will appear that a *measurable* uncertainty, or "risk" proper, as we shall use the term, is so far different from an *unmeasurable* one that it is not in effect an uncertainty at all."

In the years following Knight's contribution, the concept of utility (satisfaction) had its detractors due to its subjective nature. Allais (1953) and Ellsberg (1961) provided situations that lead to "paradoxical" behavior patterns in conflict with utility theory (also see Hogarth & Reder, 1987) and J. F. Yates, 1990). Herbert Simon (1955; 1956; 1978), the noted economist, argued that the implementation of utility theory by the average person is beyond normal cognitive limits and proposed the concept of "banded rationality" as a more suitable extension of UT.

However, when John von Neumann and Oskar Morganstern (VM) (1944) launched the field of game theory with their ground-breaking book, *Theory of Games and Economic Behavior*, they provided a means of measuring utility objectively. With the second edition of their book (1947), VM provided "an axiomatic treatment of utility", that is, the context for using utility functions in the analysis of decision-making under risky. They showed that an objectivity-based, expected utility model was possible based on rather simple axioms of consistent preference

under risk and uncertainty. In the VM model, consequences of possible actions are objectively known a long as an independence condition is upheld.

Near-term refinements to the VM model were provided by Jacob Marschak (1950): Herstein & Milnor (1953): Marschak (1950): Samuelson (1952), Herstein and Milnor (1953). Savage (1948) and then Anscombe & Aumann (1963) extended the VM model to probability distributions which are subjectively determined. This subjective expected utility (SEU) model served as the basis for the emergence of the "decision theory" and "rational choice" fields of study, subsequently developed to a greater extent by Edwards (1962): Kahneman & Tversky (1979b): and Karmarkar (1978). Historical perspectives on the concept of risk are provided by (Bernstein, 1996; Hacking, 1975; Muir, 1996).

Methodology

In order to investigate students' perception of risk in making course selection decisions, the author conducted a survey of both undergraduate and graduate students in a private university. A total of 503 students responded to the survey, including 390 undergraduate and 113 graduate students. Among the undergraduate group, 62 were freshmen, 78 were sophomores, 107 were juniors, and 143 were seniors. The university's School of Business Administration (SBA) and Arts and Sciences (A&S) were represented in the population so that interdisciplinary as well as undergraduate/graduate comparisons can be made.

Two surveys instruments were developed. One instrument was used for undergraduate students (Exhibit A) and another for graduate students (Exhibit B). There were minor differences related to types of courses taken, not risk factors. Risk factor categories in both instruments were Subject Matter, Professor, Course Environment, and Grading. From prior interviews with students, this sequence of reasoning in evaluating the risk in selecting courses was the most intuitive. The survey instruments were shown to groups of undergraduate and graduate students prior to conducting the overall survey to elicit suggestions on question inclusion or omission, construct, and order. For example, feedback resulted in modifying an original version of the undergraduate survey to include a separate Subject Matter sections for assessing the risk in selecting General Education courses and Major courses. The survey instrument went through several revisions before the final version.

Prior to conducting the survey, students were told the purpose of the survey (assessment of risk in course selection), that their responses were purely subjective based on their thoughts and experiences in selecting courses, that they should consider the entire scale of degree of risk they perceive in making course selections, and that there are no right or wrong answers. The rating scale ranged from zero (no risk) to four (extreme risk). Students were given twenty minutes to complete the survey. All students completed the survey within that time frame.

Responses were segmented by major undergraduate and graduate student groups and further segmented for analysis based on undergraduate class standing (freshman through senior standing) and school (Arts & Sciences and Business). Strength of risk perception was determined by mean scores of response ratings were used to determine strength of risk perception and standard deviation of scores were used to measure the degree of divergence in risk perceptions.

Results

Table 1 shows the mean scores (M) and corresponding standard deviations (S) for risk elements for the entire population of students taking the survey, categorized by all undergraduates, class standing within undergraduates, school within undergraduates, and all graduate students.. The risk elements (in abbreviated descriptions) are shown in the order in which they appeared in the survey. In general, risk scores for all elements were in the 1.5 to 2.5 range, indicating that students perceived a mid-level of risk in CS. An interesting aspect of the results is the relative risk they perceive in the risk elements. Both absolute and relative risk perception results are described below.

Table 1. Student Risk Perception of Subject Matter Statistics
(M: Mean, Range:0-4; S: Standard Deviation)

	All UG	Fr	So	Ju	Se	UG Bus	UG A&S	All Grad
Count	390	62	78	107	143	202	188	113
Subject Matter (G.E. Courses)								
Will not match course description	M:1.33 S:0.86	M:1.53 S:0.88	M:1.33 S:0.87	M:1.24 S:0.87	M:1.31 S:0.84	M:1.25 S:0.83 (7;0.73)	M:1.35 S:0.86 (7;0.81)	n/a
Too difficult	M:1.87 S:1.10	M:1.90 S:1.09	M:2.13 S:1.04	M:1.98 S:1.19	M:1.64 S:1.05	M:1.80 S:1.11	M:1.88 S:1.08	n/a
Not personally interesting.	M:2.50 S:0.96	M:2.43 S:1.00	M:2.37 S:0.95	M:2.48 S:0.94	M:2.61 S:0.96	M:2.58 S:0.93	M:2.45 S:0.99	n/a
Will not assist in career path.	M:1.93 S:1.11	M:1.99 S:1.14	M:2.01 S:1.04	M:1.85 S:1.16	M:1.93 S:1.10	M:1.99 S:1.11	M:1.91 S:1.11	n/a
Subject Matter (UG Major Courses; Grad)								
Will not match course description	M:1.33 S:1.01	M:1.39 S:0.99	M:1.38 S:1.00	M:1.39 S:1.11	M:1.25 S:0.95	M:1.22 S:0.95	M:1.40 S:1.04	M:1.67 S:1.01
Too difficult	M:1.93 S:1.04	M:1.72 S:1.04	M:2.37 S:0.98	M:2.04 S:1.05	M:1.71 S:0.97	M:1.89 S:1.07	M:1.98 S:1.01	M:1.42 S:1.06
Not personally interesting.	M:1.80 S:1.11	M:1.64 S:0.98	M:1.72 S:1.16	M:1.86 S:1.13	M:1.86 S:1.13	M:1.87 S:1.11	M:1.74 S:1.12	M:2.36 S:1.09
Will not assist in grad school admission	M:1.56 S:1.15	M:1.60 S:1.07	M:1.69 S:1.20	M:1.60 S:1.15	M:1.44 S:1.15	M:1.55 S:1.13	M:1.59 S:1.15	n/a
Will not assist in career path.	M:1.69 S:1.16	M:1.64 S:1.18	M:1.89 S:1.23	M:1.73 S:1.14	M:1.57 S:1.12	M:1.68 S:1.18	M:1.74 S:1.14	M:2.37 S:1.12
Subject Matter (UG G.E. and Major Courses; Grad)								
Negative recommend-ation by other student	M:2.61 S:0.93	M:2.38 S:1.05	M:2.75 S:0.82	M:2.63 S:0.94	M:2.64 S:0.91	M:2.71 S:0.90	M:2.54 S:0.96	M:2.19 S:1.10

Subject matter risk elements were divided into two categories, General Education (GE) courses, which included only undergraduate students, and Major courses, which included both undergraduate and graduate students. In the GE category, the potential risk perceived by students that the course would ultimately not provide the expected returns was ranked highest (highest mean score) when there was a negative recommendation by other students. This "network effect" was prevalent across all subject matter categories and in all class standings, with a mean score of 2.61 for undergraduates and a slightly lower score of 2.19 for graduates. Sophomores seemed to rely on the "network effect" to a greater degree than students in other class standings. Also, undergraduates in the SBA showed a slightly higher "network effect" than those in the A&S school. The "network effect" was consistently the highest risk condition across all academic standing groups with the exception of freshmen who ranked "not personally interesting" slightly higher.

The potential that the GE course would be "not personally interesting" to the student also showed high perceived risk with a mean score of 2.50, but dropped significantly in importance for students considering elective, major, or graduate courses (1.80). There was a high level of consistency in perceived risk for those elements related to GE courses with the exception that seniors ranked their perception that a course would be "too difficult" lower than students in other class rankings. Of course, seniors were looking retrospectively at GE courses, so their perception likely was skewed by their experience in those courses. Standard deviations were low for all risk elements across all student categories implying agreement among risk perceptions.

For risk elements related to courses in the students' major, which provide more decision alternatives, the "network effect" again predominated. Whereas for GE courses, students showed higher perceived risk in the course being "not personally interesting" than the course being "too difficult", for major courses, those rankings were reversed for undergraduates, with "difficulty" having more perceived risk than "uninteresting." For graduate students the risk elements of "not personally interesting" (2.36) and "will not assist in career path" (2.37) showed a virtual tie for highest risk element and with very similar standard deviations. Undergraduate were not as concerned about the course not meeting their expectations that it would assist in their career path (1.69). Notably, sophomores and juniors showed higher scores in the career path risk element than seniors. The perceived risk that the course would be "too difficult" ranked relatively low (1.42).

The next set of risk elements presented in the survey concerned the professor (Table 2). The "network effect" ranked high when students considered risks associated with the professor teaching the course. Undergraduates relied more on the "network effect" (2.71) than graduate students (2.11) and freshman (2.46) somewhat less than all other undergraduates. Sophomores gave this risk element the highest score (2.88) found in any risk element category. The perceived risk that the professor would not present the material "in an interesting way" received high mean scores for both undergraduates (2.46) and graduate students (2.39). The importance of this risk element increased for undergraduates as class standing progressed and showed higher for SBA students than A&S students. For both UG and G class groups, the perceived risks of the professor being "too demanding" and "unavailable outside of class" were relatively low (1.83 and 1.69 for UG; 1.51 and 1.61 for graduates).

Differences in the manner in which students saw risk in this category were found in four elements. Juniors saw more risk than other subject groups in the degree to which the course description matched the manner in which the professor presented the course, possibly formed from experiences in courses where there was a mismatch. Other differences were in the lower

risk assessment by graduate students (versus undergraduates) in the "too demanding", "uses Socratic method", and "negative recommendation" elements. The greater maturity and academic experience of graduate students relative to undergraduates may contribute to this difference.

Table 2. Student Risk Perception of Professor
(M: Mean, Range:0-4; S: Standard Deviation)

	All UG	Fr	So	Ju	Se	UG Bus	UG A&S	All Grad
Count	390	62	78	107	143	202	188	113
Professor								
The course presentation will not match course description	M:1.70 S:0.95	M:1.65 S:1.07	M:1.67 S:0.87	M:1.81 S:1.02	M:1.66 S:0.90	M:1.65 S:0.94	M:1.76 S:0.99	M:1.77 S:1.11
Not presented in interesting way.	M:2.46 S:0.88	M:2.32 S:0.91	M:2.40 S:0.92	M:2.48 S:0.81	M:2.53 S:0.90	M:2.51 S:0.89	M:2.42 S:0.91	M:2.39 S:1.01
Professor unavailable outside of class	M:1.69 S:1.07	M:1.68 S:1.03	M:1.88 S:1.13	M:1.72 S:1.01	M:1.58 S:1.08	M:1.66 S:1.07	M:1.68 S:1.08	M:1.62 S:1.09
Too demanding	M:1.83 S:1.05	M:1.73 S:1.00	M:1.98 S:1.05	M:1.89 S:1.11	M:1.77 S:1.03	M:1.90 S:1.06	M:1.73 S:1.02	M:1.51 S:1.01
Uses Socratic method	M:1.71 S:1.07	M:1.70 S:0.99	M:1.98 S:1.03	M:1.79 S:1.17	M:1.52 S:1.02	M:1.69 S:1.11	M:1.74 S:1.02	M:1.27 S:0.94
Negative recommend-ation by other student	M:2.71 S:1.02	M:2.46 S:1.14	M:2.88 S:0.96	M:2.75 S:1.01	M:2.69 S:0.98	M:2.78 S:0.99	M:2.64 S:1.06	M:2.11 S:1.11

The risk elements in the Course Environment category related to assignment (reading and writing) and exam types (Table 3). With regard to reading assignments, undergraduate students expressed the greatest risk perception for the potential that the GE course would have "too many reading assignments" (2.43): with sophomores seeing the highest risk in this element (2.76). UG showed less concern with this element for major courses (2.13). Graduate students saw less risk in reading assignments being too extensive (1.88) than that the reading material would not be interesting (2.12). The next highest perceived risks for UG were seen in the "reading material not interesting" and "too much busy work" elements, both receiving scores of 2.23.

Overall, graduate students perceived less risk in the elements of Course Environment than UG. Higher scores for graduate students were found in "reading material not interesting" (2.12) and "too much busy work" (2.05). "Demanding writing assignments" were seen as having higher perceived risk by sophomores (2.30) and seniors saw the highest perceived risk in "demanding writing assignments" (2.24) than any subject category.

The survey revealed that the perceived risk associated with the type of exam given in the course was low relative to the other risk elements. Only freshmen in non-science courses revealed somewhat high perceived risk that exams would be essay-type (2.18). Graduate students showed very low risk perception for the exam type elements.

Table 3. Risk Perception of Course Environment

(M: Mean, Range:0-4; S: Standard Deviation)

	All UG	Fr	So	Ju	Se	UG Bus	UG A&S	All Grad
Course Environment								
Reading material not interesting	M:2.23 S:0.95	M:2.14 S:0.94	M:2.29 S:0.82	M:2.17 S:0.94	M:2.27 S:1.03	M:2.25 S:1.05	M:2.22 S:0.87	M:2.12 S:1.01
Textbook too difficult.	M:1.81 S:0.97	M:1.93 S:0.89	M:2.11 S:0.90	M:1.83 S:1.02	M:1.60 S:0.97	M:1.79 S:1.05	M:1.81 S:0.91	M:1.52 S:1.01
For G.E., too many reading assignments	M:2.43 S:1.04	M:2.39 S:1.04	M:2.76 S:0.93	M:2.39 S:1.03	M:2.31 S:1.07	M:2.50 S:1.03	M:2.36 S:1.06	n/a
For major, too many reading assignments	M:2.13 S:0.99	M:2.15 S:1.07	M:2.22 S:0.92	M:2.16 S:0.93	M:2.05 S:1.02	M:2.09 S:0.97	M:2.23 S:1.00	M:1.88 S:1.17
Know less than other students about subject at start	M:1.66 S:1.01	M:1.72 S:0.89	M:1.72 S:1.05	M:1.70 S:1.08	M:1.56 S:1.00	M:1.59 S:1.06	M:1.76 S:0.97	M:1.52 S:1.08
Reading material not interesting	M:2.23 S:0.95	M:2.14 S:0.94	M:2.29 S:0.82	M:2.17 S:0.94	M:2.27 S:1.03	M:2.25 S:1.05	M:2.22 S:0.87	M:2.12 S:1.01
Textbook too difficult.	M:1.81 S:0.97	M:1.93 S:0.89	M:2.11 S:0.90	M:1.83 S:1.02	M:1.60 S:0.97	M:1.79 S:1.05	M:1.81 S:0.91	M:1.52 S:1.01
For G.E., too many reading assignments	M:2.43 S:1.04	M:2.39 S:1.04	M:2.76 S:0.93	M:2.39 S:1.03	M:2.31 S:1.07	M:2.50 S:1.03	M:2.36 S:1.06	n/a
For major, too many reading assignments	M:2.13 S:0.99	M:2.15 S:1.07	M:2.22 S:0.92	M:2.16 S:0.93	M:2.05 S:1.02	M:2.09 S:0.97	M:2.23 S:1.00	M:1.88 S:1.17
Know less than other students about subject at start	M:1.66 S:1.01	M:1.72 S:0.89	M:1.72 S:1.05	M:1.70 S:1.08	M:1.56 S:1.00	M:1.59 S:1.06	M:1.76 S:0.97	M:1.52 S:1.08
Demanding writing assignments	M:2.19 S:1.02	M:2.13 S:1.01	M:2.30 S:0.98	M:2.06 S:0.96	M:2.24S: 1.08	M:2.20 S:0.99	M:2.18 S:1.06	M:1.59 S:1.10
Too much busy work	M:2.23 S:1.07	M:2.04 S:1.05	M:2.14 S:1.00	M:2.19 S:1.08	M:2.38 S:1.10	M:2.32 S:1.05	M:2.11 S:1.09	M:2.05 S:1.10

The last general category of risk presented to the student for evaluation related to grading (Table 4). This category was broken down into “Grading” and “Historical Grade Distribution”. Within the “Grading” risk category, grading elements showed the highest risk scores than any other category. Undergraduates attributed significant risk (fourth highest among all risk elements) to the professor being a demanding grader (2.48): with sophomores giving this element the highest risk score (2.63) of any class standing. Graduate students gave a lower risk score (1.95) to this element than undergraduates, either because they were more certain of their exam-taking ability or the perception, based on experience, that professors give higher grades in graduate school.

Table 4. Risk Perception of Grading Policy
(M: Mean, Range:0-4; S: Standard Deviation)

Grading								
	All UG	Fr	So	Ju	Se	UG Bus	UG A&S	All Grad
Professor will be a demanding grader.	M:2.48 S:0.93	M:2.39 S:0.88	M:2.63 S:0.91	M:2.54 S:0.98	M:2.41 S:0.93	M:2.46 S:0.87	M:2.55 S:0.97	M:1.95 S:1.03
Grading not clearly defined	M:2.17 S:1.13	M:2.03 S:0.96	M:2.41 S:1.28	M:2.26 S:1.10	M:2.05 S:1.13	M:2.28 S:1.15	M:2.06 S:1.13	M:1.89 S:1.16
No curve.	M:1.95 S:1.05	M:2.24 S:0.96	M:2.01 S:1.01	M:1.88 S:1.10	M:1.85 S:1.06	M:1.95 S:1.11	M:1.95 S:1.01	M:1.66 S:1.20
Grading too subjective.	M:2.16S: 1.04	M:2.10 S:1.04	M:2.16 S:0.99	M:2.20 S:1.02	M:2.15 S:1.08	M:2.28 S:1.04	M:2.01 S:0.98	M:1.85 S:1.04
Grade will include class participation.	M:1.86 S:1.17	M:2.21 S:1.11	M:1.83 S:1.21	M:1.70 S:1.21	M:1.82 S:1.14	M:1.93 S:1.21	M:1.80 S:1.14	M:1.61 S:1.18
Grade will include class attendance.	M:1.81 S:1.22	M:2.13 S:1.13	M:1.73 S:1.27	M:1.50 S:1.14	M:1.91 S:1.25	M:1.83 S:1.27	M:1.81 S:1.21	M:1.41 S:1.25
Small number of large exams	M:2.36 S:1.11	M:2.60 S:1.08	M:2.55 S:0.90	M:2.32 S:1.21	M:2.18 S:1.11	M:2.33 S:1.08	M:2.44 S:1.12	M:1.58 S:1.04
Grading too much weighted toward paper.	M:1.98 S:1.08	M:2.25 S:1.04	M:2.03 S:1.03	M:1.83 S:1.11	M:1.93 S:1.08	M:1.96 S:1.04	M:1.99 S:1.11	M:1.41 S:0.97
Historical Grade Distribution (If Known)								
% of "A" grades	M:1.61 S:1.37	M:1.68 S:1.40	M:1.71 S:1.42	M:1.66 S:1.39	M:1.48 S:1.32	M:1.62 S:1.38	M:1.60 S:1.34	M:1.60 S:1.21
% of "B" grades	M:1.68 S:1.10	M:1.90 S:1.13	M:1.81 S:1.01	M:1.65 S:1.11	M:1.53 S:1.13	M:1.62 S:1.08	M:1.75 S:1.12	M:1.44 S:1.03
% of "C" grades	M:1.98 S:1.07	M:1.96 S:0.98	M:2.27 S:1.02	M:1.97 S:1.05	M:1.84 S:1.12	M:1.96 S:1.10	M:2.07 S:1.06	M:1.56 S:1.20
% of "D" grades	M:2.25 S:1.36	M:2.17 S:1.29	M:2.51 S:1.36	M:2.26 S:1.36	M:2.14 S:1.38	M:2.26 S:1.43	M:2.26 S:1.29	M:1.67 S:1.50
% of "F" grades	M:2.42 S:1.55	M:2.39 S:1.54	M:2.64 S:1.63	M:2.44 S:1.52	M:2.30 S:1.54	M:2.45 S:1.60	M:2.35 S:1.52	M:1.73 S:1.61
No grade distribution consistency	M:2.20 S:1.11	M:2.13 S:1.03	M:2.33 S:1.06	M:2.34 S:1.18	M:2.07 S:1.10	M:2.28 S:1.08	M:2.10 S:1.11	M:1.83 S:1.30

Undergraduate students also saw higher risk in their grade being weighted too much on a small number of large exams (2.36) with the risk decreasing as class standing progresses. The

same risk-decreasing progression was found for the "no curve" element, with the need for risk resolution by their grade being adjusted in the event that an exam results in low grades for all students declining with student experience. Relatively higher risk scores were given by all UG subject groups to the elements "Grading not clearly defined" (2.17) and "Grading too subjective" (2.16). Overall, graduate students perceived less risk in CS than UG in the grading policy of the course.

In response to the perceived risk in CS when they know the historical grade distribution, all students were given the following (written) survey instructions: *Assume that you know the historical grade distribution for a particular course offered by a particular professor. Please indicate the degree to which you would consider each of the following in your assessment of the risk associated with taking the course.* Below those instructions, the survey showed six elements – *The percentage of "x" grades*, where x equaled A through F, and *There has been a wide dispersion of grades (that is, grades of A, B, C, D, and F are typically given each time the course is given)*. The results showed increasing perceived risk for increasing percent of poorer grades, as would be expected. Furthermore, lack of grade distribution consistency showed relatively high perceived risk, more so for UG (2.20) than for G (1.83).

Within the academic standing groups, freshmen gave high risk scores to all grading categories while, in general, the grading risk scores declined as academic standing advanced. This indicates that students are more concerned about the risk of not achieving their desired grade earlier in their academic career than later. Standard deviations in the "D" and "F" risk elements were higher than for any other elements, demonstrating that some students were very concerned about getting a "D" or "F" in the course while others had more confidence that their performance would warrant a higher grade

DISCUSSION AND IMPLICATIONS

The CS decision throughout a student's college career involves both expected return and perceived risk. Risk Theory provides a foundation upon which these decisions can be analyzed. The related field of Decision-Making under Risk and Uncertainty ties together these two decision elements. The importance of this area of study cannot be overstated as it is integrated into many fields – business, investments, science, military, politics, medicine, and education.

The results of the present survey lead to the inference that students enroll in a course hoping for a positive outcome but realizing that the outcome is not certain. A student's expectations may not be met due to many factors. The survey addresses academic factors, but personal and emotional factors may also contribute to the risk. With respect to those academic factors, the survey results indicate a contrast between the high perceived grade grade-related risk and low subject matter-related risk of UG students and the inverse risk perception of G students relative to UG. We learned that UG and G students perceive risk differently. UG students perceive grade factors as representing the highest risk, and G students perceive subject matter as the highest risk. Risk perceptions also differ across class standing among UG students, but are very consistent between UG Business and Arts & Sciences students.

If we assume that students are risk averse in their CS, then the task facing college administrators in a position to influence CS is to reduce the perceive risk of that decision. Risk cannot be eliminated as expected returns may be multi-dimensional and outside the control of administrators. Students in a class will have varied expectations, all of which cannot be met in full. For example, even if a student were guaranteed an "A" in a course, thereby eliminating the

risk that their grade expectation would not be met, their expected "subject matter is interesting" or "relevance to career path" return may not be met. Some students in the same class may be willing to sacrifice grade for a rigorous learning experience related to subject matter of high interest.

The results indicate that enhanced access to relevant information about courses will contribute to reducing the perceived risk of CS and provide a realized return closer to the expected return, thereby reducing the risk of the decision. Mintzberg (1998), using the leadership style of Maxwell Tovey, then artistic director and conductor of the Winnipeg Symphony Orchestra, proposed that leadership/managing is to act invisibly, unobtrusively, to guide through "nuances and constraints" and not "obedience and harmony." Enhancements in the information technology infrastructure of most academic institutions provide the foundation for administrators to "act invisibly and unobtrusively", reducing CS risk through wider and more accessible and organized channels of information flow. Greater course information access among students may contribute to higher quality of learning experience through a clearer understanding by administration and faculty of student expectations.

There are other areas of Risk Theory and Decision Making Under Risk and Uncertainty that provide research paths to enhance the understanding of students' course selection. Regret Theory, normally stated in terms of a pairwise choice between alternatives, states that a decision-maker desires to avoid the disutility of the post-decision perception that they have made the wrong decision even if the decision was made maximizing expected utility (Loomes & Sugden, 1982; Sugden, 1993; Quiggin, 1989). Another area is an investigation of the cross-cultural differences of risk perceptions of U.S. and non-U.S. students in selecting courses (i.e., Marris, Langford, & O'Riordan, 1998; Renn & Rohrmann, 2000; E. Weber & Hsee, 2000; E. U. Weber & Hsee, 1999). A prospective research area that would be particularly interesting to university administrators in providing systematic approaches to risk perception is decision-making support systems, which are generally thought of as computerized organizational (university) systems to support both student and administrative decisions (i.e., Mora, Forgionne, Gupta, Cervantes, & Gelman, 2003; Power, 2002; Power & Sharda, 2007).

Exhibit A
Undergraduate Student "Course Selection Risk" Survey

If you have already completed this short questionnaire, please do not complete it again. Simply return it without response to your professor.

This survey does not apply to the course in which you are now sitting, but to courses you might take in general. There are no "correct" responses to this survey. Your responses are your personal analyses of the issues inherent in the questions. The questions pertain to your course selection evaluation and, in particular, your personal assessment of the risk factors in choosing the courses in which you have a choice and not those which you are required to take.

In responding to the questions below, please describe your own personal thinking as best you can. Do not sign your name, as your responses will be anonymous.

Thank you for your cooperation.

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively to the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.** **No Risk (0)**	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Subject Matter (G.E. Courses)					
The subject matter presented in a course for a G.E. Requirement will not match the course description in the school bulletin.	0	1	2	3	4
The subject presented in a course for a G.E. requirement will be too difficult for me to handle and achieve my grade objective.	0	1	2	3	4
The subject matter in a course for a G.E. requirement will not be personally interesting to me.	0	1	2	3	4
I will find that at the end of a G.E. course, it will not assist me towards choosing a major or eventually embarking on my career path.	0	1	2	3	4
	0	1	2	3	4
Subject Matter (Major Courses)					
The subject presented in a course for my major will not match the course description in the school bulletin.	0	1	2	3	4
The subject presented in a course for my major will be too difficult for me to handle and achieve my grade objective.	0	1	2	3	4
The subject matter in a course for my major will not be personally interesting to me.	0	1	2	3	4
I will find that at the end of a course required for my major, it will not assist me towards getting into the graduate school of my choice.	0	1	2	3	4
I will find that at the end of a course	0	1	2	3	4

required for my major, it will not assist me embarking on my career path.					
	0	1	2	3	4
Subject Matter (G.E. and Major Courses)					
A friend or fellow classmate has told me negative things regarding the subject matter taught in either a G.E. or major course.	0	1	2	3	4

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively to the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.**				
	No Risk (0)	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Professor					
The course professor will not present the course material as specified in his/her course syllabus.	0	1	2	3	4
The course professor will not present the course material in an interesting way.	0	1	2	3	4
The course professor will not be available to assist me with the course work outside the classroom.	0	1	2	3	4
The course professor will be too demanding of my active participation during class, i.e., answering questions and participating in class discussions.	0	1	2	3	4
The professor extensively uses the Socratic method, that is, instead of lecturing in class, the professor asks a sequence of questions and, through answering, the student eventually comes to the desired knowledge.	0	1	2	3	4
A friend or fellow classmate has told me negative things regarding a professor.	0	1	2	3	4

	0	1	2	3	4

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively to the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.** **No Risk (0)**	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Course Environment					
The textbook and other reading material will not be interesting to me.	0	1	2	3	4
The textbook reading will be too difficult.	0	1	2	3	4
In a course for a G.E. requirement, the amount of reading in the course will be very demanding.	0	1	2	3	4
In a course required for my major, the amount of reading in the course will be very demanding.	0	1	2	3	4
The other students in the course will know more about the subject at the beginning of the course than I know.	0	1	2	3	4
There will be a lengthy writing requirement for the course such as large research papers.	0	1	2	3	4
There will be a lot of busy work assigned for this class.	0	1	2	3	4
In classes for a liberal arts major (i.e., English, Philosophy, Political Science, etc) exams will be essay-writing format.	0	1	2	3	4
In classes for a non-liberal arts major (i.e., Business, Math, Chemistry, etc) exams will be essay-writing format.	0	1	2	3	4
In classes for a liberal arts major (i.e., English, Philosophy, Political Science, etc) exams will be multiple choice and application- based format.	0	1	2	3	4

In classes for a non-liberal arts major (i.e., Business, Math, Chemistry, etc) exams will be multiple choice and application-based.	0	1	2	3	4
	0	1	2	3	4

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively to the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.** **No Risk (0)**	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Grading					
The professor will be a demanding grader.	0	1	2	3	4
The grading policy will not be completely defined.	0	1	2	3	4
The professor will not grade on a curve.	0	1	2	3	4
The grading will be too subjective.	0	1	2	3	4
A portion of my grade will be determined by active class participation.	0	1	2	3	4
My grade will be influenced by my class attendance.	0	1	2	3	4
My grade will be weighted too much on a small number of large exams.	0	1	2	3	4
My grade will be weighted too much on large writing assignments such as research papers.	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
Historical Grade Distribution					
Assume that you know the historical grade distribution for a particular course offered by a particular professor. Please indicate the degree to which you would consider each of the following in your assessment of the risk associated with taking the course.					

The percentage of "A" grades	0	1	2	3	4
The percentage of "B" grades	0	1	2	3	4
The percentage of "C" grades	0	1	2	3	4
The percentage of "D" grades	0	1	2	3	4
The percentage of "F" grades	0	1	2	3	4
There has been a wide dispersion of grades (that is, grades of A, B, C, D, and F are typically given each time the course is given).	0	1	2	3	4
There has been high volatility in grades (that is, some semesters the professor gives higher grades and some semesters the same professor gives lower grades, with no overall consistency from semester to semester).	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4

Exhibit B
Graduate Student "Course Selection Risk" Survey

If you have already completed this short questionnaire, please do not complete it again. Simply return it without response to your professor.

This survey does not apply to the course in which you are now sitting, but to courses you might take in general. There are no "correct" responses to this survey. Your responses are your personal analyses of the issues inherent in the questions. The questions pertain to your course selection evaluation and, in particular, your personal assessment of the risk factors in choosing the courses in which you have a choice and not those which you are required to take.

In responding to the questions below, please describe your own personal thinking as best you can. Do not sign your name, as your responses will be anonymous.

Thank you for your cooperation.

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively to the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.**				
	No Risk (0)	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Subject Matter					
The subject presented in the course will not match the course description in the school bulletin.	0	1	2	3	4
The subject presented in the course will be too difficult for me to handle and achieve my grade objective.	0	1	2	3	4
The subject matter presented in the course will not be personally interesting to me.	0	1	2	3	4
When the course is complete, I will find that the material I learned will not assist me in advancing through my career path.	0	1	2	3	4
A friend or fellow classmate has told me negative things regarding the subject matter taught in the course.	0	1	2	3	4
	0	1	2	3	4
Professor					
The course professor will not present the course material as specified in his/her course syllabus.	0	1	2	3	4
The course professor will not present the course material in an interesting way.	0	1	2	3	4
The course professor will not be available to assist me with the course work outside the classroom.	0	1	2	3	4
The course professor will be too demanding of my active participation during class, i.e., answering questions and participating in class discussions.	0	1	2	3	4

The professor extensively uses the Socratic method, that is, instead of lecturing in class, the professor asks a sequence of questions and, through answering, the student eventually comes to the desired knowledge.	0	1	2	3	4
A friend or fellow classmate has told me negative things regarding a professor.	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively to the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.** **No Risk (0)**	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Course Environment					
The textbook and other reading material will not be interesting to me.	0	1	2	3	4
The textbook reading will be too difficult.	0	1	2	3	4
The amount of reading in the course will be very demanding.	0	1	2	3	4
The other students in the course will know more about the subject at the beginning of the course than I know.	0	1	2	3	4
There will be a lengthy writing requirement for the course such as large research papers.	0	1	2	3	4
There will be a lot of busy work assigned for this class.	0	1	2	3	4
The exams will be essay-writing format.	0	1	2	3	4
The exams will be multiple choice and application-based.	0	1	2	3	4
	0	1	2	3	4

	0	1	2	3	4

Potential Course Risk Factors (Please respond to the following as they pertain to any course you are considering and not exclusively the course in which you are currently sitting. If you consider any other course risk factors that are not shown below, please write them in the blank rows and indicate their risk levels for you.)	**Please circle the number in the column representing the level of risk you perceive in each potential course risk factor.** **No Risk (0)**	**Low Risk (1)**	**Moderate Risk (2)**	**High Risk (3)**	**Extreme Risk (4)**
Grading					
The professor will be a demanding grader.	0	1	2	3	4
The grading policy will not be completely defined.	0	1	2	3	4
The professor will not grade on a curve.	0	1	2	3	4
The grading will be too subjective.	0	1	2	3	4
A portion of my grade will be determined by active class participation.	0	1	2	3	4
My grade will be influenced by my class attendance.	0	1	2	3	4
My grade will be weighted too much on too few exams.	0	1	2	3	4
My grade will be weighted too much on too few writing assignments.	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
Historical Grade Distribution					
Assume that you know the historical grade distribution for a particular course offered by a particular professor. Please indicate the degree to which you would consider each of the following in your assessment of the risk associated with taking the course.					
The percentage of "A" grades	0	1	2	3	4
The percentage of "B" grades	0	1	2	3	4
The percentage of "C" grades	0	1	2	3	4

The percentage of "D" grades	0	1	2	3	4
The percentage of "F" grades	0	1	2	3	4
There has been a wide dispersion of grades (that is, grades of A, B, C, D, and F are typically given each time the course is given).	0	1	2	3	4
There has been lots of volatility in grades (that is, some semesters the professor gives higher grades and some semesters the same professor gives lower grades, with no overall consistency from semester to semester).	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4

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A Leadership Deficit: the Discipline of Development

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Abstract

The world is facing a leadership deficit within higher education institutions. These very institutions have the opportunity to fill the gap by identifying emerging "best practice" leadership programs and developing curricula to eliminate the deficit. A narrow functional expertise in leading post secondary institutions is passé; what universities demand will be those who are familiar with ways of increasing revenue, running competitive commercial-like organizations, and yet be a traditional administrator in a university setting. They must understand what universities are about and empathize with them, but they must also know how to run a business within a university. Few college presidents have served previously as deans of business schools, but the task of leading a college is demanding the incorporation of business capabilities as an important intellectual engine in the leading of these institutions. A specific course curriculum to develop this type of leader may be the critical success factor in eradicating the deficit.

Keywords: Leadership deficit, emerging higher education leaders.

Introduction

Today more than ever, there is a need for academic leadership that reflects a business attitude, and more importantly, business acumen. Slaughter and Leslie state, "Policy makers at the level of the nation state, whether responding to pressure from the market, international capital mobility, or the business class, are concentrating state money on higher education units that aid in managing or enhancing economic innovation and thereby, competitiveness" (1997). The overarching purpose of this paper it to try to convince traditional post-secondary leaders that the leadership deficit should be considered serious and the ideas presented in this paper may move them into action. The desire of this author is to ask leaders to judge it as useful to the extent that it helps them understand how the development of the leaders, prior to obtaining their position, will close the deficit gap that is occurring in the 'business' of academics. This will take discipline on the part of today's leaders to implement the proposed seven course developmental curricula. The paper is an attempt to share "best practices" that is proven to be successful at the University of London, and examine the opportunity to transfer those best practices into the United States' higher educational system. This may be the beginning of eradicating the skill deficit of those who are charged with leading post secondary institution through the 21st century.

Organization

The paper begins with a discussion on the leadership deficit and follows with a program outline that encompasses coursework vital to post-secondary leadership in the 21st century. It examines the central ideas of these "best practices" and explores an emergent model of leadership and global application based on a 2003 research conducted at the University of

Oxford, United Kingdom. There is an argument for business-enterprise benchmarking methods to be used within the academic environment, and for leaders to investigate a number of courses and learning tasks that would accelerate the development of those who have the desire to lead a Higher Education Institution (HEI) but not the skills nor the know-how in which to be successful in the competitive global environment. The objective of this paper is to challenge the future HEI leaders to engage in such learning tasks, unmask traditional power, overcome fear of change, reclaim courageous leadership and practice a new style of leading. The paper's conclusion is a statement on how leaders can combat the tendencies to ignore the business aspect of a university and provide a practical and relevant curriculum to teach future leaders a new approach to leading post secondary institutions.

The Awareness of the Deficit

The environment of higher education is changing, and doing so at unprecedented speed and on a global scale. Historically it has been commonplace for a leader of a university to come from the ranks of academia. However, there is a chasm between being an academic and moving into a post-secondary leadership role. The chasm is a traditional mindset, lack of experience in a business enterprise environment, minimal preparation for such leadership, and lack of familiarity with all the aspects involved in managing and leading a college or university. More recently, powerful external stakeholder groups have imposed a template of college-as-business-enterprise on higher education (Lyons, 2004).

Since higher educational institutions have historically been insulated from the business-enterprise configuration, and although the significant differences between higher education and business enterprises will remain, society is inviting a mindset into academia that is demanding an increase in value of the education and accountability from the colleges' leadership. Along with the financial stringency that accompanies this mindset is that universities learn the art of financial survival in the new world (Williams, 2003). The increasing number of college presidents hired from outside academia reinforces this new paradigm.

In the 21st century, post secondary leaders are expected to design compelling visions, manage people efficiently, and steer their institution to profitability; but, where are the developmental actions that provide that skill or learning for these leaders? Consideration of the "best practice" learning presented in this paper may inspire leaders to experiment with different approaches in the way they develop future post-secondary leaders, or even allow space for the transferring of the best practice to occur within their university. For example, how do we teach academics to 'run on the edge' if running on the edge is a competitive skill to possess? Those courageous leaders who are edge runners don't fit squarely into any one box. In their leadership journey they interpret trends from the marketplace, translate messages across the departments, and envision the future impact of today's decisions and actions. Running on the edge is a behavior of a leader who knows how to use their campus infrastructure to generate income. One example of using a campus infrastructure as a cutting edge endeavor is the University of Warwick's campus grocery supermarket. According to the 2002 Earned Income Report, the intrapreneurial enterprise generated over £4 million in one year. "The University of Warwick's supermarket is the most successful grocery store market of its type in the United Kingdom," stated a key leader at that university. In order to have a successful supermarket that is a model for the industrial sector, it was important to adopt a 'runners on the edge' mindset, and that is often seen as risk taking by the university" (Smith, 2003).

Being a leader who runs on the edge does not come without its challenges and often they clash with more traditional, rule-bound colleagues, and they are often frustrated by organizational systems that are risk averse. And yet with today's unprecedented speed of change, diverse, and globalized world, HEIs need to develop these special people in order to stay competitive. A specific developmental curriculum that provides the laboratory for these new leaders to explore the opportunities and foster their creativity in all aspects of their leadership role is critical to the sustainability of a competitive college.

In the curricula there should be discussions on how academic leaders can generate income for their academic business, (intrapreneurial mindset) and also explore how the leaders of income generating ventures run their businesses that are not in the academic arena. This is a very different aspect of college leadership than traditional perspectives. Kanter describes this type of experience as "opportunities for integrative thinking that actively embrace change," (1983). She stated in her book, *The Change Masters*, those schemes to create mechanisms for exchange of information and new ideas across boundaries, and ensure that multiple perspectives are taken into account in decision-making, provide an environment where innovation flourishes (1983). Now 23 years since her book was published, we are still able to identify a gap in leadership that does not have such schemes in place. If we wish to create such schemes as Kanter describes, there needs to be a developmental curriculum strategy that prepares leaders, such as college deans, or even department chairs, and ultimately presidents of colleges and universities. To do this well, leaders need to understand what universities are about and empathize with them, but they also need to know how to run a business within a university. This dichotomy requires the leader to know how to maintain a balance between the often-conflicting demands of non-traditional actions and the core mission of the university. Universities need to know how to successfully manage the tensions between old and the new, between tradition and iconoclasm, between continuity and change. The University of Oxford is in some sense the same institution that came into existence in the thirteenth century, in every detail, apart from a few remnants of buildings and occasional references to Greek philosophers; now it comprises a different set of ideas, entities, and activities (Williams, 2003).

The business of universities and college is knowledge. A modern university creates and interprets information and ideas and it trades in them. Until the late twentieth century, ideas and information evolved slowly. However, the need for the university enterprise to ensure survival and success is speeding up. New ideas need to be acted on almost immediately or they will be appropriated elsewhere (Williams, 2003). " Universities are based on knowledge, but no university or set of universities can stop or even seriously slow its international growth. Caught in the swell of knowledge production, even the richest institutions find full coverage of old and new fields beyond their capability" (Clark, 1998). The "best practices" captured in this paper identify courses that may just transform a traditional leader into the leader required for the 21st century.

What does it mean to lead in a higher education institution? As a practicing educator in England, Michael Shattock suggests several specific ways leaders can help escape a traditional thought of leading in an academic setting (Shattock, personal communication, August 16, 2005). One innovative strategy is through specific coursework in which future leaders will learn to identify their skills and techniques that transform their academic strength and link it to leading a business. Another scheme would be to learn in an international virtual classroom with leaders who are enrolled in the same type of specific coursework. This collaborative international laboratory would expose leaders to alternative approaches to leading by gaining an

understanding and awareness of the enterprises their global colleagues are learning to lead. This experience may be a catalyst in closing the gap of the leadership skill deficit. It will provide initiatives that will serve to create global thinking leaders who will understand academics, business practices, and a global perspective of leading. The phenomenon of leading a university as a business creates a need for a leader to have feet in both camps; the academic side of the university and the business aspects of leading a dynamic, forward moving university.

The direction of university leadership is being transformed due to many factors; limited governmental and tuition based funding, global thinking, speed of technology changes, and the cost of not developing leaders to provide the new direction of universities. We must know that we cannot untransform and then transform. The transformation is a process, and the ideas presented in this paper may be the impetus to the transformational change on how to prepare leaders of higher education.

The Discipline to Develop

The strategy underlying the outline of the best practice coursework from the MBA in Higher Education Program at the University of London maximizes the impact of gaining business acumen while also learning the academic nuances within a post secondary institution. The time and energy invested in this effort will pay both short and long term benefits, not the least which is competitive posture for the institution and its sustainability. These potential leaders may be described as hybrid leaders who have academic excellence with industrial relevance (Smith, 2003). The person selected to fill the highest position within an institution needs to be familiar with ways of making money, running competitive commercial organizations, and yet be a traditional administrator in a university setting. They must know what today's universities are about. They must empathize with them, but must know how to run a business within a university. The right person to lead a HEI is one who is able to commute fluidly between university and industry. It is difficult to get a leader who is good at both business enterprise and university. Because if a leader is doing business enterprise they do not know about universities and if they are doing universities they do not know about business-enterprises. If missing either of those in the future, it is probably terminal in being able to lead a university that is innovative, competitive, and a place where intrapreneurial creativity flourishes.

The proposed course contents offer an intellectual and professional challenge that will become recognized components in the professional formation of future higher education leaders in the United States. The courses will foster the creation of a community of practice, including an international community with the proposed collaborative work with international institutions. Six of the courses are an example of what is being taught in the program at the University of London, and the seventh is a new course designed for providing future leaders to look through the lens of a different approach to leading. The total program from the University of London would not be instantly transferable to United States' higher educational institutions, and it would be unjust to attempt to do so. However, there are some elements within the program that would transfer well into the American structure if today's leaders are open to change, and are not feint of heart. The proposed program would consist of seven courses:

1. Higher education and research institutions as organizations: Strategic Management.
2. The management of financial resources in higher education: Principles of university finance.
3. Management of teaching and research in higher education.

4. Institutional governance and marketing considerations in higher education.
5. The management of third stream activities in higher education.
6. The international role of higher education.
7. The virtual laboratory of international collaboration in a movement toward a theory of participative self-governance.

The foundation of the design of the courses demonstrates an understanding of the concept of a dichotomy in leading higher educational institutions. Leaders are never to lose sight of the mission to teach, conduct research, and service, but yet the new world is expecting the leadership to know how to be creators of wealth for the institution and to do so with a business-enterprise mindset. The importance of knowledge in wealth creation has steadily grown and is now about to leap to a much higher level and cross additional borders as more and more parts of the world plug into an ever growing, ever changing, ever more accessible planetary brain bank (Toffler, 2006).

There is a temptation to design a course from scratch; however, the speed of change in higher education would benefit from implementing the "best practices" that can be easily transferred into a university setting. The business-enterprise does not always create from scratch; they identify benchmarks and adopt the proven and successful elements from the benchmarks to move their organization forward. Academic benchmarks, such as these proposed courses, should be explored and courageously implemented. To grasp the significance of this proposed higher educational leadership program, we need to recognize that no institution exists in isolation, and the development of leaders rests on these core ideas, which if mastered, can make sense in realizing that the university, although a powerful component of a larger macrosystem, is becoming a college-as-business-enterprise.

Course Outlines:

Course 1: Higher education and research institutions as organizations: Strategic Management.

This course introduces students to organizational theory and to concepts of strategic management, strategic positioning, and strategic thinking using models from both the private and public sectors, as well as from higher education itself. Several of the elements within this course are: 1) organizational theories and organizational culture, including global cultures; 2) introduction to strategies of HEIs, the governments, and the market for intrapreneurial endeavors; 3) for-profit strategies in translation research; 4) the management of change in HEI; and, 5) management of planning, opportunities, and uncertainty.

There is and will continue to be a growing need for ongoing and effective strategic visioning, the process that facilitates strategic leaders to see, construct a compelling vision, and chart a new course with integrity (Huber and Walker, 2005). Huber, et al, continues to state that although applicable to many different organizational contexts, strategic visioning is often viewed as an elusive and confusing concept. This is primarily due to the myriad of leadership theories and ever-increasing pile of literature contending for the mind of the practitioner. Yet too often, the literature highlights the significance of strategic vision without answering the critical question of *how* to effectively navigate this complex and sometimes treacherous strategic leadership process (2005). This course must answer that question.

Course 2: The management of financial resources in higher education: Principles of university finance.

This course offers a generalist's view of a specialist subject. It does not cover any of the technicalities of accounting practice, but focuses instead on finance as an integral aspect of university management (both public and private). It provides participants with a broad understanding of where the traditional funding comes from to operate a university, a college or even a department, how the leaders choose to spend it, and how the leaders try to control expenditures. Case studies will be used in understanding:

1. Trends and diversity in university funding
2. Basic dynamics of a university's internal economy
3. Systems of control and what goes wrong with them

In addition, new opportunity funding sources, such as intrapreneurial endeavors, must be understood. Some of the elements in this course are: a) changing patterns of financing HEIs; b) economics of university borrowing; c) institutional arrangement for resource allocation; d) generating non-state income (private funding); e) finance-led strategic position; e) principles of the development planning of a university foundation; and, f) combining aesthetics with usefulness in university building.

Course 3: Management of teaching and research in higher education.

This course is concerned with teaching and research and how they are 'managed' and by whom. Teaching and research are the core business of higher education institutions, but their 'management' at departmental or institutional level does not always reflect this. The ideas discussed in-depth in this course are: 1) external pressures for accountability, improve performance, and greater effectiveness; 2) the nature of professional expertise – skill, function and role; 3) building a research culture across all colleges; 4) teaching and research relationship building; and, 5) the meaning of quality and the effectiveness of quality assurance mechanisms, and their impact on HEIs.

Course 4: Institutional governance and marketing considerations in higher education.

The aim of this course is to introduce the students to the principles and practice of institutional governance and to consider them critically from a higher education perspective. Corporate governance issues in higher education have become increasingly important, as many HEIs have undertaken large-scale reforms in their governance. This course addresses this theme and examines evidence of changes in institutional governance and the roles of key players and structures.

There is a focus on marketing management, strategic marketing, competitive positioning, and satellite and online campuses as implicit management tools within higher education. Each aspect of structure and operation is singled out for analysis and study.

Course 5: The management of third stream activities in higher education.

This course examines the institutional management issues involved in what are often called, "third stream" activities, covering higher education institutions' roles in economic development, regional engagement, relations with industry, intellectual property, and the exploitation of research outcomes. "Translational research" raises significant strategic and financial issues for institutions in their relations to mainstream teaching and research. In depth case studies will be used on how third stream activities are integrated into overall institutional

strategies, how they are managed and on what financial basis, what risks they entail; and, how they are reconciled with other concepts of higher education institutions' roles in society.

Course 6: The international role of higher education.

This particular course explores some of the biggest challenges that higher education institutions face today due to the increased pressures from globalization. The students critically examine the international activities of various universities and the management issues raised at the various leadership levels within the institution. Topics covered will include student recruitment, academic concerns of overseas students, international student exchanges, remote campuses, and competition and collaboration in international research. This course would be an effective experience for international 'virtual' classroom collaboration.

Course 7: The virtual laboratory of international collaboration in a movement toward a theory of participative self-governance.

In addition to the six courses described, it is important to gain a practical understanding how to lead, not in terms of industrial age leading, but in terms of leading knowledge workers. The leadership style discussed in this section is a fresh idea, and one with powerful new tools for thinking about and preparing for the future. Probing into this new leadership behavior adds to the scholarly works of Apps' theory that a "new kind of leader, with a new approach to leadership, is essential for postsecondary institutions" (1994).

Learning about the application of a participative self-governance leadership (PSG) approach may be a pivotal learning point in the developmental strategy for emerging HEI leaders. The fundamental characteristics of this leadership framework are: 1. Independent scholars;

2. Future oriented momentum is based on decisions derived from a basis of persuasion, discussion, debate, and consultation;

3. Significant amount of time working and learning together (meshing); and,

4. Synergy of brilliance.

This course's concept is for the learners to first understand each of the characteristics of PSG and then have the opportunity to apply it in a collaborative, international learning laboratory.

Characteristic One: Independent Scholars

An important element of a PSG structure consists of independent scholars. A leader at the University of Oxford stated, "Everyone thinks they are their own boss and by the very nature of this university people are bright and independently minded. They know that the leadership style of self-governance creates incredible people who work together and do incredible things" (Smith, 2003). What this leader does is share success stories. Heifitz stated, "We must avoid the pressure to be heroic and to think of ourselves as one who can solve an organization's problems alone. Instead we work together on it. That process is quite painful, because the university historically wants to project hopes, dreams, and antagonisms onto some heroic figure. The leadership style must be one that knows it cannot solve this problem alone, but can do so together. There is no one boss and no heroic figure" (Apps, 1994).

And yes, there are independent scholars in PSG theory, but the university, by its governance, has some framework of regulations. However, leading with the PSG leadership style the university operates in an outward oriented manner and knows that it is a body that needs to be engaged with the world outside. There is no direct authority that will block the exploration

or the ability to discuss new ideas, new expeditions with academic or public and private enterprises throughout the world.

The PSG style is designed to allow leaders to gain access to senior level people in industry, and do so without permission from the university or asking for approval through a committee. "If we, as future oriented leaders, are going to give the universities real live programs we must do so without waiting for the academics to take twenty years to decide," stated a PSG leader at the University of Warwick (Smith, 2003).

The mitigating factor in the "independent scholar" characteristic of PSG is that the university encourages innovative leaders to do things differently and to not be burdened with a standard academic process, up to a point. PSG leaders give permission for organizations inside the institution to set their tone, the vision and the pace of their organization, and communicate this to the university without a directive telling them the path and the vision they should set for their organization.

Leadership without leading is not only motivational, but because of this style, everyone connected to the university or college can see the business getting better, and that it is within their hands to create wealth for their organization and the university; even if it is to increase enrollment in a medieval writing interpretation course. Leadership without leading is an attitude of the PSG leader who wants the innovative side of the university to be successful, as well as the traditional aspects. Self-governance enables leaders to go in the direction they believe they should, do what they think they should do, and then bring people together to ensure it happens. "Because of the faith in self-governance, I am able to synthesize issues, decide the resolution of the issues, and discuss the issues and solutions through," stated a leader at the University of Warwick (Smith, 2003).

The strength of a PSG style of leading allows for people to finds ways to be creative, innovative, and to resolve conflict in their own leadership way. The faith in self-governance is demonstrated by the university always moving forward, taking calculated risks, leveraging the talent they hire, and not dictating the exploration and experimentation efforts. A professor at the University of Oxford stated, "This style of university leadership is exciting because you can see how innovation can work in a totally different environment than from the traditional aspect of university leadership" (Smith, 2003). Everyone bears the responsibility for the consequences of their performance and the effect it may have on the university's image, reputation and fiscal contribution. However, there is no one breathing down the neck or measuring the daily performance. This enables initiatives to occur, universities to grow, expand, and become dynamic. These transformed institutions will gain the reputation for being innovative. Once you dictate how to innovate, you lose creativity (Smith, 2003). Give the professors and leaders their space in which to be innovative and do not interfere in a directive sort of way. This is the genesis of a future oriented university.

Characteristic Two: Decisions by discussion, debate, persuasion and consultation

This characteristic is not leadership by executive decision making or control. Self-governing leadership enables creativity and innovation to be supported by debate and persuasion, and not by directives or control. This is a change from the executive culture where rules and regulations come down from the top. Covey stated, "We live in a Knowledge Worker Age but operate our organizations in a controlling Industrial Age model that absolutely suppresses the release of human potential" (2004). He further writes that the mind-set of the Industrial Age that still dominates today's workplace will simply not work in the Knowledge Worker Age and new

economy (2004). Everything should be thought about, discussed, debated, and justified. What is important though is to ensure that this democratic process does not slow things down. The majority of the debates and consultations are not done in committees but are done by sitting and talking with each other. Leaders are empowered to lead by their expertise in negotiating skills, their persuasion skills, and their acceptance to risk. The decisions are based on the leaders working with each other, debating each side of the issues, and then moving forward to ensure success of the decision. One of the key traits of ensuring this decision-making style works is to make relationships work. Everyone in the university is a microcosm of what the university does, so it is important that every one talks, discusses, and debates when making decisions not only for their organization, but also for the university.

An example of this style of decision making in practice is when a key leader at the University of Warwick was negotiating a contract with an overseas company. He needed to hedge currency and needed to do financial activities that universities are not geared to do. Through his discussions and persuasive skills with the university, he reached a 'go ahead' decision on risking the funding. Decisions are not always unique, but many times are trying to improve the competitiveness of the university, and as long as decisions are made in a democratic process, the posture of the competitiveness is incorporated into the forward movement of the university.

It takes courage and a reputation of speaking the truth when debating and discussing. Imaginative leadership is needed in the university system. Courageous leadership is needed that allows for the decision making process to be based on debates and consultation rather than on directives from executive orders. Going out to the front line and taking risks is an important element, but one must do so from the groundwork of discussing and consulting, not only with internal stakeholders, but also the external stakeholders.

Characteristic Three: Time and effort talking and learning together

This element of PSG leadership requires a significant amount of time and effort spent talking together as a team. PSG leaders are supportive of each other, rather than the prescribing of actions. An example of support for each other is:

> There was a professor in the University of Oxford who was running a company in his research lab using research students. Supposedly this person had told the technology transfer office about this because he wanted to sell the company. The potential buyers wanted the university to write a letter stating that they had no ownership to the intellectual property.
>
> The university did have a claim. Here is a perfect example of one academic who was a mile outside the intellectual property regulations. So what did the leadership do? They spent a significant amount of time helping him back over the fence. PSG leaders helped him to stay within the intellectual property regulations, and maintained the relationship with the academic professor, who is the person leaders are at the university to support. (Smith, 2003).

This support action is known as meshing. It is when leaders spend most of their time talking and learning in concert with a number of interested parties so that everyone knows what is occurring in the university. The talking and learning is bi-directional, which enables leaders to interact appropriately with the internal factions of the university, but also with the outside world. The time talking and learning is essential for innovation to flourish. "What is key to ensuring success is that there is common sense, there is a great deal of talking, and that we share

our process and our knowledge" stated a professor at the University of Oxford (Smith, 2003). Leaders need to be willing to always exchange views, and mix academic and administrative teams to work together. The evolution occurring in HEIs is all about creating cross-disciplinary teams who can work together on a project, rather than one single department to take on the work. This is a key focus of PSG leadership. This teamwork support structure enables the university to be seen as doing the right thing in a professional way for the university's competitive posture on a global scale.

Characteristic Four: Synergy of Brilliance

The process of learning from each other feeds the value and application of applying this learning to innovation within a university. "This value is fostered by working in a climate where there is an appreciation for a strong perfectionist way of doing things," stated a leader at the University of Warwick (Smith, 2003). The synergy of brilliance is demonstrated by the fact that as a PSG leader what you say your team can deliver, your team must deliver, and the results must be of the highest standard. Extraordinary results are achieved because of the brilliant people the university hires to perform the university work. Leaders need to use the strength of the synergy to move the university forward and thus, affect the shape and the direction of the university.

The financial bottom line will not be achieved unless the university hires the right skills with the right attitudes and, decisions and direction are based on that synergy. Collins (2001) stated, "We must first get the right people on the bus, the right people in the right seats, and the wrong people off the bus, and then figure out where to drive it." "We achieve results because of the people we hire. Not only because they are good scientists, or good leaders, but because they share their expertise and apply this sharing by supporting and helping as opposed to being self serving," stated a key leader at the University of Oxford (Smith, 2003).

"There is an admiration for my leadership in bringing senior level people in government and the world of policy and practice to a point where they are thirsty for research and then we bring them into real partnership with the university. There is also admiration for the capacity to turn that skill into funded projects," stated a University of Warwick academic leader (Smith, 2003). The atmosphere that the PSG leader creates and maintains is one where everyone is explicitly valuable and the strategies developed are based on that value. Without this leadership skill, the university would not proceed effectively and competitively in the direction it chooses.

Overall, the PSG leader needs to be familiar with concepts of generating revenue, running competitive commercial organizations, and yet be a traditional administrator in a world-class university. PSG leadership is a democratic style of leadership in which individual contribution is critical to the acceptance of decisions and directions agreed to by the leadership core. "Leadership decisions need to be taken on the outcome of a balance of influence rather than on pure procedures put in place by leaders" (Handy, 1993). To apply this leadership style within an HEI it is important that the leader has academic excellence combined with business relevance. PSG leaders identify the best, nurture cooperation, create the environment that enables the synergy of brilliant people, and then get out of the way for innovation to occur.

Conclusion

Few college or university presidents have served previously as deans of business schools, but the task of leading a college is demanding the incorporation of business capabilities as an

important engine in the leading of these institutions. A program of specific courses to develop this type of leader is the critical path in eradicating the skill deficit.

Universities are expecting more of their leaders, and leaders in all chairs – but in particular, college deans, department chairs, and presidents. This paper is an effort to address important issues, but nothing as important as reducing the skill deficit of those leading HEIs, and their ability to compete globally. Future leaders need to engage their university into exploring, studying, and closing the deficit gap in leadership skills and abilities. The responsibilities of university leaders are enormous, and leaders are needed who can see opportunity, make bold but intelligent decisions, and implement solutions - all in an uncertain world.

Little is written about the best way to develop leaders who demonstrate the desire and courage to fulfill a leadership position within higher educational institutions, such as a department chair, deans, or even presidents of colleges and universities. There has been no roadmap for such positions. It is time for us to look at 'international' best practices, and emerging leadership styles.

This paper foresees the critical need for new leadership that will be required in 21st century higher education institutions. If we have the courage, and do not allow those who are feint of heart to discourage the intrapreneurial spirit of new ideas, and we find ways to implement these seven courses, then just possibly we have begun the journey to eliminate the deficit in HEI leadership. Kotter tells us that we do not create change unless we establish a sense of urgency (1996). The urgency is upon us, and we need to begin the process of developing HEI leaders who are exposed to the proposed innovative classes. They need to develop and experience using a PSG leadership style. The specific program from the University of London would not be instantly transferable to US Higher Education institutions, and it would be unjust to attempt to do so. However, this paper identifies proposed coursework that may easily transfer well into the US structure if the leaders are open to change, and have the courage to create a university that is different than the one they are currently leading. A narrow functional expertise in leading post secondary institutions is passé; what universities demand will be those who are familiar with ways of generating revenue, running competitive commercial organizations, and yet be a traditional administrator in a university setting.

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Information Technology Competencies Expected in Undergraduate Accounting Graduates

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Abstract

As information technologies (IT) grow more advanced, current accounting education is challenged by major changes in the environment in which professional accountants are operating. One of the major factors that affect this environment is the impact of IT on the accounting profession. Our survey of recruiters indicates that new accounting graduates are expected to be able to use financial spreadsheets, business graphics, word processing, presentation, audit, tax preparation, small business systems, database management systems, accounting, and communication software at the expert level. They are also expected to be able to evaluate entity's IT assurance needs, organize and manage own system and organize system resources, as well as safeguard system against unauthorized use, virus, spam, and spyware. As accountants adjust to this evolving information environment, it is essential that we, accounting educators, continuously enhance our own IT knowledge, skills and abilities (KSAs), and integrate the relevant IT topics into the traditional accounting core subjects such that the future professional accountants remain competitive and pertinent in the new and changing environment.

Key words: Information Technologies**,** Software, IT Assurance, System Resources, Safeguard System

Introduction

As information technologies (IT) grow more advanced, current accounting education is challenged by major changes in the environment in which professional accountants are operating. One of the major factors that affect this environment is the impact of IT on the accounting profession. A recent example is that the SEC has mandated the largest companies to start furnishing XBRL with their Q2 2009 SEC filings, and smaller companies to follow one year later. Mutual funds must begin tagging key information, including risks, fees and performance, by January 2011.

The Institute of Management Accountants and Financial Executives International commissioned a research entitled "What Corporate America Wants in Entry-Level Accounts" in 1994. The findings revealed that information systems design was one of the KSAs considered most important by Corporate America. The research also found that there was a significant gap

between the KSAs that corporations expected from entry-level accountants and the accounting curricula provided by business schools.

The Institute of Management Accountants published another study entitled "The Practice Analysis of Management Accounting" in 1996. The study analyzed the work of more than 800 management accountants and found that (1) the use of computerized spreadsheets, and the use of computerized accounting systems were two of the most important KSAs, and (2) computer system operations was one of the activities that are most critical to success on the job.

Chang and Hwang (2002) explored educators' perceived level of importance of emerging IT issues. Their findings indicated that information security and internal control was the most important topic to be taught in the IT related courses, followed by database management, business processes and documentation, information system design, and e-business.

AICPA Core Competency Framework for Entry into the Accounting Profession (AICPA, 2006) stresses that individuals entering the accounting profession must be able to:

- Accesses appropriate electronic databases to obtain decision-supporting information
- Assesses the risk of technology and automated business processes
- Uses technology assisted tools to assess and control risk and document work performed
- Builds appropriate models and simulations using electronic spreadsheets and other software
- Exchanges information using appropriate communication technologies such as e-mail, discussion boards and video-conferencing
- Recognizes commonly used information architectures
- Recognizes business opportunities and risks associated with electronic commerce
- Mines electronic data sources for business and industry information
- Uses technology to develop and present strategic information

This study investigated the IT competencies desired in new undergraduate accounting graduates by employers in industry. In September 2007, a questionnaire was designed mainly based on International Federation of Accountants' (IFAC) International Education Guideline 11 (IFAC, 2003). The questionnaire was hand delivered to 150 recruiters in an accounting conference in October 2007. The recruiters were asked to evaluate thirty five (35) information technology competencies in 5 categories using a five point Likert-type scale with 5 denoting very important, 4 important, 3 neutral, 2 not important, and 1 not important at all. A total of 63 questionnaires were answered and returned by the respondents. This is equivalent to a response rate of 42 percent.

Findings

To determine whether there are significant differences among the recruiter's rankings on the perceived level of importance of the IT competencies investigated in this study, the competencies were sorted in ascending order based on mean of ranks (Table 1), and stepwise F tests for equality of means were conducted. At first, we compared the means of ranks between financial spreadsheets (X_1) and business graphics (X_2), i.e, we tested the hypotheses

$$H_0: \mu_1 = \mu_2$$
$$H_1: \mu_1 \neq \mu_2$$

Since there was no significant difference, we included word processing software (X_3) in the hypotheses, i.e., we tested

$$H_0: \mu_1 = \mu_2 = \mu_3$$
$$H_1: \text{not all } \mu_i \text{ are equal}$$

We continued to add a competency to the hypotheses until the null hypothesis was rejected. When the following hypotheses were tested

$$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7$$
$$H_1: \text{not all } \mu_i \text{ are equal}$$

We rejected the null hypothesis (F=2.49, P=0.02) and classified the first six competencies as Group 1.

To identify the second group, we started by testing

$$H_0: \mu_7 = \mu_8$$
$$H_1: \mu_7 \neq \mu_8$$

and repeated the same process we used to identify the first group. The 7th through 11th competencies are classified as Group 2. Following the same statistical procedures, the remaining competencies are classified into additional five groups. The results are given in Table 1.

The results reveal that undergraduate accounting graduates must master the six types of software in Group 1:

- Financial Spreadsheets
- Business Graphics
- Word processing
- Presentation
- Audit Software
- Tax Preparation software

Fifty three (84%) to 59 (94%) out of 63 respondents rated them very important. The six types of software in Group 1 are followed by the following five competencies in Group 2:

- Small Business Systems
- Database Management Systems
- Computerized Accounting Packages
- Evaluation of Entity's IT Assurance Needs
- Communication software (e-mail, file transfer, web browser)

The group mean of the second group is a high 4.69 which indicates that in addition to the software in group 1, accounting graduates must also master the four types of software in Group 2. Moreover, they must have the KSAs to "analyze/evaluate and advise on entity's IT assurance needs based on legal, ethical, professional standards and other requirements and best practices" (IFAC, 2003). All recruiters consider the IT competencies listed in Groups 1 and 2 very important or important.

Group 3 includes:

- Operating and managing own system and organizing system resources
- Safeguarding of system against unauthorized use, software piracy, virus attacks and system failure
- Operating systems

The three items in Group 3 are basic computer operating KSAs. They are normally covered in an IT literacy course. Those who do not possess those KSAs may be considered computer illiterate. It is a surprise to see them not being included in Group 1.

Group 4 contains:

- Decision support software
- Statistical analysis and forecasting packages
- Utility programs

Seventy eight (78) percent to 82 percent of correspondents consider the three competencies in Group 4 very important or important. AICPA expects individuals preparing to enter the accounting profession must be able to use quantitative techniques to determine relative importance and likelihood of alternative scenarios, and employs model-building to quantify problems or test solutions (AICPA, 2008). It is not a surprise to see that accounting graduates are expected to be able to use quantitative analysis software.

The competencies in groups 5 and 6 with the highest and lowest means of ranks are web application development software ($\bar{X}_{18}$=3.73) and system development life cycle ($\bar{X}_{28}$=3.18), respectively. Testing the hypotheses:

$$H_0: \mu_{18} = 4$$
$$H_1: \mu_{18} < 4$$

and

$$H_0: \mu_{28} = 3$$
$$H_1: \mu_{28} > 3$$

we accept $\mu_{18} < 4$ (t=-3.84, P=.0002) and $\mu_{28} > 3$ (t=3.021, P=.001). The fact that the means of the ranks of the competencies in groups 5 and 6 are between 3 and 4 indicates that they are desirable but not absolutely required. The competencies in Group 6 deal with systems analysis and design which was one of the KSAs considered most important by Corporate America according to a 1994 study by The Institute of Management Accountants and Financial Executives International. Further research is needed to clarify the contradictory findings.

The competencies in Group 7 are related to the management of IT adoption, implementation, and use. More than 80 percent of the respondents did not consider them important. Possibly it is because that those items are the tasks of the IT department in many organizations or the entry-level accountants are not assigned to those tasks.

Table 1
Information Technology Competencies

IT Competencies (X_i)	Frequency of Rank 5	4	3	2	1	Total Freq.	Mean of Ranks	F-Value	Ranking in Groups and Group Mean($\bar{\bar{X}}$)
Financial spreadsheets (X_1)	59	4	0	0	0	63	4.94	$H_0: \mu_i = \mu$, i=1,…,6 F=1.17 P=0.32	
Business graphics software (X_2)	59	4	0	0	0	63	4.94		
Word processing software (X_3)	58	5	0	0	0	63	4.92	$H_0: \mu_i = \mu$, i=1,…,7 F=2.49 P=0.02	1 $\bar{\bar{X}}$ = 4.90
Presentation software (X_4)	57	6	0	0	0	63	4.90		
Audit software (X_5)	54	9	0	0	0	63	4.86		
Tax preparation software (X_6)	53	10	0	0	0	63	4.84		

Small business systems (X_7)	48	15	0	0	0	63	4.76	H_0: $\mu_i = \mu$, i=7,…,11	
Database mgmt systems (X_8)	47	16	0	0	0	63	4.75	F=1.98 P=0.10	
Computerized accounting packages (X_9)	45	18	0	0	0	63	4.71	H_0: $\mu_i = \mu$, i=7,…,12 F=6.71 P=0.00	2 $\bar{\bar{X}}$ = 4.69
Evaluation of entity's IT assurance needs (X_{10})	41	22	0	0	0	63	4.65		
Communication software (e-mail, file transfer, web browser) (X_{11})	37	24	2	0	0	63	4.56		
Operating and managing own system and organizing system resources (X_{12})	25	34	4	0	0	63	4.33	H_0: $\mu_i = \mu$, i=12,13,14 F=0.24 P=0.79	
Safeguarding of system against unauthorized use, software piracy, virus attacks and system failure (X_{13})	25	34	4	0	0	63	4.33	H_0: $\mu_i = \mu$, i=12,…,15 F=2.88 P=0.04	3 $\bar{\bar{X}}$ = 4.31
Operating systems (X_{14})	26	27	6	2	0	61	4.26		
Decision support software (X_{15})	13	36	11	0	0	60	4.03	H_0: $\mu_i = \mu$, i=15,16,17 F=0.21 P=0.81	
Statistical analysis and forecasting packages (X_{16})	11	39	13	0	0	63	3.97		
Utility programs (text editor, folder manager, file compression, back-up/recovery) (X_{17})	11	36	11	1	0	60	3.97	H_0: $\mu_i = \mu$, i=15,…,18 F=2.65 P=0.049	4 $\bar{\bar{X}}$ = 3.99
Enterprise Resources Planning Software (X_{18})	2	37	17	0	0	56	3.73	H_0: $\mu_i = \mu$, i=18,19,20 F=0.81 P=0.45	
Web application development software (X_{19})	2	38	18	0	0	58	3.72		
Computer Languages (X_{20})	7	37	19	0	0	63	3.71	H_0: $\mu_i = \mu$, i=18,…,21 F=2.66 P=0.048	5 $\bar{\bar{X}}$ = 3.72
Evaluation of Information System Objectives (X_{21})	3	28	26	6	0	63	3.44		
System evaluation methods and techniques (X_{22})	2	28	27	5	0	62	3.44		
Communicating results of system evaluations (X_{23})	0	29	26	8	0	63	3.33	H_0: $\mu_i = \mu$,	

Role of info. in organization design and behavior (X_{24})	0	22	39	2	0	63	3.32	i=21,…,28 F=1.23 P=0.28	6 $\bar{\bar{X}}$ = 3.32
Specific types of system evaluations (X_{25})	1	23	31	7	0	62	3.29		
System evaluation following up (X_{26})	0	25	30	8	0	63	3.27	H_0: $\mu_i = \mu$, i=21,…,29 F=3.19 P=0.001	
System analysis and design techniques (X_{27})	0	19	42	2	0	63	3.27		
System development life cycle phases, tasks, & practices (X_{28})	0	13	47	2	0	62	3.18		
Financial control over IT (X_{29})	0	12	37	14	0	63	2.97		
IT Administrative issues (X_{30})	0	9	40	14	0	63	2.92		
IT Operational issues (X_{31})	0	10	38	14	1	63	2.90	H_0: $\mu_i = \mu$, i=29,…,35 F=0.33 P=0.92	7 $\bar{\bar{X}}$ = 2.89
Mgmt of system maintenance and change (X_{32})	0	10	35	15	1	61	2.89		
Mgmt of end-user computing (X_{33})	0	9	36	15	1	61	2.87		
Security, back-up and recovery (X_{34})	0	7	41	14	1	63	2.86		
Mgmt of system acquisition, development and implementation (X_{35})	0	7	39	16	1	63	2.83		

Conclusion

IT has been changing the way organizations operate. Wide use of IT in the business world creates new demand for skills and knowledge that accounting students are expected to have. Our findings indicate that new accounting graduates are expected by their employers to be able to:

1. Use the following types of software at the expert level:
    - Financial spreadsheets
    - Business graphics
    - Word processing
    - Presentation
    - Audit
    - Tax preparation
    - Small business systems
    - Database management systems
    - Computerized accounting packages
    - Communication software (e-mail, file transfer, web browser)
2. Evaluate entity's IT assurance needs

3. Organize and manage own system and organize system resources,
4. Safeguard system against unauthorized use, virus, spam, and spyware,
5. Be familiar with the following types of software:
    - Operating systems
    - Decision support software
    - Statistical analysis and forecasting packages
    - Utility programs (text editor, folder manager, file compression, back-up/recovery)

As potential employers demand more IT KSAs, accounting curriculum needs to be changed to meet such expectations. Teaching accounting students only on traditional accounting topics may put them at a competitive disadvantage in the job market. Adding additional IT courses to the accounting curriculum may not be feasible in the campus climate of nowadays. A more practical approach is to integrate IT into existing accounting courses. Some Accounting instructors may not feel comfortable with IT. A workshop may encourage them to grow in IT KSAs and confidence. Adding one or two faculty in accounting information systems may also speed up the integration process.

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Student Reading Strategies and Textbook Use: An Inquiry into Economics and Accounting Courses

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Abstract

Faculty members take great care in selecting textbooks that present material in a meaningful way that promotes student learning. However, faculty members often express frustrations that students don't use the textbooks to their full potential, and that some students rely solely on faculty lectures or presentations. After providing an extensive literature review into why textbook selection is important, how students use textbooks, what types of reading strategies are used by students in various disciplines, and instructor strategies for increasing textbook reading, the authors used reading journals to investigate how students were utilizing assigned textbooks in their own courses. The resulting investigation revealed insights into how students are currently reading and using textbooks, allows for the development of focused strategies to improve student textbook use, and provides suggestions for further research and potential research designs that will move the body of literature forward.

Keywords: Reading strategies, textbook use, expository text, reading journals

Introduction

Faculty members take great care in selecting textbooks that present useful material in a meaningful way that will promote student learning. However, faculty members often express frustration that students don't use the textbooks to their full potential, and that some students rely solely on faculty lectures or presentations. Upon encountering a statistic indicating that only 17% of students in introductory macroeconomics courses completed all assigned readings (Schneider 2001, p.A12), the authors designed an investigation about reading strategies and textbook use in their courses. It follows to reason that if students are not reading the text, or are not utilizing the text in a way that promotes learning of the content, then significant learning gaps can emerge.

The authors present extensive research into why textbook selection is important, how students use textbooks, what types of reading strategies are used by students in various disciplines, and instructor strategies for increasing textbook reading. The authors then used reading journals to study how students were utilizing assigned textbooks in their courses. The resulting investigation revealed insights into how students are currently reading and using textbooks, allows for the development of strategies to improve student textbook use, and generates specific research questions to move the body of literature forward.

Research on Textbook Selection and Use

Faculty members place great emphasis on selection of the text for each of their courses because of the important role preparatory reading can play in the learning process. The text represents an important tool to be used to explore content directly relevant to class discussions and lectures. The text also represents an alternative delivery vehicle for content, and students can use it to clarify points that they did not clearly follow from lecture, or from content areas intentionally not covered by lecture. The text is also a source of examples, problems, discussion questions, and cases used for both in-class and out-of-class assignments. As such, the text serves a foundational purpose.

In an extensive reflection on textbooks and their use as a source of research, Issitt notes that although there is often great disdain for texts in academic fields, texts are nevertheless pervasive. "As a teaching aid and as part of the learning experience, they are practically ubiquitous."(Issitt, 2004, p.683) Besser et al. (1999) and Robinson (1994) also note how texts can serve as a guide for students in learning and instructors in development of courses, but texts go beyond that to "provide uniform content for individual college students to study according to their own ability, [and] motivate greater involvement…" (Besser et al.1999, p. 5) This can result because "students find textbooks easier to read than primary source material, which leads to higher "self-efficacy perceptions for understanding the course" and more "motivated behavior" for students. (Clines as cited in Besser et al. 1999, p.5) Regardless of whether instructors utilize texts for one or all of the above reasons, little doubt remains that given the extensive use of texts in university level courses, instructors consistently rely on texts as a key part of the knowledge delivery/acquisition system.

In terms of text selection, the instructor also plays an important role in potentially fostering reading – and hence one hopes learning – through the text. Hidi and Anderson (1992) note that generating interest is key in fostering learning because "research on individual interest has shown that…adults who are interested in a topic or an activity pay more attention, persist for longer periods of time, and acquire more knowledge than subjects without interest." (Hidi and Anderson, 1992, p. 217) So instructors necessarily need to select text which will interest their student audience. However, there is a very fine line to walk in such textbook selection. Wade (1992) cautions that "some popular strategies for creating interest may not facilitate, indeed may even interfere with the important learning information." (Wade, 1992, p.256) This results because readers spend proportionately more time on interesting, yet unimportant details. Garner et al. (1992) are concerned with text selection for similar reasons, which they term the 'inconsiderateness' of texts, or that texts do not clearly signal important as opposed to unimportant information. They found that the more unimportant information in a text (what they term 'seductive detail'), the lower was retention of important information. This is a huge potential problem because "when importance and interestingness diverged, interestingness was the better predictor of which information would be recalled." (Garner et al.1992, p. 244) In addition, they found that greater overall retention resulted from generally interesting texts rather than generally uninteresting texts. The fine line mentioned above for instructors then becomes one where texts selected are generally interesting, yet derive the interest not from Garner et al.'s 'seductive details,' but rather from generating interest within the important textual information.

Research by Besser et al. shows that students have what they term 'strong student opinions' about their texts. "Students will be most concerned about a textbook's writing, then the

cues [organizational cues] that help interpret the writing, and lastly all other aspects of the book."(Besser et al. 1999 p.10) This means specifically that,

> "students believe that the quality of writing in a textbook is paramount, and that writing aspects account for half of the helpful learning and 60 percent of the non-helpful learning….In regard to writing quality, the two most helpful aspects to students are relevant examples that review or reinforce the lecture material, and easy to read, clear writing. The three least helpful writing aspects, all receiving equal mentions, were: (a) long sentences/wordy, (b) writing is confusing; doesn't make sense, and (c) writing is boring/not interesting…Directives and signals, or the organizational elements are next in importance. Students like: (a) key words in boldface or italic, (b) end–of-chapter summaries, (c) glossaries, (d) introductions to chapters that overview the content, and student questions; They don't like long blocks of text without a break….Although graphics is the third area of concern, students like charts, tables, diagrams and pictures; they don't like small print, and they aren't particularly impressed by sidebars." (Besser et al. 1999 p.15)

Considering how important textbooks are to both instructors and students, the query then becomes, how *effective* is student use of texts?

Results on Textbook Reading

A number of researchers have tried to evaluate both the quantity and quality of student text use. These include examinations of how much students use the text, when they read the text, the intensity with which students read the text, as well as how different subsets of students vary in their text use. Generally, the results are not encouraging to instructors who view the text as an integral tool in the learning process.

Sikorski et al. (2002) find that student time spent reading texts falls short of the rule of thumb for study time at the university level (2 hours study for each credit hour per week). Smith and Jacobs, in examining textbook use by general and organic chemistry students, found "students reported spending an average of 4.1 ± 0.1 hours per week using the following textbook resources: textbook, study guide, solutions manual, textbook's website, and accompanying CD. By comparison, organic chemistry students reported spending an average of 5.8 ± 0.2 hours per week." (Smith and Jacobs, p.100) Of these hours reported, the general chemistry students spent only 2.6 hours using the text itself, and organic chemistry students spent 3.3 hours. (Smith and Jacobs, p.100) Phillips and Phillips' results in introductory accounting show that students averaged 100 minutes per chapter. (Phillips and Phillips, 2007, p. 32) Murden and Gillespie (1997) are concerned that insufficient time spent reading the text will lead students to discount the text as a primary information source and instead rely predominantly on the lecture.

The timing of text use has also been examined. Phillips and Phillips found 17% of students read before content was first discussed, 55% after all lectures on the chapter, and 28% read the material concurrent with content discussions. Students in top quartile are most likely to read before material was addressed in class while those in the lowest quartile will most likely to wait until after. Further, Phillips and Phillips found that 2/3 of chapters read by students in the top quartile were completed in a single setting opposed to only ½ of those in lowest quartile.

(Phillips and Phillips, 2007, p. 32, 34) In also examining when students read the text, Clump et al found that in their study of psychology courses "students read on average 27.46% of the assigned readings before class and 69.98% before an exam". (Clump et al. 2004, p 227) Clump et al. conclude that "with such low levels of readings before class, it is not surprising that many students were not involved in class." (Clump et al. 2004, p.231)

Researchers have also examined the quality of student text use primarily in terms of whether the student reads material intensely or superficially. Biggs (1987) sees the two approaches as different insofar as the former is linked to developing competence in the subject examined, while the later relates more toward minimal required knowledge acquisition geared primarily to rote memorization. Elias (2005) examined these two types of study approaches (termed deep and surface) with particular focus on accounting students. "The results indicated a significant positive correlation between the deep approach and [overall] GPA… and a negative correlation between the surface approach and [overall] GPA." (Elias, 2005, p.196) Further, "results showed a positive correlation between the deep-study approach and expected class grade…and a negative correlation between the surface approach and expected class grade." (Elias, 2005, p.197) Variation in intensity of reading also emerged based on gender, type of students, and major.

> In general, female and nontraditional students used the deep approach more often compared with men and traditional students. Also freshman students used the deep approach more often than did sophomores and juniors, but use of the deep approach increased again among seniors. There were significant differences based on selected major. Accounting and nonbusiness majors used the deep approach the most, whereas economics and general business majors used it the least. (Elias, 2005, p.197)

Phillips and Phillips, in addition to looking at time spent with the text and timing of text use, also addressed whether the students they examined were using different reading strategies similar to those examined by Biggs and Elias. Phillips and Phillips' terminology is sinking in versus skimming. Like other researchers, they found that students do combine their reading strategies. They also found a correlation between intensity of reading and the quality of the student. They found that the number of students reporting confusion did not vary according to performance, but that higher performing students attended to their confusion by deeper examination of the text, whereas poorer students reduced anxiety and confusion by refusing to read or by resorting to memorization. (Phillips and Phillips, 2007, p.31)

Results for Principles of Microeconomics and Financial Accounting

Phillips and Phillips used learning journals to gather the information already noted above as well as more situational information regarding how students were reading the textbook. This information included the mood of the student, location, distractions, and barriers to effective reading. This information opens a window on the context within which students use their assigned text.

To determine how students in introductory economics and intermediate accounting were using textbooks, the authors provided students in Principles of Microeconomics and Financial Accounting with tables in which they recorded their reading times, number of pages read, locations, mood, and reading strategies for each chapter of the course text. Students completed

the tables and turned the relevant chapter information in when they sat for the exam covering the corresponding chapters. At the beginning of the research project, a graduate assistant facilitated the completion of student release forms, and each student was assigned a participant number to be used on their reading journals in lieu of their names. The authors motivated student participation by offering extra credit for completion of the reading journals. At the end of the semester, a graduate assistant calculated the number of extra credit points for each student and points were added to the ending student point totals. Results were not summarized until the semester was completed and grades were submitted. Approximately 68% of the introductory economics students and 80% of the accounting students consistently completed the reading journals during the semester.

The purpose of this study is not to statistically compare reading results between courses or to compare reading results to student performance. The course instructors, disciplines, and student populations all varied too greatly for comparative research questions. Principles of Microeconomics is a sophomore level required business core course with an enrollment of approximately 90% non-economics majors. The instructor uses a lecture/discussion format with course grades based on multiple choice exams, economics essays, and applied group projects. Financial Accounting is also a sophomore-level required business course, however the enrollment is approximately 65% non-majors. The instructor uses a lecture/problem review format and an electronic textbook homework management system. The course grades are based on multiple choice and other objective format exams, problem exams, and homework scores. Again, although the intent was not to statistically compare reading results between courses or to compare reading results to student performance, the authors were interested in deeply investigating student textbook use in their courses so they could compare their results with existing research, consider possible instructional interventions, and obtain a baseline for further research in this area. The results from the reading journals are summarized in Table 1 below, and general observations made and specific research questions generated from the results are discussed following the table.

Table 1: Results of Reading Journals

	Principles of Microeconomics	**Financial Accounting**
Average time spent per chapter	82 minutes	111 minutes
Textbook material was read …		
• Before the chapter was initially discussed in class	13%	46%
• Partially before and partially after the chapter was initially discussed in class	7%	14%
• After all class lectures or discussions	71%	36%
• Students did not read the chapter	9%	4%
How many times was the textbook used per chapter?		
1	63%	33%
2	32%	41%

3 4 5	3% 2% 0%	21% 2% 3%
Settings and Distractions • No distractions (generally quiet location and environment) • Mild Distractions (music or television in background, group study, occasional interruptions) • Major Distractions (lots of people around, online or texting conversations, video games, reading only during television commercials)	 50% 33% 17%	 58% 33% 9%
Mood during reading • Positive (upbeat, energized, relaxed, eager to prepare, calm, alert …) • Negative (obligated, tired, nervous, bored, overwhelmed, frustrated …) • Indifferent (Hungry, normal, ok …)	 26% 68% 6%	 44% 44% 12%

General Observations:

1. It appears that the average time per chapter, the timing of the reading, and the times the textbook was used varied greatly between the courses. Possible explanations could be based on differences in how textbooks are used in disciplines, instructor expectations and communications, and course design. The accounting course specifically uses an electronic homework manager system that could have resulted in increased textbook use, although the use of the textbook is not required as part of the homework manager assignments.
2. The settings and distractions appeared to be similar between courses.
3. The results from the sophomore introductory economics course are similar to the Phillips and Phillips results from introductory accounting as to the timing of textbook reading. The results from the Financial Accounting course are similar to the Phillips and Phillips results as to the average time spent per chapter.
4. The results from both courses studied show markedly higher percentage of students completing the reading (91% and 96% in economics and accounting respectively) than in the Schneider report of only 17% of students completing the reading in an introductory economics course.

5. The mood during reading varied between courses, and it is unclear what may have caused the difference. One potential difference is the number of non-majors was higher in the economics courses.

Based on the literature review and the results from the reading journals, specific research questions can be generated as follows:

1. How does reading vary across disciplines? A research study could be designed using introductory accounting and introductory economics courses that have similar level students and similar instructor use of textbooks, course design, and course assessments.
2. How do reading behaviors change throughout an academic program? A research study could be designed to investigate student use of textbooks using the same instructor, but different courses and course levels. For example, one could investigate a sophomore level Financial Accounting course and a junior level Intermediate Accounting course taught by the same instructor who uses similar teaching methodologies for both courses. This would also investigate whether reading behaviors are significantly different in required core courses with substantial students who are non-majors, and courses required within a major.
3. Do instructional interventions make a significant difference in how students use the textbook? Using the information in this study as a baseline, instructional interventions could be designed to attempt to increase positive textbook use, and the results could be compared with the original study results.
4. Does the use of an electronic homework management system increase the use of textbooks in a way that enhances student learning? A research study could be designed using the same instructor with multiple class sections with the only variable being the use of an electronic homework management system in one course with the other course section being a control group.

Strategies for Promotion of Text Reading

Once an understanding is developed as to how students are using textbooks in a particular course, attention can be turned to incorporating strategies into courses that can promote and encourage positive textbook use. Instructors have a key role to play in the promotion of text reading. Phillip and Phillips' findings show that students are not motivated by anxiety to read the text, and cautions instructors from raising anxiety levels. "Students already fear the textbook and expect the topic to be confusing; in our study, students were not motivated by their anxiety to adopt better reading strategies. This finding suggests an alternative approach for engaging students in good reading habits: instructors should play to students' optimism and good intentions regarding the textbook, especially in the first days of the course." (Phillips and Phillips, 2007 p.38)

Instructors can also suggest the most effective ways for students to read the text. "Early on, instructors can explicitly mention the sinking in versus skimming reading strategies and remind students that they may not have time to return to the text if they adopt a skimming approach." (Phillips and Phillips, 2007 p.38) They further suggest that instructors promote desired behavior by using deeper analysis of the text to confront confusion and anxiety. Students need active instructor advice on effective reading strategies. Research on reading comprehension shows that, "proficient readers are likely to use summarizing, connecting related

information across sentences and paragraphs, assessing information completeness, and formulating questions and hypotheses." (Crain-Thoreson et al. 1997)

McConnell and Hoover (2008, p. 6) present several strategies that can encourage student interaction with text and monitor student understanding of what they have read:

1. Use in-class questioning where the instructors choose the student to respond as opposed to allowing students to volunteer answers. This method is particularly appropriate for lecture or discussion pedagogies. Student preparation is expected and instructors can incorporate lack of preparedness into their grading system if they so desire.
2. Assign exercises or problems and have students publicly share responses. This method again reveals student preparation and helps the faculty members identify common student misunderstandings.
3. Use electronic quick response systems. Quick response systems indicate on the screen how many students have responded to the question and the percentage correct. In addition, the systems can track each student's score.
4. Give quizzes over the reading assignment, either with or without notes. Most textbook publishers have electronic homework systems available that can shift the quiz time from in-class to outside of class. This could be particularly appealing to faculty members who want to assure the students have completed pre-readings before an in-class discussion of the more difficult chapter issues.
5. Use multiple condition grading. Rather than assigning points to an element an instructor believes to be essential to learning, the faculty member requires completion of the additional element as an additional condition to achieve a desired grade. An example of a multiple condition grading strategy is shown below in Table 2.

Table 2: Example of Multiple Condition Grading System

Grade	Requirements for Grade	
	Scores on Traditional Graded Course Elements (exams, problems, projects)	**Chapter Reading Questions & Answer Assignments (assignments must be complete and well-prepared to receive credit)**
A	90-100%	Complete at least 9 of the 10 chapter Q&A assignments
B	80-90%	Complete 8 of the 10 chapter Q&A assignments
C	70-80%	Complete 7 of the 10 chapter Q&A assignments
D	60-70%	Complete 6 of the 10 chapter Q&A assignments
F	Below 60%	Complete less than 5 chapter Q&A

Instructional strategies to increase appropriate student use of textbooks should be designed to match course learning objectives, course content constraints, disciplinary styles of learning, and instructional approaches.

Conclusion

Textbook use is an important, but under-investigated element of student learning. The authors have presented extensive research into why textbook selection is important, how students

use textbooks, what types of reading strategies are used by students in various disciplines, and instructor strategies for increasing textbook reading. The study of textbook use in their own courses supports the related research and offers interesting insights into the potential differences between textbook use and disciplines, instructor strategies, and course design. The study therefore provides a method other faculty members can use to investigate student use of textbooks at their local institutions so that instructional strategies can be tailored to the needs and reading habits of their discipline. It also provides suggestions for further research and potential research designs that will move the body of literature forward.

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How Business Students Spend Their Time—Do They Really Know?

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ABSTRACT

The purpose of this paper is to determine how students majoring in some area of business spend their time, relative to how they think they spend their time. In order to assess this gap, undergraduate business students who were enrolled in the first or second business statistics course at a regional southern university were required to record in a logbook, for a period of one week, the number of hours they spent using YouTube, FaceBook, MySpace, the number of hours they watched TV, the number of hours spent studying, as well as several other items. Students in the statistics classes were chosen because all business students, regardless of their major, have to take these courses, and the researchers felt that this was the best way to get a representative group of all business majors. Data was collected from a total of 212 business majors. Additionally, before they started this one-week period, the students were asked to determine, to the best of their abilities, the amounts of time they thought they spent on these activities. Tests of significance revealed ten (10) significant differences between the actual time spent on the activities selected, and the pre-conceived estimate of time spent on these activities. On nine of these significant differences, the students thought they spent more time on the specific activity than they actually did. This would seem to indicate that students need to improve their time management skills. For example, students estimated that they spent more than 1.5 times more time using FaceBook and MySpace than they actually did, and estimated twice as much on Moodle (an open source course management system) as they actually did.

Our findings should be of value to students, faculty, and advisors. It is very likely that many students are unaware of such differences, and if they can be made aware of them, by either faculty or advisors, or both, it should result in higher academic performance by the students. The results may also lead to students devoting more attention to developing their time management skills, which should enhance their personal development, and even their collaborative learning skills.

Keywords: Business undergraduates' time use, time management skills, academic performance

INTRODUCTION

Today's college student has access to technologies that might have seemed virtually "science fiction" a mere 20 years ago. The Internet, WWW, cell phones, iPhones, and iPods are only part of a vast array of potential distractions to today's college students, who spend less time studying than their predecessors (Nonis & Hudson, 2006). The ubiquity of such technologies suggests that college students may in fact be unaware of these distractions. The purpose of this paper is to determine how students majoring in some area of business spend their time, relative to how they think they spend their time. Our approach involves analyzing information collected by students by means of a logbook, a method which is similar to that of Nonis, Philhours, & Hudson (2006), and Budden et al. (2007), both of which required the use of a diary by students.

MOTIVATION FOR STUDY

It is likely that many students are unaware of possible differences between how they spend their time, and how they think they spend their time. Such a perception gap may lead to a lower academic performance by students, because, according to one study at least, there is a relationship between study time and college outcomes (Stinebrickner & Stinebrickner, 2004). If students can be made aware of such a perception gap, by either faculty or advisors, or both, it should result in higher academic performance by the students. Moreover, results of such a study may also lead to students devoting more attention to developing their time management skills, which should enhance their personal development, and even their collaborative learning skills.

RESEARCH QUESTION

From the foregoing, our specific research question is as follows: How do students majoring in some area of business spend their time, relative to how they think they spend their time?

LITERATURE REVIEW

Few would argue that student learning in a university setting takes place when there is active participation by professor and student; and the roles of each are heterogeneous. The professor has the formidable task of delivering course material to students, and the students are expected to master the material, measured by their performance in the academic environment. A study by O'Toole, Spinelli, & Wetzel (2000) attempted to determine congruency of attitudes by business school professors and undergraduate business students regarding important learning dimensions. Both groups strongly agreed that the professor's presentation clarity, enthusiasm for teaching, and exam fairness and quality were most important for student learning. Students, for their part, seek to maximize their overall grade point average (GPA) for the semester—a goal that requires the (optimal) application of time (McFadden & Dart, 1992). It is this all-important time factor by students that we seek to understand better by way of our study.

A novel study done by Trueman & Hartley (1996), focused on time-management skills and their relationship to a student's age. In their study, first-year undergraduates at a British university were divided into three age groups: traditional-entry students (under 21 years of age); borderline mature students (between 21 and 25 years of age); and older mature students (greater

than 25 years of age). The results of their study indicate that there are significant differences in the time-management skills among the three age groups, with the older mature students making the greatest use of time-management strategies.

Unfortunately, merely requiring students to attend time-management workshops is inadequate, as indicated by the results of a study undertaken by Horstmanshof & Zimitat (2007). Optimality of time use by college students is eroded when non-academic activities serve as distractions from study time. Such "learning postponement" is addressed in a study by Dietz, Hofer, & Fries (2007), the aim of which is to somehow relate procrastination to a lack of "daily routines" associated with academic activities. Their results suggest that student planning is integral to the prevention of academic procrastination. A student's ability to plan is but one skill among several for student self-management, the training of which is studied by Gerhardt (2007). Specifically, Gerhardt (2007) compiled four self-management tutorials, used by a group of undergraduate students, which presented components of self-management skills; these included: (1) self-assessment; (2) goal setting; (3) time management; and (4) self-regulation. Students' self-management skills, both pre- and post-training, were assessed, with results that showed significant increases in students' self-management skills.

Many educators are likely to accept the notion that students' willingness to work in a particular course is based in large part on the desired final grade. Results from a study by Lammers et al. (2005) suggest that there is surprising agreement between faculty members and students on the amount of work required for success in university courses. The same study also suggests that students' perceptions regarding study time per week exceeded what faculty members considered necessary for success in university courses.

Despite its obvious necessity, students' study time is probably perceived as their least favorite requirement for learning. Trout (1997) makes the point that the problem of students who dislike studying is nothing new; however, what is new is the ever-increasing number of such students. In terms of students' time, Trout (1997) states that today's college student resents the "intrusion" of coursework on his or her personal time. Students' perception of "time intrusion" may be mitigated somewhat through the use of computer simulations as part of regular coursework, as indicated by Young, Klemz, & Murphy (2003), who found that such simulations actually led to an increase in the number of hours students reported studying for a class.

A series of studies that attempted to assess the relationship between the quantity (i.e., amount) of studying by students and their resultant grades was done by Schuman et al. (1985). Their results showed a virtually non-existent relationship between hours of study and earned grades. This, according to Schuman et al. (1985), was both unexpected and surprising. A subsequent study by Michaels & Miethe (1989) extended the study done by Schuman et al. (1985), as an attempt to discern whether specification errors may have contributed to the purported "weak relationship" (Michaels & Miethe, 1989) between hours of study and earned grades. Results of the Michaels & Miethe (1989) study suggest significant main and interaction effects of academic effort on academic performance.

Nonis & Hudson (2006) examined possible effects on academic performance by time spent studying and working. The results of their study, similar to that of Schuman et al. (1985), imply that neither the time spent studying nor the time spent working seemed to have a direct effect on academic performance. Nonis & Hudson (2006) hypothesize that academically strong students possess an innate work ethic, which is manifested in their academic studies, thereby leading to positive academic performance.

An examination of business and marketing students' use of time, as highlighted by use of a diary, is described in Nonis, Philhours, & Hudson (2006). In their study, student time use and its role in academic performance is explored. As with our study, student participants were asked to indicate the amount of time spent on various activities each day for a period lasting one week. In contrast to our study, however, the study done by Nonis et al. (2006) employs a clustering procedure that classifies students based upon how they spend their time. The two clusters include: (1) campus-centered students, or traditional students; and (2) life-centered students, whose focus also includes life outside of campus. The results of the study done by Nonis et al. (2006) suggest that academic performance may be the result of combinations of variables, such as time spent on the computer, watching television, and other forms of entertainment study time outside of normal class meetings, and part- or full-time employment.

A study similar to ours was done by Budden et al. (2007), which involved students' use of diaries, or journals, to track their usage of media during a one week period in a typical fall semester. The media tracked in this study included historical media such as radio and television, as well as Internet media like MySpace, Facebook, YouTube, email, and Blackboard. In contrast to our study, for which the research problem emphasizes understanding better college students' use of time in general, the study done by Budden et al. (2007) attempts to examine usage patterns and market usage of the Internet as a communication medium among college students. Results of the study done by Budden et al. (2007) indicate that both male and female students spend more time using historical media (radio and television) than that of Internet media. An exploratory study done by Cheung & Huang (2005) identified various factors that may enhance Internet use by students, with the goal of having a positive impact on university learning. Cheung & Huang (2005) suggest that such enhanced Internet use is not intended to replace traditional learning, but should be used as a supplement.

METHODOLOGY

The purpose of this paper is to determine how students majoring in some area of business spend their time, relative to how they think they spend their time. In order to assess this, undergraduate business students enrolled in the first or second business statistics course at UL-Lafayette were required to record in a logbook, for a period of one week, the number of hours they spent using YouTube, FaceBook, MySpace, the number of hours they watched TV, the number of hours spent studying, as well as several other items. The reason these students in these classes were chosen was because all business students, regardless of their major have to take these courses, and the researchers felt that this was the best way to get a representative group across majors. Data was collected from a total of 212 business majors. Additionally, before they started this one-week period, the students were asked to determine, to the best of their abilities, the amounts of time they thought they spent on these activities.

RESULTS

Table 1 shows the demographic characteristics of the students. As can be seen from the table, more than 53 percent of the respondents were males. With respect to race or ethnic origin, more than 84 percent were Caucasians. The majority of student respondents were classified as juniors and seniors, and almost 69 percent had a grade-point average of 2.80/4.00 or higher. The average age was slightly over 22 years old.

Table 1
Demographic Characteristics of the Respondents

Variable	Percent of Respondents
Gender:	
Male	53.3%
Female	46.7%
College Classification:	
Freshman	0.5%
Sophomore	10.9%
Junior	58.1%
Senior	30.5%
Race/Ethnic Origin:	
Caucasian	84.9%
African-American	10.9%
Hispanic/Hispanic-American	1.4%
Asian/Asian-American	1.4%
Other	1.4%
Grade-Point Average:	
2.00 – 2.39	8.5%
2.40 – 2.79	22.6%
2.80 – 3.19	34.9%
3.20 – 3.59	22.2%
3.60 – 4.00	11.8%
Age:	
Range	19 to 50
Average Age	22.33
Median Age	21.00

As mentioned previously, tests of significance were used to determine if there were significant differences between the amount of time the students thought they spent on certain activities per week, and the actual amount of time they did spend on these activities. These results are shown in Table 2. As the table shows, ten (10) significant differences were found between the actual time spent on the activities selected, and the pre-conceived estimate of time spent on these activities. On nine of these significant differences, the students thought they spent more time on the specific activity than they actually did. This would seem to indicate that students need to improve their time management skills. For example, students estimated that they spent more than 1.5 times more time using FaceBook and MySpace, than they actually did and twice as much on Moodle (an open source course management system) as they actually did.

While they watched television about the same amount of time as they thought they did, the alarming aspect of this activity is that they watched television more than they studied, even though they studied significantly more than they thought they were studying. Along these same lines, they spent about as much time at work as they thought, but this time spent was again much more than the amount of time spent studying.

With respect to the use of the Internet for academics, shopping, recreation, or work, the students again thought they used the Internet for each of these activities more than they actually did use them. In fact, they thought they used the Internet for academics 2.8 more times than they actually did, the Internet for shopping 3.27 times more than they actually did, Internet for recreation 1.95 more times than they actually did, and Internet for work 2.88 times more than they actually did. While actual usage of Internet for each of these activities was not exceptionally high, the fact remains that their forecasts of time used were significantly off.

As was stated earlier, they actually studied 1.3 times more than they thought they did. However, the respondents went to class significantly less (1.25 times less) than they thought they did. Specifically, they thought they were attending classes for about fifteen hours per week, when in fact they only attended about twelve hours per week.

CONCLUSIONS

While the study sampled undergraduate students, its findings pertain to these students' time management practices as well as to the universities within which these students study. First, the results of this study suggest that undergraduate business students, without realizing it, may be sacrificing some aspects of their academics and study time, due mostly to contemporary "technological distractions," such as YouTube, FaceBook, and other similar WWW technologies. Our results may serve as motivation to these and other undergraduate business students to increase their awareness about and make improvements in how they make use of their time.

Second, the pedagogy of business faculty may benefit from these findings, since a realistic understanding about students' use of their time might serve to motivate discussion about the importance of good time management as important to success in a college course. As an instructor, setting realistic time on task expectations is always difficult. In developing expectations, these findings may help business faculty better understand how and where students are spending their time and may help faculty better facilitate discussions on course expectations.

Table 2
Results of Significance Tests between Pre-conceived Time Spent and Actual Time Spent on Selected Activities

Activity	Actual Time Spent		Perceived Time Spent		t-stat	p-value
	Means*	Std. Devs.*	Means*	Std. Devs.*		
1. Hours spent using You tube	0.49	2.04	0.66	1.42	-1.01	.314
2. Hours spent on FaceBook	1.06	2.01	1.64	2.63	-3.40	.000**
3. Hours spent on MySpace	0.85	1.72	1.32	2.88	-2.88	.004**
4. Hours spent on Moodle	1.40	2.18	2.83	2.59	-7.18	.000**
5. Hours spent watching TV	10.89	8.98	10.59	10.16	0.47	.640
6. Hours spent listening to the Radio	5.44	7.70	7.75	10.15	-3.61	.000**
7. Hours spent using the Internet for Academics	1.29	2.15	3.66	3.74	-8.43	.000**
8. Hours spent using the Internet for Shopping	0.33	0.86	1.08	1.76	-6.03	.000**
9. Hours spent using the Internet for Recreation	2.47	5.05	4.82	7.84	-5.27	.000**
10. Hours spent using the Internet for Work	0.86	3.98	2.48	5.95	-4.01	.000**
11. Hours spent Studying	9.66	6.62	7.40	6.57	4.58	.000**
12. Hours spent in Class	12.20	3.52	15.37	7.43	-6.37	.000**
13. Hours spent at Work	20.51	15.51	19.00	12.06	1.89	.060

***Hours Spent in One Week**
****Significant at α = .05**

Third, academic and career advisors may benefit from this study by developing a better understanding of student time allocation and student perceptions (or in this case misperceptions) of time allocation. Student mentors, equipped with these findings, should be able to better assess the time management skills of students by asking similar

questions to those posed in this study. For instance, this study found that students actually spent fewer hours attending class than they anticipated. As a mentor, it is important that students attend class session and asking questions about their attendance could help identify symptoms which ultimately lead to poor performance.

Finally, universities across the country are attempting to increase their retention of students from semester to semester. Through a better understanding of student time management practices, university administrators can effectively position their institutions to build effective relationships with students. While attention has been given to activities like academic and career advising, universities are beginning to look at issues like student involvement, engagement, and campus pride. This study provides great insight into how students spend their time and how they believe they spend more time on activities (like Internet usage) than they do. The study also finds that students' perception of time spent on commitments, like work, was very accurate. This demonstrates that when provided with structure, students can effectively manage the task. Likewise, university administrators may be able to help students manage their academic/university task by strengthening attendance and in-class Internet usage policies.

FUTURE RESEARCH

Since this study focused solely on the students' perspective, future research might include an assessment of faculty perceptions of how they think students actually spend their time during a typical quarter or semester. Moreover, it may be interesting to compare such faculty perceptions against measures of how students actually spend their time. One issue involved in this type of study will be matching faculty respondents with those of their students. This type of matching will require the participation of faculty as a respondent and disseminator of the measurement instrument to their students. Methodologically this will be cumbersome, but the findings would be a great extension to the current study.

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Teaching Diversity/Multicultural Education Courses in the Academy: Sharing the Voices of Six Professors

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Abstract

There are many anecdotes about what Diversity/Multicultural Education (DME) professors endure while teaching these courses; however, limited research has been done on using the voices of professors to share their feelings about teaching diversity/multicultural education courses. This article will share the results of a qualitative study involving six DME professors about their stories of teaching diversity/multicultural education courses. Results of this study indicated that DME professors noted that gender and equity issues as well as student resistance were among the challenges that affected their course evaluations. Despite the challenges, DME professors continue to have positive feelings about teaching DME courses and that they accept the challenges involved in teaching DME courses.

Key Words: Diversity Courses, Multicultural Education Courses, Diversity Courses Challenges

Sharing the Voices of Six Professors

Within many teacher education programs diversity and multicultural education (DME) courses have become required courses for graduate and undergraduate teacher education programs. These courses have proliferated as a result of changing student demographics, state certification requirements and or national accreditation such as the National Council for the Accreditation for Teacher Education (NCATE). In fact, 39 states require teacher education programs to prepare teachers to meet the needs of culturally, linguistically, ethnically, economically diverse (CLEED) classrooms. Although, much has been written about the need for such courses, very little has been written about challenges of teaching these courses from an instructor's perspective.

Within teacher education, it is an assumption that there is no difference between teaching DME courses and other foundations and methods courses. However, many DME professors know differently and yet, are often silenced within the academy when attempting to explain the difference. These instructors soon realize the awesome burden of teaching these courses and at the same time they are significantly responsibility for imparting their subject matter content to students many of whom for the first time in their lives have had to discuss, confront and participate in discussions that challenged their beliefs systems about culturally, linguistically, economically, ethnically diverse issues. There are many anecdotes about what professors endure while teaching these courses; yet, very little research has been done on using the voices of professors to share their feelings about teaching ME courses.

Three research questions guided the study. These questions were:

1. What are the feelings of DME professors about teaching DME courses?
2. What are their challenges and likes about in teaching DME courses?
3. How do DME courses affect them?

As such this paper will share the results of a qualitative study involving six DME professors about their stories of teaching diversity/multicultural education classes at their respective institutions.

The Study

Participants. The participants in this study were six university professors with more than 15 years of experience in teaching both graduate and undergraduate multicultural education courses. There were four females and two males in the study. The ethnicities of the participants were 4 African Americans, 1 Asian American and 1 European American. Two of the participants had 15 years of experience, one had 17, one had 30 and two had 35 or more years of experience teaching in the field of multicultural education. Six had formal training in ME as a part of their graduate experiences at the master's or doctoral level with two having an emphasis in multicultural education at the doctoral level, but studied some aspect of multicultural education during their graduate work. One developed a background in the issues through professional development. These professors have developed and taught multicultural graduate and undergraduate multicultural education courses at universities in California, Texas, Wisconsin, Washington, Louisiana and Illinois. They have taught at leading research I institutions, research II and teacher education institutions. All participants have developed DME courses. One of the participants has developed and taught DME courses at two research I institutions, two have developed and taught at both research I and research II institutions and teacher education institutions, one has developed and taught at a research II institution only and one has developed and taught only at a teacher education institution. All of the participants have publications in the field of multicultural education. Their publications vary from refereed and non-refereed publications in the form of journal articles, books (edited and single authored), book chapters, newsletters and conference proceedings. The number of publications range from 10 to over 50 publications.

Table 1 - Teaching Experiences of Participants

Participant #	Name	Ethnicity	Years of Teaching
1	John	African American	15
2	Jean	African American	15
3	Jan	African American	17
4	June	Asian American	25
5	Janie	European American	35
6	James	African American	37

Courses Taught. The participants have taught a variety of DME courses. These graduate and undergraduate courses include:

1. Multicultural Ed. and Ed. Admin.
2. Diversity Issues in Higher Ed.

3. Development of Cross-Cultural Competencies
4. Equity Issues in Higher Education
5. School and Community Relations
6. Multicultural Education: Introductory Class
7. Multicultural Education: Issues and Practices
8. Foundations of Education in a Multicultural Society
9. Special Education for Diverse Students
10. Cultural Foundations of Education
11. Cultural Pluralism in Agriculture

Interest in DME Field. The participants' interest in the field of multicultural education had various beginnings. For example, June's interest began when she was a first grade teacher in an inner city school and was that she had biases. Jan's interest started when she was bussed into the "White" high school and later on it was further impacted when she became an administrator for a diversity service department at her institution. John, on the other hand, got interested in the field through his undergraduate teaching. While he was trained in cultural foundations, his first job in higher education was teaching an undergraduate multicultural education course and a graduate cultural foundations course. He stated that his role as a college administrator focused him to help faculty members address issues of diversity.

Jean stated that she realized that she lacked a systematic knowledge base about differences in her classrooms as a special education teacher. For Janet, it was her family that includes multiracial adopted children who are African American, Vietnamese and Mexican American and that she lived and worked in rural and urban neighborhoods in Detroit, Michigan and in California. Also, her doctoral work that focused on a cross-national study of educators attitudes toward multicultural education enhanced her interests as well.

James became interested in the field as an Agricultural teacher, but developed more scholarly approaches to the discipline while working with his wife in her field of multicultural education. In addition, his teaching discipline became concern with the preparation of Agricultural teachers and to increase the number of diverse students in agricultural related classes in high school.

Impact of Gender and Ethnicity on Course Delivery

Gender. In regards to gender, the participants felt that gender impacted their course delivery. June and Janie said that they used their mothering experiences in their courses and that being a mother has impacted their development as a teacher. Janie stated that she is a nurturer yet she demands respect. She did not want nurture to be perceived that she would not provide students frank feedback. Jean looked at gender differently when she stated that her gender like culture, all of it impacts how she teaches. John and James believed that gender always has an impact on teaching. Jan was very explicit when she describe several incidents how gender impacted her teaching. She shared how White males challenged her authority and how White females challenged her instructional authority. Students made comments that she was an angry Black female who had the audacity to demand that they (White students) comply the rules.

Ethnicity. In response to the impact of ethnicity on course delivery, all of the respondents noted that their ethnicity was a factor. Janie stated that students judged her as a White female while June said that as a woman of color, she used her life experiences to enrich the theoretical aspects of her teaching. Jan indicated that her ethnicity played a role in her student resistance. Jean felt that her ethnicity affected her philosophy and that her phenotype had a definite impact on her teaching. John and James concurred with others that ethnicity affected delivery.

Student Resistance, Course Challenges and Evaluations

Student Resistance. For many of the participants, student resistance was captured in two words, "student fears." Sometimes this "fear" is equated with anger and students attitudes that I will not learn from you. This fear of the concepts that they are learning are baseless and unflattering that makes White people responsible for whatever was done to people of color rather than looking at the fact that Whites are where they are today because of merit. They also felt that students had a lack of understanding of "White privilege" and that they had a fear of personal change. In fact, James shared the story about one student making a "noose" in class and thought nothing about making or hanging a "noose."

Challenges. Participants described challenges as dealing with student resistance, helping student understand White privilege and teaching students how to value differences. Not only was it a challenged to assist White students, but Jan found it challenging to help students of color put "slavery and oppression" into context as they analyze their own educational and social status. For Jean, it was a challenge to help students "value differences." One of Janie's challenges was that students questioned her credibility as a White female teacher educator teaching ME courses. She also found that students questioned the relevance of ME and their own inability to examine their own bias. June found the teaching of cultural competencies to her students was one of the greatest challenges.

Course Evaluations. Opinions vary among participants. They stated that their evaluations have been challenging, usually quite good to open-ended and direct. Jean stated that she usually get good or horrible. As Jan explained that the evaluations are good except by those students who struggled with accepting some of the more "non-flattering concepts such as racism, oppression and White privileged. She said that sometimes she is called racist for spending time on such discussion. James stated while his evaluation were high, in fact, his is one of the highest in the department, some of his colleagues were the lowest.

Personal Changes and Memorable Moments

Personal Changes. Teaching DME course has caused professors to change as well. These changes ranged from deepening their commitment to social, economic and environmental justice to creating a desire to learn more about teaching DME issues. These changes have helped them become more responsive to differences. Participants wanted to increase their desire to learn more about themselves and the subject matter and about the barriers to understand cultural impacts and cultural communication.

Memorable Moments. All participants had some memorable moments about teaching DME courses. Jean enjoyed seeing students experience the "ah-hah" moments that assisted them in wearing a new set of lenses. While John said that his moments were when students come back and describe experiences that they have used to assist students. June sees these moments as when students see their own prejudices, when new teachers begin to believe in students of color and see her students reach out to students of color and their families. Janie said that there were so many that she could write a book. Jan always have memorable moments when she, like Jean, see her students having the "light blub" moments such as they really understand concepts such as internalized oppression. Also she said that she likes it when her students of color realize the true meaning of internalized oppressions and how it has been perpetuated in their own lives. James stated that hearing students say that they need more courses like this and that these courses should be required for all students.

Critical Analysis of Three Themes

There are three overarching themes that emerged from the content analysis of the voices of these six participants. These themes were resistance, gender and ethnicity and their personal commitment. These will be discussed in this section.

Resistance. The theme of student resistance was prevalent in many of their comments even when the comments were on other issues such as gender, ethnicity, teaching issues such as White privileged or on student evaluation. Higginbotham's definition of resistance best describes what the participants felt. This definition states resistance is an oppositional behavior of an individual or group of individuals to another individual, idea, action which usually occurs in an interactive environment involving power relationships (domination/subjugation). Embedded within the concept is the idea of acceptance and/or change. Resistance is manifest as active, passive, or as even absent. It is evident that the students that were discussed by these participants were demonstrating that oppositional behavior and that it was active, as Jan noted and even passive as Jean noted as well with her students saying that they liked the class and after reading her class evaluations she noted that they only pretended.

Looking further, the participants noted what Rodirquez (1998) identifies as ideological resistance. This resistance refers to feelings of disbelief, defensiveness, guilt, and shame that European preservice teachers and inservice teachers experience when they are asked to confront racism and other oppressive social norms in class discussions. Jan captures the point when she states that:

> White males often challenged my instructional authority or my knowledge base. White females often challenged the amount and type of homework assignments. Some did not even want to buy the textbook! They seem to think I was somehow being an overbearing, angry Black female who had the audacity to demand their compliance to rules with which they did not agree.

Gender and Ethnicity. Although gender was not as prevalent as resistance, and the notion that two of the participants associated gender with mothering skills, the African American participants made more explicit comments about gender. In fact, Jan denoted that gender was of great concern to her, especially when challenged by White

females and males regarding her knowledge and her work expectancy. However, she was keenly aware that it was hard to make a clear distinction between gender and ethnicity as the two were linked together. Houston (2005) captures the essence of Jan's concern about gender when she states that "student ratings of professors may be biased against women in subtle but significant ways." Furthermore, stereotyped expectations of women (to be nurturing and warm) overlap very little with expectations of professors to be knowledgeable and competent.

All participants believed that ethnicity impacted delivery. Such a belief concurs with what others have said in the field. Yet, we question that if this is such an issue, then, it poses great threat to faculty. In fact a recent review of research by Huston (2005) noted the research by Hamermesh & Parker (2005*)* that stated that they found lower ratings for final course evaluation for female minority faculty members, but not for male minority instructors**.** Interestingly, the two African male participants in this study acknowledged that they had higher evaluations than their female counterparts in their departments. According to their study, women instructors received significantly lower course evaluations than male instructors (nearly one-half standard deviation lower), and faculty of color received lower course evaluations than White faculty. When they looked at race and gender, they found that that female faculty of color received lower course evaluations. There seems to be both qualitative and empirical research to support the notion that gender and ethnicity can impact course ratings as this was evident by the qualitative findings in this study.

Personal Feelings. From the evidence presented here, it seems that these professors enjoyed teaching DME courses and that they want to improve their ability to teach these courses. They realize that there are challenges but these challenges have not deterred them from changing their teachings as to not confront student behaviors and attitudes. Given their length of service in teaching these courses gives a clear message that teaching these courses requires commitment, cultural understanding, care and a critical consciousness. Such traits concur with the work of Geneva Gay (2003) and her students in their journey to become multicultural educators. In the foreword of Gay's book, she emphasizes that helping students understand the journey is paramount to them staying in the profession. While many young multicultural educators may not have the context of social issues as the 60's and 70's (the civil rights era), they must understand the social contexts and the struggles of preparing educators to be critical observers and participate in what Sleeter and Grant (1999) entitles, multicultural education that is social reconstructionist. This is what Jan means when she describes students being supportive of DME are students who have:

> …attitudes and behavior that show a willingness to explore cultural topics (historical and current), even if they are new and perhaps disturbing, in an effort to better understand the world today and our shared places in it.

Personal Response

As participant observers, in sharing our voice to this research, we concur with the participants in this study. Yet, we would like to further reiterate the issue about student evaluations and make several recommendations. Since the participants in this study had at least 15 years of experience and all but one is a tenured professor, we think that more studies should be conducted on the weight of student evaluations for non-tenured

professors and the need for department and tenure review committees to understand this plight for faculty members.

Over the past twenty years, we have seen a difference in student attitudes about diversity. The climate seem less tolerant in my institution, yet, when we talk to DME colleagues at American Vocational Association, Minorities in Agriculture Natural Resources and Related Sciences (MANNERS) National Association for Multicultural Education (NAME), Association of Teacher Educators (ATE), American Educational Research Association (AERA), younger faculty members are concern about how they can improve their teaching evaluations. In fact, one colleague was denied tenure due to low student evaluations when she demonstrated a quality research and publication record, won a teaching award and had national leadership. Such weighting of student evaluations concerns us as scholars in the field. To that end, we believe that it is imperative that we have a national study on that issue.

The second response is to teach young faculty members how to design their evaluation instrument as to have a composite score of their teaching evaluation. For example, redesign the evaluation with a content analysis of open-ended questions. Thirdly, faculty should have peer-evaluation and develop a means to informed department heads and review committee about the challenges as well as help them to understand student resistance. This should be done in a pro-active manner, rather than reactive.

Summary

It is no doubt that these DME professors have developed a repertoire of skills to continue teaching DME courses as their longevity ranges from 15 years to 37 years. They realize that teaching these courses have challenges, yet there are memorable moments that provide the support and desire to continue to teach DME courses. They have taught at a multiplicity of institutions and use their own personal experiences that are laced with the scholarship of their discipline. They are passionate about their teaching and Janie says:

> … I want my students to believe that there is a reason to hope for a more just society and that they are a part of the solution to the dire problems that we are facings in the nation and world.

In summary, DME professors have positive feelings about teaching DME courses and they accept the challenges. DME professors noted that these courses affect them personally and professionally; yet, they continue to teach them and said that they will accept each course with a new set of students as challenges.

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A Curricular--Co-Curricular Approach to Student Leadership Development

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Abstract

Truman State University is a small (5700 students), public, highly selective, state-designated liberal arts and sciences university located in Kirksville, Missouri (population 17,300). As the public liberal arts and sciences university for the state of Missouri, one part of its mission is to cultivate in students the "willingness and ability to exercise personal and intellectual leadership in his or her chosen field of endeavor" (Truman State University Mission Statement). The Truman Leadership Scholars Program is designed to attract high ability students with leadership experience to the university through a "full-ride" scholarship with the opportunity to participate in a four-year leadership development program that incorporates curricular and co-curricular components. Participating students receive minimal credit for two required classes, volunteer for a minimum of fifty hours in the community under the direction of a community mentor, and develop and complete a personal development project and a public leadership project. During this process, students demonstrate personal development and leadership skills and contribute to the Kirksville community as well as to the Truman State University community. This model holds potential for universities to incorporate curricular and co-curricular leadership training for students.

Keywords: leadership, leadership training, student leadership development

Introduction

The large number of leadership development programs, seminars, and books on the topics of leadership and leadership development suggest a need for leadership development in many organizations. The university seems like a logical and convenient setting for students to learn and experience leadership, either through curricular and/or co-curricular activities. However, it has been suggested that leadership education often does not tie leadership theory and application together well (J.P. Meyer, 2003). Combining curricular and co-curricular activities may provide the needed opportunity to learn and practice leadership theory. The Truman Leadership Scholar (TLS) model provides a framework for such experiential leadership education.

The Truman Leadership Scholar (TLS) Program was established in 1998 as a selective scholarship program for high ability students consisting of several meetings with participants throughout their freshman year at Truman, followed by a three day training retreat at the close of the spring semester. Following that retreat, there were no other requirements. The TLS Program was revised in 2002 as a means to recruit high ability students with strong leadership experiences to Truman State University and

improve their leadership skills through curricular and co-curricular activities. Students selected for this program receive the Truman Leadership Scholarship (full tuition, room and board, and must be Missouri residents). The students are selected by the admissions office with input from the Truman Leadership Scholars (TLS) Committee. The program is administered by the Truman Leadership Scholars Committee, consisting of one faculty member, the Dean of Student Affairs and an Assistant Dean of Student Affairs.

The objectives of the Truman Leadership Scholar Program are:

- To attract outstanding students to Truman State University.
- To help achieve Truman's mission to cultivate in students the "willingness and ability to exercise personal and intellectual leadership in his or her chosen field of endeavor"(Truman State University mission statement).
- To provide student with an opportunity to grow and develop as leaders through training, focused experiences, and service opportunities.
- To provide Truman students with an opportunity to provide service and leadership to Truman and the larger community while working on their undergraduate degree at Truman.
- To prepare effective leaders for the roles and challenges they will face in the future.

Annually, thirty-five to forty-five first-time freshman receive Truman Leadership Scholarships based on academic performance and the demonstration of leadership during their high school experience. Although the TLS Program is a four-year experience, participants may opt out at the end of each year and still retain their scholarship by maintaining academic eligibility and fulfilling scholarship work-study hours each semester (scholarship recipients at Truman work on campus about fifty to seventy-five hours a semester as a condition of their scholarship). The scholarship work-study hours are waived for students who remain in the TLS Program. Truman Scholars remain with their cohort as they move through the program.

The Truman Leadership Scholar experience is based upon the idea that college students can acquire many of the important skills of leadership by combining in-class and out-of-class experiences. Also, to become effective leaders, they must first learn self-leadership and then they learn to lead others more effectively. The Franklin/Covey programs, The Seven Habits of Highly Effective People® and The Four Roles of Leadership® provide a framework to help prepare the students to experience the curricular and co-curricular activities that help solidify leadership skills. An understanding of self-sacrifice through volunteering in the community, self-discipline to improve oneself and leading an approved project to give back to the Truman State University community are all experiences that help prepare students to be leaders as they move from a university setting to the world-at-large. The following details explain the TLS program year by year.

First Year

Objectives for the first year experience are:

- Students will develop and utilize a personal mission statement to set priorities in their lives.
- Students will improve in their ability to manage time effectively.

- Students will develop habits that improve their physical, emotional, social, intellectual and/or spiritual health.

Students enroll in the course, INDV 120 Leadership Scholar 1, to participate in Franklin/Covey's The 7 Habits of Highly Effective People® training in the first year of the program. This program is taught by a faculty member and the Dean of Student Affairs who are both certified Franklin/Covey facilitators. Students attend the class during the second block of their first semester and the first block of their second semester at Truman (sixteen weeks total). The training involves structured presentations, exercises, readings, and videos designed to help participants achieve a high level of understanding and application of the seven habits identified by author Steven Covey, as characteristic of highly effective people. They receive .5 credit hours each block as well as a certificate for completing the course. Immediately following the completion of the course, students are briefly interviewed by the Truman Leadership Scholars Committee to determine if the students desire to continue in the program for the second year or opt out. Continuing students also have the opportunity to express preference for volunteer sites for their second year experience.

Second Year

Objectives for the second year experience are:

- Students will give selflessly of their time and talents to serve others.
- Students will gain an understanding of the needs of others through their service.
- Students will feel more connected with the Kirksville community.
- Students will gain a deeper understanding of The Seven Habits of Highly Effective People® through experience and observation.
- Students will demonstrate personal responsibility and proactivity in participating in volunteer opportunities.

The second year experience consists of the students completing a minimum of fifty hours of volunteer service under the direction of a community mentor. A member of the TLS Committee arranges numerous volunteer sites from which students select. Students have volunteered at such sites as the Kirksville Chamber of Commerce, the Kirksville Police Department, city government offices, United Way, YMCA, Kirksville Arts Society, Head Start, and elementary, middle and high schools and camps for disadvantaged youth. A meeting is held at the beginning of the school year to introduce the students to their community mentor and learn more about their volunteer experience. The students are divided into three groups and assigned to a member of the TLS Committee as their campus coordinator. The campus coordinator meets bi-monthly with his/her assigned group for discussion meetings to process the experiences the students are having and to tie those volunteer experiences back to The Seven Habits of Highly Effective People® training. The students keep a log of their volunteer service hours which is signed by their community mentor. Following the completion of this experience, the community mentor completes an evaluation of the student and the experience.

Third Year

Objectives of the third and fourth years:

- Students will reflect critically on their leadership development skills.
- Students will receive feedback from others regarding their abilities as a leader.
- Students will demonstrate knowledge of leadership theory.
- Students will develop in their ability to challenge processes.
- Students will develop in their ability to empower others.
- Students will develop in their ability to model appropriate values.
- Students will develop in their ability to encourage others.

Students in the third year of the program enroll in the course, INDV 220 Leadership Scholar 2, to participate in Franklin/Covey's The Four Roles of Leadership™ training. This class is offered the first block of the fall semester for .5 credit hours. The Four Roles of Leadership™ training is designed to assist students in developing skills as leaders and managers. The training examines a theory of leadership based on the leadership roles of Pathfinding (creating a joint vision that connects leaders and stakeholders); Aligning (creating the right system of processes and structure to achieve the desired results); Empowering (releasing the talent, energy, and contributions of people toward the desired end); Modeling (being trustworthy, and living and leading by principles).

Following successful completion of The Four Roles of Leadership™, the students then submit a written proposal to the TLS Committee for the Private Victory Project. This project is designed by the student and approved by the TLS Committee. This project allows the student to develop and practice "private victory" principles and skills learned in The 7 Habits of Highly Effective People® training. It involves the commitment of approximately seventy-five hours by the student. The project must be designed specifically to increase the student's understanding and application of one or more concepts from their 7 Habits training such as character development, circle of influence, change cycles, win-win rescripting and character, and four dimensions of renewal. Upon completion of the project, a final report consisting of the proposal description, a results section summarizing the outcomes and benefits of the project, and any supporting documentation that helps to demonstrate the preparation, completion and results of the project. Examples of Private Victory projects include creation of a "favorite quotes" book, writing a novel, studying and creating a family history, writing a book of poetry, study abroad and focus on reading and skill development in the area of international communication, and completing a summer internship as a stage manager for several theater productions.

Fourth Year

The fourth year consists of a Public Victory project. This project is designed by the student, supported by a mentor from the university community, and approved by the TLS Committee. The project's purpose is to provide the student with opportunities to demonstrate his/her ability as a leader, develop leadership skills in others, and enhance the Truman State University community. The Public Victory project involves the commitment of approximately one hundred fifty hours of the student's time during the

academic year and directly benefits students, faculty, and/or staff of Truman State University. It must be designed specifically to increase the student's understanding and application of one or more of the concepts from The 7 Habits of Highly Effective People® and The Four Roles of Leadership™ training (for example, aligning, levels of empowerment, modeling, creating third alternatives, and celebrating differences). The student submits a proposal to the TLS Committee for approval. The proposal contains a general introduction and mission statement for the project; expected outcomes (the end in mind) and how the processes are aligned with the mission; the project's contribution to the student's Public Victory and how the results benefit the Truman community; the mentor agreement explaining the roles and responsibilities of the mentor and mentee in completing the project (the win-win agreement); the process of the steps, activities, time lines, strategies, etc., (the plan of action); and the evaluation section explaining the methods used to evaluate and demonstrate the effectiveness of the project in achieving the expected outcomes. The student and the mentor (a member of the Truman faculty, administration or staff) will meet and create a win-win agreement for the project. Based on that agreement, the student and mentor will meet periodically for supervision, advice and/or consultation regarding the project. When the project is finished, the mentor will complete an evaluation of the student's leadership skills and the success of the project. Upon completion of the project, the student will submit a final report to the TLS Committee. The report would include a description of the proposal, a results section where the outcomes and benefits of the project are summarized in a maximum of ten pages. Appendices providing supportive documentation such as evaluation results, progress reports, etc., could be added to the report. Examples of Public Victory projects include developing a curriculum and teaching Truman students how to do technical theater (mentored by two drama faculty); developing and implementing a training program for Student Ambassadors (mentored by the Student Ambassador advisor); assisting the Student Health Center with an assessment project and co-chairing the Student Health Fee Committee (mentored by the Student Health Center Director) and creating and implementing a transition leadership training program for the Psi Chi fraternity (mentored by the organization advisor).

Conclusion

Written evaluations from community and campus mentors (and the number of letters of recommendation students have asked the facilitators to write) suggest the Truman Leadership Scholars Program is achieving at least some of the program objectives. Anecdotal comments by program graduates also suggest successes.

One graduating student suggested she had become more confident in her leadership and personal relationship skills and had learned how to react to certain situations better. She also felt she had developed more self-awareness as a leader. Another student thought the 4-Roles and 7 Habits training helped her lead an organization more effectively as he created mission statements, gained support of his group and empowered others to meet their personal goals as well as the organization's goals. Another indicated leadership had become a priority in his life, enabling him to use his talents and skills to effect positive change and lead others.

The President's Distinguished Leader Recognition Breakfast is held annually to celebrate and recognize those students who have successfully completed the Truman Leadership Scholars Program. The students receive congratulations and a certificate of completion from the president of the university at this breakfast.

Although anecdotal responses can be valuable in evaluating a program such as the TLS Program, a more formal evaluation method is proposed to better clarify leadership strengths and weaknesses of the "graduates" and that might suggest program improvements. A possible tool for this type of assessment might be the student version of the *Leadership Practices Inventory* (*LPI)*, the *Student LPI* developed by James M. Kouzes and Barry Z. Posner (Kouzes and Posner, 2006). Students entering the TLS Program could be assessed initially and then again at the completion of the program using the *Student LPI—Self* version and the results compared as a pre-test—post-test evaluation.

A suggestion for future research would be to expand the evaluation process following a student's completion of the program to include leadership assessment of the student by her Public Victory mentor and others involved in her Public Victory project, using the *Student LPI—Other* version and compare the results with the student's self evaluation. This could provide insight into the effectiveness of the program as perceived by the student and as viewed by "outside" evaluators.

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Need-Based Segmentation Analysis of University Career Services: Implications for Increasing Student Participation

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Abstract

This study employs a *maximum difference scaling* analysis in order to examine the career services needs of university students so that they become more engaged with and use available career services. Based on the results, four distinct need-based segments of students are identified. Suggested strategies are provided to meet the needs of each segment as a means of increasing the effectiveness and use of career development services on college campuses.

Keywords: career service centers, higher education, need-based segments, maximum difference scaling, placement, marketing

Introduction

One of the more notable trends in higher education in recent years has been the transformation of university career services centers (UCSCs) from merely being the coordinators of on-campus placement into full service centers of career development (McGrath, 2002; Patterson, 1995; Rayman, 1999; Snow, 1995; Thompson, 1999). While UCSCs continue to have primary responsibility for coordinating placement activities, most of these centers now also provide students with a wealth of additional career development services. These include: mock interviews, resume critiquing, informational databases on employers, career counseling, internship and externship placement assistance, assessment testing, resume books/postings, job listings and job search training (McCorkle, Alexander, Reardon, & Kling, 2003; McGrath, 2002; Thompson, 1999).

This expanded menu of services has been funded by universities in an effort to make their students more marketable to employers (McCorkle et al., 2003). This goal is important; not only in terms of helping colleges and universities achieve their mission of contributing to the success of their students, but also because an effective career development program will help postsecondary institutions improve their placement rates (Combs, 2001; Gigliotti, 1994). Improving this metric is highly desirable because it is often a key performance indicator in the strategic plans of universities, used by a variety of publications as a main criteria in their college rankings, and many college applicants use placement rates as a measure of educational quality and value (Bednowitz, 2000; Howard-Vital, 2006; Maringe, 2006; McGrath, 2002).

Unfortunately, merely offering career development activities to students does not guarantee that they will take advantage of these opportunities. While these services are essential to developing "career savvy" students, research suggests that many college students make little use of the services provided by their university's career center (McCorkle et al., 2003; McGrath, 2002; Patterson, 1995). Obviously, for career development initiatives to be successful, colleges and universities need to get as many of their students as possible to not only register with career services but to actively participate in the career development activities that are available. To help achieve this end, a number of researchers have recognized the need for career services to be more effective in marketing their services so that students become more engaged with and actually use the career development services available to them (Bullock and Brooks, 1994; McCorkle et al., 2003; Patterson, 1995; Priessler, 1994; Rayman, 1999; Thompson, 1999).

Study Purpose

The purpose of this study is to investigate the different underlying needs and preferences that drive student usage of career services. Such an understanding of student needs, regarding job search preparation, can provide a foundation upon which marketing campaigns to increase the level of student participation can be developed.

The methodological approach used in this study seeks to accomplish this purpose by identifying different need-based segments (i.e., groups of students who share a common need profile) and developing specific strategies designed to raise the career services participation rate within each segment. This segmentation-based approach is consistent with most strategic marketing frameworks implemented today and avoids the pitfalls associated with viewing a diverse and complex market as a single homogeneous group (Best 2005; St. Clair and Tschirhart, 2007).

This segmentation approach is based on the underlying belief that if the goal is to increase the career services participation rate of students, then a one-size fits all marketing strategy is unlikely to be effective. To accomplish the study purpose, the following research questions will be addressed:

- What career services attributes are most important for driving student participation?
- What need-based segments exist and what is their nature?
- What background characteristics describe each segment?

Literature Review

Environmental factors pressuring universities to improve UCSC effectiveness

A number of factors within the environment are exerting strong pressure on universities to improve the effectiveness of their career service centers. These factors include: (1) tighter job markets, (2) more competition among schools for applicants (3) higher tuition and "return on investment" expectations (4) less on-campus recruiting and (5) volatility in the economy.

Tighter job markets.

Continual increases in the number of college graduates combined with a slowing economy has meant that merely getting a degree does not guarantee students will land a good paying job (McGrath, 2002). As a result, universities have sought to improve the marketability of their graduates One strategy postsecondary institutions are using to improve student marketability is to provide them with access to more extensive career development services (McCorkle et al., 2003). Research suggests that there has been "a paradigm shift in career services that focuses on the comprehensive delivery of services to students for the duration of their undergraduate education," (Nell, 2003, p.184). Failure to provide an effective career support system could cause universities' placement results to decline which would put them at a disadvantage when competing for applications with other universities (McGrath, 2002).

More competition among schools for applicants.

Public and private universities are facing increased competition for applicants from the influx of both for-profit colleges and on-line and off-campus programs delivered by formerly out-of-market universities (Howard-Vital, 2006). For example, Stokes (2005) forecasted that the number of distance students enrolled in online certificate or degree programs would rise from 1.2 million in 2005 to 1.8 million in 2007. As a result, colleges and universities have had to work harder in order to maintain enrollment quantity and quality (Domino et al., 2006; Maringe, 2006). Part of this effort has been directed toward expanding career development services because doing so can serve the dual purpose of providing benefits that can be promoted to potential applicants as well as a means for improving placement rates, a metric commonly used by applicants and their parents as a selection criterion (Harris & Jones, 1999). Additionally, the need to improve in these areas is further intensified because of the entrance of new and "unconventional" competitors. These new sources of competition actively promote a more vocational oriented appeal that targets non-traditional students who tend to place higher value on placement related issues (Howard-Vital, 2006; Veloutsou, Lewis, & Paton, 2004) and expect a greater return on their educational investment (Harris & Jones, 1999).

Higher tuition and return on investment.

Steadily decreasing government funding for education has forced public colleges and universities to rely on annual tuition increases in order to balance their budgets (Snow, 1995). As a result, the cost of higher education continues to increase at a rate substantially higher than the rate of inflation (McGrath, 2002). These increased costs have caused applicants and their parents to not only more strongly consider tuition as a factor in their school choice but also the long term financial consequences of obtaining a particular degree (Harris & Jones, 1999). This means more consideration is being given to a university's placement record as applicants try and calculate the potential financial return on their educational spending (Domino et al, 2006; McGrath, 2002; Rayman, 1999). Delivering an effective career services program is seen as one way to help justify the rising costs of education.

Less on-campus recruiting.

For reasons of cost efficiency, many employers have been cutting back on their on-campus recruiting (McCorkle et al., 2003; McGrath, 2002; Rayman, 1999; Snow, 1995). As a result, students have had to become more proactive in their job searches in order to fully exploit available employment opportunities (McCorkle et al., 2003). Thus, universities have recognized the need to provide students with more extensive career development training in areas such as job search skills including resume building, and networking (McCorkle et al., 2003). Maintaining placement success necessitates that schools get more students to participate in career development programs that will improve their job search capabilities.

Volatility in the economy.

Increased volatility in the economy due to radical shifts in technology and globalization have increased the responsibility on universities to prepare their students to enter a work environment in which they will likely have to change careers multiple times over the course of their lifetime (Rayman, 1999). According to Peterson (1995), career counselors estimate that college graduates will have from three to five careers and eight to ten jobs. To meet this challenge, postsecondary institutions need to deliver effective career training to as many of their students as possible. These environmental factors have exerted pressure on colleges and universities to better prepare their students to succeed in an increasingly dynamic and competitive job market (McCorkle et al., 2003).

Research on Student Usage of Career Services in Higher Education

Previous research has examined a number of influences on student usage of UCSCs and strategies for raising participation. Variables such as issues related to the design and use of the WWW and other connecting technologies (e.g., What are "appropriate" career services for a website?) in UCSCs (Davidson, 2001; Menkhoff, Loh, Chiang, & Wah, 2005; Packard, 2003; Sampson, Carr, Panke, Arkin, Minvielle, & Vernick, 2003; Venable, 2007), the effectiveness of parents and career services staff jointly motivating students to make use of career services (Harris & Jones, 1999), men's reasons for and for not seeking career counseling and other career-related services (Rochlen & O'Brien, 2002), advertising career counseling services to men (Rochlen, Blazina & Raghunathan, 2002), and stronger UCSC embedding within postsecondary institutions, e.g., the curriculum model (making career services part of course provision) (Watts, 2006).

A study that provides a good illustration of both the need for career services and the problem of getting students to participate in UCSCs is McCorkle et al. (2003). These researchers examined the extent to which marketing students have "self-marketing" skills, i.e. are able to apply what they have learned about marketing to their own job search process. First, despite their superior knowledge of marketing, they found that marketing majors were no better prepared for their job search than other business majors. Second, with the exception of networking with potential employers, less than 50% of

junior students actually participated in available job-search activities such as seminars on résumé writing, trade or professional club organizations and seminars on job search techniques. Third, seniors, for the most part, were better prepared for job search than juniors (e.g., many had greater knowledge of jobs/career fields) with one notable and disturbing exception–use of career services. The authors found that seniors are using career services slightly less than juniors. Drawing on interviews and other qualitative data, they conclude that many senior-level students are "do not consider the career services to be of much assistance," (McCorkle et al., 2003, p. 202) and most "business schools would likely be appalled to find the proportion of their students who fully use the career development resources at their career services offices," (McCorkle et al., 2003, p. 204-5).

In summary, prior studies have focused on ways of using information communication technology to increase the effectiveness and student use of UCSCs, gender-specific psychological reasons for and for not using career services, the treatment effects of advertising brochures, and options for more tightly embedding UCSCs on campuses. What are missing from the literature are empirical studies that investigate the different underlying needs and preferences that drive student usage of career services.

One exception is Sampson et al., (2003) who examined need-based Internet websites in career services and thus is particularly relevant to the current study. Their research suggests the motivation for a website user to continue using a website is based on the degree of success a user has navigating that website for resources and/or services (Sampson et al., 2003). As such they advocate a website development process focusing more on meeting specific user needs and site content rather than on application of technology. In order to effectively implement this process, they indicate site designers need to be able to answer the following three questions, "Who should the website serve? What are the needs of the users? What resources are available (or should be available) to meet user needs?" (Sampson et al., 2003).

Unfortunately, in regards to "who" the website should serve, organizations have a tendency, for the sake of efficient service delivery, to lump their users together (e.g., students, parents, professionals, etc.) based upon some similar characteristic (e.g., age income, occupation, etc.). Therefore, the organization may not focus on the specific needs of specific user groups. Sometimes an organization is unaware of the process by which it distills the complexity of the population they serve into simple categories (Sampson et al., 2003, p. 9). Thus, these authors advocate the use of primary (focus groups, and surveys) and secondary research to help identify an organization's users, their needs and the resources needed to satisfy their needs.

The current study extends the Sampson et al. (2003) approach by applying it to the entirety of USCSs in general not just USCS websites. Specifically this study seeks to identify different segments of UCSC "customers" based on similarity in need profile and then presents custom-crafted marketing strategies for promoting career services to the members of each segment in order to facilitate increased UCSC participation within each segment.

Research Methodology

The research method seeks to answer the following research questions:

- What career service attributes are most important to students?
- What need-based segments exist and what is their nature?
- What background characteristics describe each segment?

A maximum difference scaling (MDS) web-based survey was administered to a sample of college students. In this section, an overview of MDS is provided, followed by a discussion of survey design and data collection. After that, the results will be presented.

Maximum Difference Scaling (MDS)

MDS is a new research method that is receiving considerable attention from academic researchers and practitioners (Chrzan & Golovashkina, 2006; Cohen & Orme, 2004). MDS is an extension of the method of paired comparisons. The method of paired comparisons has long been respected as a rigorous research method (Chrzan & Golovashkina, 2006). Whereas paired comparisons ask for the best choice, MDS asks for both the best and worst choice from a list containing multiple items. In MDS, the respondent is typically shown 4 or 5 items, with the task of selecting the most preferred/important and least preferred/ unimportant items (see Figure 1, in Appendix). The respondent is asked to choose the most important and least important items from the list. As with paired comparison, each respondent is typically asked to evaluate a number of choices that are determined using an experimental design plan. MDS requires an experimental design where each attribute is shown in the exercise a minimum of three times, with each attribute being compared to other attributes each time they are shown to respondents (Orme, 2005).

Many researchers have traditionally used *stated importance ratings* to measure attribute importance. To implement this technique, researchers ask survey respondents to rate the importance of each attribute, typically ranging from "not at all important" to "very important." Although commonly used in practice, this method has major limitations (Garver, 2003). The most significant limitation is that stated importance ratings often display a lack of discriminating power between attributes (Cohen & Orme, 2004). Typically, all attributes are “very important” to customers. Garver (2003) demonstrated, that in prior research, 78% of the attributes were "very important." Cohen (2003) concludes that if most attributes are “very important,” this method is ineffective at segmentation and research findings are extremely limited. For these reasons, this common approach was not undertaken.

MDS has a number of advantages over traditional research methods. From a researchers’ perspective, the most important advantage is that the data for each attribute typically displays much higher variance with more discriminating power compared to traditional importance rating scales. Another advantage of MDS is that it captures complicated tradeoffs in which participants must make difficult choices. Finally, MDS provides *ratio data* and eliminates *scale use bias* (Cohen & Orme, 2004).

Maximum Difference Scaling and Career Services: Designing the Study

To identify the appropriate attributes for this study, the researchers conducted a literature review and a qualitative research study. Focus groups were conducted with the target population to explore relevant attributes to students, which was used to guide survey development.

Focus groups were conducted with career service students to learn the following:

- ✓ An in-depth understanding of the student experience, in general
- ✓ Ways in which they use career service
- ✓ Primary reasons for using career service
- ✓ Primary reasons for NOT using various career services

To recruit focus group participants, a list of students who had use career service was developed. The students were invited to participate via email. As an incentive, pizza and pop were provided to students attending the focus group. A total of eight students participated in one focus group. The student sample contained an even number of males and females with a variety of different backgrounds and perspectives.

One of the researchers moderated the focus group, using an interview guide to help manage the group, yet the discussions were loosely structured and free flowing. The focus group began with general background and context style questions. Then, the students were asked questions concerning the reasons they chose to volunteer and how they got started volunteering. Probing questions were used to clarify responses and to examine the participant's perspective in more detail. (i.e., "Tell me more about that?" or "What exactly do you mean by that?"). The focus group lasted for 1.5 hours.

The focus group was videotaped, which helped facilitate data analysis. The researchers watched the focus group a number of times, taking detailed notes and using grounded theory analysis concepts. Based on the focus group results, the following key attributes were identified and used to build the attributes into MDS.

Based on the literature review, focus group results, and discussions with Career Service personnel, final attributes were formulated. The MDS web-based survey instrument was then developed and tested on a convenience sample of undergraduate students. The convenience sample was used to make modifications to the survey. The final survey was posted on a secure, password protected web site.

A large public Midwestern university supplied the researchers with a database of over 9,000 undergraduate students registered with career services. Registered students with career services were used as the sampling frame because the purpose of this study is to examine how to get students to actually use career services once they were registered. Consistent with findings from the literature, the UCSC at this university was effective at getting students to register but not effective in getting students to actually use their services. From this database, 1000 students were randomly selected to be in the sample. Each student in the sample was invited, by email, to take the survey and 244 responses were collected, for a response rate of 24.4%. While researchers always want higher response rates, the research team was satisfied with the response rate. Given the current pressures and continued pressures on survey respondents, the response rate seems reasonable (Garver, Divine, and Spralls 2009).

Results

Importance Analysis – Maximum Difference Scaling.

The researchers first cleaned the data for questionable responses. Responses with a fit statistic below 0.3 were eliminated from the sample. Researchers then used hierarchical Bayes to analyze the data, providing individual level importance scores ranging from 0 to 100. The total scores for all attributes sum to 100 with "more important" attributes having higher scores.

When students interact with UCSCs, what attributes are most important to them? Looking at the overall results in Table 1 (Appendix), we can conclude the following:

- Job acquiring attributes (quality of companies to interview with (17.1), provides a variety of different types of job opportunities (14.7), and number of companies to interview with (11.1) are critically important to students, taking three of the top four spots in regard to attribute importance.
- Helping students with job search strategies (13.6) is also critically important.
- Services that prepare students to acquire the skills and knowledge to obtain a job are much lower in importance.
- The top nine attributes represent over 77% of the importance to students, while the top four attributes represent approximately 42% of the importance.

Career Services Need-Based Segments

Examining the overall results can be misleading because different segments may have different importance values placed on different attributes (Garver, Williams, & Taylor, 2008). Differences among segments will often remain hidden when examining overall results.

To answer the second research question, K-means cluster analysis within SPSS was used to identify segments with similar importance scores. The top nine attributes in importance were used in the cluster analysis. The analysis suggested that four segments were most appropriate. Each need-based segment has different needs and is substantial in size (see Table 2, Appendix). The smallest segment (segment 3) represents 11% of the sample, while the largest segment (segment 2) represents 40% of the sample.

Before an in-depth explanation of each segment is given, a brief overview will be provided. Data analysis yielded four distinct segments that we have labeled: *placements* (segment 1), *best-fit techies* (segment 2), *unpreparedes* (segment 3), and *high-touches* (segment 4). With regard to needs, *placements* seek a large number of high quality companies to interview with. *Best-fit techies* are looking for the right job fit using technology-mediated placement assistance. Unlike, *best-fit techies*, the *unpreparedes* lack technological readiness and are primarily concerned with self-development (e.g., job seeking skills and presenting one's self effectively) and career education (career seminars and career development courses). *High-touches* are unique in that they have a strong need for one-on-one, on-site interaction or "hand-holding" with career services personnel.

Attribute importance difference across segments

Table 3 (Appendix) shows the attributes and their importance scores for each of the four segments. To determine which attributes had a significant impact upon driving segment membership, an ANOVA test was conducted for all of the attributes. Results suggest that all nine variables are highly significant predictors (eight attributes below .01) for determining segment membership.

Detailed segmentation results

Placements have two critically important attributes and both are directly related to acquiring a job. "Quality of companies to interview with" (42.7) and "number of companies to interview with" (25.7) are the key drivers that define this segment. Displaying lower importance scores for all other attributes, this segment primarily places importance on getting a job.

Best-fit techies place the highest importance on "provides a variety of different types of job opportunities" (24.9), with other attributes being aligned in a similar purpose. This segment places more importance on finding a job that is "right" for them. Supporting this conclusion, they place significantly more importance on "taking assessment tests to find the right major and potential job" (8.1) as compared to all other segments. The attribute, "seminars about potential majors and careers" was not used in cluster analysis to develop segments, yet this segment also has significantly higher importance scores on this attribute, further suggesting that they are looking for the right major and type of job.

Best-fit techies place significantly more importance on "helpfulness of career services website to research companies" (6.5) and "being notified of application deadlines" (5.7). *Best-fit techies* place significantly more importance on all attributes related to the career service website as compared to all other segments.

Unpreparеds place the most importance on preparation and developing knowledge and skills for acquiring a job. The most important attributes for this segment include "usefulness of mock interviews" (24.8) and "usefulness of resume critiquing services" (21.2). *Unpreparеds* realize that to land a job, they must first prepare themselves to do well in attracting companies.

High-touches place significantly more importance on "helping Students with job search strategies" (40.1) than other segments. Indeed, this single attribute has over 40% of *high-touches'* importance and this segment places significantly more importance on their "interactions with career service staff" than any other segment.

Describing the need-based segments

This section will examine student perceptions of UCSC usage and indicators of actual usage in order to profile each segment. Researchers have hypothesized that individual differences in demographics (i.e., gender, ethnicity, international/domestic status, full-time vs. part-time), previous experience with UCSCs, and a rough measure of Holland Code (see Holland's, 1997 theory on personality type and vocational choice) are linked to both individuals' perceptions and preferences for career services (Shivy & Koehly, 2002).

In contrast, this study found that the majority of traditional demographic variables used to describe student segments provided little help in describing the need-based segments, a phenomenon the researchers have experienced across a number of similar segmentation studies (Garver, Divine & Spralls, 2009). The best descriptors are students' own perceptions, along with actual usage data provided by the university's career service department. In Table 4 (Appendix) we provide variables that are all statistically significant descriptors of the segments. The two variables capture student perceptions regarding the extent to which they are career oriented and make use of career services. We also provide actual UCSC data (e.g., number of interviews and Web site logins) for comparison.

In the web-based survey, students were asked about their perceptions regarding: 1) their degree (level) of career orientation and 2) the extent to which they use career services. Both of these variables are significant descriptive variables of the segments. *Placements* report the highest level of career orientation, while *unpreparedss* see themselves as having the lowest level of career orientation, with the difference representing a statistically significant difference ($\alpha = .01$). Concerning perceived career service usage, *placements* again see themselves as having the highest level of usage with *unpreparedss* having the lowest level of usage, with the difference representing a statistically significant difference ($\alpha = .01$).

Data regarding the actual usage of career services were collected from the focal university's career service department. These variables are indicators of career service usage rates including: 1) number of website logins to the student's career service account, 2) number of documents (résumés, letters, etc.) that have been posted, 3) number of applications for a requested interview, and 4) number of granted interviews. The success ratio variable is the ratio of granted interviews per the number of applications for interviews.

After analyzing the actual career service usage data, four themes emerge that shape our mental models of each segment. We find that *placements are* the "heavy users" while the *unpreparedss* are "light users" of career services. *Best-fit techies* and *high-touches* tend to be "moderate users" with *high-touches* showing slightly higher usage than *best-fit techies*.

Two demographic survey questions that help describe these segments include 1) previous internship experience and 2) college enrollment (see Table 5, Appendix). Consistent with previous results pertaining to actual usage and career orientation, *placements* have the highest percentage of internship experience (67%) relative to the other three segments (40% to 45%).

Concerning the relationship between college enrollment and segment type, it is evident that best-fit techies constitute a rather sizable and consistent presence within all types of majors. Business students are most likely to be *placements* (42.9%) or *best fit techies* (38.5%) and are by far the least likely to be *unpreparedss* (4.4%). Education students are most likely to be *best-fit techies* (36.4%) and feature the largest representation of *high-touches* (29.5%), while Arts and Science majors [Mike: are Arts and Science majors combined at CMU or did you combine them?] have the highest percentages of *best-fit techies* (44%) and *unpreparedss* (16%) but the lowest percentage of *placements* (12%).

Implications for Universities

Although there is a plethora of research reporting the benefits of career services education and training, with the exception of Rochlen et al. (2002), there is little literature reporting on how these benefits are, or should be, communicated to students. Drawing on service-learning promotion research, it is likely that marketing by universities offering career services can influence students' perceptions of UCSC costs (e.g., psychological, time and effort) and benefits (e.g., increased employability) (St. Clair and Tschirhart, 2007).

The findings of St. Clair and Tschirhart (2007) on the Web site promotion of service-learning programs, leads us to believe that universities' promotion of career services should center on the benefits that students find attractive instead of simply emphasizing aspects of UCSCs that career services staff, and/or administrators find appealing.

In this section, implications are discussed for universities trying to increase participation in career services. We describe ways in which knowledge of the four major student segment needs can be used to more effectively market to them. The marketing strategies we recommend are intended to raise career services participation rates within each segment. In the remainder of this section, segment preferences are summarized followed by recruiting and communication strategies that are put forth for each segment.

Placements

Placements desire a large number of interviews with good companies (see Table 3). Hence, placements may believe that they know what they want and need in order to transition from the academy to the working world. Following qualitative research by McCorkle et al. (2003, p. 202) on marketing students, this "perception needs correction as most campus career services can provide far more than the desired on-campus job interviews, such as company research sources of information; mock interviewing; and skill development seminars on résumé/cover letter writing, job interviews, and other job search techniques."

Business students are disproportionately more likely than other students to be placements (42.9 %) and the vast majority of this segment has had one or more internship experiences. An analysis of the data (see table 4) reveals that placements see themselves as more career oriented and heavy users of career services. Behavioral data from our focal UCSC provides support for this conclusion.

In general, undergraduates tend to prefer time-limited career assistance (Shivy & Koehly, 2002). This may be particularly true for placements (see Table 3) that place far less importance on: (1) getting help with job search strategies (4.3), (2) taking assessment tests (0.9), (3) participating in mock interviews (0.7) and (4) having their resume critiqued (1.7).

Based on our understanding of the needs and preferences of placements, they will likely be responsive to appeals that offer students assistance in developing networking strategies (Shivy & Koehly, 2002). Simply put, placements may need help building sufficient networks of support (Brown & Krane, 2000). Thus, appeals should focus more on networking-related benefits.

Placements Strategy: Promote Networking Opportunities

There is evidence to support the notion that the philosophical orientation of UCSCs has shifted from "placement" toward networking (Baker, 1998; Casella, 1990; Wessel, 1996). Networking, a non-traditional type of mentoring, has been suggested as a replacement for the traditional model of dyadic mentoring (Packard, 2003). Networking has been called the most powerful vehicle in making the transition from the academy to the work force (Casella, 1990; Wessel, 1996). Indeed, more than 30 percent of the respondents in a recent survey of UCSC directors stated that the rationale for their department's existence was "connecting students with employers" (Wessel, 1996). As indicated by Peterson (1995), as much as 80% of all jobs are obtained through personal contacts. The ultimate goal for UCSCs should be to foster an independent *networking orientation* in these students (Scott, 1983).

According to Brooks (1996), a networking orientation can be accomplished in at least three important ways. First, the UCSC should forge links between faculty and potential employers. Second, the UCSC should engage in on-campus college relations activities (e.g., offering company information sessions). Third, the UCSC should offer and promote off-campus college relations activities (e.g., internships, externships, and, of course, full-time job openings). Other networking strategies include (1) establishing mentoring relationships (both face-to-face and technology-mediated, Packard, 2003) and then expanding into a personal network (Baker, 1998), and (2) relying on parents to identify possible contacts for their children as well as the children of others (Harris & Jones, 1999).

Our secondary strategy is to raise each group's perception of UCSC relevance (Rayman, 1999). Student that perceive UCSC services as relevant are more likely to use the services (Nadya, Guillen, Harris-Hodge, Henry, Novakovic, Terry, & Kantamneni, 2006). Because there are so many alternatives (e.g., students can attempt to find their own jobs, or use competing services) simple repetition of marketing messages is necessary but insufficient to make the UCSC stand for something significant to *placements*. This requires communication strategies that portray UCSC services in a meaningful way to *placements.* For example, Rochlen et al. (2002) found that gender-specific brochures may change men's attitudes toward career counseling and increase the perceived value of career services and decrease stigmas that may be attached. Perhaps, *placements* and *best-fit techies* can be reached through new and rapidly growing social networking sites such as myspace.com and facebook.com, which we discuss in more detail in the next section.

Best-fit Techies

Best-fit techies are mostly concerned with being able to evaluate a lot of good job opportunities (24.9), and getting help with job search strategies (7.0) in order to select the best "job fit" (8.1). Based solely on student attribute importance scores, we argue, that this group, unlike the others, has a preference for online job search (6.5), and being notified of job postings and application deadlines through electronic means (5.7). Previous research on online delivery of career services has examined online/offline integration (i.e., bricks and clicks strategies) (e.g., Venable, 2007), the unique needs of

some men (e.g., Rochlen & O'Brien, 2002), the unique needs of some women (e.g., Packard, 2003), and the advantages/disadvantages of online service delivery and critical issues that should be considered (e.g., Davidson, 2001).

The research on advantages and disadvantages of career interventions online is particularly relevant to this study. For Davidson (2001), the overarching advantage of career services via the Web is convenience. For students, this includes: any-time/any-place options, ownership of the process, and direct access to information while "bypassing the UCSC front desk." Researchers have found that these advantages could make it easier for UCSCs to reach men and women who may be unable or unwilling to seek out more traditional (i.e., walk-in) career counseling services (Packard, 2003; Rochlen & O'Brien, 2002). Beyond obvious concerns for privacy and confidentiality, one potential disadvantage to UCSCs of using the Web is the difficulty of tailoring services to individual needs (Davidson, 2001). We, like Davidson (2001), find that not all students have the same needs.

Packard (2003) reports the usefulness UCSCC virtual chat rooms and compares them to long-distance counselors. By extension, today's students would likely be comfortable with online resume posting see Athavaley, WSJ 12/6/06, "Posting Your Résumé on YouTube"), job application and possibly interviewing. Additionally, many students have created an avatar (one's virtual world persona) and participated in interviews in virtual worlds (e.g., secondlife.com) with companies such as Microsoft and others (see Athavaley, WSJ, 6/20/07, "A Job Interview You Don't Have to Show Up For"). Based on their stated importance scores and empirical data from extant research, this group is likely interested in conducting online job searches at Web sites such as MonsterTrak.com, a national job listing service for colleges and universities (University of California Santa Cruz Annual Report, 2004).

Going beyond online delivery preferences, we find descriptive statistics indicating that *best-fit techies* are the largest segment, light to moderate users of traditional career services (e.g., walk-in access to counseling) and are fairly equally distributed across all types of majors. Thus, it is important that UCSCs utilize the Internet (and possibly extranets) to reach this segment, thereby, freeing staff time for tasks that require human interaction (Rayman, 1999).

Best-fit Techies Strategy: Use E-Marketing

The digerati (those that are savvy regarding digital technologies) that comprise this group prefer the use of electronic networks to deliver career services (Behrens & Altman, 1998; Davidson, 2001) and information in a variety of formats (e.g., podcast and text message). Howe and Strauss (2003, p. 81), put it this way "millennial generation students expect to use technology and have the tools necessary to "streamline their educational experience." Because research shows that this segment (44% of whom are likely liberal arts majors, see Nell, 2003) has high usage rates for Internet related media (see "Buddy Can You Spare Some Time?" Wall Street Journal January 26th, 2004), the following strategies and tactics are suggested:

- drive traffic to the UCSC Web site – even at the expense of walk-in traffic (Davidson 2001) to expose students to targeted communications

- design career-themed "blogs" (online diaries) to appeal to students in this segment
- recruit newly hired students to post videos (and other user-generated content) on sites such as youtube.com (see White, WSJ 1/2/07, "Firms Take a Cue From YouTube")
- enable employers to initially screen student applicants in virtual career fairs (Steel, WSJ 10/23/07, "Marketers Explore New Virtual Worlds")
- consider building and maintaining "career communities" (e.g., utilizing the groups, events and market features in facebook.com)
- allow students to register at UCSC Web sites to have text messages sent to their cell phones notifying them that employers will be on campus

Despite this abundance of opportunities, in a recent study by Nadya et al. (2006), only 34% of students were even aware of the UCSC Web site despite it being linked to the urban university's homepage. Clearly, many UCSCs are unprepared to meet the information needs of *best-fit techies*.

Unpreparеds

The *unpreparеds are* primarily seeking career education and self-development (see Table 3). Although they are the smallest of the four segments (see Table 2), they require innovative and well thought out appeals to reach them. A careful review of the data (see Table 4) reveals that they have:

- lowest level of perceived career orientation and usage of career services (4.14 and 1.77)
- a poor success ratio for job interviews (0.10)
- lowest number of actual applications (0.64)
- lowest number of web site logins (28.86)

However, to get the real story on *unpreparеds*, one has to examine what they are not seeking (see Table 3). Unlike *placements*, they are not ready to interact with large numbers of quality companies (1.9, 4.2). Unlike *best-fit techies*, they do not consider being able to find company/job information on the UCSC web site of importance (1.2) and they place little importance on seeing a variety of different job opportunities (2.7). They have low perceived career orientation and usage of career services (4.14 and 1.77).

Based our analysis of what *unpreparеds* are seeking and not seeking, we conclude that they are lacking in job search skills. McCorkle (2003, p. 199), like Nell (2003), argues that job search skills "represent a skill set area whose development has long been neglected in many college curriculums." As evidenced by their importance scores, this group should respond well to having career services training and skills development integrated into the curriculum (Falconer and Hays, 2006).

Unpreparеds Strategy: Make Career Services Part of the Curriculum

Obviously, this group should find increased opportunities for career education and self-development appealing. Research suggests that African American students, much like *unpreparеds,* have low usage of career services. Indeed, "it is commonly known that ethnic minority students on predominantly White campuses have traditionally underused

career services," (Falconer & Hays, 2006, p.220). It is important to note that we are not saying that *unpreparedes* are largely African American, only that the experiences of African Americans with UCSCs informs our research.

One finding is particularly relevant to this study, that is, Falconer & Hays (2006) found student support for making job preparatory courses mandatory. Thus, by extension, colleges and universities should consider including career services education (including discipline-related skills (e.g., segmentation strategy) and support skills (e.g., decision-making) in the curriculum. Support for these ideas is developed in the following paragraphs.

The European-based Harris Committee (2001, p. 15) reports that the prime function of higher education careers services should be "to help the institution produce better-informed students who are self-reliant, able to plan and manage their own learning and have sound career management skills." Furthermore, they advocate that career services "have key roles in delivering, or helping tutors to deliver, aspects of the curriculum, for example relating to the development of student's career management skills, arranging work experience and encouraging students to reflect on that experience (p.30).

There is U.S. support for embedding career services education in the curriculum of colleges and universities as well (Nell, 2003). McCorkle et al. (2003), define job search skills as behaviors, techniques, and attitudes necessary to obtain employment. McCorkle et al. (2003), conclude that marketing and possibly business courses in general, should in addition to traditional course content, include *behavioral learning skills*. For example, freshmen and sophomores might be required to identify marketable career skills by writing down work-related discipline skills.

In regard to self-development, one of the most important ways to attract *unpreparedes* is to offer to help them sell themselves in the job interview. Based on *unpreparedes'* poor success ratio for job interviews, as well as empirical observations of the authors, it is reasonable to conclude that this group would benefit from learning metacommunication behaviors such as eye contact, firm handshake, and appropriate business attire (McCorkle et al., 2003). Furthermore, this group would likely be interested in proven techniques for dealing with rejection (e.g., sending a carefully written thank you letter in order to qualify for future consideration) (McCorkle et al., 2003). Our fourth segment, the *high-touches*, should also respond well to targeted offers of help with job search strategies.

High-touches

Clearly, high-touches place the most importance (40.4) on getting help with job search strategies. They likely do not believe that they can devise an effective job search strategy on their own. Although they see themselves as being career oriented (4.43) they may be at a loss to explain why they have had difficulty in landing jobs. We conclude that they are having little success at finding a job because of (see Table 4) their relatively low success ratios for interviews (.01). It simply follows, then, that *high-touches* are moderate users of career services and seek tailored job search strategies and one-on-one interaction with UCSC personnel.

High-Touches Strategy: Tailor Appeals to Stages of Career Decision-Making and Major

Morgan and Ness (2003) argue that career counseling programming should be tailored more effectively to the career decision-making needs of first-year students to lessen career decision-making difficulties. For example, first-year university students ask career counselors and other service professionals things like: What career should I take? In a similar vein, McCorkle et al. (2003) found that junior marketing majors "most used job searches" differed from that of seniors. For example, seniors most used sources included "past and/or present employers, whereas juniors did not. Furthermore, research has shown that liberal arts and business majors have very different needs (McCorkle et al., 2003; Nell, 2003). Clearly, the literature suggests that students needing help with job search strategy and desiring one-to-one interaction, such as our high-touches, should respond well to carefully targeted and highly customized appeals.

To address the information (and understanding) needs of *high-touches*, UCSCs should provide more information about various stages of career decision-making and corresponding UCSC services offered. In this way, the process does not seem so daunting and is more akin to "hand-holding," (Nadya et al., 2006). Additionally, communications could reduce *high-touches'* uncertainty about the process or steps involved in ultimately landing the "dream" job. UCSCs should also provide more information about services that are targeted at various developmental levels. For example, freshmen and sophomores are likely to be more interested in services that help them decide on the right major while seniors and graduate students would be more interested in receiving information related to their job search (McCorkle et al., 2003; Morgan & Ness, 2003).

Finally, research suggests the effectiveness of college-specific career services appeals. For example, Nell (2003) finds that "many Arts and Science students have to create their own career focus because their academic degree and acquired skills can be used in a variety industries and positions," (sic). The authors suggest a career services curriculum component and carefully planned Web site use to address some of these issues. For example, the University of Missouri at Columbia has a course named "Transitions from College to Work," (Nell, 2003). McCorkle et al. (2003), in their study of marketing students, recommend that colleges of business start self-marketing instruction early (e.g., in the Principles of Marketing course), and strengthen ties with career services (e.g., satellite UCSC offices) and stronger promotion of professional clubs/associations.

Limitations

As a research limitation, the segments identified in this study may not be applicable to undergraduate students in other universities. Furthermore, the sample is more likely to get involved in career services based on their participation for this survey, which makes our sample more likely to be different from the overall population at the study university. Thus, to generalize more to the population of undergraduate students, larger samples drawn from a larger cross section of universities will be necessary. Replications of the study methodology at other campuses is needed before the presence of the four need based segments uncovered in the current study can be scientifically generalized.

As indicated herein, the purpose of this study was to examine student needs so that UCSCs could be more effective in getting students to actually use their services. Thus, students in this sample were already registered with the UCSC. Future research may want to examine the needs of students who are not registered with career services.

Final Conclusions

This study responds to the call by Nadya et al. (2006) to investigate factors that may facilitate or hinder students from using career services. The results of the study indicate not all individuals are interested in getting the same things from career services. Student importance scores for participating in career services were analyzed and four distinct need-based segments were indentified.

Specifically, it was discovered that students classified as *placements* are likely to be business majors, have the highest levels of career orientation, career services usage, and internship experience. Although *placements* believe that all they need are a large number of high quality companies to interview with, our study finds that that this group needs to see UCSCs as relevant. Additionally, this group should respond well to appeals offering help with networking strategies despite their apparent naiveté.

In contrast, *best-fit techies* want the job that is "right for them" but they want to be able to use the Internet and other connecting technologies in their job search efforts. They are moderate users of UCSCs, well represented across all majors, especially Arts and Science. E-marketing may be a key to getting this group to participate.

Unpreparеds are least likely to be business students, have the lowest level of career orientation and the lowest level of UCSC usage. In general, *unpreparеds* are unsure how to proceed with job search strategies. They both seek and need self-development and career education. This group will likely welcome the addition of one credit hour classes on job search skills to the curriculum.

Finally, *high-touches* are moderate users of career services, and actually prefer significant one-on-one interaction with career counselors and staff. To increase the participation of this group, colleges and universities should offer one-to-one interaction with UCSC staff and professionals and consider tailoring appeals to student class year, major and type of college.

It is not necessarily recommended that universities attempt to target all four segments. Which segment a school targets will primarily be a function of their mission and their budget situation. Universities whose main objective is just to get more students more involved in career services would likely want to focus their efforts on *unpreparеds, best-fit techies* and *high-touches,* because these are the segments most likely to yield them more "new and repeat business" for their services. On the other hand, schools who view their mission one of *increasing the overall employability of all students* may want to focus their efforts on reaching out to those students who may be less interested but likely most in need of job skills training (e.g., *placements*).

This research has identified and described four need-based segments of career services users and presented a set of customized marketing strategies designed to increase student participation within each segment. This research extends the literature on career services usage and may serve to improve the effectiveness of career services practice. By providing a better understanding of student needs, this research should allow colleges and

universities to specifically target the groups identified in this study, increase their participation with career services, thereby, helping their graduates to develop the behaviors, techniques, and attitudes necessary to obtain employment.

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Table 1.

Career Service Attribute Importance

Career Service Attributes	[a]Importance Score
Quality of companies to interview with	17.1
Provides a variety of different types of job opportunities	14.7
Helping Students with job search strategies	13.6
Number of companies to interview with	11.1
Usefulness of resume critiquing services	4.6
Taking assessment tests to find the right major and potential job	4.5
Helpfulness of career services website to research companies	4.1
Usefulness of mock interviews	4.1
Being notified of application deadlines	3.9
Seminars about potential majors and careers	2.9
Ease of navigating the Career Services website	2.8
Interactions with Career Service Staff	2.6
Convenience of resume critiquing services	2.2
Convenience to register with career services	2.0
Timeliness of turnaround for resume critiquing services	1.9
Process of being assigned interviews	1.9
Convenience of signing up for interviews	1.8
Ease of updating personal profile	1.7
Being reminded to update profile on a regular basis	0.7
Quality of interviewing facilities	0.6
Convenience of scheduling mock interviews	0.5
Usefulness of taking assessment tests	0.3
Convenience of taking assessment tests	0.3

[a]The attributes in a given study will be scaled from 0 to 100, with the entire number of attributes sharing a total of 100 points, with "more important" attributes possessing higher scores.

Table 2.

Need-based Segment Size as a Percentage of the Sample

Segment 1: Placements	27%
Segment 2: High-techs	40%
Segment 3: Unprepared	11%
Segment 4: High-touches	22%

Table 3.
Assessing Differences in Importance Scores Across Need-Based Career Service Segments

Career Service Attributes	SSD @ .05	Segment 1 Placements	Segment 2 Best-fit techies	Segment 3 Unpreppareds	Segment 4 High-touches
Quality of companies to interview with	Yes	**42.7**	7.7	4.2	8.9
Provides a variety of different types of job opportunities	Yes	8.5	**24.9**	2.7	9.4
Number of companies to interview with	Yes	**25.7**	7.7	1.9	3.9
Helpfulness of career services website to research companies	Yes	1.3	**6.5**	1.2	4.7
Helping students with job search strategies	Yes	4.3	7.0	5.6	**40.4**
Taking assessment tests to find the right major and potential job	Yes	0.9	**8.1**	3.8	2.9
Usefulness of mock interviews	Yes	0.7	1.5	**24.8**	3.1
Usefulness of resume critiquing services	Yes	1.7	3.2	**21.2**	2.7
Being notified of application deadlines	Yes	3.5	**5.7**	1.4	2.1

Table 4.

Description of Segments Using Perceptual and Behavioral Data

Descriptive Variables	SSD @.1	Segment 1 Placements	Segment 2 Best-fit techies	Segment 3 Unpreparedes	Segment 4 High-touches
Perceptions of Career Oriented	[a].079	4.58	4.33	4.14	4.43
Perceptions of Usage of Career Services	[c].006	2.88	2.65	1.77	2.51
Actual Number of Logins	[a].053	61.02	34.65	28.86	50.60
Actual Number of Documents	[c].010	3.04	1.42	1.18	1.32
Actual Number of Applications	[c].000	5.63	1.05	0.64	2.26
Actual Number of Interviews	[c].000	2.37	0.37	0.27	0.57
Actual Success Ratio for Interviews	[c].000	0.39	0.16	0.10	0.10

[a]Significant at an alpha level of .1, [b]Significant at an alpha level of .05, [c]Significant at an alpha level of .01

Table 5.

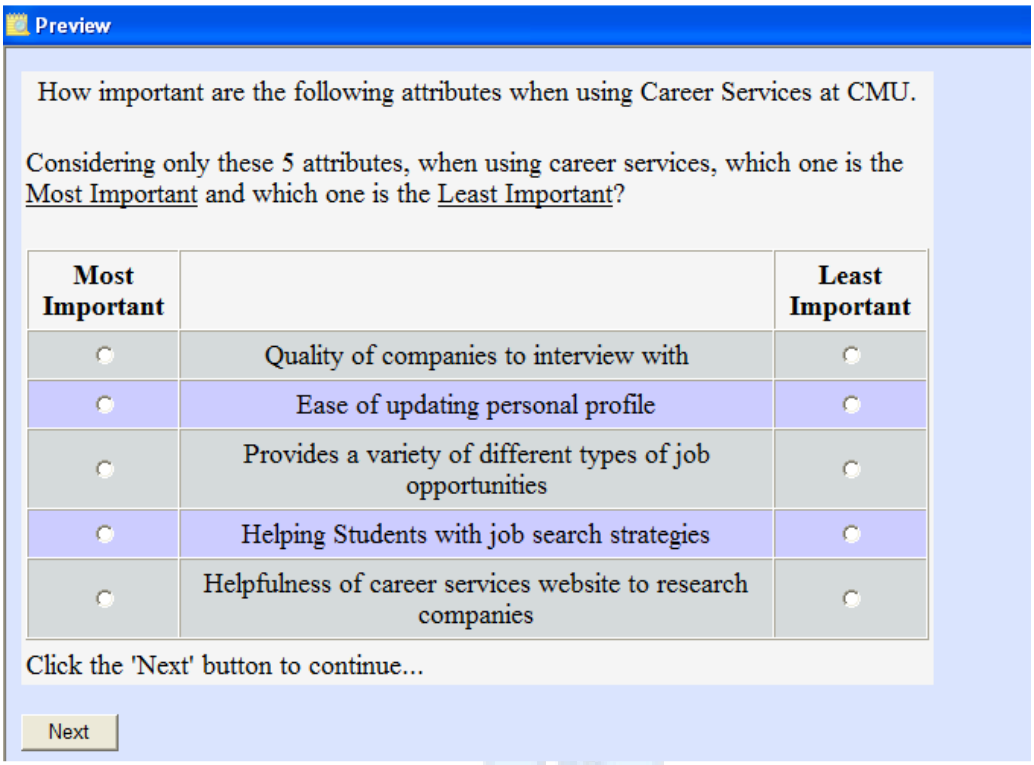
Percentage of Each Segment with Internship Experience

Segment Membership	Segment 1 Placements	Segment 2 Best-fit techies	Segment 3 Unpreparedes	Segment 4 High-touches
Internship Experience	67%	40%	41%	45%

Table 6.
Distribution of Segment Membership Within Each Type of Major

Type of Major	Segment 1 Placements	Segment 2 Best-fit techies	Segment 3 Unpreparedes	Segment 4 High-touches
Business Majors	42.9%	38.5%	4.4%	14.3%
Education Majors	20.5%	36.4%	13.6%	29.5%
Arts and Science Majors	12.0%	44.0%	16.0%	28.0%

Figure 1.
Screenshot illustrating the on-line MDS data collection method



Student Perceptions of the Faculty Course Evaluation Process: An Exploratory Study of Gender and Class Differences

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ABSTRACT

Student evaluation of teaching (SET) has long been the subject of research, primarily focusing on two areas. The first area addresses the accuracy of students' perceptions regarding their teachers' performance in class. Secondarily, research has focused upon uncovering the source of students' perceptions about teaching effectiveness and quality. Most such studies utilize actual SET data sets generated by student course evaluations. A variety of variables such as class size, gender, and expected grade are used in statistical analyses. This paper, however, describes a study, not of SET data itself, but of student perceptions of the entire faculty class evaluation process. After a series of student focus group discussions, a 16-item Faculty and Course Evaluation Questionnaire was developed. The survey results indicate a number of significant statistical differences in responses related to gender and class ranking, as well as other process issues. For gender differences, female students were found to take the evaluation process more seriously than their male counterparts. Additionally, female students reported believing the evaluation process was more important than males in the sample. Male students, indicating some cynicism about the class evaluation process, were significantly different in a negative way from female students in terms of their perception that the higher the grade projected the higher their evaluation of a professor and their belief that professions adjusted their in-class behavior at the end of the semester to achieve higher evaluations. Discussion of these and other results are provided as well directions for future research.

Keywords: Student evaluation of teaching, student perceptions of class evaluation processes

INTRODUCTION

In this paper, the authors report on an exploratory study of the perceptions that a sample of business students hold regarding the faculty and class evaluation process within a small, private, southern comprehensive university. The School of Business Administration is accredited by AACSB at the graduate and undergraduate levels.

While most of the research on student evaluations of teaching (SET) focuses on various student characteristics and contextual factors that may affect the legitimacy, validity and reliability of SET processes, this research asked students to share their views on the overall process using a 16-item assessment tool. Thus it represents one of the few recent attempts to ascertain students' perceptions of the evaluation process. In addition to considering the aggregate perspectives of students regarding the process, analysis was

also performed to determine any existing gender or year-in-school (class) differences within the sample. For this paper, the authors will describe the origins of the assessment tool, the methodology and results of the study and discuss the implications of results. Attention will also be given to future research in this area of great personal and professional significance to educators.

OVERVIEW OF THE LITERATURE

Helterbran (2008) suggests that teaching is a complex process that "involves the interweaving of content knowledge, pedagogy skills and a knowledge and appreciation of the multi-faceted nature of students to, in the end, be able to point to evidence that learning has occurred (p. 126). However, in higher education these days faculty teaching effectiveness is often evaluated through SET processes that have been routinely criticized for being open to many sources of bias and error. Wachtel (1998) is among those who additionally question whether students have the capacity to actually evaluate teaching and teaching effectiveness.

Conversations among university colleagues on the topic of student course and faculty evaluations are typically animated and full of opinions, myths, war stories and frustrations. Almost every business discipline forms professional associations, holds conferences and publishes journals focused only on teaching students in their discipline, not on organizational research within the discipline.

Predictably many articles appear in such journals that focus, not on how to more effectively teach the discipline, but on how faculty teaching is evaluated. Researchers frequently point out that because SET ratings are often used to both establish teaching competence and as a component of overall faculty evaluation, the origins of the ratings and the influences on the ratings are critical to consider. Moore (2008) notes many of these controversies in a recent work that also addresses the perceptions students hold regarding SET processes.

Published studies of course and faculty evaluation by students generally fall into two separate but related areas. The first area addresses the accuracy of perceptions by students on faculty performance, while the second research focuses on the sources of students' perceptions about teaching effectiveness. The first area, accuracy of perceptions, often involves grading leniency as related positively to student evaluation, a commonly held perception among faculty. Cognitive dissonance theory, for example, suggests that students who expect poor grades rate instructor poorly to minimize psychological or ego threat. One study (Maurer, 2006) found support for cognitive dissonance as a significant variable affecting accuracy of student perceptions.

Another such study (Heckert, Latier, Ringwald-Burton & Drazen, 2006), however, found that student perceived "effort appropriateness" was more positively related to faculty evaluation than was simple expected grade. That is, students who extended effort, learned more, and were subsequently rewarded, rated instructors more highly than simply expected grade could explain. The role of the scale used and question sequencing used on the rating form was another approach studied (Sedimeier, 2006) That author concluded both of these had significant effects on the accuracy or reliability of student evaluations.

The second, and perhaps more common, research approach in analyzing student evaluation processes is to assess the source of the student perceptions about teaching effectiveness. Such studies often focus on the students' demographics as well as the characteristics of the course or delivery method. Females were found to have more effective "evaluation abilities" than males and evaluated some aspects of courses more favorably than males, particularly in open-ended formats. Females, for example, had more accurate recall (Darby, 2006a) in articulating course events. Another study by the same author found that elective courses were more highly rated than required courses (Darby, 2006b). In a complex longitudinal study, McPherson (2006) found that many variables such as student class level, and even time of day, related significantly to student evaluation scores. Using the same course and instructor teaching one section of a traditional course format and a section of a two-way interactive television delivery, results suggested that the traditional course format was more highly rated (Mintu-Wimsatt, et al., 2006).

A third, and more unique approach, is presented in this paper and involves the study of students' perceptions of the faculty and class evaluation process. There is relative scant research in this area although logically it is an important orientation to consider regarding SET. Moore (2008), using eight items to assess student perceptions, completed a study of student perceptions of teaching evaluations and found while students perceived SETs as effective measures of teaching effectiveness, they exhibited doubt about whether either faculty or students take the process seriously. The students also were indifferent about whether the SET process was a useful process. Another study addressed some concern about how students perceived the evaluative process. It suggested that faculty and students should partner in evaluating courses and pedagogy to overcome erroneous perceptions, such as why faculty emphasized certain topics. The study found that course effectiveness was improved through such partnering (Giles, et al., 2006).

In another study of student perceptions of SET processes, Sojka, Gupta and Deeter-Schmelz (2002) compared student perceptions with faculty perceptions regarding students' evaluations (3 items), effects of student evaluations (6 items) and seriousness of the SET process (2 items). Results from that study indicated that on seven of the 11 items there were significant differences between student and faculty SET perceptions. In each of those comparisons, faculty rated the particular item as more positive than did students.

The intention of this study is to extend consideration of student perceptions of SET processes and to look at gender and year-in-school differences that may exist in the perceptual schema that students collectively retain about faculty and class evaluation processes.

METHODOLOGY

The original idea for this research evolved from the authors' concerns about the faculty/class evaluation and its legitimacy as related to performance evaluation of faculty at their university. As part of a project-focused undergraduate human resource management course, students were assigned to a focus group to discuss faculty and class evaluation issues and to identify perceptions that business students, in general, held about the SET processes within the School of Business Administration.

The student focus group met four times to dialogue about the mandatory faculty/course evaluation process. Focus group dialogue was facilitated by the lead author and also included discussion of the standardized SET forms that were and remain in use. Additional discussion focused on semester timing of the evaluations, use of the SETs by faculty and administrators, student candor and comfort level with the process, and faculty behavior surrounding the SET process. At the time of the focus group, the authors had not discovered related work done by the researchers noted above. Hence, the generation of potential items for the FCEQ (Faculty and Course Evaluation Questionnaire) was independent of and not informed by any other sourcing than the aggregate perceptions of students participating in the focus groups. Final item selection and composition of the FCEQ was completed by the lead author of this article based on the project work of the student focus group.

The Faculty and Course Evaluation Questionnaire (FCEQ) included 15 perceptual items and one item addressing students' overall perceptions on the effectiveness of the SET process. The instrument was divided into three sections addressing: 1) Students Responses about Themselves; 2) Student Responses about Professors; and 3) Student Responses about the Evaluation Process. Item 16 was an omnibus "effectiveness" item which served as the dependent variable in the regression analysis of the other 15 items included in the FCEQ. All 16 items were scored on a 1 – 4 scaling from Strongly Disagree (1) to Strongly Agree (4). Demographic data was collected on gender, school (Business versus Arts and Sciences) and class ranking (freshman through senior). The FCEQ items are identified in Table 1 below. Table 2 presents a summary of sampling characteristics.

TABLE 1

Faculty and Course Evaluation Questionnaire

Directions: Please complete all of the questions below as truthfully as possible and fill in the information at the bottom of the page. Use the following scaling key for your responses

Strongly Disagree/Never **
Disagree/Seldom
Agree/Sometimes
Strongly Agree/Often

Student Responses about Themselves

1) I take evaluating the professors in my courses seriously.
2) I tend to evaluate female professors higher than male professors.
3) I feel comfortable giving a negative evaluation for a bad professor.
4) I rate professors based on their personality and enthusiasm and not on what I have learned.
5) The higher the grade that I expect to receive in a class, the more positive my evaluation.
6) I don't write many comments on the evaluation form for fear of being identified.
7) Overall, I think the professor and course evaluation process is important.

Student Responses about Professors

8) Professors take my evaluation comments seriously.
9) My evaluations are used in professor tenure and salary raise decisions.
10) Professors use their evaluations to improve their courses.
11) When students give low evaluations, professors adjust to improve their teaching.
12) Professors adjust their behavior at the end of the semester to get better evaluations.

Student Responses about the Evaluation Process
13) Completing the evaluation form in the beginning of a class is better than later in the class.
14) The questions asked on the form are clear to me.
15) The questions asked on the form are relevant to evaluating a course/professor.
16) Overall, I think the professor and course evaluation process is effective,

School _____

Gender: ___ M ___ F

Class Ranking: ___ Freshman ___ Sophomore ___ Junior ___ Senior

TABLE 2
COMPARISON OF SAMPLE TO POPULATION DEMOGRAPNICS

Sample (N=316)		Population (N=2228)
First Year	13.6%	32.1%
Second Year	24.0	24.0
Third Year	26.3	22.0
Fourth Year	36.1	21.9
Male	48.3	41.4
Female	51.7	58.6

ADMINISTRATION AND ANALYSIS

The FCEQ was administered to approximately 320 randomly selected students in a cross-section of business classes in the School of Business Administration at a small, AACSB-accredited liberal arts university. A comparison of the sample demographics to the actual population indicates some skewing of the sample. Fewer first-year students were represented in the sample and more senior-year students were represented than as reflected in the university population. The second and third-year population was almost exactly represented in the sample. Male and female students were fairly closely represented in the sample as compared to the university gender make-up. Demographic comparisons are illustrated in Table 2 above. Given the exploratory nature of this study, adjustments in sampling procedures will be addressed in future replications.

Data analysis was straightforward given that this was an exploratory study in student perceptions of the SET process. After descriptive statistics were assessed, ANOVA was used to assess gender and year-in-school differences for the entire sample

on the 16 individual items. Additionally, a multiple regression analysis was performed using Item 16 as the dependent variable for the other 15 scale items. Table 3 indicates the item number, mean and standard deviation for each item.

TABLE 3
ITEM NUMBERS, MEANS AND STANDARD DEVIATIONS

Item #	Mean	Std. Dev.
1.	3.03	.80
2.	1.84	.75
3.	3.23	.84
4.	2.46	.71
5.	2.45	.80
6.	1.95*	.90
7.	2.91	.83
8.	2.54	.76
9.	2.32	.78
10.	2.56	.77
11.	2.36	.76
12.	2.37	.78
13.	2.16	.96
14.	3.29	.62
15.	2.98	.68
16.	2.64	.78

* Reverse scored item

RESULTS

In considering the means for the individual items, the authors decided that items with averages of 2.70 or above represented positive perceptual sets on the part of the students in this sample. Hence, within this interpretive framework for the "Student Responses about Themselves (Items 1 – 7), dimension students indicated that they took the process seriously (Item 1, Mean = 3.03), felt comfortable with giving negative feedback (Item 3, Mean = 3.23) and believed that the SET process is important (Item 7, Mean = 2.91).

Currents suggest that faculty member gender does not matter greatly to the students in terms of rating (Item 2, Mean = 1.84) and that students have limited reservations about sharing negative qualitative comments about faculty (Item 6, Mean = 1.95). Additionally, it would appear that within this sample, expected grade in a class (Item 5, Mean = 2.45) and the personality of a faculty member (Item 4, Mean = 2.46) are not of major importance in their ratings of faculty.

In looking at the results for Items 8 – 12 (Student Responses about Professors), all item means are in the 2.32 – 2.56 range. Given the four point scaling for the FCEQ, the five items related to that dimension remain in the "neutral" range. It appears that students in the current sample are somewhat unsure about how evaluations are used or whether faculty behavior actually changes or is influenced constructively by SET feedback.

Lastly, in reviewing the means for the third section of the questionnaire, Student Responses about the Evaluation Process (Items 13 – 16), while the students appear to find the SET questions clear (Item14, Mean = 3.29) and relevant to faculty evaluation (Item 15, Mean = 2.98), they are less than wildly enthusiastic about the overall process (Item 16, Mean = 2.64). The authors recognize that Item 13 was probably confusing as presented so the results are likely without much importance in the current study.

Using ANOVA to assess gender and class rank differences, results suggest a number of significant statistical differences in responses related to gender and class ranking. For gender differences, five significant differences emerged. Female students took the evaluation process more seriously than their male counterparts (Item # 1, Males = 2.87, Females = 3.17, F = 11.41, p = .001). Additionally, female students perceived the evaluation process as more important than did their male counterparts in the sample (Item #7. Males = 2.79, Females = 3.01, F = 5.72, p = .017). Gender difference results also suggest that male students may experience more cynicism related to the SET process than do female students. Males were significantly different than female students in terms of their perception that the higher the grade projected the higher their evaluation of a professor (Item # 5, Males = 2.54, Females = 2.37, F = 3.62, p = .058) and their belief that professors adjusted their in-class behavior at the end of the semester to achieve higher evaluations (Item # 12, Males = 2.49, Females = 2.27, F = 6.031, p = .015). Overall, these findings suggest that females have a more positive and less cynical view of the SET process and dynamics than do males, although only four significant gender differences emerged.

In regards to year-in-school (class ranking), three significant, yet relatively consistent differences were identified. First-year students (more so than sophomores, juniors and seniors) tended not to rate female professors higher than their male counterparts (Item # 2, First Year = 1.58, Second Year = 1.88, Third Year = 1.98, Fourth Year = 1.82, F = 3.098, p = ,027). Upperclassmen in the sample, therefore, reported rating their female professors higher than their male professors. Results on other items suggest that first-year students believe that faculty took the evaluation process comments more seriously than sophomores, juniors and seniors. (Item # 8, First Year = 2.93, Second Year = 2.43, Third Year = 2.52, Fourth Year = 2.49, p = .003) Lastly, in addressing the relevance of evaluation questions to actual professor evaluation, the first-year students reported a higher perception of question relevance than did any of the three upper-class groups. (Item # 15, First Year = 3.31, Second Year = 2.91, Third Year = 2.94, Fourth Year = 2.96, F = 3.809, p = .01).

The regression analysis in which the first 15 items were regressed on the evaluation effectiveness omnibus item (Item 16) rendered a significant ANOVA level (F = 23.46, p < .000) with approximately 51% of the variance explained by the model. Five items emerged as statistically significant in their contribution to the understanding of students' overall perceptions of the effectiveness of the faculty class evaluation process.

The five items that loaded significantly on their relationship to perceived SET process effectiveness were (in order of significance): 1) Evaluation Question Relevance in Reference to Teaching Evaluation (Item 15, t-value = 6.99, p > .000); 2) Importance of the Process, Student Perspective (Item 7, t-value = 3.93, p > .000); 3) Use of Evaluations by Faculty to Improve Their Courses (Item 10, t-value = 3.50, p = .001); 4) Use of Evaluations to Improve Their Teaching (Item 11, t-value = 3.14, p = .002): 5)

Comfort with Giving a Negative Evaluation of a Professor (Item 3, t-value = 2.47, p = .014). Item 8 (Professors Take Evaluation Comments Seriously was marginally significant when using the .05 convention of significance (t-value = 1.88. p = .06).

DISCUSSION

The pattern of means as positive, negative or neutral should be addressed initially. This study suggests that any item with a mean at or above 2.7 is a positive indicator related to student perceptions of the particular items and item whose mean was below 2.3 would be a negative indicator worthy of commentary. Those items with means 2.3 and 2.7 probably aren't very meaningful in terms of understanding student perceptions at this point. Overall, it would appear that the students have a fairly ambivalent collective perceptual set relative to the process and to the individual items related to the process given that eight of the sixteen items fall within the 2.3 to 2.7 range.

Five items at or above the 2.7 threshold on the scale suggest that students generally take the process seriously, feel comfortable giving "bad" professors negative evaluations and feel the questions asked on the form are both clear and relevant. Given the mean of 2.64 for the effectiveness item, further study and a rescaling of the instrument may provide a clearer perspective on the perceptions of process effectiveness that students retain.

Some specific item responses may warrant further discussion. One of the lowest rated items is # 9: perceived use of evaluation data in tenure and salary decisions. Many students simply do not understand the importance and use of SET data in the overall framework of faculty performance appraisal. The focus group which produced the instrument was also less aware of the use of the data than faculty generally perceive. In fact, some individual students actually disagreed that evaluative data was even used. Also, related to previous studies, students may be less susceptible to cognitive dissonance (giving a professor a poor evaluation in anticipation of making a bad grade) if they knew of the importance of the process. Just as supervisors are trained in performance appraisal, perhaps student should be given a statement of the importance and use of their evaluations. Finally, faculty should feel secure in the fact that, in general, students do take the process seriously (despite the misperceptions of some), and feel comfortable with giving a professor a poor evaluation. With all of the professional rancor and inconclusive research on exactly what is measured with SETs, at least our data suggests that students bring a fair amount of authenticity to the process.

The gender differences are quite limited within this sample. This finding may suggest fairly consistent perceptions of the SET process by male and female students. While there are only four significant differences between female and male students, there was no significant difference in the perceptions that the process is both important and overall an effective process. As noted above, it would appear that the female members of this sample have somewhat a more positive view of the process than do the males.

When considering year-in-school (class) as related to overall perceptions of the SET process and dynamics, results suggest surprisingly consistent perceptions across classes represented in the sample. Thirteen of the sixteen items demonstrated no significant differences based on year-in-school. As was consistent across these three significant findings, upper-class students did not differ significantly from one another on

any of the three variables, while departing significantly from the views of the freshmen in the sample. It is noteworthy that no significant differences emerged for upper-class students on any of the 16 items in the FCEQ. Perhaps once indoctrinated into the SET process, students come to see the process as a routine end-of-semester exercise rather than as a meaningful exercise in feedback that may have a positive effect on educational quality and continuous faculty improvement.

The regression analysis explained a significant level of variance (51%). The first ranked item is Question Relevance to students. The SET form used at our institution is relatively simple and straightforward with only six questions, using Likert-type scales, related to course objectives, learning environment, communication style, etc. and two general questions asking for a global rating of, first, the course and finally the instructor. The remainder of the evaluation form lists typical open-ended questions, such as, what students liked best/least and suggestions for improvement. This data indicates that simplicity may be the best approach in designing a course evaluation form, one that is generic enough to be used across disciplines. Students using the same form for all courses also may tend to take the process more seriously; faculty would use the feedback; and would be able to more easily compare professors and, therefore, feel more comfortable giving "bad" professors a negative evaluation. Other data and studies provide some support for the above discussion.

Overall then, while the current FCEQ is hardly a perfect instrument, it has helped to understand better how students see the evaluation process. With further instrument development and expanded replications of this original study, the authors hope to learn more about the perceptions of students in an effort to make the evaluation process more meaningful and relevant to them and to the faculty who engage in the process.

DIRECTIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Given the exploratory nature of this research and the relatively scant attention student perceptions of the SET process has received, our intention is to do a more advanced study in the near future. At present the FCEQ is being revised based on feedback provided by colleagues at a recent SoBA research forum. A number of the items will be rewritten to make them clearer and to eliminate compound sentences that may be confusing to students who complete the instrument. It is anticipated that the revised FCEQ will include approximately 25 items. The scaling of the instrument will also be changed from its current 1- 4 scale to a 1 – 10 scale.

Our goal will be to increase sample size and to acquire a large sample of liberal arts students from within the College of Arts and Sciences. This will allow us to compare business students and liberal arts students' perceptions of their respective SET processes. While their evaluation process is different from that in our SoBA, given the generic nature of the revised FCEQ will lend itself to usage in other learning contexts where SETs are used to evaluate teaching and teachers. Lastly, a sample the perceptions of graduate students enrolled in our MBA program at several different campuses of the university will also be taken.

In conclusion, the research described in this paper represents just the third recent study of students' perceptions of SET processes and dynamics and the first to consider gender and class differences as related to perceptions of SET. While the current FCEQ is

an imperfect instrument, with further instrument development and replication, a greater contribution to this area of research in the future is anticipated.

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The Experience of Experiential Exercises in Management Classes: A Professor's View

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Abstract

The experiential exercise is a teaching method that allows students to be engaged in the learning process. Experiential learning is widely recognized as an effective way for students to learn about essential business management topics. Experiential exercises are employed as a means to increase the student's comprehension of such topics as innovation and creativity, social responsibility and ethics, team effectiveness, decision making, organizational and international culture, emotional intelligence, and conflict management. A key to the experiential exercise is that it provides an opportunity for the student to learn in a manner that shifts them from a passive to an active participant in the learning process. While research emphasizes the relationship between experiential exercises and student learning, little has been written about experiential exercises and facilitator learning. This paper proposes that preparation; using student feedback and the reflective mode of the Experiential Learning Theory model may increase facilitator learning and contribute to the successful implementation of experiential exercises in the classroom. The paper includes the author's experience with experiential exercises and recommendation for future study.

Keywords: Experiential, Learning, Business, Management, Experiential Learning Theory

Introduction

Over the past few decades, experiential learning has increased in popularity. Numerous studies describe incorporating the experiential exercise to facilitate student learning on the topics of innovation and creativity, social responsibility and ethics, team effectiveness, decision making, organizational and international culture, emotional intelligence, and conflict management (Armstrong, 1999; Bacon, Stewart & Giclas, 1996; Blanton & Barbuto 2005; Duhon, Bushardt, & Daniel, 2006; Gibson, 2006; King, 1998; Ledman, 2001; Moore & Ryan, 2006; York, 1995). While this list is not intended to be exhaustive, it demonstrates that the experiential exercise is a useful tool for facilitating learning on a wide array of topics in the management discipline.

Experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984: 41). Experiential learning can be understood as a form of learning by doing. However, this is much too simplistic of a description for experiential learning. In fact, the experiential learning process follows the mechanics of the brain as described below:

> …concrete experiences come through the sensory cortex, reflective observation involves the integrative cortex at the back, creating new

abstract concepts that occurs in the frontal cortex, and active testing involves the motor brain (Zull, 2002: 18-19).

In addition, Kolb's (1984) theory of experiential learning contains a model conceptualizing a learning cycle that contains four related modes. The four modes are experience, reflection on the experience, thinking, and then finally, action, or in others words, putting into practice what has been learned.

While experiential theory has in the past been applied to student learning, this paper presents the argument that the theory also applies to facilitator learning. In particular, the mode of reflection on the experience can assist the facilitator in the successful implementation of the experiential exercise. In addition, preparation and the use of student feedback may also aid the successful implementation of experiential exercises in Management classes.

Overcoming Resistance

Even though the evidence is strong to support the benefits of experiential exercises, this model of instruction departs from the traditional teaching method. "In most college classrooms, the professor lectures and the students listen and take notes. The professor is the central figure, the 'sage on the stage,' the one who has the knowledge and transmits that knowledge to the students" (King, 1993: 30). In addition, a problem exists in the power of the status quo. "Lecturing has dominated postsecondary education for centuries" and despite considerable research that this practice should change, the status quo continues (Johnson, et al, 2007: 27). Therefore making the transition from the traditional teaching method to experiential exercises may pose a challenge to professors. It can be easier to stay with a method that has worked for years. However, even though a particular method has worked in the past does not preclude other teaching methods from being just as effective or perhaps even more effective.

Perhaps it's the preconceived notion that carries over from childhood that a professor should always have the answers. A colleague once commented that perhaps this notion was first embedded in our brains from the television episodes of "Gilligan's Island" that portrayed the Professor as the source of knowledge and subsequently the instigator of a solution for the problem or situation the group of castaways encountered. The reality is that teachers do not always have all the answers, and should therefore be relieved from an insurmountable burden.

Nonetheless, a professor's reluctance of trying something new and different in the classroom is real. Developing a teaching method that departs from the traditional teaching strategy where the professor is the sole source of information may challenge the professor's own self perception concerning their role as a teacher (Grasha, 2002). While this is understandable, not trying a different method of teaching keeps one in a non-growth and non-learning range. Author Peter Senge, known for his cutting edge work on learning organizations states "through learning, we re-create ourselves. Through learning we become able to do something we were never able to do"(Senge, 1990: 11).

One element that should be exercised when implementing the experiential exercise is the willingness on the professor's part to take a risk. This is in sharp contrast to the teaching model where the professor lectures facts and students take notes. "It is fun

to teach when you can take command of a group of people and share your knowledge and experiences. The experience is personally rewarding and self-perpetuating" (Grasha, 2002: 82). Every class has its own personality and there is not always a known outcome for every experiential exercise. The past experiences, training, age and attitude of the class will have its own unique experience with an exercise. There are no guarantees that even an exercise that has been highly successful in the past will always be successful. However, the experiential exercise creates a learning opportunity for both the student and professor.

Mentors

When the author first began teaching, endless hours were spent going over theories, memorizing important dates, authors and citations. This method of teaching follows the transmittal model where the professor transmits the knowledge to the student (King, 1993). This was a somewhat stressful way to prepare for class because the focus was on making sure that students got the correct information during the lecture. It also seemed this was a somewhat accepted way of teaching since no other methods of instruction had been experienced. Formal training of professors tends to create traditional teaching methods that create passive rather than active learners (Grasha, 2002).

Much of graduate training for many prospective faculty is focused more on learning about conducting solid research. Many colleagues already entrenched in the midst of their academic careers consistently lament the virtues of being a strong researcher. You may recall the following conversation between two college professors, Dr. Dexter Cornell and Dr. Graham Corey, in a scene from Charles E. Pogue's 1988 film *D.O.A.*:

> Corey: "Hey, Dex! Dex, you ought to slow down in this heat."
> *Cornell: "I thought you were a Ph.D. Dr. Corey, not an MD."*
> *Corey: "You know what I am. I'm an assistant professor, mortgaged to the eyeballs with two kids and a third on the way."*
> Cornell: "Oh congratulations Graham, boy or girl?"
> Corey: "The word around the faculty lounge is that you recommended your friend Hal to the Dean, Dex. I've been here longer, I was next in line."
> Cornell: "Well, I didn't put Hal's novel on Putman's spring list, Graham. You know academic politics as well as I do: 'Publish or Perish'… Always has been, always will be*."*

During the early years of a professor's career much emphasis is placed on achieving success in the publishing arena and achieving tenure. "More and more university educators are cognizant of the fact that academic rank and acquisition of tenure hinges on one's ability to research and publish and not on success in classroom teaching" (Mensah, 1982: 578). Research indicates that, regardless of marital status, assistant professors on a tenure track in the United States work on average more than 50 hours per week (Jacobs & Winslow, 2004). Additionally, based on information obtained from over 20,000 professors in 14 countries, there appears to be worldwide agreement that a strong record of successful research is important in faculty evaluation (Altbach & Lewis, 1995).

Mentors can have a dramatically beneficial effect on individual teaching methods of junior faculty (Bullard & Felder, 2003; Kemp & O'Keefe, 2003; Savage, Karp & Logue, 2004). New faculty members can learn from more experienced professors how to more efficiently use their time and shrink the learning curve that accompanies new course preparation. A colleague once suggested there were other ways for students to learn and related successes using experiential exercises. It sounded intriguing at the time and his willingness to honestly discuss the learning curve was fascinating. The reason for the fascination was due to the fact that the professor was referring to his own learning curve. He openly talked about his experience with experiential exercises; including those that succeeded and others that were somewhat less than successful. He explained that both were important because learning was always taking place. Certainly, in the successful experiences it was evident that the students had learned a great deal about the concepts under study. However, those less than successful were also key exercises because while students learned less about the concepts under study the professor learned more about how to better conduct experiential learning exercises.

Preparation and Planning

Preparation and planning can contribute to the success of conducting experiential exercises. As previously discussed in this paper, because the experiential exercise departs from traditional teaching methods, professors may be hesitant to attempt a different method of instruction. However, a positive outlook about the experience may contribute to the professor's performance and successful implementation of experiential exercises in the classroom. Historically, academic journals approached the topic of improving success from a coaching perspective drawing on constructs such as positive self-talk, focusing and visualization (Howland, 2006). Another more cerebral coverage of the topic reports vividness of imagery was positively correlated with the number of aversions (Dadds et al, 2004). Findings from this experiment, where fear is defined as an aversion, documents that those subjects who are more adept at visualization, garner a much stronger influence in calming their fears. Although there is a variation among subjects in their ability to visualize, this research outlines visualization as a powerful tool.

Recently, positive psychology and more specifically, positive organizational behavior, have received an increasing amount of attention as an area of research interest (Fineman, 2006; Roberts, 2006). Positive psychology is defined as "the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions" (Gable & Haidt, 2005: 104). Positive organizational behavior is defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today's workplace" (Luthans & Church, 2002: 60). In fact, research findings show that hope, resilience, optimism and efficacy are positively related to work performance, where performance included both self-report and objective measures (Luthans, et al, 2007). "Negative emotions such as fear and anxiety can block learning, while positive feelings of attraction and interest may be essential for learning" (Kolb & Kolb, 2005: 208). Therefore, taking the time to adopt a positive position about the experiential exercise may contribute to a successful outcome.

Teachers in higher education face the challenge of adopting pedagogy that involves flexibility for exercises and active learning while managing the constraints of time in the classroom (Nijhuis & Collis, 2005). In order to effectively conduct experiential exercises, time management must be considered. A well-structured experiential exercise typically provides the total time needed for the exercise and the breakdown of time for each segment (Pfeiffer & Jones, 1980). For example, segments of the experiential exercise are: the amount of time to set up the classroom and get students into groups; the length of time for students to work on an activity; the length of time for discussion; and the time required to process the exercise. When possible, students can be asked to help as much as possible with such tasks as arranging desks, passing out written handouts, acting as observers, or conducting mathematical calculations (when appropriate) and returning materials to the facilitator at the end of the session.

As discussed previously in this paper, traditional teaching methods may indoctrinate students to a preconceived notion that a professor is looking for a right answer or a correct response. Therefore, it is important to not force any outcome and to attempt to make whatever happens a learning moment. Allow learning to take its course for each student (Pfeiffer & Jones, 1980). Give students a broad overview of the exercise, however take care not to overload or tell students what should happen. Be open to the student's experience and encourage them to apply their experiential learning outcome to their own situation. Professors should be warned to not argue with students over results or do the exercise again in order to obtain certain conclusions (Pfeiffer & Jones, 1980).

The Reflective Process

In accordance with the experiential learning theory, the reflective mode is a critical step in the learning process for the student. Reflection allows for intentional consideration of the experience and integration with other experiences to solidify learning (Hatcher & Bringle, 1997).

To enhance the reflective mode of experiential learning theory, students are sometimes required to write a reflective observation about the experiential exercise and turn it in (Young, 2003). Allowing student feedback allows the professor to have insight to the exercises from the learner's perspective (Hatcher & Bringle, 1997). A careful and committed reading of the students' reflective observations offers insight into how they interpreted the experiential exercise and how they can apply what they learned.

However, this source of information can also be incorporated into the professor's reflective process. According to experiential learning theory, after the 'concrete experience' of the experiential exercise, the reflection mode allows a dissection of the experience. This mode allows the learner to think about the experience in ways that may introduce a "creative tension" and new implications can be drawn (Kolb & Kolb, 2005:194). The reflective process is open to the facilitator's own inquiry into what has been learned. The following is a sample of questions that may assist the facilitator's reflection on the experiential exercise:

> Did the students write honestly about their experience and where they able to connect to the concepts under study?
> Are there any changes that can be made to improve the facilitation of learning?

Did students have questions that could have been addressed early in the exercise or where they given so much information at one time that they were overwhelmed?

Reflection allows time for the facilitator to process how the exercise provided a learning opportunity for the students. Moreover, the facilitator's own introspection during the reflective mode creates a "learning space" (Kolb & Kolb, 2005: 199). The learning space concept emphasizes that learning does not occur in only one way, rather learning takes place in reference to the context of the environment. Therefore one should acknowledge that the context of the environment includes the thoughts, feelings and experiences of the students as well as the facilitator (Nonaka & Konno, 1998). In this way, the professor's creation of knowledge about the experiential exercise is unique and embedded in experiencing the exercise.

Use Student Feedback

Concerns for accountability and quality in teaching at the university level have spurred a 'scholarship of teaching and learning movement' (Boyer, 1990: Glassick et al, 1997). Numerous studies have sought to identify the underlying constructs of good teaching (Biggs, 1989, 2003: Prosser & Trigwell, 1999; Ramsden, 2003). Extending this body of work, Law, et al, (2007) identified good teaching practices not often identified. One finding underscores the importance of teachers "using student feedback as a pedagogical instrument " to improve their own learning (Law, et al, 2007: 255).

Student feedback may be obtained by requesting a global critique of the experiential exercises. This valuable information may be used to enhance facilitator learning about the implementation of experiential exercises. At the end of the semester, students may evaluate all the experiential exercises conducted throughout the semester. Students can be asked to provide anonymous feedback on the exercises by indicating the exercises they recommend to keep for next semester and the ones they would not include. Students are also encouraged to anonymously offer suggestions on strengthening any of the exercises or a method of delivery that may improve the learning experience. Offering students the ability to provide anonymous feedback provides protection from identification if they write a negative review of an exercise. Allowing this protection contributes to an honest assessment of the exercises. Because the main objective is to facilitate student learning, the students' perspectives should receive preferential treatment. Thus if there is a majority of agreement among students that a particular exercise is ineffective, serious consideration should be given to its retirement. However, if the professor has made notes about a certain exercise and plans to make changes that will help better facilitate learning, it is possible to keep the exercise for the future.

Future Study

This paper presents the argument that while research supports that the experiential exercise is beneficial to student learning, there is a little research regarding the experiential exercise and facilitator learning. Therefore this paper takes the first step in opening the door to future research on the topic of experiential exercises and facilitator

learning. The underlying core of this paper calls for professors to learn more about how to best prepare future generations of managers. There are many research opportunities for testing learning outcomes based on facilitators' experiences with experiential exercises and traditional teaching methods. Since this area has not yet been explored, grounded theory research is recommended (Glaser & Strauss, 1967). Grounded theory research using qualitative methods such as the critical incident technique (Flanagan, 1954), depth interviews (Strauss & Corbin, 1990), purposive theoretical sampling (Glaser & Strauss, 1967) and narrative analysis (Riessman, 1993) may yield new, theoretically grounded insights. Qualitative analysis has been used as a method of inquiry when quantitative tools have not yet been developed on topics such as interpersonal sensitive behavior (Margolis & Molinsky, 2008) and negative voice effects (Potter, 2006).

Conclusion

An experiential exercise is a learning opportunity for both the student and the professor. I have used experiential exercises in the classroom for over ten years and it is my hope that my experience can be helpful to you. As a note, my experience with experiential exercises has resulted in the vast majority of them being successful and enjoyable. In addition, the success is not attributable to any measure of expertise, but rather to a willingness to be open to learning and grasping Experiential Learning Theory. My recommendation is that professors add experiential exercises to their teaching repertoire. This paper has demonstrates how the professor can use preparation and student feedback to enhance successful implementation of the experiential exercise. In addition, the professor is encouraged to reflect upon the experience; think about how the exercise contributed to student learning; modify the exercise if necessary and continue to incorporate experiential activities into the classroom. Students will be given an opportunity to learn about management concepts in an active rather than passive manner. Moreover, professors are allowed an opportunity to learn as they experience the experiential exercise.

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