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LETTER FROM THE EDITORS

Welcome to the *Academy of Educational Leadership Journal*. The *AELJ* is published by the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *AELJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to publish empirical, theoretical and scholarly manuscripts which advance the discipline, and applied, educational and pedagogic papers of practical value to practitioners and educators. We look forward to a long and successful career in publishing articles which will be of value to many scholars around the world.

The articles contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

We intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

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UTILIZATION OF LAPTOP COMPUTERS IN THE SCHOOL OF BUSINESS CLASSROOM

Richard Skolnik, State University of New York – Oswego

Mia Puzo, State University of New York – Oswego

ABSTRACT

This study uses student surveys, a faculty survey and direct classroom observation to ascertain how students use laptop computers in the classroom and to identify the pedagogical techniques which greater student engagement. Students and faculty overwhelmingly indicate that laptop computers enhance course instruction. The results show that the benefits of laptop computers in the classroom include an increase in student spreadsheet skills and the ability to take notes electronically. Both students and faculty indicate that the disadvantages of using laptop computers include distractions offered by the web and the possibility of increased academic dishonesty. Over half of the students surveyed acknowledged using laptops to engage in activities not related to the course. Class observations show that on average approximately 15% of students are off-task at any one point in time. Pedagogy influences the effectiveness of laptops. Activities that engage students in the class help minimize the potential distraction created by access to the Internet. Lectures accompanied by PowerPoint slides led to the largest proportion of students engaged in off-task activity.

INTRODUCTION

Technology enhanced learning environments are becoming increasingly important in business education. As a result, many colleges and universities have initiated programs to promote the use of laptop computers in the classroom (Carnevale and Young, 2006). Laptop technology provides a number of benefits which enhance learning both in and out of the classroom. Integrating laptops into the classroom environment allows students to take notes faster and keep them organized. Instructors can create a “real-time” class environment by having students immediately access web resources to enhance class discussions and download course material in place of using a textbook (Cudd et al., 2003). The portability and mobility of laptop computers is leading to a new kind of classroom environment, which has both advantages and disadvantages (Effaw et al., 2004; Oppenheimer, 2003).

The educational advantages of wireless Internet are also accompanied by challenges and distractions for both instructors and students (Young, 2006). Suddenly, students have the ability to transport themselves anywhere the Internet will take them -- whether or not it has anything to do

with class. They can use their laptops to message friends, shop online, and surf the web. Additionally, the course instructor must learn a new set of teaching skills, and she or he must feel confident and comfortable with the laptop environment in order to be effective. Instructors are sometimes overwhelmed by this prospect and are often faced with the daunting task of effectively integrating the laptop into the day's lecture (Hall and Elliot, 2003). The goal of this research is to gain an understanding of how students use laptops in the classroom and which pedagogical techniques result in their most effective use.

EXPLORATORY SURVEY

The study began with an exploratory survey in the Fall 2005 semester for students enrolled in finance courses. All of the finance courses were offered in a tiered classroom with seating for 36 students. Each student position had a laptop computer connected to the Internet. The classroom had an instructor's console equipped with a laptop, overhead projector and multimedia devices. The student laptops were secured to the tables and could not be moved or adjusted. The instructor could not see the laptop screens without walking around the classroom, which was difficult because of the tiered seating.

At the end of the semester, a survey was given in the sections of three faculty members, which consisted of four sections of Corporate Finance and two sections of an upper-level finance course. Corporate Finance, a required course for students in the School of Business, enrolls juniors and seniors and has prerequisites of two accounting courses, two economics courses and a statistics course. The upper-level finance course has Corporate Finance as a prerequisite and enrolls primarily seniors. The survey asked students about their usage of computers in the class and their perception of the advantages and disadvantages of having computers in the classroom.

As Table 1 indicates, 75% of the students found that the laptop enhanced learning; only 12% found that the laptop distracted them from learning. Although nearly half of the students had laptops, two thirds of them preferred having the laptop available in the classroom, even though the positions and screens were not adjustable and there was limited space for books or writing. The students who owned laptops but preferred using provided computers probably found carrying a laptop computer to class inconvenient.

The survey indicated that the effectiveness of the laptop varied with the pedagogy used by the instructor. Over 90% of the students used the computer when spreadsheet problems were demonstrated and a corresponding percentage felt that their spreadsheet skills improved. Students had access to files that instructors use for PowerPoint presentations and over three quarters utilized the computer during PowerPoint enhanced lectures. Class discussions and lectures with the instructor typing notes or using the board resulted in a smaller, but still majority, of students indicating that the laptop was effective. Over half of the students indicated that they used the

computer during class discussions; however, the survey did not ask whether the computers were used for on-task activities during discussions.

Table 1: Fall Student Survey					
				Yes	No
Do you own a lap top?				48%	52%
Would you prefer the course in a room in which you could bring your own laptop?				38%	62%
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Using the laptop computer enhanced my learning in this course	40%	35%	13%	6%	6%
I used the laptop computer whenever the instructor demonstrated Excel problems	58%	26%	10%	4%	1%
I feel that my Excel skills have improved because of computer use in this course.	51%	30%	10%	4%	5%
I feel more confident analyzing financial problems.	39%	38%	18%	2%	4%
I used the laptop computer to take notes when the instructor lectured.	35%	22%	13%	15%	15%
I used the laptop computer to take notes when the instructor typed notes.	38%	19%	15%	13%	15%
I used the laptop computer to do work in other classes.	11%	18%	30%	18%	22%
I used the laptop computer for non-academic pursuits (email/surfing/games/etc.)	20%	35%	23%	12%	10%
I used the laptop computer in other classes because of using the computer in this course.	4%	15%	42%	21%	18%
Having computer access during quizzes and exams increases cheating.	21%	12%	24%	21%	21%
	Very Effective	Effective	Neutral	Ineffective	Very Ineffective
Demonstration of spreadsheet problems.	68%	24%	7%	1%	0%
Lectures from PowerPoint.	42%	35%	18%	4%	1%
Lectures with the instructor typing notes.	32%	30%	25%	9%	4%
Lectures with the instructor writing on the board.	22%	28%	35%	12%	3%
In class assignments that require surfing the web.	39%	26%	19%	5%	1%
Class discussions.	26%	30%	27%	11%	6%

Students admitted to using the computers for non-class related activities. Approximately 30% used the computer to work on assignments from other courses. Over half surfed the web, checked email, played games or did some other activity that was not academic. The survey did not ask the students the relative amount of time that they used the computer for on-task versus off-task activities.

Laptop computers in the classroom can lead to increased cheating for a couple of reasons. The first, a low tech reason, occurs because of the increased visibility of peer work. Unlike an exam on a desk, the laptop screens are vertical, which allows for greater visibility of answers, especially for students sitting in the back row. Second, since the laptops are connected to the Internet, students can search web sites, email or instant message classmates, or retrieve stored notes. The survey found that one third of the students expressed concern that the computer increased cheating on exams; however, a greater percentage, 45%, felt that cheating did not increase.

The results of the Fall survey, indicated that a more in-depth study was needed to answer fundamental questions about laptop usage and the effectiveness of the computer in the classroom. The study was expanded in the following semester to include a wider range of classes and measurements, including a survey of instructors and direct classroom observation of pedagogical technique and student activity.

SURVEY AND OBSERVATIONS

Laptop usage expanded in the Spring 2006 to include rooms not equipped with computers. Students in sophomore-level accounting and mathematics courses were required to bring their own computers to class. The Spring survey results spanned five instructors and 173 students. Results of the Spring Student Survey are presented in Table 2. Since most of the classes surveyed required students to have their own laptops, it is not surprising that 90% of the students owned a laptop and 80% had two or more classes that required one. In contrast to the previous survey, most students preferred bringing their own computer to class rather than using one provided in the classroom. Students generally found that laptops enhanced their learning; 45% responded positively compared to 30% who disagreed with the statement. However, student perception of the usefulness of laptops was less in the Spring semester than in the Fall semester. In the Fall survey, 75 percent of the students agreed and 12 percent of the students disagreed that laptops enhanced learning, for a positive ratio of 6.25; in the Spring, the ratio was 1.5. Although only speculation, the drop in the ratio may be attributed to either less serious students or instructors with less experience teaching in the laptop environment. Many of the students in the Spring survey were sophomores while students in the Fall survey were juniors or seniors. In the Fall, all of the instructors had had previous experience teaching in the laptop environment, while in the Spring, several instructors were teaching in the laptop environment for the first time.

				Yes	No
Do you own a lap top?				90%	10%
Would you prefer the course in a room in which you could bring your own laptop?				60%	40%
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Using the laptop computer enhanced my learning in this course	20%	25%	25%	17%	13%
I used the laptop computer whenever the instructor demonstrated Excel problems	35%	32%	16%	9%	9%
I feel that my Excel skills have improved because of computer use in this course.	38%	29%	11%	12%	9%
I feel more confident analyzing financial problems.	13%	36%	30%	12%	9%
I used the laptop computer to take notes when the instructor lectured.	11%	20%	17%	24%	28%
I used the laptop computer to take notes when the instructor typed notes.	9%	27%	14%	21%	29%
I used the laptop computer to do work in other classes.	20%	36%	12%	19%	13%
I used the laptop computer for non-academic pursuits (email/surfing/games/etc.)	35%	29%	17%	9%	10%
I used the laptop computer in other classes because of using the computer in this course.	10%	16%	26%	28%	20%
Having computer access during quizzes and exams increases cheating.	14%	20%	26%	20%	20%
I use a laptop computer in other courses even if it is not required.	9%	17%	22%	32%	20%
	Very Effective	Effective	Neutral	Ineffective	Very Ineffective
Demonstration of spreadsheet problems.	57%	27%	9%	6%	1%
Lectures from PowerPoint.	27%	36%	25%	9%	2%
Lectures with the instructor typing notes.	14%	20%	34%	24%	8%
Lectures with the instructor writing on the board.	10%	26%	29%	27%	7%
In class assignments that require surfing the web.	27%	33%	30%	8%	2%
Class discussions.	10%	20%	42%	20%	8%

Two thirds of the students felt that their Excel skills improved because of laptops in the course. The students' perception of increased Excel skills is also reflected in the activities that they found the computer to be most useful. Two thirds used Excel when the instructor demonstrated Excel problems, while only 42% used the computer to take notes when the instructor lectured. Nearly 60% found the computer useful when web browsing was required. Less than one third used the computer during class discussion.

As indicated in the Fall semester survey, laptops can be a source of distraction for students. Nearly two-thirds of the students used the laptops for non-academic pursuits, like web-surfing, emailing, or gaming. Over half of the students reported using the laptop to complete assignments from other courses. Student perception of the effectiveness of laptops in the classroom is probably linked to the degree in which students are inclined to use the laptop for non-academic purposes. In the Fall survey, 55 percent of the students agreed and 22 percent of the students disagreed that they used the laptop for non-academic pursuits, for a ratio of 2.5. In the Spring survey, the ratio increased to 3.4.

As in the Fall survey, students had diverse opinions regarding the impact that laptop computers had on cheating on exams and quizzes. Surprisingly, the proportion who thought that cheating increased were nearly the same (34% in the Fall, 33% in the Spring), as was the proportion who believed that cheating did not increase (42% in the Fall, 40% in the Spring). The diverse opinion may be the result of classroom management techniques or may reflect diversity within sections. A cross-tabulation of the academic dishonesty question by section shows large intra-section variation in student responses. Students within the same section have very different views of the effect that laptop computers have on academic dishonesty.

The second stage of the study was supplemented with direct classroom observations of students using laptop computers in the classroom. The observer sat in the classroom with a laptop computer and recorded the number of students that were using the laptop for course purposes, using the laptop for non-course purposes, or not using the laptop. The activity of the instructor was also noted. The observation period was one minute in length and the observations were spaced in ten minute intervals. Five observations were taken in each class.

Figure 1 depicts the number of students on-task during each of the five observation intervals. The class observations indicate the highest number of students on-task can be found during class observation interval three, which took place approximately 30 minutes into the class period. Students are the most engaged in class during the midpoint of class and the number of students engaging in on-task behaviors drops before and after the third observation interval.

The results of the class observations indicate that instructional activity plays a role in students' activities when using laptops in the classroom. Figure 2 depicts the percentage of students on-task by instructional activity. The lowest percentage of on-task students was found when the instructor lectured using PowerPoint. The reasons for this could be that many instructors post their PowerPoint lectures online and students are expected to follow along with the instructor by viewing

the lecture on their laptop. However, instead of following along with the instructor they often engage in other activities such as games, email, Instant Messenger, and work for other classes. Instructors do not even realize that the students are off-task because they assume that they are using the laptop to follow along with their lecture.

Figure 1. Percentage of Students on Task by Time Interval

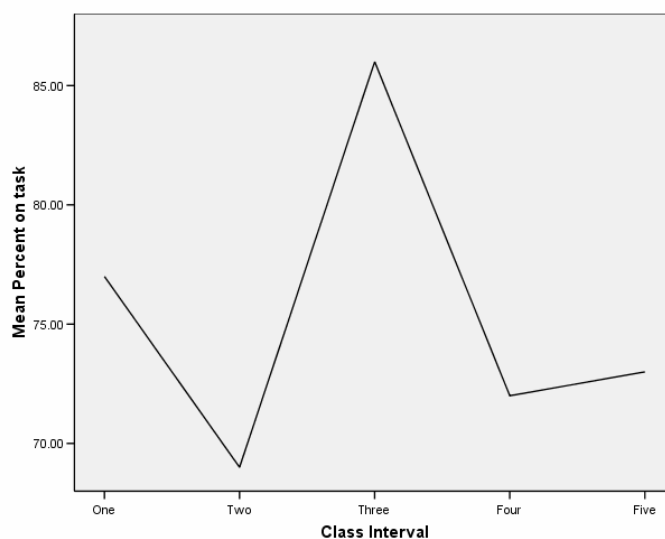


Figure 2. Percentage of Students On-Task by Instructional Activity

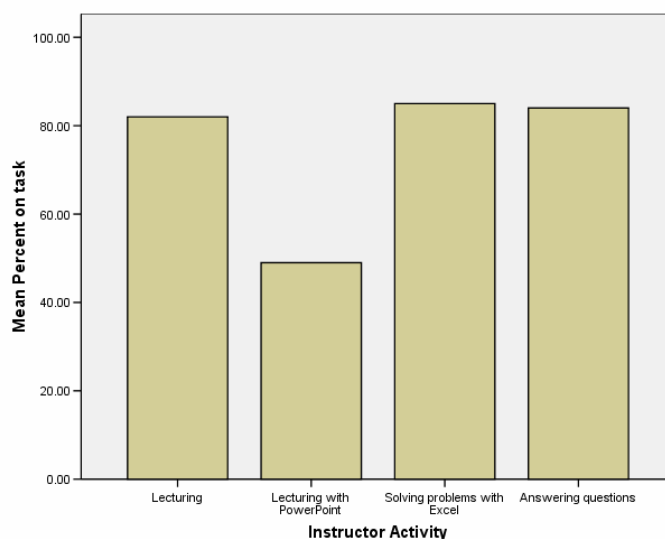


Table 3: Faculty Survey Results						
		Expert	Moderate	Beginner		
How would you rate your overall comfort level teaching with laptops		100%	0%	0%		
Hardware proficiency		40%	60%	0%		
General software proficiency		100%	0%	0%		
General Laptop-Discussion Groups		40%	20%	40%		
		Very Effective	Effective	Neutral	Ineffective	Very Ineffective
Demonstration of spreadsheet problems		40%	20%	40%	0%	0%
Lectures from PowerPoint		20%	20%	60%	0%	0%
Lectures with the instructor typing notes.		60%	20%	20%	0%	0%
Lectures with the instructor writing on the board		0%	60%	20%	20%	0%
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Teaching with laptop computers enhanced student's learning		40%	40%	20%	0%	0%
Students Excel skills have improved because of computer use in this course		100%	0%	0%	0%	0%
Students are more confident analyzing financial problems using a computer.		40%	60%	0%	0%	0%
Student used the laptop computer to take notes while I lectured.		0%	40%	40%	20%	0%
Students used the laptop computer to take notes while I typed notes.		0%	40%	40%	0%	20%
Students used the laptop computer for non-academic pursuits (emails/surfing/games/etc.)		40%	20%	0%	20%	20%
Having computer access during quizzes and exams increases cheating		0%	80%	20%	0%	0%
Classroom configuration is important in laptop learning environment.		60%	40%	0%	0%	0%
Textbooks still play an important role in student learning.		60%	20%	20%	0%	0%
The laptop format can enhance the communication process.		0%	80%	0%	0%	20%
Teamwork is more effective in the laptop environment.		0%	40%	40%	0%	20%
Not every topic lends itself to laptop use.		80%	20%	0%	0%	0%

In conjunction with a PowerPoint presentation, instructors may consider using techniques that increase on-task activity, these include: posting PowerPoint presentations after the class is completed; posting PowerPoint presentations with details missing so that students can fill in notes as the class proceeds; and training students to use the note feature of PowerPoint in order to create their own content. The relative effectiveness of each these techniques could be explored by future research.

The spring semester study was augmented with a survey of faculty members regarding their perceptions and concerns of student laptop usage. The survey results, presented in Table 3, indicate that faculty were comfortable with the laptop environment, they considered themselves competent with laptop technology and they recognized that laptop effectiveness varied with pedagogical techniques. Faculty felt that laptops were most effective for the demonstration of spreadsheet problems and least effective during lectures. Both students and faculty felt that laptops were more effective when lectures were enhanced with PowerPoint presentations; however, classroom observations indicated that students were more likely to be off-task during a lecture if a PowerPoint presentation was used.

All of the faculty were concerned about academic dishonesty when the laptops are available for quizzes and exams. Prohibiting the use of laptops during graded in-class assignments could eliminate this problem; however, if students are trained to solve problems using the computer, it may not be equitable to restrict the usage of computers on exams. For example, in Corporate Finance students use Excel to solve various financial problems. If students are not allowed to use a computer on an exam, the exam would not evaluate the ability of students to solve financial problems.

The faculty survey contained open-ended questions pertaining to the advantages and barriers to using laptop computers in the classroom. Advantages cited include the ability of students to create, manipulate and store information; the convenience of note-taking; the exposure to technology; and the ability to work on practical problems. Barriers to integrating the laptop into the classroom include the cost to students of having a laptop; the physical facilities supporting laptop use, like power plugs and printers; the inconvenience of carrying laptop computers; the distractions created by having laptops available during class; and increased means of cheating on exams or graded exercises. Some of the disadvantages, like the cost of laptop computer ownership and the physical facilities to support laptop computer usage, are disappearing as technology progresses. As shown in this study, a majority of students use the laptop computers for non-class related activities; however, at any one point in time, a preponderance of students use their computers for class related activity.

SUMMARY AND CONCLUSION

Students and faculty concur that laptop computers in the classroom enhance the educational experience; however, the degree to which laptops are beneficial depends upon the structure of the

class. Access to computers in the classroom can increase student engagement as students take an active role in learning; however, laptops in the classroom can lead to less engagement because of increased access to off-task activities, like the web, email and games. Course design becomes more important in a laptop environment. A course that effectively integrates laptops has the potential of increasing student engagement; one that does not, has the potential of decreasing student engagement. Just as course design becomes more important for student engagement in a laptop environment, so too does a culture of academic honesty. Technology increases the ways in which students can receive aid on exams or other graded exercises. A strong culture of academic honesty can balance the increased ease of cheating. Currently, laptop computers outnumber desktop and laboratory computers on campus (Wagner, 2005). Laptop computers will become increasingly prevalent in college classrooms; faculty and administrators need to adapt pedagogy to maximize their usefulness. Future research could compare the learning outcomes of students with laptops versus those without laptops.

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DEMOGRAPHIC FACTORS AND STUDENT PREFERENCES ON THE SYLLABUS IN THE PRINCIPLES OF ACCOUNTING COURSE

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ABSTRACT

At one time, the course syllabus was a one-page document. Today's typical college syllabus is a multiple-page document that addresses a number of issues and contingencies. This paper presents the results of a survey of 1,726 students from 31 universities in 19 states regarding the course syllabus. The survey instrument was administered during the spring 2002 term and contained 28 items that previous research indicates are likely to appear on a course syllabus. The primary purpose of this study is to assess the relative importance students in the Principles of Accounting course place on different items that frequently appear on a course syllabus. The results are analyzed by the following demographic characteristics: gender, age, years of college experience, and grade point average. The findings of the study indicate that students do not attach the same amount of importance to all syllabus components and that the level of perceived importance varies by the demographic factors. Faculty members may use the findings of this study to adjust their syllabi to improve communication to different types of students.

INTRODUCTION

In recent years, groups as diverse as the American Association for Higher Education, the Carnegie Foundation for the Advancement of Teaching, state legislatures, business leaders, students, and parents have called for improvements in higher education (Seldin 1990). Specific calls to improve accounting education at colleges and universities have been made by the Accounting Education Change Commission (AECC), the American Accounting Association (AAA), the major accounting firms, and many others (AAA, 1996; AECC, 1993; Albrecht & Sack, 2000; Kerr & Smith, 2003). The AECC identified five dimensions it considered critical for effective teaching, and the Committee on Promoting and Evaluating Effective Teaching reaffirmed the importance of the five critical areas (AAA, 1996). The five dimensions are designing/developing curriculums and courses, selecting and using appropriate material strong presentation skills, using suitable pedagogical methods and assessment devices, and providing guidance and advisement to students.

Although most accounting syllabi do not specifically address presentation skills, they often reflect the design of the course, the selection of appropriate material, the pedagogical methods and assessment devices that will be used, and some guidance to the students on how to successfully complete the course.

Furthermore, the instructor prepares the course syllabus for several stakeholders: students, colleagues, administrators, and accrediting agencies. Jervis and Hartley (2005) suggest that faculty may use syllabi from other schools to aid in developing a course, and several AAA sections support syllabi exchange websites. Faculty and administrators often view the syllabus as a formal contract between the instructor and students. Unfortunately, when a procedural difficulty occurs in a course, the lack of information in the syllabus is often the source of the problem. Consequently, the syllabus may be a major consideration in student appeal proceedings (Parkes and Harris, 2002). In addition, the syllabus is used in decisions regarding accreditation of educational institutions and programs. Perhaps the mixture of several purposes and stakeholders has created a variance in the length of course syllabi. Where the syllabus was once a one-page document, it has evolved into a detailed course guide of several pages that addresses a number of issues and contingencies (Garavalia et al., 1999).

A review of the literature also indicates some dissension on the purposes/components that make up an “ideal” syllabus. According to Matejka and Kurke (1994), an ideal course syllabus should include the instructor’s plan of action for the course, the standard provisions for a contract between student and instructor, a statement of the course’s general purpose, the instructor’s orientation to the content and, finally, the information that should be given to the customer (i.e., the student). While Parkes and Harris (2002) agree that a syllabus should serve as a contract, they believe the other purposes of a syllabus are to provide permanent documentation for assessment and to provide information useful for student learning. While controversial, the idea that the syllabus shall form the basis of a contract is not surprising for instructors who believe that students are indeed customers (Shelley, 2005; Halbesleben et al., 2003). Those teachers would be interested in research that determines what their customers want and need in a syllabus.

However, individuals involved in higher education who do not accept the viewpoint of students as customers may still find student opinions are important for several pragmatic reasons (Zell, 2001). First, students may use the syllabus to decide if they should continue their enrollment in the class. For example, a student may decide his/her schedule is overloaded if the syllabus communicates that several time-consuming projects are required for the class. The student can withdraw from the class and take the course in a later semester, presumably when the student has more time available. Additionally, professors who have enrollment-sensitive classes may need to know the most important syllabus factors in the prospective student’s decision. Second, an instructor may find it prudent to know the critical components of a course syllabus from a student’s perspective, given the relative weight of student evaluations in tenure, promotion, and pay raise decisions. Course evaluation forms often ask the student to respond to questions about the syllabus

(e.g., “The instructor provided a syllabus that clearly stated the course requirements”). Thus, an instructor’s evaluation scores could be negatively affected if the material considered most important to the student is not included in their syllabus. Finally, as the course syllabus grows in length, the students may struggle with information overload. In other words, the increasing length of course syllabi may impede the student from discerning the information he/she really needs to process, particularly if the size of the syllabus discourages the student from reading the entire document.

In any case, Altman (1999) suggests that syllabus goals can only be achieved if the syllabus provides sufficient information. Yet, sufficient information may not be the only problem facing the instructor’s syllabus. One would expect students to read and remember only information they deem important. Even though an instructor may believe that all of the information in the syllabus is of great importance, it does not necessarily follow that the students will attach the same weight to that information. Furthermore, students with similar characteristics may have similar preferences on course design, teaching and assessment methods, and administrative issues, all of which are usually reflected in the course syllabus.

Therefore, this study assesses the relative importance that students in the Principles of Accounting course place on items that previous research indicates frequently appear on a course syllabus. Data for the study were gathered with a one-page questionnaire. A national “convenience sample” was conducted during the Spring 2002 term. The paper is organized in the following manner. The first section provides a review of the available literature. The second section discusses the design and the administration of the survey questionnaire. The third section presents the study’s results and the final section discusses the overall conclusions from the study.

REVIEW OF THE LITERATURE

Although numerous articles from various disciplines discuss general syllabus content, empirical studies of syllabus components are a generally unexplored area. In a search of the literature, only three empirical studies of syllabus components were identified. A study by Smith and Razzouk (1993) gathered information from 152 students enrolled in two upper-division marketing courses at a state-assisted university in the southwest U.S. The purpose of the study was to “assess the nature and degree of usage of course syllabi” (Smith and Razzouk, 1993, 218) by advanced undergraduate marketing students. The survey instrument developed by Smith and Razzouk was composed primarily of open-ended questions that were dependent upon a student’s ability to recall specific information from the course syllabus. Smith and Razzouk were surprised at the inability of these advanced undergraduates to recall relevant syllabus information such as course objectives and evaluation procedures. Smith and Razzouk concluded it was necessary to increase the effectiveness of the course syllabus “as a communication vehicle in the classroom” (Smith and Razzouk 1993, 218).

Becker and Calhoun (1999) conducted a pre- and post-semester survey of 863 and 509 undergraduate students, respectively, in various sections of introductory psychology courses at four midwestern institutions. The students were asked to view 29 items that are likely to appear on a course syllabus and indicate (with a seven-point Likert scale) how much they would attend to each of the 29 items. Of the 29 items, the four that were “most important” to students were: “examination and quiz dates,” “due dates of assignments,” the “reading material covered by each exam or quiz,” and the “grading procedures and policies.” The four items that were the “least important” to the students were: the “titles and authors of textbooks and readings,” the “drop (withdrawal) dates,” “course information” (such as course number and title, section number, credit hours), and the “academic dishonesty policy.” Comparing “first semester students” to “continuing students,” Becker and Calhoun found continuing students ranked items pertaining to the type of exams and assignments higher than first-semester students. Comparing students of “traditional age” with those of a “non-traditional age,” Becker and Calhoun found “continuing students rated items pertaining to course goals, title, and author of textbooks, and kind of assignments as more important than did traditional-age students” (Becker and Calhoun, 1993, 9).

Garavalia et al. (1999) compared survey responses (using a five-point Likert scale) of 242 students and 74 faculty at Valdosta State University. The undergraduate students were enrolled in eight sections of the university’s introductory psychology course. The 74 faculty who participated in the study were solicited using a university faculty listserv that contained 536 members. Both faculty and students responded to a 39-item survey. The results of the study indicated that students and faculty members differed in the amount of importance assigned to 15 suggested syllabi components. Items students and faculty disagreed upon include: “examples of completed projects/papers,” the “instructor’s home phone number,” the “basic format of examinations,” and the “length of required projects/papers.” Examples of items that faculty members and students rated similarly in importance were: the “instructor’s e-mail address,” the “grading scale for final course grade,” and “the syllabus should be adjusted periodically throughout the semester.”

RESEARCH METHODOLOGY

Accounting faculty at 50 colleges and universities were contacted via e-mail early in the Spring 2002 term and asked to participate in a study pertaining to the course syllabus. The contacted faculty members were asked to administer a survey questionnaire to students enrolled in an introductory accounting course. Some faculty stated they were interested in the research concept but were not teaching an introductory course in the spring term. Other faculty stated that institutional policies or other reasons made them unable/unwilling to participate in this study. Faculty at 31 institutions in 19 states agreed to administer the survey questionnaire to students enrolled in the Principles of Accounting course. Faculty who agreed to have their classes participate in the study were mailed a package that contained a specified number of student survey questionnaires and a pre-

paid, pre-addressed envelope in which to return the completed student questionnaires. Each faculty participant was asked to distribute the student questionnaires to willing volunteers. The students answered the survey questions after their class session.

The instructions at the top of the survey were: "The Syllabus for a course is an 'agreement' between the instructor and the students in a course. We are researching what factors students feel are important to include in a Syllabus." The survey instrument contained two sections. The first section contained 28 items that frequently appear on a course syllabus. For the most part, the items used in this study were also used in the study by Becker and Calhoun (1999). A seven-point Likert scale was assigned to the student responses (where "1" = "no attention at all" to "7" = "great deal of attention"). Each item in this section had a corresponding reference to a course syllabus component (e.g., "attendance policy," "examination and quiz dates," "late assignment policy," "course goals and objectives," and "required prerequisite coursework to enroll in the course").

The second section of the survey requested demographic data from the individual student respondent. Specific questions pertained to the respondent's gender, age, year in school, primary field of study, and grade point average. Each faculty member who distributed the survey also completed a questionnaire. The faculty responded to the 28 syllabus items and provided data pertaining to institutional characteristics. Specific questions inquired if the institution was either private or state-assisted, if the school of business was accredited by the Association to Advance Collegiate Schools of Business-International (AACSB), the state in which the college/university was located, and the approximate "full-time equivalent" (FTE) size of the student body.

RESULTS

This study examines perceptions of syllabi items by different student groups. Therefore, Panel A of Table 1 summarizes institutional and student data for specific demographic characteristics. Students at state-assisted institutions accounted for 71.4 percent (1,233 of 1,726) of the respondents, although only 61.3 percent (19 of 31) of the colleges and universities that administered the survey were public institutions. While approximately one-third of U.S. colleges and universities were accredited by the AACSB in 2002, almost 39 percent (672 of 1,726) of the student respondents were at these institutions. Although none of the responding colleges and universities had more than 20,000 full-time equivalent (FTE) enrollment, almost half (48.4 percent) of the institutions had student enrollment between 1,000 and 4,999 FTE.

Panel B of Table 1 presents the self-reported data provided by the student respondents. Of the 1,726 respondents, the number of males and females were approximately equal, with 847 (49.1 percent) female respondents, 864 (50 percent) male respondents, and 15 non-respondents (to this question). The average age of the respondents was 21.63 years and the students were, on average, taking 14.29 credit hours of classes. Most students were in their second (44.8 percent) or third (31.6 percent) year of collegiate studies. Although a number of academic majors were represented by the

respondents, the four most frequent majors were Management (18.4 percent), Accounting (16.6 percent), General Business (15.6 percent), and Marketing (14.5 percent). The average cumulative grade point average reported by the student respondents was 3.0.

Panel A: Institutional and Student Respondents				
Characteristic	Institutions		Students	
	Number	Percent	Number	Percent
Public (state-assisted)	19	61.3	1,233	71.4
Private	12	38.7	493	28.6
AACSB	10	32.3	672	38.9
Non-AACSB	21	67.7	1,054	61.1
Less than 1,000 FTE	1	3.2	19	1.1
1,000 – 4,999 FTE	15	48.4	834	48.3
5,000 – 9,999 FTE	10	32.3	551	31.9
10,000 – 20,000 FTE	5	16.1	322	18.6
More than 20,000 FTE	0	0.0	0	0.0
Panel B: Student Respondents				
Characteristic	Number		Percent	
Male	864		50.0	
Female	847		49.1	
Not Reported	15		0.9	
First Year	169		9.8	
Second Year	774		44.8	
Third Year	546		31.6	
Fourth Year	174		10.1	
Fifth (or More) Year	31		1.8	
Not Reported	32		1.9	
Accounting	287		16.6	
Economics	45		2.6	
Finance	144		8.3	
General Business	269		15.6	
Information Systems	189		11.0	
Management	318		18.4	

Marketing	250	14.5
Other Business	45	2.6
Sciences	20	1.2
Humanities and Social Sciences	58	3.4
Journalism	8	0.5
Mathematics & Comp. Science	15	0.9
Education	3	0.2
Fine Arts	7	0.4
Other Major	25	1.4
Undecided/Undeclared	15	0.9
Not Reported	28	1.6
Characteristic	Number	Average
Age (in years)	1,677	21.63
Credit Hours Current Semester	1,691	14.29
Cumulative G.P.A.	1,508	3.00

Table 2 reports the summary statistics (mean and standard deviation) for each of the 28 survey items, listed in order from the highest mean (most important item to appear on the syllabus) to the lowest mean (least important to appear on the syllabus). Using a seven-point Likert scale for the responses (“1” = “no attention at all” to “7” = “great deal of attention”), the five items with the largest numerical values were: “Grading procedure and policies” (6.451), “Number of examinations and quizzes” (6.262), “Examination and quiz dates” (6.255), “Instructor information (for example, name, title, office location, phone number, and e-mail address)” (6.126), and the “Due dates of out-of-class assignments” (6.065). The five items with the lowest numerical values were: “Academic dishonesty policy” (4.691), “Title and authors of textbooks and readings” (4.750), “Required prerequisite coursework necessary to enroll in the course” (4.975), “Course information (for example, course number and title, section number, credit hours)” (4.992), and “Drop/withdrawal dates” (5.051). These results indicate that students attach differing amounts of importance to syllabus components. The extreme example is the amount of importance students place upon “Grading procedure and policies” as compared to “Academic dishonesty policy.” The difference in the mean scores between those two items is $1.76 = (6.451 - 4.691)$. Thus, the score for “Grading procedure and policies” increased by 37.52 percent over the score given to the survey item titled “Academic dishonesty policy.”

Table 2: Syllabus Item Mean and Standard Deviation Results:				
Ranked by Mean Score				
10	Number of examinations and quizzes	6.262	1.098	1,719
12	Examination and quiz dates	6.255	1.293	1,720
6	Instructor information (i.e.; name, title, office location, phone, e-mail)	6.126	1.226	1,725
17	Due dates of out-of-class assignments	6.065	1.427	1,719
25	Instructor's office hours	6.058	1.289	1,720
8	Attendance policy	6.045	1.360	1,719
11	Kind of assignments (i.e.; readings, papers, presentations, projects)	6.008	1.275	1,719
9	Type of examinations and quizzes (i.e.; multiple choice, essay)	5.981	1.339	1,722
13	Reading material covered by each examination or quiz	5.975	1.335	1,719
2	Days, hours, and location of class meetings	5.738	1.589	1,726
16	Whether extra credit can be earned	5.712	1.558	1,720
20	Dates and time of special events that must be attended outside class	5.690	1.630	1,721
18	Late assignment policy	5.662	1.487	1,718
14	Schedule of topics to be covered	5.624	1.449	1,716
5	Course format (i.e.; lecture, discussion, videos, classroom activities)	5.577	1.456	1,722
1	Class participation requirements	5.457	1.522	1,725
4	Course description	5.438	1.578	1,712
21	Amount of work (i.e.; amount, number & length of assignments)	5.322	1.598	1,721
23	Course goals and objectives	5.300	1.608	1,715
28	Available support services (i.e.; tutoring, computerized study guides)	5.272	1.720	1,705
24	Holidays observed	5.213	1.822	1,720
22	Where to obtain materials for class (i.e.; texts, readings, labs)	5.062	1.737	1,719
27	Drop/withdrawal dates	5.051	1.865	1,714
3	Course information (i.e.; course #, title, section number, credit hours)	4.992	1.824	1,725
19	Required prerequisite coursework necessary to enroll in the course	4.975	1.884	1,712
15	Title and authors of textbooks and readings	4.750	1.938	1,719
26	Academic dishonesty policy	4.691	1.975	1,717

For Tables 3 through 6, tests were conducted to see if gender, years in college, GPA, or the age of the students made a difference in their responses to the syllabus components. In general, the sample data for each of the 28 items exhibited some distribution tendencies of skewness or kurtosis.

However, if each group has more than 30 subjects, a traditional ANOVA procedure is robust against moderate departures from normality (Lehman et al., 2005). Also, a Levene's test for equal cell variances was conducted for each of the 28 items in each of the following analyses. The Levene's test results indicated that unequal variances occurred ($p < .05$) for gender in nine of 28 cases, two of 28 cases for GPA, eight of 28 cases for class rank, and 13 of 28 cases in the analysis of traditional and nontraditional students. Therefore, a Welch ANOVA was selected as a conservative statistical approach, as it allows for unequal group variances when testing for differences in group means. If the Welch ANOVA indicated that a significant difference ($p < .05$) between groups existed, then a Games-Howell Pairwise Comparison test was used when more than two groups existed in the means test. The Games-Howell test is a nonparametric multiple comparison procedure used to determine which of the groups are different from one another. In addition, Tamhane's T2, Dunnett's T3, and Dunnett's C nonparametric multiple comparison procedures were conducted on the data and the parametric Tukey-Kramer HSD multiple comparison procedure was applied to the data. All of the tests yielded approximately the same results provided by the Games-Howell Pairwise Comparison test.

Table 3 indicates that significant differences ($p < .05$) exist between male and female ratings of syllabus components on 11 of the 28 questions. Except for three items, ("Where to obtain materials for class," "Amount of work," and "Course goals and objectives") females rated the syllabus components as more important than males. Thus, females appear to place more importance on the communication of syllabus information. Both sexes rate "Grading procedures and policies" as the most important item, and both sexes provide the lowest mean for the item, "Academic dishonesty policy." The most significant differences between the two groups' responses were the items: "Instructor's office hours," "Attendance policy," "Number of examinations and quizzes," and "Instructor information (for example, name, title, office location, phone number, e-mail address)." These results suggest that females put more importance on instructor information than males.

Table 4 reflects the effect of college experience on the importance that students attach to syllabus components. Traditional class ranks of freshman, sophomore, junior, and senior were designated as one, two, three, or four years of experience, respectively. Students who reported that they had attended university classes for more than four years were placed into the same group, and designated to have at least five years of college experience. The number of usable responses to the 28 items ranged from 1,675 to 1,694. Panel A of Table 4 displays the Welch ANOVA results. The ANOVA results indicate that significant differences ($p < .05$) exist between the different class groups on nine of the 28 items. Items displaying the most significant differences ($p < .001$) include "Where to obtain materials for class (for example, texts, readings, lab materials)" and "Academic dishonesty policy."

Table 3: Student Gender Analysis:						
Welch ANOVA Results, Ranked by Absolute Difference between Means						
Item Number	Item	Means		Absolute Diff.	F ratio	Prob > F
		Female	Male	between Means		
25	Instructor's office hours	6.1965	5.9233	0.2732	19.3602	<.0001
8	Attendance policy	6.1809	5.9149	0.2660	16.4798	<.0001
17	Due dates of out-of-class assignments	6.1708	5.9582	0.2126	9.4894	0.0021
6	Instructor information (i.e.; name, title, office location, phone number, e-mail address)	6.2326	6.0209	0.2117	12.8107	0.0004
16	Whether extra credit can be earned	5.8197	5.6095	0.2102	7.7925	0.0053
10	Number of examinations and quizzes	6.3586	6.1676	0.1910	12.9764	0.0003
18	Late assignment policy	5.7547	5.5728	0.1819	6.4075	0.0115
20	Dates and time of special events that must be attended outside of class	5.7787	5.6074	0.1713	4.7242	0.0299
22	Where to obtain materials for class (i.e.; texts, readings, lab materials)	4.9775	5.1347	0.1572	3.4846	0.0621
11	Kind of assignments (i.e.; readings, papers, presentations, projects)	6.0852	5.9313	0.1539	6.2240	0.0127
7	Grading procedure and policies	6.5284	6.3766	0.1518	10.4629	0.0012
14	Schedule of topics to be covered	5.6956	5.5535	0.1421	4.1092	0.0428
1	Class participation requirements	5.5242	5.3893	0.1349	3.3544	0.0672
15	Title and authors of textbooks and readings	4.8107	4.6834	0.1273	1.8313	0.1762
12	Examination and quiz dates	6.3147	6.1947	0.1200	3.6547	0.0561
26	Academic dishonesty policy	4.7476	4.6276	0.1200	1.5665	0.2109
28	Available support services (i.e.; tutoring, computerized study guides)	5.3293	5.2255	0.1038	1.5393	0.2149
13	Reading material covered by each examination or quiz	6.0225	5.9302	0.0923	2.0428	0.1531
2	Days, hours, and location of class meetings	5.7792	5.6968	0.0824	1.1514	0.2834
19	Required prerequisite coursework necessary to enroll in the course	5.0095	4.9274	0.0821	0.8046	0.3698
24	Holidays observed	5.2539	5.1798	0.0741	0.7025	0.4021
5	Course format (i.e.; lecture, discussion, videos, classroom activities)	5.6107	5.5406	0.0701	0.9835	0.3215

Table 3: Student Gender Analysis:						
Welch ANOVA Results, Ranked by Absolute Difference between Means						
Item Number	Item	Means		Absolute Diff.	F ratio	Prob > F
		Female	Male	between Means		
21	Amount of work (i.e.; amount of reading, number and length of other assignments)	5.3001	5.3442	0.0441	0.3221	0.5704
4	Course description	5.4618	5.4179	0.0439	0.3282	0.5668
9	Type of examinations and quizzes (i.e.; multiple choice, essay)	5.9965	5.9594	0.0371	0.3249	0.5687
23	Course goals and objectives	5.2889	5.3097	0.0208	0.0704	0.7908
27	Drop/withdrawal dates	5.0548	5.0418	0.0130	0.0206	0.8859
3	Course information (i.e.; course number and title, section number, credit hours)	4.9965	4.9850	0.0115	0.0170	0.8963

Panel B of Table 4 provides the results from the Games-Howell Pairwise Comparison tests for each of the nine items. In general, the group of students with at least five years of college experience was never significantly different from the other groups. The senior group (class year = 4) had the lowest mean scores on eight of the nine items. The only item on which the senior group did not have the lowest mean score was Item 10, the “Number of examinations and quizzes.” Item 10 was also the only item where the multiple comparison procedure did not find a significant difference among the years, although the Games-Howell Pairwise Comparison test almost showed a significant difference between year three and year one (p -value = .054). Specifically, the multiple comparison tests reveal that the most common difference occurs between freshman and seniors. Although other class groups also had significant differences with the seniors, Items 22, 26, 28, 18, and 27 typically found that students in their first year had the highest mean response, and students in their fourth year provided the lowest mean response. This result is logical for some items such as “Where to obtain materials for class (for example, texts, readings, lab materials),” and “Available support services (for example, tutoring, computerized study guides).” Presumably, freshmen may be unaware of how to access these resources, while the fourth-year student may already know this information based upon experience. Also, experience would explain why fourth-year students whose academic career is almost finished assign less importance to items such as Item 19 (“Required prerequisite coursework necessary to enroll in the course”) and Item 23 (“Course goals and objectives”). Seniors should be completing their academic program, thus one could expect that they have researched these two items of information long before they enrolled in the class. In contrast,

sophomores and juniors are just starting to satisfy core curriculum requirements, and they usually are very concerned about this information.

Table 4: Years of College Experience Analysis:

Panel A: Welch ANOVA Results, Ranked by F ratio					
Item Number	Item	Total Observations	Degrees of Freedom	F ratio	Prob > F
22	Where to obtain materials for class (i.e.; texts, readings, lab materials)	1687	4	7.8392	<.0001
26	Academic dishonesty policy	1685	4	5.2700	0.0005
19	Required prerequisite coursework necessary to enroll in the course	1680	4	4.8377	0.0010
28	Available support services (i.e.; tutoring, computerized study guides)	1675	4	4.5156	0.0017
12	Examination and quiz dates	1689	4	3.9945	0.0039
18	Late assignment policy	1686	4	3.3917	0.0105
23	Course goals and objectives	1683	4	2.6417	0.0352
10	Number of examinations and quizzes	1687	4	2.6129	0.0368
27	Drop/withdrawal dates	1684	4	2.5719	0.0393
4	Course description	1681	4	2.3633	0.0547
2	Days, hours, and location of class meetings	1694	4	2.3435	0.0564
9	Type of examinations and quizzes (i.e.; multiple choice, essay)	1690	4	1.9090	0.1106
16	Whether extra credit can be earned	1688	4	1.8266	0.1254
13	Reading material covered by each examination or quiz	1687	4	1.7438	0.1421
11	Kind of assignments (i.e.; readings, papers, presentations, projects)	1687	4	1.6211	0.1707
5	Course format (i.e.; lecture, discussion, videos, classroom activities)	1691	4	1.5199	0.1981
14	Schedule of topics to be covered	1684	4	1.4247	0.2274
17	Due dates of out-of-class assignments	1687	4	1.3682	0.2466
1	Class participation requirements	1693	4	1.3201	0.2640
20	Dates and time of special events that must be attended outside of class	1689	4	1.2813	0.2788
3	Course information (i.e.; course number and title, section number, credit hours)	1693	4	1.2604	0.2872

Table 4: Years of College Experience Analysis:

21	Amount of work (i.e.; amount of reading, number and length of other assignments)	1689	4	1.2587	0.2878
25	Instructor's office hours	1688	4	1.1731	0.3242
15	Title and authors of textbooks and readings	1687	4	0.9266	0.4497
24	Holidays observed	1688	4	0.9182	0.4545
7	Grading procedure and policies	1691	4	0.8861	0.4734
6	Instructor information (i.e.; name, title, office location, phone number, e-mail address)	1693	4	0.5754	0.6808
8	Attendance policy	1687	4	0.5174	0.7231

Table 4 (Continued)

Panel B: Results of Games-Howell Pairwise Multiple Comparison Tests of Pairs for Items with Significant Welch ANOVA Results (Alpha =.05 or less)

Class Year	Number of Observations	Mean	Standard Deviation	Games-Howell Pairwise Comparison Test Results*
Item 22				
1	169	5.5740	1.4254	A
5	30	5.4667	1.3322	A B
3	546	5.0769	1.7404	B
2	769	5.0052	1.7552	B
4	173	4.6879	1.8695	B
Item 26				
1	168	5.1191	1.8338	A
2	768	4.7122	1.9402	A
3	546	4.6960	1.9878	A
5	31	4.2581	2.3940	A B
4	172	4.1628	2.0823	B
Item 19				
3	542	5.1365	1.8936	A
1	168	5.1190	1.8533	A
2	768	4.9583	1.8107	A
5	30	4.8000	1.7889	A B
4	172	4.3663	2.1136	B

Table 4 (Continued)				
Panel B: Results of Games-Howell Pairwise Multiple Comparison Tests of Pairs for Items with Significant Welch ANOVA Results (Alpha =.05 or less)				
Class Year	Number of Observations	Mean	Standard Deviation	Games-Howell Pairwise Comparison Test Results*
Item28				
1	168	5.4286	1.6545	A
2	762	5.3504	1.6900	A
3	541	5.2717	1.7208	A
5	31	5.1290	1.7271	A B
4	173	4.7225	1.8719	B
Item 12				
1	169	6.4556	1.0291	A
3	544	6.3640	1.1721	A
5	31	6.1935	1.2759	A B
2	771	6.1621	1.4081	B
4	174	6.1034	1.3688	A B
Item 18				
1	169	5.8935	1.3231	A
3	541	5.7800	1.4278	A
5	31	5.6774	1.6204	A B
2	771	5.6174	1.4929	A B
4	174	5.3966	1.6157	B
Item 23				
5	31	5.6129	1.4760	A B
1	169	5.4260	1.4907	A B
3	541	5.3715	1.5743	A
2	769	5.2705	1.6209	A B
4	173	4.9538	1.7581	B
Item 10				
3	543	6.3757	1.0551	A
2	772	6.2358	1.1060	A
4	172	6.2093	1.0773	A
5	31	6.1613	1.0359	A

Table 4 (Continued)				
Panel B: Results of Games-Howell Pairwise Multiple Comparison Tests of Pairs for Items with Significant Welch ANOVA Results (Alpha =.05 or less)				
Class Year	Number of Observations	Mean	Standard Deviation	Games-Howell Pairwise Comparison Test Results*
1	169	6.1006	1.1784	A
Item 17				
1	168	5.3036	1.7260	A
2	769	5.0897	1.8473	A B
3	542	5.0480	1.9008	A B
5	31	4.7419	1.7883	A B
4	174	4.7011	1.9568	B
*Levels not connected by the same letter are significantly different				

Table 5 examines the differences in syllabus component ratings by students with differing grade point averages (GPA). The student sample was split into five groups. The first group self-reported a GPA of less than 2.5. The GPAs of the second, third, and fourth group ranged from 2.5 to 2.99, 3.0 to 3.49, and 3.5 to 4.0, respectively. The fifth group was composed of students who did not report their GPA, hence the group was labeled as “Not Reported.” Panel A of Table 5 summarizes the results from the Welch ANOVA’s on the 28 survey items. The number of responses ranged from 1,705 to 1,726 for a given item. Significant results at the 0.05 level are shown for five of the 28 items. Those five items were further analyzed using the Games-Howell Pairwise Comparison procedure and the results of those tests are displayed in Panel B of Table 5. The analysis failed to find any significant difference between the groups for Item 23, “Course goals and objectives,” although the mean scores indicate students with lower GPAs rated the item as more important than students with higher GPAs. Items that impact success in a course or indicate the lack of success showed differing responses based upon GPA. For example, students with a lower GPA (e.g., 2.5 to 2.99) displayed more interest in Item 28, “Available support services (for example, tutoring, computerized study guides),” than students with a higher GPA (e.g., 3.0 to 3.49). Furthermore, students with the lowest GPA ranked information about drop/withdrawal dates, Item 27, as much more important than students with the highest GPAs. However, the Welch ANOVA results in Panel A show other items (e.g., Items 9, 11, and 12) that were related to exam dates, exam times, or types of assignments that might be graded, which did not display any significant differences among the groups. The multiple comparison test of Item 3, “Course information (for example, course number and title, section number, credit hours),” suggests that students with a GPA of 2.5 to 2.99 believe that information is more important than students with a GPA of 3.5 to 4.0. As one would expect, students in the higher GPA groups rated Item 7, “Grading procedure and

policies,” as more important than students with lower GPAs, but the only groups that were significantly different were the “3.5 to 4.0” group and the “Not Reported” group. Overall, the results suggest that students attach importance to specific syllabus components based upon their GPA.

Panel A: Welch ANOVA Results, Ranked by F ratio					
Item Number	Item	Total Observations	Degrees of Freedom	F ratio	Prob > F
3	Course information (i.e., course number and title, section number, credit hours)	1725	4	3.4539	0.0083
28	Available support services (i.e., tutoring, computerized study guides)	1705	4	3.4386	0.0085
27	Drop/withdrawal dates	1714	4	2.9425	0.0198
23	Course goals and objectives	1715	4	2.9092	0.0209
7	Grading procedure and policies	1722	4	2.7459	0.0275
19	Required prerequisite coursework necessary to enroll in the course	1712	4	2.1635	0.0715
2	Days, hours, and location of class meetings	1726	4	2.0298	0.0885
22	Where to obtain materials for class (i.e., texts, readings, lab materials)	1719	4	2.0171	0.0903
4	Course description	1712	4	1.9956	0.0934
21	Amount of work (i.e., amount of reading, number and length of other assignments)	1721	4	1.7715	0.1327
26	Academic dishonesty policy	1717	4	1.7005	0.1480
16	Whether extra credit can be earned	1720	4	1.6756	0.1538
10	Number of examinations and quizzes	1719	4	1.5755	0.1790
15	Title and authors of textbooks and readings	1719	4	1.4756	0.2078
18	Late assignment policy	1718	4	1.2769	0.2775
20	Dates and time of special events that must be attended outside of class	1721	4	1.1207	0.3455
5	Course format (i.e., lecture, discussion, videos, classroom activities)	1722	4	1.0483	0.3813
1	Class participation requirements	1725	4	0.9734	0.4213
14	Schedule of topics to be covered	1716	4	0.9723	0.4219
11	Kind of assignments (i.e., readings, papers, presentations, projects)	1719	4	0.9333	0.4440

Table 5: GPA Group Analysis

Panel A: Welch ANOVA Results, Ranked by F ratio					
Item Number	Item	Total Observations	Degrees of Freedom	F ratio	Prob > F
8	Attendance policy	1719	4	0.9163	0.4538
25	Instructor's office hours	1720	4	0.7866	0.5340
9	Type of examinations and quizzes (i.e., multiple choice, essay)	1722	4	0.6133	0.6531
12	Examination and quiz dates	1720	4	0.5911	0.6692
6	Instructor information (i.e., name, title, office location, phone number, e-mail address)	1725	4	0.5750	0.6808
17	Due dates of out-of-class assignments	1719	4	0.4031	0.8065
24	Holidays observed	1720	4	0.3986	0.8097
13	Reading material covered by each examination or quiz	1719	4	0.3955	0.8120

Table 5 (continued)

Panel B: Results of Games-Howell Pairwise Multiple Comparison Tests of Pairs for Items with Significant Welch ANOVA Results (Alpha =.05 or less)				
GPA Group	Number of Observations	Mean	Standard Deviation	Games-Howell Pairwise Comparison Test Results*
Item 3				
2.5 to 2.99	471	5.2144	1.7512	A
Not Reported	217	5.0507	1.7956	A B
< 2.50	234	4.9615	1.9040	A B
3.0 to 3.49	483	4.9255	1.7998	A B
3.5 to 4.0	320	4.7469	1.8974	B
Item 28				
< 2.50	232	5.4526	1.5947	A B
2.5 to 2.99	465	5.4194	1.7794	A
Not Reported	214	5.3551	1.6686	A B
3.5 to 4.0	317	5.1230	1.7413	A B
3.0 to 3.49	477	5.1006	1.7120	B

Table 5 (continued)				
Panel B: Results of Games-Howell Pairwise Multiple Comparison Tests of Pairs for Items with Significant Welch ANOVA Results (Alpha =.05 or less)				
GPA Group	Number of Observations	Mean	Standard Deviation	Games-Howell Pairwise Comparison Test Results*
Item 27				
< 2.50	233	5.3176	1.6847	A
2.5 to 2.99	469	5.1429	1.9422	A B
Not Reported	215	5.0512	1.8974	A B
3.0 to 3.49	481	4.9688	1.8419	A B
3.5 to 4.0	316	4.8418	1.8654	B
Item 23				
Not Reported	218	5.4495	1.5745	A
2.5 to 2.99	467	5.4240	1.5462	A
< 2.50	232	5.3922	1.6268	A
3.5 to 4.0	318	5.1635	1.7234	A
3.0 to 3.49	480	5.1563	1.5797	A
Item 7				
3.5 to 4.0	319	6.5517	0.9161	A
3.0 to 3.49	482	6.4959	0.8414	A B
2.5 to 2.99	471	6.4544	1.0008	A B
< 2.50	232	6.3707	1.0322	A B
Not Reported	218	6.2798	1.1638	B
*Levels not connected by the same letter are significantly different				

Previous research (Becker and Calhoun, 1993) found differences in students of a traditional age and those of a non-traditional age. Table 6 presents the Welch ANOVA results of traditional and non-traditional students' responses to the syllabus survey instrument. Students were placed into a traditional age group if their age was 23 or less, and a non-traditional age group if their age was 24 or more. The results demonstrate very few differences between the two groups. Significant results ($p < .05$) were only achieved on four items. However, the results are similar to Becker and Calhoun's findings in that non-traditional students rated Items 23 and 15, "Course goals and objectives," and "Title and authors of textbooks and readings," significantly higher than traditional students. This study's results were dissimilar to Becker and Calhoun's in that Items 9 and 11 "Type of examinations and quizzes (for example, multiple choice, essay)" and "Kind of assignments (for

example, readings, papers, presentations, projects),” were not rated significantly different by the two types of students. An interesting result was that traditional students rated Items 16 and 19, “Whether extra credit can be earned” and “Required prerequisite coursework necessary to enroll in the course,” significantly more important than non-traditional students. Thus, the results suggest that older students may be more interested in the content of the course, but younger students have higher interest levels on grade or curriculum issues.

**Table 6: Traditional/Nontraditional Student Analysis
Welch ANOVA Results, Ranked by Absolute Difference between Means**

Item Number	Item	Mean		Absolute Diff. between Means	F ratio	Prob > F
		Acred.	Non-Acred.			
23	Course goals and objectives	5.5810	5.2406	0.3404	9.8364	0.0019
16	Whether extra credit can be earned	5.4546	5.7497	0.2951	6.1928	0.0133
15	Title and authors of textbooks and readings	4.9842	4.6923	0.2919	4.8106	0.0289
19	Required prerequisite coursework necessary to enroll in the course	4.7331	5.0064	0.2733	3.9648	0.0473
26	Academic dishonesty policy	4.4841	4.7027	0.2186	2.3535	0.1260
24	Holidays observed	5.0438	5.2423	0.1985	2.2928	0.1309
9	Type of examinations and quizzes (i.e.; multiple choice, essay)	5.8110	6.0014	0.1904	3.6334	0.0575
27	Drop/withdrawal dates	4.8849	5.0644	0.1795	1.6853	0.1951
4	Course description	5.5857	5.4122	0.1735	2.6217	0.1063
17	Due dates of out-of-class assignments	5.9170	6.0783	0.1613	2.2371	0.1357
28	Available support services (i.e.; tutoring, computerized study guides)	5.1355	5.2919	0.1564	1.5188	0.2187
3	Course information (i.e.; course number and title, section number, credit hours)	4.8504	5.0063	0.1559	1.4950	0.2223
20	Dates and time of special events that must be attended outside of class	5.5516	5.7037	0.1521	1.5958	0.2074
5	Course format (i.e.; lecture, discussion, videos, classroom activities)	5.4643	5.5904	0.1261	1.4506	0.2293
14	Schedule of topics to be covered	5.7115	5.5962	0.1153	1.3689	0.2428
11	Kind of assignments (i.e.; readings, papers, presentations, projects)	6.0870	5.9824	0.1046	1.4464	0.2299
21	Amount of work (i.e.; amount of reading,	5.2222	5.3247	0.1025	0.7603	0.3839

**Table 6: Traditional/Nontraditional Student Analysis
Welch ANOVA Results, Ranked by Absolute Difference between Means**

Item Number	Item	Mean		Absolute Diff. between Means	F ratio	Prob > F
		Acred.	Non-Acred.			
	number and length of other assignments)					
2	Days, hours, and location of class meetings	5.6732	5.7533	0.0801	0.4468	0.5044
18	Late assignment policy	5.5929	5.6688	0.0759	0.4701	0.4934
22	Where to obtain materials for class (i.e.; texts, readings, lab materials)	4.9842	5.0599	0.0757	0.3527	0.5530
8	Attendance policy	6.0000	6.0642	0.0642	0.5299	0.4671
12	Examination and quiz dates	6.1976	6.2616	0.0640	0.5086	0.4762
6	Instructor information (i.e.; name, title, office location, phone number, e-mail)	6.0827	6.1294	0.0467	0.2699	0.6038
7	Grading procedure and policies	6.4229	6.4532	0.0303	0.1817	0.6702
25	Instructor's office hours	6.0717	6.0556	0.0161	0.0315	0.8593
13	Reading material covered by each examination or quiz	5.9802	5.9661	0.0141	0.0211	0.8845
1	Class participation requirements	5.4606	5.4536	0.0070	0.0044	0.9470
10	Number of examinations and quizzes	6.2569	6.2609	0.0040	0.0027	0.9589

DISCUSSION AND CONCLUSION

As previously discussed, the syllabus has become a longer, more comprehensive document of course content and policies. The content of the syllabus is important for accreditation, resolving disputes between instructors and students, and the administration of the course. Furthermore, instructors use the course syllabus to communicate their expectations of what students must do to be successful in their course. Conversely, students make enrollment decisions and instructor evaluations based, in part, on the contents of the syllabus. Therefore, given the importance of the syllabus, one finds it surprising that only three studies have empirically examined the course syllabus. This study's primary purpose is to assess the relative importance that different types of students enrolled in an introductory accounting class place on items that frequently appear within a course syllabus. Faculty members may use the findings of this study to reassess their syllabi and

perhaps include, emphasize, or provide more complete explanations of those items that are of the greatest concern to their students.

The results of the study reveal the amount of importance that students assign to different syllabus components varies greatly. Furthermore, the study shows that different types of students assign different levels of importance to syllabus components. Given that the three highest-ranking items in Table 2 deal with exams and grades, one can presume students would appreciate syllabi that fully explain and highlight those items. A secondary area of importance that emerges from the data is that an instructor's personal information and office hours are very important to students. On the other hand, one may be surprised to find that students do not consider information on the academic dishonesty policy, the name of their textbook(s), or the required prerequisites as important as holidays observed or the times and location of class meetings.

This study extends previous research on syllabus components because no other study has been conducted on syllabus components that used a sample composed mainly of students from several business disciplines enrolled in an accounting principles course. The only study conducted in a business field tested the recall of syllabus elements and by upper-level marketing students. Furthermore, this study extends prior research by investigating different responses by students to syllabus components by the factors of gender, years of college experience, grade point average, and age. The study's results suggest that females place more importance on the communication of syllabus information. Also, females desire information on the instructor more so than males. The results indicate the number of years that a student has been enrolled in a university also affect their perceptions of the syllabus. Specifically, students in their fourth year of college assign less importance to information on obtaining class materials and drop/withdrawal dates than freshmen. In addition, the fourth-year student places less importance on other syllabus components such as: the academic dishonesty policy, the required course prerequisites, the available support services, and the late assignment policy. The data analysis reveals that the GPA of a student may affect how much the student desires certain information in a course syllabus. Students with a low GPA are more interested in ascertaining the drop/withdrawal dates and the availability of support services than are students with a high GPA. Conversely, students with a high GPA rate information on grading procedures and policies as more important than students with a low GPA. These results may have implications for instructors who teach honors classes or remedial classes to "at-risk" students. Finally, some differences exist between traditional and nontraditional age students. The results suggest that students of traditional college age tend to focus more on grade and curriculum issues than nontraditional students, but the older students rated items dealing with the content of the course significantly higher than the younger students.

However, this study does not specifically address how an instructor should incorporate these findings into their syllabus. Becker and Calhoun (1999) suggest alternative strategies may be used to communicate syllabus information. An instructor who wishes to satisfy student interests can use the results from this study to place the highest-rated components from their appropriate student

groups on the first page of the syllabus or to give the information a prominent display using word processing features (e.g., boldface type, different font sizes, etc.). An alternative strategy is to use the results to determine where student interest is lower, but the instructor believes the information is highly important. Then the instructor attempts to overcome the lack of interest by making those syllabus items more prominent. A variant of this approach would be to create special handouts of the items the instructor considers the most important, or conversely, if the instructor feels their syllabus creates information overload, to eliminate unnecessary information and to use separate handouts for topics of lesser importance.

A limitation of this study is survey response bias, which is inherent in all survey research. However, the large sample size should overcome most objections to this limitation. Furthermore, the study's institutional response rate is 62 percent, as 31 of 50 schools agreed to participate in this study. Further research might look for other factors that influence syllabi components. For example, how much influence do accreditation agencies exert upon the syllabus? A longitudinal study investigating changes in syllabi components over time may be of interest to educators and administrators. Finally, a study comparing faculty ratings to students' ratings on the importance of particular syllabi items could lead to further insights that improve communication and course administration.

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RETHINKING FACULTY ROLE IN A KNOWLEDGE AGE

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ABSTRACT

While the relationship and the relative importance between the primary faculty tasks of teaching and research have been debated and empirically examined, the fundamental faculty expectations at most universities remains unchanged. The shift to a knowledge age and the need for knowledge workers along with an emerging paradigm shift towards learning begs that the traditional faculty role be reexamined. The need for faculty to disseminate information has been replaced by the need for learners to know how to use and apply information.

In this article, we apply value chain analysis to determine where the focus of faculty work is located and to identify how faculty can best create leverage among their activities along the chain. This analysis yields a shift in faculty focus “downstream” in the value chain, where more is expected of faculty in the areas of course design and student learning and assessment. In fact, the article points out several trends that clearly indicate that this shift downstream has taken place. Based on this value chain analysis, the authors draw conclusions on what changes should be considered regarding faculty roles.

INTRODUCTION

Scholars have attempted to determine what, if any, relationship exists between research and teaching (e.g., Hattie and Marsh, 1996; Rowland, 1996; Marsh and Hattie, 2002). That is, do the skills required for effective teaching and effective scholarship complement one another so that one can be competent or expert in both? Correlation studies have at best found no relation—in some cases it has been found that there is a negative relation (e.g., Hattie and Marsh, 1996). During this time, our understanding of knowledge, an epistemological question, and our advances in learning theory have widened the gap between actual teaching practice and espoused learning designs in college and university classrooms. The faculty role, working on a well-worn model of performing both research and teaching, is increasingly under stress to improve both. As such, it begs the question of whether teaching and scholarship are truly complementary skills and processes; that is, can faculty build leverage by spending time in one endeavor to inform and help the other?

While there is a need to continue to examine the empirical basis for the assumed synergy between research and teaching, it is time for University administrations to act on the paradigm shift that is often attributed to the knowledge age. Driven by the simultaneous breakthroughs in technology and learning theory, the knowledge age has created an environment of constant change and changed the value propositions of knowledge itself. Other industries such as newspapers have had to change their business models based on this shift. Many sober educators, based on these external trends, have called for radical change—including change to traditional faculty roles—to take place in the field of higher education as a whole (e.g., Barnett, 1992; Guskin, 1994b).

In fact, one of the primary challenges facing Universities today is that they must become more efficient in the use of their resources. With faculty being the primary resource of universities, the question must be addressed as to how to use these resources most efficiently. Does the traditional model that calls for nearly equal amounts of time spent between research and teaching (with relatively smaller responsibilities for service and administration) allow for the efficiencies necessary for the modern University? Are there other ways of conceiving of the faculty role to make more effective and efficient use of this essential, but costly resource? This article will use the conceptual model of value chains to analyze the faculty role; specifically, it will propose that based on the leverage points for faculty work, many universities should consider differential faculty roles to create efficiencies *and* to become more effective in delivering value in a knowledge age.

THE KNOWLEDGE AGE AND KNOWLEDGE WORKERS

As the structure and organization of business changes to reflect a global world, the need for competent learners has grown. International business and political commentator Thomas Friedman (2000) posits knowledge has taken on a different character and its value within organizations must be treated differently. Consider the National Security Agency (NSA). During the Cold War, information was disseminated on a “need to know” basis only. This top-down “knowledge management” system is inadequate to today’s competitive challenges and has been modified to reflect a “need to share” policy. Command and control no longer works as organizations must depend on the ability of people throughout the organization to make decisions on vast and often competing knowledge sources. Information is only important to the degree that it can be interpreted and transformed into meaningful knowledge. As Drucker (2001) predicted many years ago, there is now a crying need for knowledge workers, people who can apply, synthesize, and evaluate information.

Knowledge workers tend to be more generalist than specialist. Friedman (2000) makes comparisons between journalists and academics, “There is a deeply ingrained tendency to think in terms of highly segmented, narrow areas of expertise, which ignores the fact that the real world is not divided up into such neat little beats and that the boundaries between domestic, international, political and technological affairs are all collapsing.” In a global world, where information is nearly

transparent, it is necessary to *arbitrage* several dimensions (or areas of knowledge) in order to be able to make meaning. That is, it is not the knowing of any single piece or perspective, but knowing the “interaction of all of them together” that makes insight and application possible.

The metaphor of arbitrage is an apt one; a market term referring to the simultaneous buying and selling of the same thing in different markets. Commodities traders engage in arbitrage when they take advantage of different prices of the same commodity in different markets (leveraging their knowledge by buying at the cheaper price in Chicago, for example, and selling at the higher price in New York.). Arbitrage requires a wide net of informants or information sources and an ability to synthesize or exploit this information or knowledge. Jack Stack (2007) observed entrepreneur Vikas Goel applying arbitrage to create a successful international business. Goel is the CEO of a Singapore-based company selling computer-based products. He has been able to compete in hypercompetitive markets because of his ability to “arbitrage” functions. For example, he is able to finance his operations through vendors (at about 1-2% cost) by offering insurance to those vendors. The key is that he can shop the world for the lowest rates—turns out that such insurance can be gotten cheaply in Ireland and Germany. Using his knowledge and ability to garner information widely, Goel has been able to make profits—on very slim gross margins—based on his ability to use information.

Not only has the nature of work changed, but so has the value of learning. Perhaps Silicon Valley is the best metaphor for this transformance. The Valley is a rich, transparent network of technology talent, a community of practice, if you will. The notion is that learning is done through collaboration and information is shared rather than hoarded. The rhetoric of the learning organization is considered an important way to create sustainable competitive advantage. High-level positions such as Chief Knowledge Officer are borne out of the need to capture what is already tacitly known within the organization so that it can be leveraged for productive use. Lew Platt, former CEO of Hewlett Packard once said “If HP knew what HP knows, we would be three times as profitable.”

Within academia, a “learning paradigm” was ushered in by the mid 1990s by Barr and Tagg (1995) who noted the importance of learning and what is now known about it. Guskin (1994a) stressed that new knowledge about how people learn coupled with the power of digital technology enabled a transformance of new methods for student learning. In theory, and almost overnight, the faculty role was transformed from one of teacher as disseminator of knowledge to that of facilitator of learning (e.g., Brew, 1999). There is now a rich body of literature in disparate fields such as biology, anthropology, and cognitive science that reveals the nature of learning as a more learner-driven transaction where the learner constructs knowledge (see Brown, Collins, and Duguid, 1989).

Finally, the impact of technology on the world outside has been swift and significant. The Internet and digital technology have created a “democratization of information” where now anyone with a relatively inexpensive computer can tap into a vast array of information sources. These technologies have disrupted many old-line businesses. One example is the newspaper business,

which is discussed further in the next section. Another example is encyclopedias, which commanded a nice market of families with children. That market for print volumes collapsed within a few years in the early 1990's because ordinary families could gain access to information through CD ROMs and the Internet—in effect the print volume no longer held an information advantage in its value to the customer. The linkage or value chain was deconstructed.

Evans and Wurster (1999) call this phenomenon deconstruction, where the integrated linkages between information and physical products are destroyed. Academia is not immune to the widespread information “leakage”; consider the announcement a few years back by MIT that they would digitize course notes for their entire curricula and make them available on the Internet—free. Information is ubiquitous, easier to access by consumers, citizens, and students. Value now resides in the products of knowledge use. Even in a liberal arts arena, knowledge for its own sake and in no particular context is insufficient to the needs of most learners who live in an information-rich world where access is no longer a problem but understanding is critical.

The needs of society are changing, and with the availability of new technologies (i.e., digital and learning), the call for academic units to restructure still resonates today. A value chain analysis provides one lens for showing how faculty work and how the dual research and teaching emphasis is at odds with the new value propositions most universities and colleges are being called to provide.

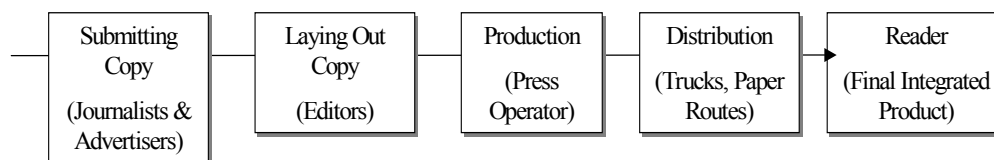
VALUE CHAINS

An analysis of most businesses can be done by examining the sets of internal activities and services needed to deliver value—called value chains. Many industries in the past delivered an integrated set of services, which allowed them to leverage their advantage of information sources and knowledge into products and services consumers desire. New technologies such as the Internet, however, have compromised these integrated value chains. Specifically, these businesses, relying on integrated sets of services, have been deconstructed so that pieces of the integrated product can be separated successfully. Deconstruction relates to the concept of the value chain and how technology can destroy or blow to bits the traditional linkages of the internal activities of the business.

Consider the newspaper business where the established value chain has become vulnerable to deconstruction. Its value chain involves journalists and advertisers submitting copy, editors laying it out, printing, and distribution (see figure 1). In essence, the newspaper brings readers to selected journalists and advertisers, with value created in the linkages that bind each of the boxes represented in figure 1. Traditionally, newspapers have been able to leverage their capability to organize (editors do this), produce, and distribute something readers cannot easily get otherwise. However, technology now makes it possible in many cases to unbundle the pieces of this integrated value chain. While newspapers will likely not go away because people like to read them, the business is not as integrated as more highly focused companies (e.g., eBay) can pick off parts of the chain. Also,

journalists are now more able to bypass the traditional distribution channel of the newspaper to reach consumers directly through media such as blogs or other Web sites. Furthermore, there is a chance through telecommunication networks and digital technology that individual customers can get customized information based on their individual wants and needs (e.g., *Wall Street Journal Interactive*).

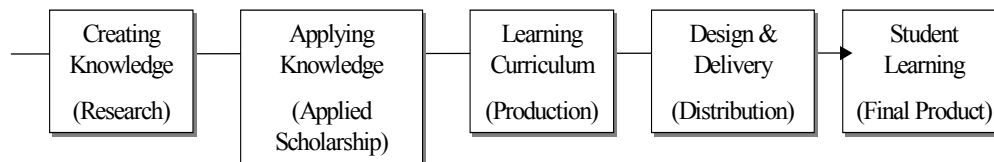
Figure 1. The Newspaper Value Chain



Embedded in this value chain are services like classifieds, where the newspaper has enjoyed an information advantage of being able to bring sellers in touch with buyers. Due to technology this competitive advantage has been diminished, with Internet auctions and other meeting places able to bring much larger or more specialized pools of sellers together. No longer does the newspaper hold as clear an advantage of information or knowledge from the consumer/reader. In fact, newspapers find themselves downsizing and consolidating in the midst of new realities of their business—they were quasi-businesses that operated as public trust institutions. Now many newspapers are searching new market opportunities as a way to survive. In short, the old value proposition of the newspaper has been changed and those in the business must change in response.

Academic institutions have worked off a similar value chain. Specifically, the university brings knowledge from faculty to students leveraging the linkages of knowledge creating activity with distribution of the final product (see figure 2).

Figure 2. Academic Value Chain

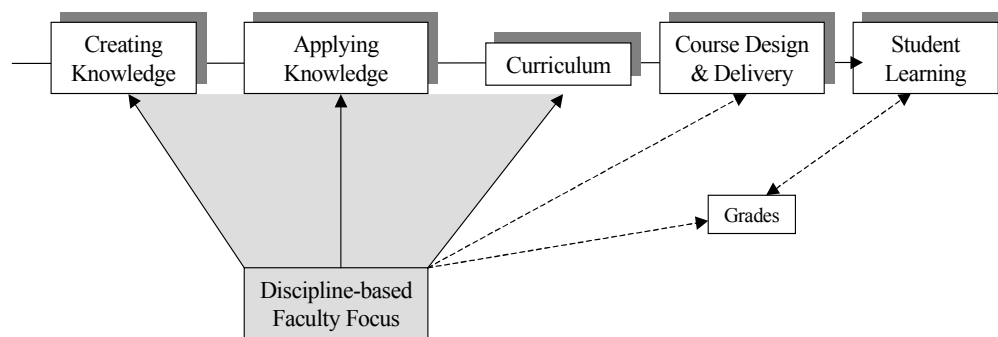


The value proposition for academic institutions, represented by the linkages of the value components, may be compromised by the ability of focused entities to take a piece of the value chain. For example, online programs offered by institutions such as Phoenix University have become successful, at least in terms of enrollments, by focusing on the distribution (design and

delivery) slice of the chain to grant their degrees. Their value proposition is one of convenience to mostly non-traditional students. Online programs may not *yet* significantly threaten traditional student populations that value the college experience, but it is evident that the stable, traditional, integrated educational product is challenged by both competitive forces and external pressures.

Before the explosion of technology helped usher in a global, knowledge-based economy and organizations of all types began finding competitive advantage in the use of knowledge rather than simply possession of information no one else had, academia had a straightforward approach to the linkages in the value chain. Research and scholarship by professors had a direct impact on the information they would present in their lectures. That is, the knowledge creation function (the research role) provided some leverage for the teaching function. This relationship is captured in figure 3 (with the shaded area representing the area of leverage for faculty work).

Figure 3. Traditional Faculty Focus in Academic Value Chain



For most universities and even colleges, the faculty focus was *upstream* or on the left side of the value chain (shaded area). While teaching courses was still prominent, the teaching was driven by the search for knowledge—almost always within the bounds of a discipline—through research and developing curriculum. Therefore, faculty were able to create some leverage among their activities by focusing upstream, allowing them to spend less of their valuable time on course design and delivery. Course load was measured not only by number of credit hours but also by number of preps. Schools had ways to adjust to variations in emphasis: adjust teaching load and/or use teaching assistants. Liberal Arts colleges, where research-based scholarship tended to be less, teaching loads could be as much as 4-6 courses a semester. For research universities, the teaching role for many faculty continues to be supported by use of teaching assistants along with reduced loads.

The point is not that colleges or faculty did not take their teaching role seriously—most did—only that the creative focus of their work was in the discipline, usually involving some sort of

research, inquiry, and/or study. The teaching function of preparing lecture notes, making tests, and meeting with students was more a byproduct of their discipline work. Compared to scholarship, teaching was mostly a “low technology” activity, which took time and was important, but was a byproduct of the discipline-based scholarship. Thus, faculty were able to leverage off their discipline-based work to meet the needs of their teaching load. Support was provided to help free up time for research (i.e., teaching assistants) or give direct help in research activity. The faculty member would be in charge of the content and curriculum, leaving assistants the job of administering course duties such as tests and study sessions.

This framework for university faculty work was mostly consistent with the value proposition. Universities and colleges were aligned with this value as the salient performance metrics and status given to faculty revolved around their discipline-based scholarship and teaching. As centers for discipline-based knowledge they fulfilled their mission to society by providing valuable research in a number of fields (e.g., science in the aftermath of events like Sputnik or AIDS). It also provided a sufficient education for scores of post-secondary adults and conferred degrees that held currency with employers. Furthermore, students and families valued the college experience as a transition to adulthood and preparation for a number of careers. Like newspapers and encyclopedias, the environment has changed so as to upset the value proposition, not to mention the traditional role of faculty.

SHIFT IN FACULTY WORK

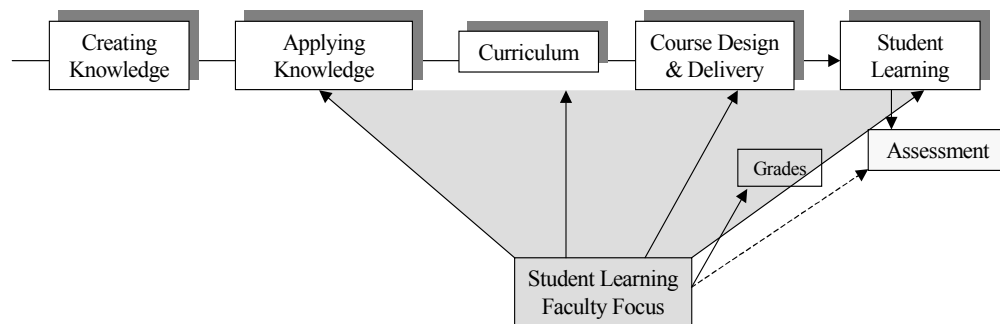
While literature shows that many faculty still value and prefer to work in the traditional discipline-focused role (e.g., Massy and Wilger, 1995), it is evident that they are being pulled downstream on the value chain. Now faculty often must think more about student learning as they become involved in activities like program assessment. They are being challenged with their teaching as never before—the emergence of teaching and learning centers is evidence of this. One study by Milem, Berger, and Dey (2000) showed that over a 20-year span (comparing 1972 perceptions to those in 1992) faculty in the most recent group reported spending more time doing both research *and* teaching. Although the study authors interpreted this finding as evidence that work spent on research did not take away time on teaching, it could be interpreted that the two activities have become more bifurcated, with faculty having to work more at each since the additional teaching activities (such as assessment and learning designs) are not tied to research. Furthermore, these data are indication that faculty are being forced to spend more time in their teaching role due to pressures to address student learning as required by accrediting bodies, funding agencies, and the schools themselves.

Part of the challenge is that effective learning is no longer assumed to be the result of delivering content to students as faculty are more and more being challenged to produce and verify student learning. Over the last couple of decades, faculty have been introduced to pedagogical ideas

like learning objectives, cooperative learning, and authentic assessment and to instructional tools like PowerPoint®, computer simulations, and the Internet. Fulfilling the teaching role requires so much more, today. Roy Pea (2000) acknowledged this by defining the new faculty role as moving “from a delivery agent of canonical curriculum to a teacher as learner who needs to model processes of inquiry in a domain of study and to guide the development of students’ abilities to participate in forms of meaningful knowledge use.”

As noted earlier there are pressures both in terms of what we know about learning and the needs of a global economy that are dictating the shifting value proposition. If we believe Pea’s definition and take heed of the changing external environment, then it is easy to see how faculty at many institutions are being pulled away from their familiar, if not preferred, discipline-based focus. Figure 4 illustrates how a new focus sets up on the academic value chain.

Figure 4. Downstream Faculty Focus Along Academic Value Chain



There is plenty of evidence that faculty work has shifted downstream along the value chain. Much of the development efforts on colleges over the last 10-15 years have revolved around the teaching and learning function. Teaching centers have become staples and faculty developers have established themselves as part of the academic support system. Within the disciplines themselves, there are now many more discipline-specific journals focused on pedagogy. The notion of scholarship and teaching has gained some acceptance, especially since the work of Ernest Boyer (1990), who sought to place teaching research on the same level as basic and applied. In fact, the Carnegie Foundation through the AAHE has involved dozens of institutions in initiatives regarding teaching and learning scholarship. Furthermore, with more technology tools now available for instructional applications, universities are now trying to figure out how to support faculty in using these new tools as a way to improve student learning. However, faculty work is still largely structured as it was 25 years ago. More importantly, many faculty have difficulty thinking about their work as taking place in a learning paradigm.

There are several things to note from the emerging faculty focus. First, it is broader, requiring faculty to be more than discipline experts. The shifting faculty focus does not eliminate scholarship, but it does change it. Remember Friedman's assertion that the really insightful people today are those that can arbitrage, rather than those narrowly focused. In fact, faculty might practice collaboration across disciplines and functions, requiring them to read, study, and apply knowledge in a way that permits them to fulfill interdepartmental learning goals. In contrasting the nature of academic structures that have a learning focus vs. an instructional one, Barr and Tagg (1995) note that a learning focus places importance on cross-discipline or departmental collaboration on program-wide outcomes as opposed to a strict structure of independent disciplines. The mindset of faculty focused downstream on the chain is one that recognizes themselves as teaching students, not just teaching a subject.

Secondly, the creative focus is on creating learning environments and student learning, thus requiring of faculty new ways to think and practice the teaching craft. Here is where teaching assistants—largely a tool to help manage faculty load, not to develop pedagogical skill—have been supplanted by instructional designers and faculty developers. This downstream focus does not preclude scholarship; it only means that basic, knowledge-creating research activity (vs. synthesizing and application scholarship) is largely unrelated to much of the downstream activity required of a student learning focus, especially at the undergraduate level. That is, the creative efforts required for basic research in the discipline have little connection to building learning environments and addressing issues of student learning—and vice versa. While strong discipline expertise of the facilitator is still necessary for these learning environments, it is not sufficient to creating the rich educational contexts described by Guskin (1994b) and consistent with the learning paradigm. Barr and Tagg (1995) assert that in a learning-centered approach, “faculty are the primary designers” of learning methods and environments. The movement towards the scholarship of teaching and learning is recognition of the need to better leverage scholarship with downstream teaching focus. Those that are focused downstream are most likely to spend their creative energy exploring life in the classroom and engaged in questions of how their students learn, not solely focused on “prepping” for what to teach.

Finally, the relation of faculty serving in such a role relative to the institution is more integrated. For example, downstream faculty tend to be more attuned to the need of assessment at the program level. Accrediting bodies and new accountability structures have made program assessment mandatory. Downstream faculty, however, tend to understand why assessment as a process is important beyond simply satisfying demands. It is akin to how accountants characterize budgets or managers might view strategic plans—the plan is nothing, planning is everything. For those faculty positioned downstream, program and course assessment is about meaningful process, not simply satisfying external demands. In a downstream focus, community is a wide net. Those downstream see community of practices as vital, where there is something to be learned outside the discipline and outside academia.

The shift of faculty focus has been the result of a fundamental shift of societal needs in that direction. That is, the past needs for knowledge creation (i.e., basic and applied research) have subtly shifted to needs for educated students able to learn. An analogy might be drawn with the pharmaceutical industry where there are three distinct parts to the value chain: research, testing, and delivery. Mark Levin of Millennium Pharmaceuticals reported that his company had migrated downstream towards the delivery end or customer focused part of the value chain because this has the most value right now (Champion, 2001). While research is still important, Levin noted that value in the industry had shifted since the Human Genome Project was released (“We’re awash in basic information about genes.”); basic knowledge has become a commodity with firms now working at the customer side of the chain in order to bring added value. To compare, perhaps fewer resources (e.g., faculty time) are needed to pursue academic research and relatively more resources spent on supporting faculty in creating positive learning experiences and engaging in scholarly inquiry related to those efforts. For many universities, value must be found on the customer-side of the chain.

ALTERNATIVES MOVING FORWARD

The point is not that universities are likely to be put out of business, only that they must identify clearly the value they mean to offer. Nor is it our point to diminish the discipline-based faculty focus—in many contexts, this type of faculty role still makes sense such as in research universities with post graduate programs that have a significant accountability to grants specifically earmarked for knowledge purposes located upstream on the value chain.

We do suggest, however, that colleges and universities should look at their value chain closely to help them determine the work faculty must do. Many mid-tier institutions (comprehensive universities and liberal arts colleges) and those serving heterogeneous populations should be identifying their primary value proposition as being downstream—and establish themselves as institutions truly devoted to student learning. If faculty work remains strictly discipline-focused, then efforts to meet twenty-first century societal and students’ needs will fall short and could diminish the value of the degree. Already, businesses today spend four times as much on non-college training and education programs than on degree reimbursements. The ratio 25 years ago was one to one.

If the institution is large enough that it needs to conduct significant research *and* promote student learning, especially in the undergraduate area, then it must learn ways for more than one type of faculty to exist. That is, if there is no leverage between the research and student learning ends of the chain, it is folly to try to require all faculty members to do both well. Instead, differential faculty roles make more sense—trying to exploit the variable talents of faculty and staff to provide value at all parts of the value chain. As Barr and Tagg (1995) assert, fostering and empowering student learning is a “challenging and complex” endeavor; faculty with a true downstream focus are

more likely to be able to devote the time to make these learning opportunities, in line with new learning technologies, a reality.

Paradoxically, universities that view themselves as primarily providing value downstream often exclude candidates for faculty positions if they do not have a Ph.D. and do not have a strong publication record. This leads to an inbreeding of a discipline-first mindset of people that value the professoriate and discipline-based scholarship above other value components. Although the Ph.D. is a worthy credential, the academic training for it is not likely to have prepared the instructor for excelling on the student learning end of the value chain. Many faculty who have succeeded at focusing downstream have done it after earning their Ph.D., not because of it—or never earned a Ph.D. at all. In some ways, the practitioner, coming from outside academia, is better positioned to meet the demands of the downstream faculty focus.

Finally, even if the administration identifies, aligns, and fully supports faculty roles that allow for the leverage depicted in a student learning focus, it will not be easy to get many faculty to adopt the downstream role. The professoriate has evolved to a point where faculty are as loyal to their profession (and discipline) as they are to the institution for which they work. Many faculty implicitly value discipline-based scholarship and publication as an important part of their profession as it is more easily measured and typically rewarded more. Furthermore, mobility is often determined by a resume that includes a healthy publication record. Accrediting bodies can be a hindrance also as they define academically qualified to the degree faculty stay disciplined-based as demonstrated by their research in that discipline.

Although corporate managers at Encyclopedia Britannica were slow in seeing CD ROM encyclopedia versions as viable competitors to their expensive print volumes, when they did try to adjust, they were thwarted by their own sales force, who liked selling door-to-door and receiving \$500 commissions for sales. Under the old value proposition, value was in the dedicated sales force, which was able to take advantage of their information advantage on consumers. Similarly, the main distribution channel for academic units, faculty, will need to change from a comfortable and often preferred position of being content experts and scholars of discipline knowledge to learning facilitators with content expertise. As Guskin (1994b) noted, while change must be instituted from the top, it is not likely that it can occur through decree or coercion—faculty will have to decide to override these professional constraints. Understandably, many faculty will not be easily persuaded without commitment by the University.

To move faculty to a downstream focus and to help them succeed in developing the skills of facilitation requires new support structures inside the university. Because the Ph.D. does not prepare faculty for a downstream role, there must be long-term development activities helping move faculty in this path. As noted earlier, most institutions have established teaching centers to support faculty teaching—these should be staffed by those imbued with a downstream focus and the skills to foster substantive change. Moreover, these teaching center staff should be charged with developing faculty holistically not just changing tools in their toolkit. That is, workshops on

techniques (e.g., cooperative learning skills) often get applied in ways that don't really change the way students receive instruction. With a development focus, the interventions are long-term and targeted at helping faculty engage in their own inquiry about how they can facilitate meaningful learning for their students. Only to the extent communities of practice can be established, driven by strong teaching centers and strong faculty leaders, can faculty begin realizing the promise of working at the customer end of the value chain.

In addition, educational technology must play a role in helping faculty address student learning. Technology has the potential to transform learning environments, but at a tremendous cost and commitment by faculty who must design them. With the technology bundle getting bigger and much more sophisticated, the choice to learn new technologies is a tougher one to make. Yet, it is increasingly clear that faculty will have to not only use technology, but design activities that require students to use it as well. Educational technologists, with the ability to provide instructional design, are assets universities likely need to invest in and are already doing. Some universities, as a way to bridge the gap of a disciplined-based skill set of its faculty, are developing models where educational technologists are working with faculty content experts to design online courses. Such collaborations should be considered as important for on-site programs as well. The downstream faculty focus requires supports like instructional developers and educational technologists who believe in and understand learning facilitation roles.

Finally, institutions will need to become more creative in how they acknowledge faculty work. Rank and tenure is typically wedded to the three categories of scholarship, teaching, and service. Complaints about the inadequacy of rank and tenure systems have tended to become tiresome from all sides, yet the system is not typically set up to effectively acknowledge teaching performance, let alone to judge the impact any one faculty member has on student learning. For those institutions that truly adopt a student learning focus, evaluation of individual teaching becomes less relevant because student learning is the result of a combined effort of many. By definition the learning paradigm shifts focus from instructional goals to learning goals.

And faculty may need to follow the path of journalists like Friedman, who understand the holistic nature of understanding in a knowledge age. Friedman (2000) asserts,

If you want to be an effective reporter or columnist trying to make sense of global affairs today, you have to be able to do something [that allows you to synthesize many different perspectives]. Because today, more than ever, the traditional boundaries between politics, culture, technology, finance, national security and ecology are disappearing. You often cannot explain one without referring to the others, and you cannot explain the whole without reference to them all. Therefore, to be an effective foreign affairs columnist or reporter, you have to learn how to arbitrage information from these disparate perspectives and then weave it all together to produce a picture of the world that you would never have if you looked at it from only one perspective. That is the essence of information arbitrage. In a world where we are all so much more interconnected, the ability to read the connections, and to connect the dots, is the real value added provided by a journalist. If you don't see the connections, you won't see the world.

Faculty, especially those working with a downstream focus, and the institutions that employ them have a similar challenge to redefine their role.

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TRANSFORMATIONAL LEADERSHIP AS AN EFFECTIVE CLASSROOM LEADERSHIP MODEL FOR BUSINESS ETHICS INSTRUCTION

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ABSTRACT

Charges have gone out from business and academia to our university business programs to examine ethics curriculum in order to produce more ethical employees (Soule, 2005). Transformational leadership offers promise as a model for business ethics instruction because it is "ultimately a moral exercise in that it serves to raise the standards of human conduct" (Burns, 1978, p. 20) which is exactly what is needed to produce ethical business graduates.

As Kouzes and Posner (2002, p. 31) point out, "To effectively model the behavior they expect of others, leaders must first be clear about their guiding principles. ... leaders are supposed to stand up for their beliefs, so they'd better have some beliefs to stand up for." This paper uses a survey of the literature and a personal observation approach to explore how the transformational leadership model serves as an effective classroom leadership model for instructors in business ethics in theory and in practice.

THE CALL FOR MORE ETHICAL BUSINESS GRADUATES

It has been several years since a number of business scandals rocked the American business climate. Court verdicts still loom for some alleged culprits. Problems can come from anywhere whether family, government, the workplace or society at large (*Ethics Education in Business Schools*, 2004, p. 9). Many in the business and business ethics communities are realizing that real changes have to take place in values based ethics, beyond the compliance recommendations of Sarbanes-Oxley. At stake is our free market system. The *Ethics Education in Business Schools* (2004, p. 7) report concurs: "At issue is no less than the future of the free market system, which depends on honest and open enterprise to survive and flourish." Aronson (2001, p. 245) highlights the need for corporate leaders to maintain long-term success of the firm and ultimately capitalism and democracy by demonstrating ethical behavior which he says "may essentially be described as behavior which is good as opposed to bad or right as opposed to wrong." Mendonca (2001, p. 268) adds that "Organizational effectiveness on an enduring basis is greatly enhanced by the self-transformation of the leader and of the followers that is inherent in ethical leadership." The need for more ethical leadership in business is clear. Something needs to be done to encourage ethics in students.

Business leaders and business ethics leaders in the United States and elsewhere (Milton-Smith, 1995) are collaborating to discover solutions. Both are looking to business school instruction for help. There is a realization that business schools aren't the only ones working to make the world a better place but they can provide guidance to students to do the right thing and also be successful (*Ethics Education in Business Schools*, 2004). There is a sturdy resolve to find answers no matter how much effort it takes.

Even though ethics instruction has been part of business schools for years, there is a concern that business schools have not been taking their ethical instruction role seriously. An alumnus of Harvard Business School provides an enlightening example. It was said that Jeff Skilling liked "guys with spikes" (McClellan & Elkind, 2003). He appeared to resonate with a Darwinian *survival of the fittest* approach to business ethics with raw cash tossed like dripping red meat as the *stimulus* and cutthroat, take no prisoner business tactics as the faithful *response*. Ironically, this *enlightened* and *practical* view of business ethics culminated in a rumination by Skilling during the last days of Enron: *the traders have taken over* (McClellan & Elkind, 2003), one of the key groups that Skilling controlled.

Jeff Skilling graduated from Harvard Business School. Not too many years after Skilling graduated (in the late 1980s), Etzioni (2002) relates his experience observing Harvard business faculty debating about what to do with a large grant to develop business ethics instruction for their MBA students. In the debate on how the monies should be used most effectively, several professors enjoined that business ethics instruction at the MBA level was useless. Students had already formed their views, so there was no need to interfere. One professor in particular argued that everything is relative anyway so there can be no positive influence.

The Dean of the University of Houston-Downtown College of Business penned an article where he asserted that he saw no problem accepting bribes in international business settings because "everyone is doing it" anyway and you have to "do what you have to do" to compete (Bates, 2006). In fact he basically chides those who don't take bribes as reflecting "our cultural arrogance as we try to impose our values, our business practices and our way of doing things upon other countries. ... Imperialism of values ... is treacherous because it is indirect, subtle, subtle, cumulative and destroys the sovereignty of countries." Obviously there is no antithesis with this gentleman. Insisting on honesty can be *unethical* depending on what part of the world you live in.

Even in Australia concerns about audit fraud in the 1980s have caused business schools there to come "under increasing pressure to address the issue of business ethics and to 'develop and educate' a new generation of more ethical business people" in spite of the fact that there was a realization that they had previously provided little leadership in the area of business ethics instruction (Milton-Smith, 1995, p. 684).

As the AACSB puts it (*Ethics Education in Business Schools*, 2004, p. 9), "While a number of business schools have developed innovative strategies for engaging students in the challenge of providing ethical leadership, the assumption of many faculty and program leaders that the majority

of students are being adequately prepared in this domain is highly questionable." So there has never been a more opportune time for business ethics instructors to rise to the occasion and make positive differences for business ethics at the individual and corporate levels. Will you be one of those instructors?

TRANSFORMATIONAL LEADERSHIP

There has been a strong call for a different approach, to make ethics work (*Ethics Education in Business Schools*, 2004) and to *teach students well to do well*. Business ethics instructors serve as leaders for their students. Since they are leaders in the classroom, what leadership model will be used? What will be that leadership approach that will help students *do well*? In this section, we will review the basic tenets of transformational leadership, affirm it as a viable moral leadership approach, show how this approach can be useful in any organizational situation, and explore how it is an effective approach for key leaders as they influence organizations for good.

People have been studying leadership for thousands of years including principles associated with transformational leadership (Humphreys & Einstein, 2003, p. 87). Recently more information has emerged. Today, the transformational leadership approach has promise because of its inherent focus on morality. Ciulla (1995) notes that good leadership refers not only to competence but also to ethics. Hood (2003) ties leadership to values. She found that "the ethical orientation of the CEO is a critical issue to consider in understanding ethical practices in organizations" (Hood, 2003, p. 269). She found that as the key leaders (CEOs) in organizations reflect social (including forgiveness, helpfulness, politeness and affection) and personal morals (including honesty, self-respect, courage and broad-mindedness), based on Rokeach (1973) topology, that they tend to support formal statements of ethics and tend to strive to produce more ethical organizations. Also she found that transformational leaders (as determined by the Multifactor Leadership Questionnaire by Bass and Avolio, 1995) tend to strive more for ethical conduct and ethical organizations. Mendonca (2001) concurs that effective leadership necessitates that leader's behavior and influence techniques reflect ethical and moral values.

In recent years, transformational leadership has received as much or more research attention as any other leadership paradigm (Sivanathan & Fekken, 2002). Avolio and Bass (2004) highlight four basic components of transformational leadership:

1. Idealized influence (followers idealize and emulate the behaviors of their trusted leader)
2. inspirational motivation (followers are motivated by attainment of a common goal)
3. intellectual stimulation (followers are encouraged to break away from old ways of thinking and are encouraged to question their values, beliefs and expectations)

4. individualized consideration (followers' needs are addressed both individually and equitably).

Transformational leadership occurs when, in their interactions, people "raise one another to higher levels of motivation and morality. Transforming leadership ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both the leader and the led, and thus it has a transforming effect on both" (Burns, 1978, p. 20). Leaders transform and motivate followers by: (Burns, 1978; Bass, 1985) (1) making them more aware of the importance of task outcomes, (2) inducing them to transcend their own self-interest for the sake of the organization or team, and (3) inducing their higher-order needs.

According to Bass (1996; 1997), transformational leadership is considered effective in any situation or culture and does not specify any conditions under which authentic transformational leadership is irrelevant or ineffective. Krishnan (2002, p. 23) shows that transformational leaders will try to influence the values of his or her followers: "Transformational leadership involves the uncovering of contradictions among values and between values and practice, and the realigning of values in followers. Congruence between the value hierarchies of leaders and followers would produce a powerful potential for the exercise of purposeful leadership."

It seems that the values of key leaders play an important role in the health and effectiveness of organizations. This bodes well for the use of transformational leadership in the classroom, with its high level focus on the values of leaders, as a leadership model for key leaders in organizations. Hood (2003, p. 264) suggests that top managers, particularly their ethical traits, play a key role shaping ethical behavior with individuals in the organization. Van der Colff (2004, p. 503) suggests that transformational leadership is one of the competencies required for leaders for the 21st century. Dionne, Yammarino, Atwater, and Spangler (2004) looked at the link between transformational leadership and team performance. Krishnan (2002) highlights that several studies have demonstrated empirically how values affect personal and organizational effectiveness. Chen (2004, p. 432) concluded that leaders can influence subordinates through interactions and culture in Taiwan. "Organization culture has a significant impact on how employees view their organizational responsibilities and their commitment. Leaders affect their subordinates both directly through their interactions and also through the organization's culture." Bass (1999) mentions the "augmentation effect" which is the positive impact of transformational leaders. "Leaders are responsible for the organization's moral climate ... Through the use of morally appropriate influence strategies and tactics that are motivated and guided by moral intent, leaders can facilitate the moral development of followers" (Mendonca, 2001, p. 268). Bass (1998) emphasizes that leaders (past and present) impact the organizational culture with their values which flow from their beliefs.

So transformational leadership offers promise for impacting organizations. But it has to be more than the leader's beliefs. The leader has to also intentionally take action to bring ethics to bear on followers. "Ethical behavior on the part of the leader would appear to be a necessary condition for the establishment of an ethical organization, but this alone is not sufficient. Ethical leadership

is required. CEOs are obliged to set a moral example for organizational members and to demarcate the constant striving for increased profits from those activities which may be detrimental to the values of society in general" (Aronson, 2001, p. 245). What can business ethics instructors do to have that impact?

BUSINESS ETHICS INSTRUCTORS AS TRANSFORMATIONAL LEADERS

Let's continue our examination of transformational leadership and see how it might relate to teachers as leaders in business ethics classes. We will look at research on the issue and consider personal observations of a business ethics instructor.

Research

Pounder (2003, p. 8) acknowledges that "there is a paucity of research examining the applicability of the transformational leadership notions to an instructional setting." But he goes on to emphasize that there really is a natural relationship between transformational leadership and instruction: "Thus, communication of one's teaching philosophy falls squarely within the inspirational motivational dimension of transformational leadership and influencing students by example is central to the integrity dimension" (Pounder, 2003, p. 10). Pounder also sees teaching as shaping the climate for excellence through inspirational motivation, integrity, and getting students to stretch their goals, which are aspects of transformational leadership. Motivating students through fairness, feedback and encouragement is likely to be a product of employing impression management and individual consideration with the deep sense of values and commitment generated through the use of inspirational motivation and integrity. Amitay, Popper, and Lipshitz (2005, p. 57) show a link between transformational leadership style and learning as looked at through the concept of "organization learning mechanisms" (OLM). "This refers to institutionalized organizational arrangements in which individuals reflect on behalf of the organization by collecting, analyzing, storing, retrieving, and dissemination information and knowledge that is relevant to their own performance and to the performance of the organization. ... where members of the organization interact for the purpose of learning" (Amitay, Popper & Lipshitz, 2005, p. 58).

Qualities of CEOs that are important to transformational leadership also can pertain to teachers having a positive impact on students. So, even though there is not much research on the instructor in business ethics learning, there is a fair amount of research that indicates what makes a leader have a positive impact on subordinates in business, thus tying transformational leadership to subordinate effectiveness. Others concur. Belisle (2004, p. 3) alludes to transformational leadership when she encourages the teacher leader to act as a change agent when working with high school students, seeing teachers as leaders as the key to school reform. Hood (2003, p. 264) reiterates, "Ethical leadership is essentially transformational in nature. The preparation for ethical

leadership therefore involves the self-transformation of both the leader and of the followers. ... Undeniably, the leader is indeed the soul of the organization, whose beliefs, values, and behaviors influence and share, for better or worse, the organization's moral environment." The leadership style of the CEO thus serves to communicate and exhibit the values that lead to an ethical orientation in the organization. Kelloway, Barling and Helleur (2000) emphasize the need to inject transformational leadership principles into training. Leaders inspire followers but the leader's moral actions give creditability to the vision. Without moral actions, followers view the leader's vision with skepticism (Mendonca, 2001). Hood's study (2003, p. 263) "adds to the literature on developing and maintaining an ethical orientation by examining the underlying values and leadership style of the top manager and their effects on corporate ethical practices." Pounder (2003) summarizes several benefits of transformational leadership, particularly to learning including: gaining of confidence, coping with stress among teams, and enhanced individual commitment to the group or organization. Just as corporate leaders are critical for not only talking about ethics but making them work so that their behavior sets the tone for ethics; so professors in the classroom have the exact same responsibility, if not MORE so. If CEOs are shown to be critical to business ethics knowledge and practice, if educators say it is important, if leaders in business instruction advocate it, SURELY we must consider using the transformational leadership approach in our business ethics instruction.

Leadership suggests that you want to have a change in your learner. You want to influence them in such a way that they will be different. How do you that in a classroom? How do you evoke passion in learners without becoming overbearing or bias? The solution is to realize that everyone has a standard for ethics. The problem is that most people have not identified the basis for that standard. By passionately communicating your own standard as an instructor, as transformational leadership suggests, and encouraging students to identify their standards, learning can take place; ethical learning. This creates in the classroom what is found in business. You have to carry out business with different people. This means that you have to understand and appreciate those who have different standards. However, you also must be true to your own standards. A healthy classroom environment will encourage this dynamic.

In other words, you want to make your students into transformational leaders by demonstrating transformational leadership to them as you teach. This is how business ethics instruction is multiplied into having a broader impact in the business world. If, as Kouzes and Polsner (2002) suggests, that leaders cannot impact others until they have clearly articulated their own values, then one of the primary goals of business ethics instruction should be to have students figure out their foundation for ethics; or universal. Because this will provide the passion that will cause them to want to make a difference in the lives of others.

Personal Observations

Now let's examine some applications. I base the following observations on my six years of teaching business ethics and reading extensively on the topic. The purpose here is to try to identify elements that should be included in our business ethics instruction that reflect the transformational leadership approach and really do impact students to act more ethically in business.

What are the ramifications for the instructor for helping transform students? As a transformational leader delivering business ethics instruction, you must figure out your universal and be able to clearly articulate it. Krishnan (2002) makes an important distinction between an instrumental value: a belief concerning a desirable mode of conduct; and a terminal value: a belief concerning a desirable end-state. Our *end-state* is our worldview. It answers the question why we hold to certain standards and not others. As a transformational leader you should passionately embrace your worldview to the point that you would want to encourage others to adopt it. This is critical because the whole basis of transformational leader is to change others into something based on some standard of what is right and wrong. To avoid this step can prove confusing to students. In my on going reading in the area of business ethics, I was referred to a book on ethics from a religious perspective. The author began the book by lauding another author who inspired his writing, James Rachels. Wanting to go to the original source, I poured over Rachels' book. It is an excellent book, detailing the different views towards ethics. Yet I noticed a pattern in the book. He could not really say with conviction that anything was true, even the definition of the word *morality*: "It would be helpful, therefore, if we could begin with a simple, uncontroversial definition of what morality is. But that turns out to be impossible" (Rachels, 1986, p. 1). He goes through the entire book presenting excellent material about different views towards ethics. He even presents his own view at the end which he calls *Morality Without Hubris* (or MWH). Yet even after analyzing all views and presenting his own, he is left with: "MTW is a satisfactory moral theory. ... However ... it would be wise not to make too grandiose a claim for one's own view" (Rachels, 1986, p. 151). So there is no real Truth that Rachels can assert, so there is no transformational leadership.

Many who teach business ethics may be using the same tentative approach. We realize that we need to give a tip of the hat to universals; metaphysical foundations for what we believe, but we are not willing to take a stand on right and wrong. Our approach is to simply dump different view unceremoniously in front of students like a doctor performing an autopsy. The understandable affect is sobering. Does this inspire ethical behavior in students? I think not. Krishnan (2002, p. 30) found in his study that followers "emulate only the terminal value systems of transformational leaders, but not their instrumental value systems ... One of the managerial implications of this study is that one should pay attention to terminal values of subordinates if a change is contemplated." In other words, followers pick up on the worldview of the leader and the *reason* for ethical actions, not just the individual choices themselves.

In order to have a truly transformational impact on students, our standard must include absolutes and antitheses. As Schaeffer (1968, p. 13) argues, standards hinge on our methodology, "the way we approach truth and knowing." To have truth, and therefore morals, your presuppositions must include absolutes and antithesis: if something is true, the opposite must be false. We don't like antithesis for two reasons; it can expose our own guilt. If some things are right and wrong then we can be wrong and we don't feel comfortable with that. Also, antithesis can lead to legalism. This is why in the Christian tradition there is so much emphasis on love. The goal is goodness, not harshness. Also, rules in themselves do not make people better. That happens in the heart.

I think the transformational leadership approach would argue something different. We owe it to our students. Transformational leaders clearly identify and articulate their own standards and where the standards come from. Then we can inspire students by encouraging them to think through their own standards and cite ourselves as examples. We also want to model transformational leadership in our class. We want to motivate students with ideas like this: "we want you to be great in business ethics so that you will have a positive impact on your work environment, no matter where you go." We need to inspire students with the notion that they can make a difference in business and warn them of difficulties. Aronson (2001, p. 248) highlights that ethics is basically the study of standards for determining good and bad behavior and that, "Various ethical theories exist because throughout the ages philosophers have adopted different perspectives regarding the criteria upon which ethical judgments should be based." Students need to think for themselves and determine which of these theories reflect Truth and which do not.

So, in teaching business ethics, there are two alternative. One is to present different views of business ethics and really not embrace any of them. This is not transformational and will not have an impact on students to act more ethically. Another alternative is to present different views of business ethics while embracing one particular view but not telling students about this preference. At best, this is an oversight, at worst, it is dishonest. Much of public discourse these days has lost all sense of reason and has shifted to the lowest basis for communication, the polemic. This is a technique used to advance an agenda through verbal attack. The problem with the polemic for instructional purposes is that it focuses on attacking opponents rather than rationally presenting one's own position. It believes the worst about human nature that people are not smart enough to make decisions on their own as to what is right, so they have to be manipulated verbally. This is not a good basis for instruction. It comes up in academia when students are penalized for taking a view that differs from an instructor. We do not want this atmosphere in business ethics instruction. We want to create an environment of freedom. We want students to freely express their own views. Hood (2003) states that transformational leadership strives to meet expressed needs of followers on their own terms regardless of his or her worldview. Transformational leadership style originates in personal values and beliefs of leaders, not in an exchange relationship between leaders and followers

(Bass, 1985), yet these values take into consideration followers' enduring needs. The goal is rational persuasion, not coercion.

But we also want students to understand different views because students have to carry out business with those who disagree. So, when we present different standards for ethics we also need to give students the freedom to explore their own views. That's why a complete course guide should include different viewpoints as well as Outside Learning Activities where students can gain credit for reading something of interest to them alone, that helps them in the task of exploring their own worldview. Students should also be introduced to the concept of worldview and explain the relationship between universals and particulars; that for particular actions that occur in business there is an ultimate reason for those actions. Students should be reminded that beliefs form the foundation of ethics because beliefs determine the standard. Students should be challenged to put forth their best effort. I say something like this: "You will be meaningfully employed for at least 40 years after this course. You will be working hard and you will be holding on to some ethical system. Don't you think it makes sense to spend ten weeks to really figure out what you believe? Because when you face the real difficulties of business, this is what you will hold on to; this is what will help see you through." The key point is honesty and fairness. We need to be up front about what we believe and fair and respectful toward those who disagree with us. Perhaps we need to produce what Covey suggests (1991, p. 108): "honestly matching words and feeling with thoughts and actions, with no desire other than for the good of others, without malice or desire to deceive, take advantage, manipulate or control."

Students should be encouraged to realize that their belief, no matter what it is, forms the foundation of the particular ethical choices that they make. The goal is honesty on the part of students so that they will become effective ethical leaders. As some argue, leadership can happen from any position in the organization if a person has expertise and integrity. People will listen and follow that type of person. This also reflects the essence of transformational leadership and gives students emotional intelligence, which is that non-academic ability to understand people and how to effectively work with people.

To help students understand their own ethical viewpoints, they need to carry out research and reflect on their own views. This needs to culminate in an assignment where students have to write their own, personal ethics statement where they have to articulate their universal and the particular principles that flow from their universal. Taking something like *The Worldview Questionnaire* (Ruddell, 2002) can also help. Students need to be able to present their point of view and then work with others to formulate a business ethics statement for an organization that allows them to find a common ground for doing business.

In business ethics, students need to know how to resolve the challenge of finding some unity amidst diversity. This is accomplished by helping students understand the difference between *tolerance* and *pluralism*. Belz (2001) argues that *tolerance* means that we respect each person and treat everyone humanely while *pluralism* is the notion that every idea is equally valid. Both

tolerance and pluralism suggest that we show respect for people. This is important to any successful organization and students should understand and respect other viewpoints in class discussions. One way to accomplish this goal is to require a Cross-Cultural assignment where students research a different country and present findings on the cultural and ethical issues involved in doing business in that country (or region). It is particularly helpful to have someone from the different country participate in the group or speak during the presentation.

However, tolerance suggests that students not only respect different people and different points of view but they are also obligated to think critically by analyzing these other points of view in light of their own point of view. Specifically they should compare other ethical points of view with their own. The goal is to respect people but that does not mean that all ideas presented must be equally valid. Students need to learn to discriminate right from wrong, truth from falsehood, good from bad. Students need to understand that organizations can allow for diversity in many things but there needs to be some agreement on the stated organizational standards (ethics) for productive working relationships to exist. The key is to honestly understand and communicate those standards.

For students, "business is business" is simply making a grade and getting out of the class. Many students are functional utilitarians. They need to understand why ethics are good for business in the long run. Milton-Smith emphasizes that there is a consistent opinion that ethics are good for the long term survivability and help provide a positive reputation and the ability to compete worldwide (1995). In the classroom, this means creating an atmosphere for learning by focusing on why learning is good. Meet the desire of students for reward by being prompt with returning grades but also emphasize feedback based on class objectives on papers rather than a grade only. Print out grades at the end of the semester so students can confirm the marks they have.

In summary, Hood (2003) reviews that a transformational leadership style tends to encourage ethical practices in organizations but skills in defining values-based vision, communicating the vision to followers, and using power effectively to implement the ideal are also critical to creating ethical organizations. These are the things a teacher needs to do in the classroom to impact students. Siegrist (1999, p. 297) emphasizes the critical need for graduate business programs to "move beyond the training of efficient managers" to develop curriculum and delivery systems to produce "visionary, moral, and transformational leaders." This must be our focus in business ethics instruction. As someone has said (English, 1994, p. 231) "leadership without morality is simply bureaucratic technique." We want to prepare students to be ethical as individuals in business but also equip them to lead ethics initiatives in organizations in which they will be involved.

DISCUSSION

Let's look at some principles that relate to transformational leadership in business ethics instruction. More investigation needs to be done on each topic but we can still glean some practical

suggestions for business ethics instruction which will be summarized at the end. It is hoped that there will be additional and more in depth work on issues related to this important topic.

Transformational Leadership Principles for Instruction

Podsakoff, McKenzie, Moorman, and Fetter (1990), following a review of the literature on transformational leadership, concluded that it can be summarized by six behaviors:

1. Identifying and articulating a vision
2. providing an appropriate model
3. fostering the acceptance of group goals
4. high performance expectations
5. providing individualized support to staff
6. intellectual stimulation

They adapted the above to include: communicates a vision, develops staff, provides support, empowers staff, is innovative, leads by example, and is charismatic. It might be useful to consider listing in detail what classroom behaviors are needed to accomplish these leadership goals as a way for directing curriculum.

Some companies can simply go through the motions regarding business ethics by being haphazard at best by developing *superficial* codes of conduct (that may not apply to top management) and *strategic* corporate philanthropy which can result in a *bottom line* approach (Milton-Smith, 1995). However, some large companies have moved ahead with developing business ethics in their organizations including: codes of ethics, ethics committees, communication systems for employees to report abuses or seek guidance, ethics training programs, ethics officers, and disciplinary processes (Mendonca, 2001). Other qualities to develop include in businesses are (*Ethics Education in Business Schools*, 2004):

- ◆ corporate responsibility
- ◆ corporate governance
- ◆ tools for recognizing and responding to ethical issues both personally and organizationally
- ◆ positive and negative examples of everyday conduct in business
- ◆ advance ethical awareness, ethical reasoning skills, and core ethical principles.

Milton-Smith (1995) mentions the following indicators that companies show a positive interest in business ethics: codes of ethics, ethics education programs, the handling of ethical

violations. This serves as another useful guide for business ethics curriculum; making sure business ethics students understand and can implement actions that improve business ethics in companies.

Business ethics instructors need to continually learn from business. "The self-transformation needed for ethical leadership revolves principally around character development. Yet, a survey of the codes of conduct of more than 200 companies found that 'the most ignored item was personal character - it seemed not to matter'" (Walton, 1988, p. 170). We need to be in touch with problems and solutions found in business.

Let's consider measurement. There are some issues to resolve. The heart is important to character development which certainly seems to be the purview of transformational leadership. Because the heart is all that is going on inside the person, it is difficult, if not impossible to measure. It is difficult to understand one's own heart, much less someone else's. We can look at actions but that is difficult to measure in a higher education situation. It is hard to predict what people will do in the future and then tie the business ethics instruction that they received to that behavior. Perhaps the best that can be done is to try to evaluate their attitude towards ethical issues that they will face in their academic lives and then project what they might do as a result of that and see if business ethics instruction has anything to do with a change in how they will face ethical issues in school and then project that they will have a similar response in business. We can also measure understanding of issues related to business ethics and attitudes toward certain ethical issues. So some things to consider for evaluation include a focus on knowledge obtained (do they know more about ethics than when they started?): pre-test and post-test (Mendonca, 2001). We can look at whether or not students have more consistent understanding of their worldviews. We can look at their opinions; do they think they are more ethical and their basic attitudes towards school ethical issues: pre-test and post-test.

The issue of which standard is the focus for the transformation, as discussed previously, is important in helping students sort out communications in today's complex culture. We have to help students understand that some would inject political and philosophical issues into the term *transformational* that might prove misleading. For example, Rashke (1989, p. 22) notes that; "Lurking in back of New Age semantics, which become compressed into such flagrant, pseudo-religious word mysteries as 'empowerment,' 'wholeness,' or 'planetary awareness' are verbal subliminal incendiary devices that can be used to torch just about all the benchmarks of moral authority, logical inference, and critical scrutiny that distinguish a culture." He goes on to say (Rashke, 1989, p. 23), for example, that Abraham Maslow and California's Esalen Institute were the benchmark for the New Age fusion with business and were first to "span the long-standing cleft between the 'softer' world of liberal learning and the 'harder' tradition of management science." He goes on to sound an important warning when it comes to transformational leadership (Rashke, 1989, p. 31): "Helping employees become better people sounds innocent enough. But the not so altruistic end behind the philanthropic semantics is behavior change." That's why it is so critical that business ethics instructors be open and honest. Students need to make choices with eyes wide open.

Ethics instruction needs to be broader than just a business ethics class. It needs to permeate the entire business school and university curriculums. "Creating a learning organization would indeed be the objective of ethical leaders. To achieve this objective, the leader first acquires personal mastery and then assists and empowers all employees to do the same. ... critical elements of personal mastery: shared vision, objective assessment, focused energies, and creative tension" (Mendonca, 2001, p. 271). Organizational values need to be widely shared if there is to be a consistent organizational profile (Krishnan, 2002).

The covenant is a good model for consideration as part of the transformational organization: "The employee-organization relationship is that of covenant ... In such a relationship there is not tradeoff between economic success and moral principles. Rather, adherence to moral principles constitutes the organization's higher purpose" (Dupree, 1989, p. 271). The covenantal model reflects the stakeholder idea that all parties in a business transaction should be considered whether they be employees, vendors, customers, stockholders, or society in general. The covenant stresses commitment to people based on trust with rewards and consequences to follow based on how the commitment is carried out. The covenant also includes a sign of agreement. This can be a powerful organizational culture tool to have some physical sign of covenantal commitment present in an office.

There seems to be some similarities between transformational leadership and servant leadership which might merit further examination. Stone, Russell, and Patterson (2004, p. 349) found that they are similar but the primary difference is the focus: "the transformational leader's focus is directed toward the organization, and his or her behavior builds follower commitment toward organizational objectives, while the servant leader's focus is on the followers, and the achievement of organizational objectives is a subordinate outcome." ... both ... "offer the conceptual framework for dynamic leadership."

TQM principles might shed some light on transformational leadership and business ethics instruction. Babbar (1995) compares Total Quality Management principles to the classroom which reflects on transformational leadership. Based on his research, he argues in favor of the application of TQM to instruction as follows:

1. communicate your teaching philosophy up-front;
2. influence students by setting a good example;
3. shape the climate for excellence and get the students to stretch their goals; and
4. motivate students through fairness, feedback and encouragement while instilling in them a deep sense of values and commitment.

The study of Wisdom can prove useful as a goal of business ethics instruction. Longman (2002, pp. 14-15) finds that; "Wisdom is a rich concept and is not easily summarized. ... wisdom is the skill of living. It is a practical knowledge that helps one know how to act and how to speak

in different situations. Wisdom entails the ability to avoid problems, and the skill to handle them when they present themselves. Wisdom also includes the ability to interpret other people's speech and writing in order to react correctly to what they are saying to us." It is not about academic intelligence but something more. This is why Proverbs 30:24-28 (tells us to notice ants, rock badgers, locusts, and lizards) and other places point to animals for examples of wisdom because though they lack IQ, they "know how to navigate life well" (Longman, 2002, p. 15). Longman (2002, p. 15) continues by pointing out that the idea of emotional intelligence from the book *Emotional Intelligence*, by Daniel Goleman "sounds very similar to the concept of wisdom in the book of Proverbs - at least at this initial stage of our definition." If, as Leban and Zulauf (2004, p. 560) suggest, there are linkages between emotional intelligence and transformational leadership, then perhaps a study of Wisdom can yield fruitful ideas for the practical application of transformational leadership.

Bierly III, Kessler, and Christensen (2000) reiterate this practical application in a slightly different way by showing how wisdom applies to organizational knowledge management. They (Bierly III, Kessler & Christensen, 2000, p. 596) point out the general argument of many that "superior knowledge in critical areas will lead to a sustainable competitive advantage and organizational success" and also go on to point out the fallacy of the underlying assumption (that more information and knowledge lead to greater success) behind this argument. They argue for the need for *organizational wisdom* which they describe as: "The judgment, selection and use of specific knowledge for a specific context ... That is, wisdom relates to the ability to effectively choose and apply the appropriate knowledge in a given situation" (Bierly III, Kessler & Christensen, 2000, p. 597).

One challenge with the transformational leadership approach in the classroom is that no matter how hard you try to show and tell students that it is *OK* for the professor to have a point of view and still remain fair, some people will probably be offended, probably by those who disagree with your values. It could be said that this is actually a sign that you are doing well; that you are causing people to think. The main thing is that the offense comes because the other individual (student) is not transformational and cannot respect your values (as the instructor); not vice versa. More analysis needs to be done to discover exactly where the problem lies.

The transformational leadership approach certainly reflects a theistic worldview that God wants to transform His people into His likeness. Cooper (2005) asserts that the Apostle Paul exhibited a strong sense of moral purpose and other qualities that qualified him as a transformational leader and thus worth studying. He cautions against making too close an alliance with transformational leadership (and the servant leadership model as well) but allows for discussion. He supports the idea of the Holy Spirit as transformer through the presentation of Truth (the Scripture) presented in an accurate way.

How do can these principles be used? There are applications.

Practical Recommendations for the Classroom

Based on the preceding transformational leadership principles, here is a summary of some practical suggestions for the classroom. Each principle will be listed followed by practical suggestions for instructional implementation.

Articulate a Vision

Provide an orientation for students the first day of class. Explain the vision for the course. You want students to become leaders. You want them to understand what they believe. Tell them that you want them to make a positive difference in the world. Tell them that they will spend 40-60 years working and this is probably going to be the only time in their lives where they will reflect on their business ethics; the ethics they will use for the rest of their lives. Tell them that the world needs ethical people. Tell them that they are important and can make an important difference in the world.

Show a film clip of ethical leadership (like Dan Cathey of Chick-Fil-A) that will inspire students to pursue ethical leadership

Provide a Model

Tell students about yourself; your background, your strengths and weaknesses, and how students can best work with you. As part of the class orientation (1st or 2nd meeting), articulate your ethical point of view. Tell students that you have a particular point of view about right and wrong and tell them the basis of this point of view. So during class, you will listen carefully to their ideas but also, when appropriate, tell them what you think. You want to serve as a model of ethical behavior and someone who has thought out an ethical point of view.

Confirm yourself as a model by demonstrating your integrity and fairness by the way you administer the class. Always start class on time and always end on time. This communicates respect for students. Make it a policy to return any graded work within two class periods of when it was received or all students receive five bonus points on the assignment. Make sure all work for the semester is given out the first day of class and provide reminders to students of what assignments are coming up so they can plan their work. Respond to students' e-mails as soon as received, no later than one working day from when the student sent the e-mail.

Make sure that you grade students based on their own point of view when assignments are given asking for their point of view. As long as they are wrestling with what they believe then this is good and assignments or specific test questions where they are asked for their opinion/evaluation should be good. Show sincere interest in new or different ideas presented by students. Ask questions from students to understand more clearly and, if asked, tell them what you think and why.

Show friendliness to students. Talk with them as they come into the classroom, during any breaks, and after class. Model goodwill and acceptance. Take an interest in all aspects of their lives.

Give an assignment where students write out their own, personal ethics statements. Remind them that as you have developed your own ethics statement as the instructor that you want each student to do the same. This should not be primarily an academic paper but should capture what the student really believes.

Through cases and other examples, show how other companies and leaders demonstrate good ethics. Show films. Invite guest speakers. Explore cases. Invite students to attend professional business ethics meetings.

High Performance Expectations

As part of your orientation to students, tell them about your expectations for performance and that understanding business ethics is so important that it merits effort. Remind them that in order to accomplish all class goals, hard work is needed. Make sure that every assignment ties directly to class goals. For example here are four goals to consider: understand how good ethics ties to good business, understand your own ethics and the ethics of others in a global business environment, understand how to solve ethical problems in business, learn how to set up and carry out an ethics program in an organization. Use a baseball analogy. If they achieve the first goal, it is like a single. If they achieve all four goals, it is like a home run. Reward students for completing assignments (like receiving a 95 for completing homework) which rewards their effort as well as reward students for their knowledge and understanding (test grades). As you expect a great deal from students, expect a great deal from yourself as the instructor (see above and importance of modeling). Eliminate any extraneous reading or assignments from the curriculum that do not accomplish the course goals so that you make the best use of students' time. Give the class feedback on how the class is doing on homework assignments and what you expect from them so that there can be improvement.

Individualized Support

Provide individualized mentoring through project assignments. Consider giving a semester project where teams of students (4-5 on each team) establish a company (real or imagined) and set up the ethics program for that company including: mission statement, vision statement, ethics statement, code of conduct, how to report problems, steps for solving ethical problems, details about the ethics program, evaluation, reward systems, and how the ethics function fits into the rest of the organization. Allow class time to work on the project so that you can provide feedback and mentoring. Based on student needs, recommend other reading or specific business cases to consider.

Make sure to keep consistent office hours so that you are in your office when you say you will be in your office.

Intellectual Stimulation

Use a variety of learning techniques in the course. Students are stimulated in different ways based on their learning styles. Mix up your approach. In class include: short lectures, class discussion and small group discussion, group project activity with feedback, films, film clips to use as illustrations, research using the internet to reinforce class material, guest speakers, and presentations. Outside of class for homework, include: reading and answering questions, carrying out interviews with business people about their ethics, researching ethics of other companies, writing short papers about what they believe, attending business ethics events, reading other books of interest on business ethics and receiving extra credit, and researching articles on business ethics issues and solutions. Model your passion about business ethics by discussing your own research and/or reading as it applies to course goals.

In conclusion, we have examined transformational leadership as it applies to business ethics instruction. We have identified some principles and discussed ideas for possible implementation. I trust that together, we will lead students to more ethical behavior for the good of themselves, those with whom they work, and for the world.

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A STUDY OF BUSINESS EDUCATION RESEARCH OUTLETS

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ABSTRACT

Business school faculty are seeking to respond to a renewed emphasis on the scholarship of teaching and must find publication outlets for their work. Though a number of studies have assessed the source and content of education-oriented journal publications in specific business disciplines, no cross-disciplinary assessment of business education publishing opportunities exists. This paper presents the findings of an analysis of historical and current education-related publishing opportunities for business school faculty. Initial findings indicate that the number of publication outlets has increased, but remains a small percentage of business outlets. Overall circulation of education-related business journals has increased, though a larger percent of current journals have relatively small circulations. Recent trends identified in the analysis include the introduction of journals that are distributed exclusively on-line and the increasing dominance of blind, rather than editorial, reviewed journals. Findings indicate both an increase in interest in the scholarship of teaching and an increase in competition among contributors.

INTRODUCTION

Publishing in journals that focus on teaching accomplishes several goals within the academic community. It demonstrates commitment to and insight about good teaching (Boyer, 1990). Additionally, it provides evidence for individual faculty in the review process. From a university perspective, faculty publishing education-related articles provides evidence of scholarly productivity for institutions accredited by or seeking accreditation by the American Assembly of Collegiate Schools of Business International (AACSB), particularly given the new “mission-linked” standards. Institutions with teaching as a primary mission now are able to seek accreditation without the same burden of basic research as would be expected from a research institution.

Business faculty seeking to respond to this renewed emphasis on the scholarship of teaching must find publication outlets for their work. A large body of research exists that attempts to assess “quality” of journals; however, only a small number of studies have assessed education oriented journal publications in specific business disciplines (e.g., Clark and Hanna, 1986; Clark, 1995), and no cross-disciplinary assessment of business education journals exists.

The purpose of this paper is to conduct an analysis of the education-related publishing opportunities for business school faculty and how they have changed in recent decades. Such an analysis should provide insight previously unavailable about the changing nature of education-related publications in business. This insight can inform those who seek to encourage activity in the field of business education scholarship, as well as serve as a benchmark for understanding productivity in the scholarship of teaching.

BUSINESS DISCIPLINES AND THE SCHOLARSHIP OF TEACHING

Higher education in America is under close scrutiny from many different constituencies (Mundt, 1998) including legislators and other policy makers who increasingly operate with distrust of higher education and question faculty productivity (Clausen, 1996). Criticism of the university culture paints a picture of an elitist academy of self-proclaimed scholars with little interest in teaching (Anderson, 1992), system-wide indifference to the needs of undergraduate students (Sykes, 1988), and focus on theory rather than competence of graduates (Bennis and O'Toole, 2005; Stewart, 2005). These misplaced priorities have led to the perception of many that higher education is "falling short in its attempts to transfer knowledge to students" (Binks, Starkey, and Mahon, 2006, p. 2).

Another factor affecting universities in general and business schools in particular is rising accountability standards that require professors to demonstrate the effectiveness of their teaching via outcome based assessments (Smart, Kelley, and Conant, 1999). As with other forms of scholarship, the scholarship of teaching must be public, undergo critical evaluation, and be accessible to other scholars for use and exchange (Carnegie Foundation, 1998). Such a definition implies blind review publication, or what many call research into the practice of teaching (Silva, 1998).

In addition to such external criticism from a variety of stakeholder groups (e.g., Keillor, Bush, and Bush, 1995), or perhaps in response to such criticism, the perceived importance of the scholarship of teaching in business schools has increased in recent decades (Ehie and Karathanos, 1994). Bilimoria (2000, p. 704) cites an "unprecedented attention to pedagogical issues" as one of the factors leading to a renewed emphasis on the scholarship of teaching and learning.

This renewed emphasis, along with several additional factors, is leading to a change in the way teaching is assessed. Activities and publications of the Boyer Commission, in particular, have led many business schools to reexamine the role teaching plays and its evaluation. Boyer (1990, p. 39) states that making the scholarship of teaching a top priority requires doing research on pedagogical issues and clearly argues that "articles about teaching should be peer reviewed and given weight for tenure and promotion."

LITERATURE REVIEW

Education-oriented journals are broadly defined as those whose foci are devoted to improving business pedagogy. They may concentrate on the philosophy, innovation, practice, theory, or analysis of business pedagogy. In addition, they include journals publishing case research committed to improving problem-solving skills of students. Excerpts from the mission statements for selected journals are cited in the Appendix to clarify various pedagogical emphases employed.

Many studies are available that assess “quality” of journals available to academicians. However, a surprisingly large number of these do not include education journals in their analysis. For example, Oltheten, Theoarakis, and Travlos (2005, p. 226) used “previous studies, personal communications with faculty from various universities, and survey pre-testing” to identify 66 finance journals, yet no education-oriented journals were identified for inclusion in the study. Gorman and Kanet’s (2005) study of 27 operations management journals included none with an education focus. A recent assessment of marketing journals compiled from four previous studies included no education journals, even though the article appears in the *Journal of Marketing Education* (Polonsky and Whitelaw, 2005). Other researchers (e.g., Moore and Taylor, 2000; Swanson, 2004; Fender, Taylor, and Burke, 2005) assessed “major” or “elite” publications, none of which focus on pedagogy.

Several notable exceptions include education journals in their assessment. Baumgartner and Pieters (2003) included both *Journal of Marketing Education* and *Marketing Education Review* in their assessment of 49 marketing journals. These journals ranked 24 and 46, respectively, in overall influence. In addition to overall influence, Baumgartner and Pieters evaluated influence within specific subareas. *Journal of Marketing Education* ranked number 1 in the subarea “Marketing Education.” Interestingly, however, *Marketing Education Review* tied with *Journal of Consumer Policy* and ranked 13 in this subarea.

DuBois and Reeb (2000) included no education journals in their analysis of international business journals. However, a similar study of international accounting research (Prather-Kinsey and Rueschhoff, 2004) identified 24 international articles in the *Journal of Accounting Education*, 17 in the *Accounting Educator’s Journal*, and 6 in *Issues in Accounting Education* between 1981 and 2000. They identified a total of 72 articles during this period that dealt with accounting education, ranking 7 of 11 in topic matter covered.

Publications by faculty in the top seven economics departments (by reputation) recorded 1,715 articles in 281 journals between 1995 and 2000 (Rupp and McKinney, 2002). When identifying journals with at least 5 articles by faculty from these elite institutions, the *Journal of Economic Education* accounting for only 1.79% of articles during this time period, ranking 77 of 87 journals.

Two education journals appeared in Rainer and Miller’s (2005) assessment. These authors compiled results from nine studies published between 1991 and 2003 and computed the average

ranking of 50 journals across studies. *Journal of Information System Education* and *Journal of Education for Management Information Systems* were both included in their assessment, and ranked 33 and 38, respectively. A quick glance at their data on these previous studies, however, shows that both of these journals were included in only one of the nine studies.

Similarly, Beattie and Goodacre (2006) reviewed several prior studies on accounting and finance journal rankings and included a new methodology based on the UK research assessment exercise, which requires universities to submit research outlets of up to four of their best publications. *Accounting Education* was ranked 11 of 408 journals by “research-active” faculty in the list of most frequently submitted journals. One interesting conclusion is that European academics rank *Accounting Education* more highly than UK academics, indicating perceptual differences among varying geographic constituencies.

In assessing the two primary education oriented outlets in marketing (*Journal of Marketing Education* and *Marketing Education Review*), McIntyre and Tanner (2004, p. 38) conclude that pedagogical scholarship, in the form of publication, does not appear to be related to an emphasis on teaching, but is perhaps related to an emphasis on research. Their findings suggest that “differences in missions, mission statements, and AACSB accreditation do not seem to be reflected in pedagogical research productivity.” Additionally, they found that articles in both *JME* and *MER* were written by faculty from both large and small departments and from institutions ranging from Research Intensive universities to small liberal arts colleges.

Of course, in addition to journals whose primary focus is education, other outlets for education related research do exist. For example, the *Journal of Personal Selling & Sales Management* has published articles on student perceptions of sales as a career. Such articles could reasonably be included in a broader study of teaching scholarship. *B Quest* includes a “pedagogy” section in addition to “research” and “commentary” sections. Journals such as the *Journal of Business Ethics* and others have also published articles on education topics.

METHODOLOGY

To provide an historical and a current evaluation of education related publishing opportunities for business school faculty, two key decisions were identified: source of the data and time frame for consideration. Though several sources are available (e.g., *Ulrich's International Periodicals Directory* and *MLA Directory of Periodicals*), Cabell's directories have been widely used in business for over three decades, and they provide a rather comprehensive list of publication outlets available.

The earliest edition of the directory is *Directory of Publishing Opportunities in Business, Administration and Economics* (Cabell, 1978). Two twelve-year periods (1990 and 2001-2002) allow an assessment of changes over time, and the data currently available (2006) provides a recent update. Both the 1978 and 1990 editions were published as a single text. The 2001-2002 directory,

however, was published as a four-volume set, and the most recent data, while available in text form as a four-volume set, is provided to subscribers on demand from Cabell's website (<http://www.cabells.com>).

The investigators first counted the total number of journals listed (eliminating duplication in multiple edition versions). Journals with a pedagogical focus were identified by the journal name; all those including the terms teaching, education, case, or instruction in the title were selected for inclusion in this study. Journals were organized into a database. The database included the journal title, type of review (blind or editorial), acceptance rate, percent of invited articles, time for article review, number of issues, and number of copies distributed per issue. In addition, journals that charge a fee to review and/or publish articles were identified, along with the amount of the fee.

ANALYSIS AND RESULTS

All journals included in this study are identified in Table 1. Over the four time periods studied, 76 business education journals were identified. However, only *Business Education Forum* and *Journal of Economic Education* appeared in all four of Cabell's directories. Nineteen of the journals in the current directory were not in any of the earlier editions. Thus, one-third of the publication outlets in 2006 appear to have been introduced since 2001-02.

Journal Title	1979	1990	2001-02	2006
Academy of Educational Leadership Journal			✓	✓
Accounting Education: An International Journal			✓	✓
Accounting Educator's Journal		✓	✓	✓
Accounting Instructors' Report			✓	✓
Advances in Accounting Education			✓	✓
Advances in Financial Education				✓
Annals of Cases on Information Technology			✓	
Annual Advances in Business Cases		✓	✓	✓
Business Case Journal			✓	✓
Business Education Digest			✓	✓
Business Education Forum	✓	✓	✓	✓
Case Journal				✓
Case Research Journal		✓	✓	✓
Collegiate News and Views	✓			
Delta Pi Epsilon Journal			✓	✓
Economics and Economics Education Research Journal			✓	

Table 1: Publication Outlets in Business Education				
Journal Title	1979	1990	2001-02	2006
Economics of Education Review			✓	✓
Education + Training			✓	✓
Educational Record	✓			
Financial Practice and Education			✓	
Global Perspectives on Accounting Education				✓
Interface: The Computer Education Quarterly		✓		
International Academy for Case Studies			✓	
International Journal of Accounting, Education and Research		✓		
International Journal of Case Studies and Research			✓	
International Journal of Cases on Electronic Commerce				✓
Issues in Accounting Education		✓	✓	✓
Journal for Economics Educators (Journal of the Tennessee Economics Association)			✓	✓
Journal for the Advancement of Marketing Education				✓
Journal of Academy of Business Education				✓
Journal of Accounting Case Research			✓	✓
Journal of Accounting Education		✓	✓	✓
Journal of Applied Case Research				✓
Journal of Business and Training Education			✓	✓
Journal of Business Education	✓		✓	
Journal of Business Inquiry, Research, Education & Application				✓
Journal of Cases on Information Technology				✓
Journal of College Placement	✓			
Journal of Computing in Higher Education				✓
Journal of Economic Education	✓	✓	✓	✓
Journal of Economics and Economic Education Research				✓
Journal of Economics and Finance Education				✓
Journal of Education for Business			✓	✓
Journal of Educators Online				✓
Journal of Entrepreneurship Education			✓	✓
Journal of Finance Case Research			✓	✓
Journal of Financial Education		✓	✓	✓
Journal of Health Administration Education			✓	✓
Journal of Hospitality and Tourism Education				✓

Journal Title	1979	1990	2001-02	2006
Journal of Informatics Education & Research			✓	✓
Journal of Information Systems Education			✓	✓
Journal of Information Technology Cases and Applications			✓	✓
Journal of Information Technology Education				✓
Journal of International Academy for Case Studies				✓
Journal of Legal Studies Education		✓	✓	✓
Journal of Management Education			✓	✓
Journal of Marketing Education		✓	✓	✓
Journal of Marketing for Higher Education		✓	✓	✓
Journal of Research on Computing in Education		✓		
Journal of SMET Education: Innovation & Research				✓
Journal of Teaching in International Business		✓	✓	✓
Journal of Teaching in Travel & Tourism			✓	✓
Journal ;of Technology Education		✓		
Journal of the Academy of Business Education				✓
Journal of the Association of Marketing Educators				✓
Kentucky Business Education Association Journal		✓	✓	✓
Marketing Education Review			✓	✓
Marketing Educator			✓	
NABTE Review			✓	✓
Organizational Behavior Teaching Review		✓		
Retail Education Today			✓	✓
Simulation and Games	✓			
TBEA Journal (TBTEA Journal)		✓	✓	✓
Teaching Business Ethics			✓	
The International Journal of Accounting and Educational Research	✓			
Wisconsin Business Education Journal			✓	✓
Source: Cabell's Directory of Publishing Opportunities: Various issues.				

Table 2 shows the average submission fee for reviewing and for publishing articles. Many of those journals that charge for review or publication indicate that the fee applies only to non-members or non-subscribers, though membership may be required for publication. Not surprisingly, journals charge more to publish articles than for review. As the table shows, average fees to review

articles fell slightly from 2001-02 to 2006. Fees to publish articles, however, fell dramatically by 45%. Even so, fee levels remain affordable for most business school faculty.

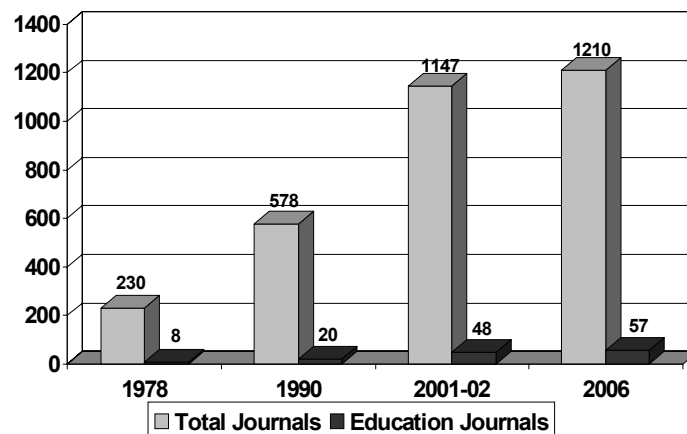
	1990	2001-02	2006
Number of Journals that Charge Fee to Review Articles (percent)	3 (15.8%)	10 (20.83%)	12 (21.05%)
Average Fee Charged	\$31.67	\$57.00	\$44.33
Number of Journals that Charge Fee to Publish Articles (percent)	NA	7 (14.58%)	9 (15.79%)
Average Fee Charged	NA	\$95.71	\$51.89

*Data for 1978 not included in directory. Fees charged are for non-members.

Source: *Cabell's Directory of Publishing Opportunities*: Various issues

Figure 1 shows that overall business related journals and business education journals grew by over 426% and 613%, respectively from 1978 to 2006; however, the dramatic increase in education journals is primarily a product of the small starting point. While the number of business related journals increased by 980 (from 230 in 1978 to 1210 in 2006) the number of journals devoted solely to business education research has increased only from 8 in 1978 to 57 in 2006. Fewer than five percent of business publications focus primarily on education.

Figure 1
Publication Outlets Available



Source: *Cabell's Directory of Publishing Opportunities*: Various issues

The increasing dominance of the blind-reviewed reviewed journals for business education research since 1978 is illustrated in Figure 2. Taken together, Figures 1 and 2 show that while there are still relatively few education outlets in business, those outlets are increasingly blind-reviewed. This would seem to be an encouraging trend for scholars interested in business education seeking peer-reviewed outlets for their research.

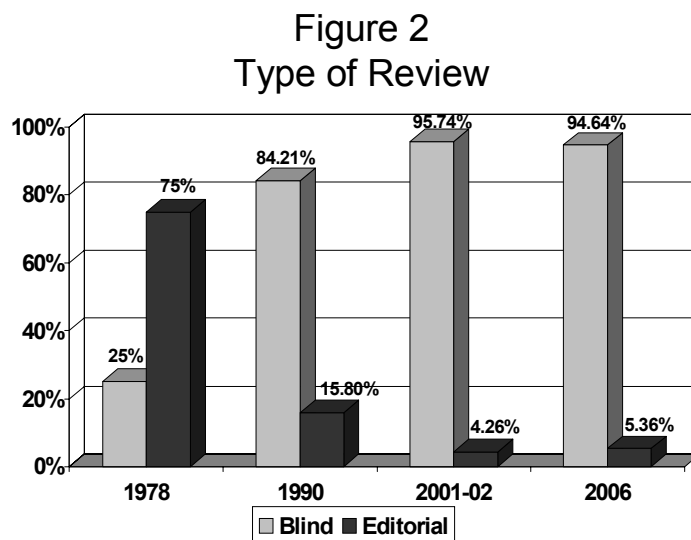


Figure 3 shows the falling percentage of invited articles in business education journals since 1978. This may indicate business researchers increasingly recognize the importance of education research resulting in more authors initiating this type of research voluntarily. The implication is education journals are therefore less reliant on solicited articles for content. Lower acceptance rates (23% in 2006 versus 26% in 1978), shown in Table 3, combined with fewer invited articles points to an increase in submissions to business education journals.

Table 3: Acceptance Rates by Education Journals				
	1978	1990	2001-02	2006
Average Acceptance Rate	26.25%	26.79%	26.32%	23.40%

Source: *Cabell's Directory of Publishing Opportunities*: Various issues

Figure 3
Percentage Invited Articles

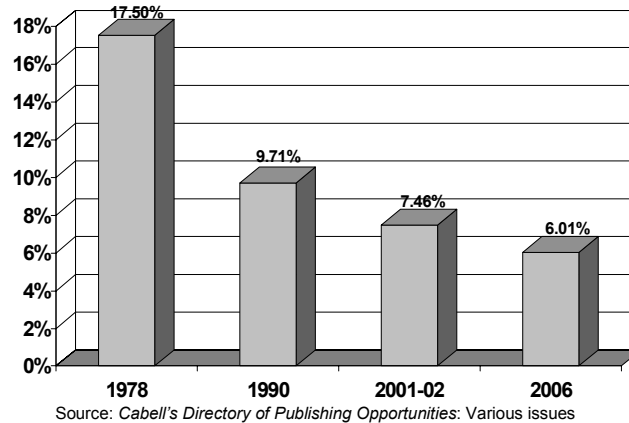
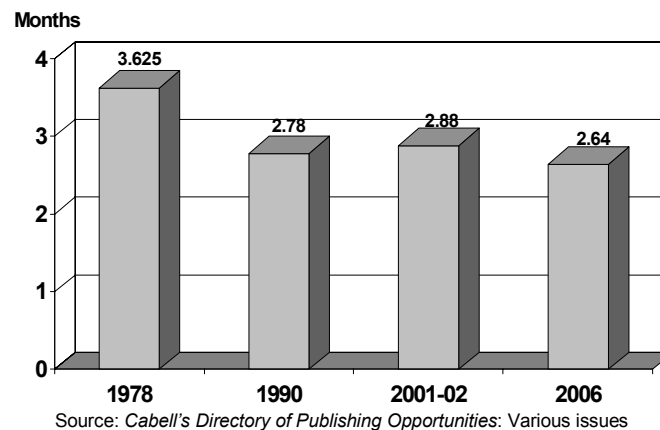


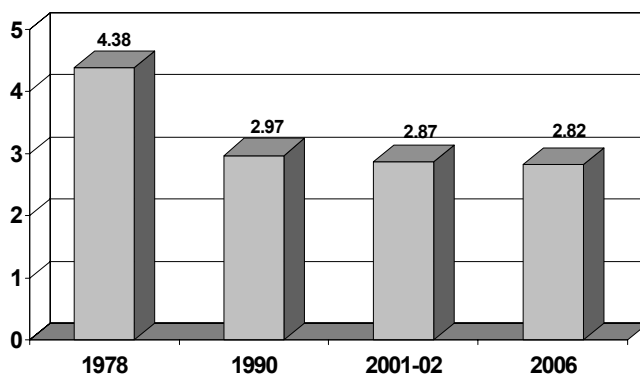
Figure 4 shows the slight decrease in average review time to review articles in business education journals. This suggests the increasing availability of referees willing to review business research. Taken together, Figures 3 and 4 may indicate an interest in business research by authors and an increasing willingness to review business research by referees. Both are the major ingredients needed to produce an academic journal and may point to more outlets for this type of research in the future.

Figure 4
Average Review Time



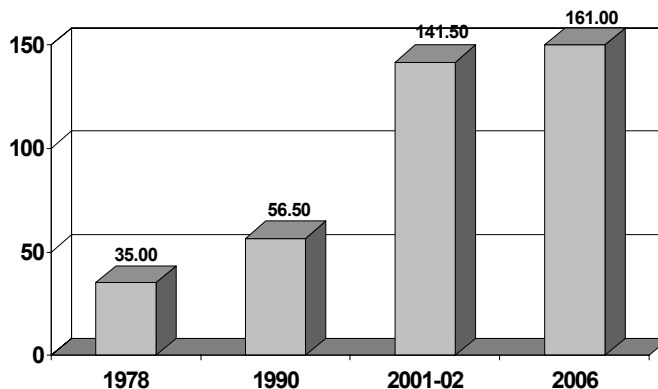
As indicated in Figure 5, the average number of issues per business education journal has dropped from over 4 in 1978 to just under 3 in 2006. Figure 6 shows the total number of issues per year for business education journals has increased from 35 to 161 over the same time period. These results imply the increasing availability of education research through new journal offerings even as these journals offer fewer issues per year.

Figure 5
Average Issues per Journal



Source: Cabell's Directory of Publishing Opportunities: Various issues

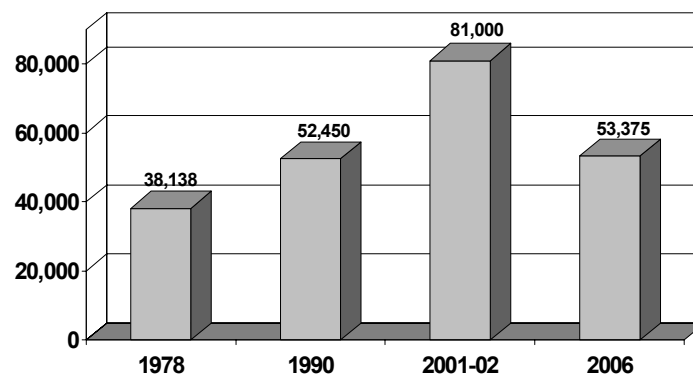
Figure 6
Total Issues of Education Journals



Source: Cabell's Directory of Publishing Opportunities: Various issues

Finally, Figure 7 shows the total circulation of business education journals peaked at 81,000 in 2001 and has fallen nearly 28,000 by 2006. This is very close to the circulation in 1990. This decline is likely due to the increasing availability of online, rather than print, journals. In 2001-2002, two journals reported that they published on-line only. In 2006, six journals were published on-line only.

Figure 7
Total Circulation of Education Journals



Source: Cabell's Directory of Publishing Opportunities: Various issues

CONCLUSIONS

Since peer review is the most important criterion when business school deans evaluate journal quality (Hynes and Stretcher, 1995), it is reassuring that the overwhelming majority of business education journals currently use a blind review process. The recent drop in acceptance rate from 26% to 23% combined with the increase in the number of outlets available indicate both an increase in interest in the scholarship of teaching and an increase in competition among contributors. Faculty can thus demonstrate not only that they are meeting the research mission of the institution through education publications, but also that these education publications are significant contributions facing substantial competition for acceptance. This evidence could also be useful to institutions seeking new and/or continuing AACSB accreditation.

The average review process of just over two and a half months for education journals seems to positively address concerns that the turnaround times for many journals is unreasonably long (Azar, 2006). The academic community appears supportive of education journals, both as contributors and as reviewers. Thus, many faculty may view activities related to these journals as an intellectual and a service contribution.

Several potentially fruitful areas of research are suggested by this study. In addition to journals primarily focused on education, a broader study of the scholarship of teaching could include discipline-oriented publications that include pedagogical contributions. Such articles could reasonably be included in a broader study of teaching scholarship. Journals such as the *Journal of Personal Selling & Sales Management*, *B Quest*, *Journal of Business Ethics*, and others have published articles on education topics and could be of interest to academicians conducting research in this area.

Business school deans appear to generally accept electronic journals as equivalent to print journals; however, a substantial minority of almost 20% automatically consider electronic journals inferior (Hynes and Stretcher, 2005). As more journals are available online, this perception may change. Future research should address both the objective quality and perceptions about online journals.

Given criticisms of faculty concern for teaching, it is interesting to note the rise in the number of education publications outlets and the rise in contributions to and support of the journals. Perhaps the problem lies not in actual faculty interests, but in inaccurate community perceptions. To correct misperceptions, the nature of pedagogical research should be communicated to constituents outside the university. University and college of business publications, such as recruitment brochures, can highlight these activities and point to changes in pedagogy that may have resulted from research on their campuses.

This study provides insight into publication outlets, but it does not attempt to assess the impact of pedagogical research in the business school curriculum nor the value placed on these publications when faculty face tenure and promotion decisions. Clearly research is needed before definitive conclusions can be drawn.

This study confirms the view that scholarship activities are “increasingly heterogeneous” (Hynes and Stretcher, 2005), with a renewed emphasis on the scholarship of teaching and learning in addition to more “traditional” basic and applied research. The findings raise a number of interesting questions to be addressed in the future. It is our hope that this work will spur more study on the nature of the scholarship of teaching and will serve as a catalyst for increased participation among faculty in this important research.

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APPENDIX

EDUCATION-ORIENTED JOURNAL MISSIONS

Excerpts from the mission statements for selected journals used in this study are cited below to clarify the various pedagogical emphases employed. All excerpts were compiled from information available on each journal's web page.

Academy of Educational Leadership: “. . . publishes theoretical, empirical, practical or pedagogic manuscripts in education. Its primary objective is to expand the boundaries of the literature by supporting the exchange of ideas and insights which further the understanding of education.”

Business Case Journal: “The *Business Case Journal* was established . . . to publish cases and research related to case writing or teaching with cases.”

The Business Education Digest: “Manuscripts submitted for consideration by *Business Education Digest* should focus on instructional philosophy, theory, or practice of business education.”

Journal of the Academy of Business Education: “The *Journal of the Academy of Business Education* is a Multi-disciplinary journal seeking the following kinds of papers:

1. Educational research – empirical research that tests teaching practices, student performance and learning environments;
2. Pedagogy – papers offering interesting or unique approaches to teaching or delivering business education – general or discipline specific.
3. Curriculum – papers addressing interesting or unique approaches to curriculum development and discipline integration.
4. Cases – well crafted cases that illustrate several important issues to either single or multiple disciplines.
5. Literature reviews – papers that offer extensive reviews of current relevant research and thought.
6. Multi-disciplinary – papers emphasizing multi-disciplinary approaches to business education.
7. Ethics and Moral Values – papers offering guidance in the integration of ethics and moral values in business education.”

Journal of Accounting Education: “. . . dedicated to promoting excellence in teaching and stimulating research in accounting education internationally. The journal provides a forum for exchanging ideas, opinions, and research results among accounting educators around the world.”

Journal of Economic Education: “. . . offers original articles on innovations in and evaluations of teaching techniques, materials, and programs in economics. Articles, tailored to the needs of instructors of introductory through graduate-level economics, cover content and pedagogy in a variety of mediums.”

Journal of Economics and Finance Education: “JEFE invites economic and finance contributions in three main areas: research, instruction and content.”

Journal of Information Systems Education: “. . . seeks original articles on current topics of special interests to information systems educators. The journal publishes applications-oriented and research articles covering information systems education and training topics. Curriculum design and implementation issues and research or application oriented

articles that describe curriculum, pedagogy, professional development or educational facilities issues will be considered for publication in the journal.”

Journal of Management Education: “Created to meet the growing demand for research, analysis and discussions on teaching management and organizational behaviour, the *Journal of Management Education* serves as a forum for the improvement of management education in both classroom and corporate settings. The journal’s reflective and informative nature makes it an ideal source for teaching exercises, ideas and strategies.”

Journal of Marketing Education: “The *Journal of Marketing Education* is the leading international scholarly journal publishing articles on the latest techniques in marketing education, emphasizing new course content and effective teaching methods. The journal also addresses such professional issues as development of the curriculum, career development, and the state of the profession. The *Journal of Marketing Education* provides a forum for the exchange of ideas, information and experiences related to the process of educating students of marketing and advertising.”

STRATEGIES FOR PROMOTING ACTIVE LEARNING IN A PRINCIPLES OF ACCOUNTING COURSE

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ABSTRACT

This article presents strategies for creating an active learning environment in a principles of accounting course. These strategies, which promote independent and lifelong learning, include the use of interactive lecture materials, collaborative in-class exercises, and self-directed out-of-class assignments. The strategies presented should not only assist instructors in teaching a more active and effective introductory accounting course, but also offer the benefits of stimulating and increasing student interest in accounting as a major.

INTRODUCTION

Principles of accounting courses present multiple challenges for instructors such as low student motivation, attendance, participation, and knowledge retention, and high student anxiety and withdrawal rates. In addition, the course material is very extensive and technical in nature, and often the instructor has difficulty in covering all the material they would like to cover during the semester. In order to combat these challenges, studies conducted by the Accounting Education Change Commission (1990; 1992) and the American Accounting Association (1995) strongly promote the use of active learning strategies in accounting courses.

Active learning is a pedagogical approach in which students do not passively acquire knowledge, but instead are actively involved and engaged in the learning process. Advocates of active learning suggest that it benefits students by promoting greater interest in the subject material, enhancing intrinsic learning satisfaction, increasing understanding and retention of course material, developing the desire and ability to become lifelong learners, and improving communication, interpersonal, problem solving, analytical thinking, and critical thinking skills.

The purpose of this paper is to present active learning strategies that we have incorporated into our principles of financial accounting course. Currently we employ active learning strategies in our lectures and course assignments. The strategies we employ are relatively short and simple. However, we believe their use has enhanced student learning by creating a more interactive classroom environment, and by increasing students' interest, motivation, attendance, and participation. At the same time, the use of active learning strategies has not prevented us from

covering the prescribed course material, but has in fact enabled us to cover additional material that we were unable to adequately cover before.

IN-CLASS STRATEGIES

Instead of providing no lecture notes or a complete set of lecture notes to students, we provide them with what are often referred to as guided notes. Specifically, prior to each lecture we post on the course webpage partially completed lecture notes that students are required to print and bring to class. During class, students complete or fill in the “missing pieces” such as key terms, concepts and formulas for that topic.

We have found multiple advantages to this strategy. First, by providing a partial set of lecture notes we are able to cover more material and do so more efficiently since students are not required to copy the entire set of lecture notes during class. This strategy also allows students to concentrate more on what the instructor is saying and often results in questions during the lecture that are more relevant and insightful. In addition, the use of guided notes promotes regular student attendance since students need to attend lectures in order to complete the lecture notes. Furthermore, this strategy facilitates greater student interest and engagement in the class. Requiring them to complete the lectures notes increases student attention during the lecture, and highlights and reinforces important information in the lecture. Finally, the missing elements of the course notes often prompt increased student responses and participation. We rely heavily on students’ responses in filling in the missing pieces and often create additional discussion by asking why other terms, phrases, formulas, etc. would not be correct.

During a lecture, many instructors notice that it is oftentimes difficult to maintain students’ interest and attention for the duration of the class meeting. In response to this concern, another strategy we utilize is to “bookend” the lecture. This involves breaking the lecture down into segments of approximately 15 minutes in length. In between these segments, we incorporate several active learning strategies to enhance the students’ learning process. These strategies allow students to contribute actively to their knowledge and understanding of the course material.

One technique we use is the “pause procedure.” We allow the students to look over their just completed lecture notes for approximately two minutes in order to revise their notes, compare what they have with their neighbors, and formulate questions. During this time, we walk around the classroom answering questions and facilitating discussions between students. This exercise gives students time to clarify, reflect upon, and assimilate what they have just heard and written, and often results in more in-depth questions and class discussions.

Other learning tools we use during this break are quantitative examples, mini-quizzes, and probing or motivating questions. The quantitative examples are often from the homework in the textbook and relate directly to the material we have just covered. We typically give the students

partial solutions to the examples, similar to our strategy with the lecture notes, in order to increase efficiency, improve attention, and encourage participation.

The short mini-quizzes can be graded or non-graded, and usually consist of two to three true/false and/or multiple-choice questions that ask students knowledge- and comprehension-based questions. The quizzes encourage students to efficiently and effectively use the “pause time” to clarify their understanding of the material just covered.

The probing/motivating questions typically are conceptual in nature and ask the students to make a prediction, relate the material to a previous topic we have discussed, or give real-world examples of the concepts presented.

For the mini-quizzes and probing/motivating questions, we use a think-pair-share strategy. Students first spend a minute or two reflecting on and writing their answers to the questions. Then they turn to one or two of their neighbors and spend a couple minutes sharing and comparing their answers. After they have shared their answers, individual students are called on randomly or the class is surveyed for their answers and asked how they reached their conclusion and whether they considered other alternatives, resulting in further class discussion.

There are several benefits to the think-pair-share strategy. First, it gives students time to carefully think about and formulate their answers or opinions. Also, having them write down their responses makes students less passive, and encourages them to be more focused and precise in their answers. Furthermore, it requires students to be responsible for carefully listening to their neighbors’ answers and opinions, sharing what they have written, and reaching a consensus. By working together, students teach and explain material to one another, create a spirit of cooperation and interdependence, and develop a personal responsibility for their learning and the learning of others. Also, the subject matter is more likely to be learned and reinforced by group interactions, and as a result, students often enhance their current level of knowledge and interpersonal skills. The familiarity students develop with one another can facilitate their formation of study groups outside of class and in other classes that they share. Finally, students have an opportunity to articulate their answers or opinions to the rest of the class and receive immediate feedback, and instructors are provided with feedback about student comprehension of the material being presented.

Bookending the lecture and incorporating the above active learning strategies in between the lecture segments benefits students by increasing their attention, by encouraging participation, and by providing them with immediate feedback on whether they understand the information presented. As a result, their retention of course material is facilitated and the development of their thinking and communication skills is enhanced. Instructors act primarily as facilitators in the students’ learning process instead of merely “transmitters” of information. Instructors also realize immediate benefits by using the feedback students provide in the class discussions to assess, modify, and refine existing lecture notes, questions, and strategies.

At the end of each class, we give the students two to three minutes to complete a “minute paper.” Students first reflect on and assess their understanding of the day’s material. Next, they

respond in writing to the following questions: (1) What was the most important or useful information you learned in class today? (2) What unanswered questions do you have and/or what information is still unclear or confusing? After reviewing the minute papers, we take a few minutes at the beginning of the next class to address topics, specific questions, and/or concerns listed by a significant number of the students. For those items not discussed, we actively encourage students to see us after class or during office hours.

We have found that the use of minute papers facilitates the assessment of student learning and promotes continuous course improvement, but is not extremely time consuming. Minute papers permit us to gather immediate feedback from the students, and encourage and provide students with a simple and direct means of expressing their thoughts, concerns, and questions about the class.

We have also found it interesting and insightful to compare minute paper responses at various points during the semester. Initially, students typically respond that they have no questions or concerns, usually for the sake of expediency. However, by taking time each class to address questions and concerns raised from the previous class, not only does the amount of tangible responses increase, but the overall quality of responses improves by giving students the opportunity to hear what questions and concerns were raised by their classmates.

OUT-OF-CLASS STRATEGIES

We also use active learning strategies in our assignments. Three out-of-class assignments we use are attendance at business student organization meetings, article summaries, and review of annual reports. These assignments allow the instructor to use instructional resources and strategies beyond the classroom, which frees up critical class time. Students explore material that is often quite different, more realistic, and frequently more interesting than material covered in class. These assignments stimulate interest in the subject matter by demonstrating the relevance of the course material to the “real world.” As a result, students begin to appreciate and develop independent learning and lifelong learning skills.

In their 2003 monograph, PricewaterhouseCoopers (PWC) emphasized the need for entry-level accountants to understand what it means to be a member of the accounting profession. They note that students often fail to fully appreciate or even comprehend the roles and responsibilities they will encounter during their careers. We address this concern as it applies to all students, regardless of their intended major, by requiring our students to attend two business student organization meetings where there is a presentation by an outside professional. Students are given a choice as to which presentation they would like to attend, subject to instructor approval, in order to increase their interest and satisfaction in the presentation. After attending the presentation, students are required to write a short summary of the presentation, including what they learned from the presentation and how they would apply it to their professional career. Along with the summary, they submit a form listing their name, date of meeting, student organization, speaker (or

firm/company name), and presentation topic. The form is signed by the faculty advisor or a student officer at the end of the meeting. By attending these meetings and presentations students develop a better understanding of what it means to be a professional through listening, meeting, and talking to outside professionals. They learn about current issues and events that are impacting professionals, further develop and refine their interpersonal, networking, and communication skills, and learn about career paths in their intended profession. For those students that become actively involved in a student organization, anecdotal evidence suggests that they become more motivated, thoughtful, and committed learners in the classroom.

Another out-of-class assignment we use is article summaries. Students are given a list of level-appropriate articles they can read from student-oriented (e.g., *New Accountant*) and profession-oriented (e.g., *The CPA Journal* and *Journal of Accountancy*) journals. Over the course of the semester, students are required to read five articles. After reading an article, students write a 1 – 1 ½ page summary of the article. As part of the assignment, they are asked to indicate what they found particularly interesting about the article; any information in the article they found confusing or ambiguous; any additional information they would have liked included in the article; the main arguments and evidence provided by the author(s); whether they agreed or disagreed with the author's or authors' conclusion or suggestions; and how they would apply any information learned to their academic and/or professional careers. Similar to the business student organization meeting assignment, students choose, from a list provided by the instructor, which articles they read in order to stimulate their interest and satisfaction. Reading the articles allows the students to explore current events and issues affecting accounting students and accountants (e.g., ethical issues), discover new ideas, and exercise comprehensive thinking. It also diminishes many of the stereotypes students have about the accounting profession, often resulting in an increased interest in majoring in accounting. The written summary emphasizes concise, to-the-point writing, which is a necessary skill in business writing, but is not always an objective of written assignments in other academic disciplines. In this assignment, students engage in analytical and synthetic activity, and learn that in business there is not always a right or a wrong answer, or even an answer at all.

The final strategy we employ primarily utilizes out-of-class work, with some in-class group work. Students are first required to review a corporate annual report, which has been assigned by the instructor, and individually answer questions based on that annual report. The company the instructor chooses should be one that students know and with which they can identify. The assignment consists of three problem sets with the first one covering general information in the annual report (e.g., products, geographic locations, board of directors, officers, and various letters and reports). The second set of questions addresses the financial statements and the notes to the financial statements. The last set requires computation of financial ratios and ratio analyses. After students have had a chance to answer the questions at home, class time is allocated for group work so students can compare answers and, more importantly, discuss where they located the information and how they reached their answer. Several methods are used to discourage any “free riders” and

ensure students are learning the information. First, groups are kept small (approximately three students) to maximize participation, and help create a sense of interdependence and accountability. Students are also required to submit a copy of their solutions before and after they have met with their group. In addition, the instructor walks around the classroom to observe the groups' progress and level of participation, to keep the groups on task and focused, and to answer any questions. Finally, selected pages from another company's annual report and similar questions are included on the final exam. Several benefits are derived from the annual report assignments in addition to the ones already addressed in the previous discussion of in-class assignments and group work. First, students are exposed to real-life examples of accounting information and applications. This often results in an increased interest and appreciation of the accounting function, which thereby helps promote accounting as a major. Second, it enhances intellectual skills, including the ability to locate, obtain, and organize information. Third, it allows students to learn by doing and helps promote independent learning. Finally, it allows instructors to provide a sense of realism in their course, and it saves valuable class time by letting the students explore the annual report outside of class, with only minimal class time used for group work.

CONCLUSION

This paper has discussed active learning strategies that the authors utilize in their principles of financial accounting course. The strategies presented can be used in small- or large-sized classes, and are also appropriate, with some revisions in type and level of assignments, for upper-level accounting courses. One key to implementing these strategies is to keep them simple. Start small and try not to overload your students with too many activities. Begin with strategies and assignments that are of short duration and structured, and ones with which you feel comfortable. As you and your students gain confidence and experience, longer and more involved strategies and assignments can be introduced. We have found that the use of the active learning strategies discussed in this paper promotes a supportive classroom environment, both intellectually and emotionally, by increasing student interest, participation, satisfaction, and knowledge in accounting, and by developing the desire and ability in students to become independent and lifelong learners.

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STRUCTURAL CHANGE IN THE CPCU CURRICULUM AND ITS EFFECT ON THE COMPLETION TIME

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ABSTRACT

This study investigates the impact of structural change of CPCU program's curriculum on candidates (students) completion time. The CPCU professional certification is the most recognized system in the area of property/casualty insurance, which provides a comprehensive, integrated, skill and knowledge set in all areas of property/casualty insurance. American Institute for CPCU has changed their curriculum program in 2003; first, they have deleted two redundant courses from the program, second, provided students with two different options to choose from on elective courses. Data collected for this study include 1782 candidates who completed their program beginning 1999 to 2006. After controlling for age, gender, and education level, we find that structural change in 2003 is instrumental in shortening the length of program completion time. Results indicate that the predictive power of structural change in the curriculum to be contingent on the level of education and gender. Candidates with higher level of education, as measured by their highest degree earned, achieved significantly better performance. Findings of this study have important implications on curriculum change for any certification or degree program. Despite the differences among candidates education level, academic performance is impacted by structural change in the program curriculum. The relationship between gender-based increases in candidate's academic performance appears significant in this study. These findings are consistent with the hypothesis that efficient curriculum structure combined with education level enhances the shortening process of program completion time.

INTRODUCTION

The system of CPCU (Chartered Property and Casualty Underwriter) professional examinations and certification is the most recognized system in the area of property/casualty insurance, which provides comprehensive integrated, skill and knowledge set in all areas of property/casualty insurance. As with professional designations in other fields, such as the CPA in accounting, the CPCU is awarded to individuals willing to go beyond the normal requirements of their profession. The American Institute for Chartered Property and Casualty Underwriters

(AICPCU) confers the CPCU designation. Traditionally, the CPCU designation was earned through the successful completion of ten college-level courses with national essay examinations, an experience requirement, and an agreement to be bound by ethical standards. Curriculum includes risk management, insurance products, insurance operations, financial analysis, and legal and regulatory environment of insurance. Each course is accredited by the American Council on Education (ACE) for at least 3 college undergraduate credits and some for 3 graduate credits. The certification helps practitioners to make sound, ethical decisions in the complex environment of property and casualty insurance.

During 2003, the CPCU curriculum was changed to enable students to complete the program by successfully completing 8 of 11 possible courses in the program. Thus an 8- part program is tantamount to completing about 24 hours of college credits (per ACE). The CPCU designation is conferred solely by the American Institute for CPCU of Malvern, Pa. In this research, we look at the changes in their program and how these changes affect CPCU program, as well as the length of completion time for certification.

The CPCU designation has been historically offered mostly in the United States, with the audience for it being the professionals within the property/casualty industry. The property/casualty industry in the United States operates in a regulated environment, and within the evolving American culture, consumer markets, and labor force. Thus factors such as, overall educational trends, demographic, litigation, and consumerism influence the insurance industry. Therefore, the need for educated professionals, and ultimately the desire and ability of insurance industry people to seek and attain CPCU certifications for diverse knowledge to keep up with the dynamic change in the environment. Thus, the objective of this paper is to analyze the effect of recent structural change in the CPCU program curriculum. We hypothesize, by changing the structure of the CPCU program curriculum; the modified system potentially mitigates the impact of the externalities in the completion time, in what may be characterized as “swift structural shift”.

Our sample consists of observations of the CPCU designee candidates who completed the program. This sample covers the period of 1999 through 2006. The sample observations are divided into pre- and post-event structural change in 2003. We examine the intervention effect of the curriculum change on completion time (length of program completion) in number of months. We control for the age, gender and level of education. Pre-event period providing a benchmark, we find the structural change is instrumental in shortening the length of completion time. This suggests that the curriculum change have impacted candidate’s performance to accelerate the course completion process. Our results contribute to the literature by documenting the constructive externalities of CPCU program and associating systematic curriculum change with the completion time momentum.

Following section summarizes the background information. In the third section we discuss our data selection and research methodology. Results of our analyses are discussed in section four and we summarize our findings in section five.

BACKGROUND

The number of industry designations has continued to grow. Although these other designations may not compete directly against CPCU in terms of curriculum offered, they may compete in terms of time. According to the 2007 Society of Insurance Trainers and Educators Designation Handbook, there are over 200 designations and certifications. U.S. Department of Education reported that over 125,000 people earned MBAs in 2005. Even though the number of business schools has increased by 10 percent according to the Department of Education, the growth rate of part-time students has been the most dramatic with 62 percent of schools reporting increases in enrollment and 20 percent reporting *significant* increases in part-time MBAs. The average age for part-time MBA enrollees is 31 years, which competes squarely with the market of prospective students enrolling in CPCU, which also had an average age of 31 for enrollment in CPCU over the period studied. Because the CPCU curriculum is a broad-based curriculum, focusing on all aspects of the industry including financial acumen, some courses are significantly quantitative. This may pose a problem to many students. The second half of the 20th century witnessed a trend of declining standards and quality in quantitative education in the U.S. Employers compete for a shrinking pool of talent of quantitative professionals, who can combine mathematical knowledge with practical applications. The effect of this trend is that a growing number of students may find the quantitative-oriented CPCU courses more challenging and therefore increase their completion time. This could also potentially affect the desire to enroll in or the ability to complete the CPCU program.

Exhibit 1: CPCU -- Old Program Structure.
Foundations of Risk Management and Insurance
Personal Lines Insurance Coverage
Commercial Property Risk and Insurance
Commercial Liability Risk and Insurance
Insurance Company Operations
The Legal Environment of Insurance
Management
Accounting and Finance in Insurance
Economics
Insurance Ethics and Professionalism

The American Institute for CPCU cited several reasons for changing the curriculum. First, many of the students specialized and/or worked for companies that specialized in personal lines or commercial lines insurance. Enabling students to choose concentrations in their preferred area and

then taking a survey course on the other lines was seen as more practical and relevant. This should generate interests among candidates to complete the program on an accelerated manner. In addition, courses from the old curriculum such as Management and Economics were deleted. The primary reason is that nearly 85 percent of CPCU matriculates had already taken similar course in their undergraduate or graduate degree program. This also enables the program to dovetail better with part-time MBA programs in which a growing number of professionals are enrolled. The growth in part-time MBA programs is probably the most significant competition for the time and resources of existing and prospective CPCU students.

Allowing students to take courses on additional topics was viewed as more relevant and supportive to the students. A new course on Financial Institutions was added to reflect the convergence of the financial services industry and the need for students to better understand other financial service products and operations in order to advance in their careers. Finally, the Institute believed that reducing the number of courses required from 10 to 8 would reduce “completion time” by several months. According to an internal survey conducted by AICPCU in 2001, “Time to Complete” was cited as the number one obstacle by students as reasons not to be able to complete CPCU certification program. The pressure on students to enroll in the CPCU program is always a challenge both with respect to money and time. Therefore, a structural transformation in the CPCU program can assist to alleviate these impediments.

Exhibit 2: CPCU -- New Program Structure. Five foundation courses:
Foundations of Risk Management, Insurance, and Professionalism
Insurance Operations, Regulation, and Statutory Accounting
The Legal Environment of Insurance
Finance for Risk Management and Insurance Professionals
Financial Services Institutions
Students can choose between (A or B) personal or commercial concentration.
A. Commercial Concentration (with personal survey)
Commercial Property Risk Management and Insurance
Commercial Liability Risk Management and Insurance
Survey of Personal Risk Management, Insurance, and Financial Planning
B. Personal Concentration (with commercial survey)
Personal Risk Management and Property-Liability Insurance
Personal Financial Planning
Survey of Commercial Risk Management and Insurance

DATA AND METHODOLOGY

The sample period is an eight year window with 1782 completed (i.e., number of candidates who completed the program) candidates' complete record of data. The event date, 2003, is the date when the structural change in the CPCU program went into effect. During this year they changed their regular ten course program into a more condensed 8 course program, which includes insurance related subject matters that are both at the undergraduate and graduate level. Revised program is equivalent to completing about 24 hours of college course credits and also has options between personal lines or commercial lines insurance. This has provided prospective candidates an incentive to enroll into the program and accelerate the completion time. Such major change in the curriculum procedure could impact the CPCU program and its affiliated CPCU Society greatly. To test the effect of this event on candidates' completion time (length of program completion), we divided our sample into two periods: the pre-event period -- January 1999 through December 2002 and the post-event period includes January 2003 through December 2006. Researchers in other studies explored and tested this very important characteristic of intervention on both cross-section and longitudinal data; see Choudhury (2007) for an intervention analysis of a tax reform act on a longitudinal data.

Table-1A and Table-1B presents summary statistics for the pre- and post-event periods. A multiple regression analysis was applied to assess the significance of structural change in the CPCU program. Structural change variable is created as a dummy variable to assess the impact of the program change in 2003. In addition to the primary independent variable, program change, the analysis also included three other independent variables: gender, age, and level of education. Gender is a binary variable and coded 1 for male and 0 for female. A number of prior studies have investigated the impact of gender as a predictor of academic performance. Two earlier studies found that female students performed better than males in accounting area (Mutchler, Turner, & Williams, 1987; Lipe, 1989), while others found males outperforming females in finance (Borde, Byrd, & Modani, 1996) and Economics (Dale & Crawford, 2000; Heath, 1989). Several studies in computer arena found that, compared to male, females tend to display lower computer aptitude (Rozell & Gardner, 1999; Smith & Necessary, 1996; Williams, Ogletree, Woodburn, & Raffeld, 1993) and higher level of apprehension (Anderson, 1996; Bozionelos 1996; Igbaria & Chakrabarti 1990). Other studies, such as Zeegers (2001), however, could not find any differences between male and female learning behavior. Because the present study focuses on candidates' performance in terms of completion time, we include gender in the research model so its effect can also be explored and controlled to observe other factors effect.

TABLE-1A: Summary Statistics of Completion Time (1999-2002)					
		Median	Mean	Std	N
		COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME
EDUCATION	GENDER				
1	F	51.83	55.83	14.94	28
	M	40.42	38.88	10.11	6
	All	50.52	52.84	15.53	34
2	GENDER				
	F	42.21	51.37	19.74	31
	M	40.50	40.21	14.95	19
	All	41.13	47.13	18.72	50
3	GENDER				
	F	48.03	51.63	19.04	309
	M	45.24	48.57	18.83	413
	All	46.57	49.88	18.97	722
4	GENDER				
	F	50.04	50.88	18.43	53
	M	43.58	43.94	18.52	100
	All	43.76	46.34	18.72	153
5	GENDER	42.44	45.93	15.21	19
	F	42.44	45.93	15.21	19
	M	42.18	44.79	18.80	29
	All	42.20	45.24	17.31	48
6	GENDER				
	F	-	-	-	-
	M	54.16	54.16	12.62	2
	All	54.16	54.16	12.62	2
All		45.27	49.09	18.77	1009

TABLE-1B: Summary Statistics of Completion Time (2003-2006)					
		Median	Mean	Std	N
		COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME
EDUCATION	GENDER				
1	F	24.79	27.19	9.62	6
	M	32.02	28.14	7.49	6
	All	27.80	27.67	8.24	12
2	GENDER				
	F	36.31	34.60	5.78	8
	M	22.45	22.30	6.39	7
	All	28.11	28.86	8.63	15
3	GENDER				
	F	28.70	29.01	8.70	144
	M	27.62	26.85	8.95	233
	All	28.01	27.67	8.90	377
4	GENDER				
	F	25.15	24.35	8.53	43
	M	21.60	22.46	9.86	91
	All	22.54	23.07	9.47	134
5	GENDER				
	F	21.73	23.46	8.53	9
	M	18.58	20.99	9.75	15
	All	20.84	21.91	9.21	24
6	GENDER				
	F	7.23	7.23	.	1
	M	32.22	28.13	12.74	6
	All	30.81	25.14	14.05	7
All		26.56	26.35	9.32	569

To test the relationship between completion time and change in the program we perform two separate analyses. First, we use correlation analysis (Table 3A) to examine the direction of the association between variables and also to observe whether the program change exhibits any structural change. Second, we regress the completion time (number of months) on the age (AGE),

gender (GENDER), education level (EDUCATION), and structural change in the program (PRGM_CHANGE). Completion time is calculated as number of months taken to complete the certification program. Therefore, the difference between the first examination date and the date of completion of the program is termed as completion time. Age is a continuous independent variable. In general, it is assumed that there is a difference between younger and older people in their learning process. These differences may relate to candidates' job position, the larger amount of life experience with motivation that they bring with them to a learning environment.

Numerous studies have found GPA to be significantly correlated with student performance in accounting (Doran, Bouillon, & Smith, 1991; Eskew & Faley, 1988; Jenkins, 1998), marketing (Borde, 1998), and economics (Bellico, 1974; Cohn, 1972; Dale & Crawford, 2000). However, because the level of education (highest degree earned) differs greatly among candidates in this study and their performance on completion time may be influenced due to the level of education, we therefore include education level as an independent variable instead of GPA. Vermunt (2005) observed that, education and learning patterns influence student's academic performance. In our study, education is an ordinal (hierarchical) categorical variable and therefore, kept in its original format (similar to Likert-Scale) ranging from high school diploma to doctorate, rather than coding into a set of indicator variables (note that, statistical significance remains comparable irrespective of type of coding of this factor). This factor will control for the level of background knowledge to isolate and test for candidates' performance in completion time due to structural change. The nature of academic discipline and education level is supposed to influence peoples thinking strategies to which academic performance may depend on.

Thus, a multiple regression model was run using SAS software (see, SAS/STAT User's Guide, 1993) on four different independent variables; age, gender, education, and program change. Program change is to measure the recent structural change in the CPCU program. This measure is designed to test the hypothesis of structural change (pre and post) in view of candidates' performance. Therefore, the specification of the regression model is of the following form:

Where:

Completion_Time: Length of time needed to complete.

Age: Age of a candidate.

Gender: Male=1, Female=0.

Education (Level of Education):

High School=1, Associate=2, Bachelor=3, Masters=4, Law=5, Doctorate=6.

Prgm_Change: On or after 2003 = 1, before 2003 = 0.

Multiple regression is often appropriate for continuous and/or categorical predictive variable (*X*) with a continuous response (*Y*). It uses method of least squares or a method of maximum

likelihood for normal populations. Further discussions on different estimation methods; see Choudhury, Hubata & St. Louis (1999), and Choudhury (1994).

TABLE-2A: Summary Statistics of Completion Time by Gender (1999-2002)

	Median	Mean	Std	N
	COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME
GENDER				
F	48.03	51.54	18.63	440
M	44.02	47.20	18.67	569
All	45.27	49.09	18.77	1009

EMPIRICAL RESULTS

Descriptive statistics for the various measures of independent and dependent variables are presented in Table 1A for pre-event period and in Table 1B for post-event period. Relatively large standard deviation value for completion time in pre-event period suggests that there was a great degree of variations among students' performance and as a result average completion time is quiet larger during the pre-event period compared to post event period. Gender differences are not quite visible in Table 2A and Table 2B between pre and post-event. Shown in Table 3A are simple pair-wise correlation coefficients among the independent variables. We found that gender and completion time were negatively correlated at the 0.05 significance level (note that, even though simple-correlation is statistically meaningless for gender, this correlation is only an indication of the relationship direction in a simple linear regression setting). This result is not surprising. As discussed earlier, studies suggest that males tend to demonstrate a higher level of proficiency in different environments than females. It is possible that gender-bound differences exert influence the way in which male and female are inclined to learn (Gallos, 1995; Gilligan, 1982; Richardson, 2000).

TABLE-2B: Summary Statistics of Completion Time by Gender (2003-2006)

	Median	Mean	Std	N
	COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME	COMPLETION_TIME
GENDER				
F	27.58	27.88	8.95	211
M	25.12	25.44	9.43	358
All	26.56	26.35	9.32	569

We also found education and completion time to be negatively correlated; this is consistent with the expectation that high-achieving students make greater efforts in acquiring the necessary knowledge and skills; as a result they may be more competitive. The correlations found in Table 3A do not pose a serious multicollinearity threat. Most of the correlation coefficients among independent variables are relatively small in magnitude.

TABLE-3A: Correlation Analysis (1999-2006)					
Pearson Correlation Coefficients					
Prob > r under H0: Rho=0					
	COMPLETION_TIME	PRGM_CHANGE	AGE	GENDER	EDUCATION
COMPLETION_TIME	1.00000	-0.57858 <.0001	-0.02876 0.2258	-0.14852 <.0001	-0.19816 <.0001
PRGM_CHANGE	-0.57858 <.0001	1.00000	-0.00450 0.8497	0.07055 0.0030	0.24103 <.0001
AGE	-0.02876 0.2258	-0.00450 0.8497	1.00000	0.01469 0.5377	0.07824 0.0010
GENDER	-0.14852 <.0001	0.07055 0.0030	0.01469 0.5377	1.00000	0.08709 0.0002
EDUCATION	-0.19816 <.0001	0.24103 <.0001	0.07824 0.0010	0.08709 0.0002	1.00000

Note: PRGM_CHANGE – represents the structural change in the curriculum of CPCU program

In Table 3B, we report the results of the regression analysis. The proposed model appeared to fit well in estimating performance as a result of completion time. Reported coefficients of determination (R^2) is 0.35, while F value is 236.33, at a significance level <0.0001. Results indicate that structural change is a significant (p-value <0.0001) predictor of student's performance as measured by completion time. Therefore, the program curriculum change in 2003 resulted in shortening candidates' completion time by 1.83 years (21.97 months) on average after controlling for demographic factors. Age is not statistically significant. Therefore, there was no evidence to support that age influences candidate's performance. Although, level of education is statistically significant but the magnitude of the coefficient does not contribute much to the curbing of completion time. Finally, we found gender to be a significant factor on completion time. This result provides support for the hypothesis that candidates' gender may contribute to a four month curbing of completion time for males. A number of possible explanations exist for this difference.

One explanation relates to differences in learning styles. Severiens and Ten Dam (1997) observe that males scored higher than female on undirected learning. The CPCU is primarily a self-study program. Nearly two-thirds of the students reported that they self-study. Although self-study

could potentially be directed, it may be less directed than other educational alternatives. Contrast the CPCU program to MBA programs that provide instructor-led learning and directed group learning. The perceived self-efficacy may be higher for women in these more directed learning environments as one study indicates that in group work females perceive that they contribute more than their male counterparts (Kaenzig, Anderson and Lynn, 2006).

Competing educational alternatives may also explain the difference. In 2001, the number of females surpassed the number of males earning a bachelor's degree in business (see, U.S. Dept. of Ed., National Center for Education Statistics, Earned Degrees Conferred). Women earning a bachelor's in business may find the MBA education as a superior educational alternative for attaining professional credentials than a CPCU designation. In fact, 51 percent of schools offering MBA stated that they had special outreach efforts for females and in 2006 public universities saw a 55 percent increase in female applicants for MBA programs (GMAC 2006). Thus women who may have started their CPCU program may ultimately find that an MBA offers greater utility and better suitability to their learning style. Concurrent enrollment in MBA or other educational alternatives with greater perceived utility may contribute to augmenting the time for females to complete the CPCU designation.

Finally, a more traditional explanation of competing time demands for women compared to men, could also account for the difference. Considering that the average age of a CPCU enrollee is 31, competing time for family care could be a factor and gender differences in time spent on family care is well-documented. On weekdays, among adults living in households with children under 18, women spent 115 minutes each day performing childcare activities; by contrast, men spent 49 minutes. On weekends, women spent 78 minutes each day on childcare while men provided about 52 minutes. This amounts to annual difference of nearly 80 hours a year, the approximate amount of time to study for one CPCU exam. Furthermore the differences are even greater when considering secondary childcare activities such as housekeeping and purchasing goods and services for children (BLS 2006).

TABLE-3B: Regression Results on Completion Time (1999-2006)

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	228245	57061	236.33	<.0001
Error	1758	424470	241.45046		
Corrected Total	1762	652715			
R-Square	0.3497		Adj R-Sq	0.3482	

Each of the above possible explanations suggests strategies for the American Institute for CPCU for addressing gender differences including facilitating more directed and group learning, special marketing efforts to females, especially those with bachelor degrees in business, developing flexible exam and online learning formats. Also, facilitating improved expectation settings for family members of women enrolled in CPCU education.

CONCLUSIONS

In this study, we examine the performance impact of CPCU candidates' due to the structural change in the program. Results of multiple regression analysis found the predictive power of structural change in the program curriculum to be dependent on the level of education and gender. As expected, candidates with a higher level of education, as measured by their highest degree earned, achieved significantly better performance.

Findings from this study have important implications on curriculum change for any certification program. Despite the differences among candidates education level, their academic performance is impacted by the curriculum change. The relationship between gender-based increases in candidate's academic performance appears significant in this study. This predictive power of gender on performance may not depend on whether and how much level of education is attained by the candidate. Rather, it probably depends on which professional and personal lives environment they exist. These findings are consistent with the hypothesis that efficient curriculum structure combined with education level generates a motivational environment for shortening the completion time. Therefore, the results of this study indicate that the structural modification in the program have impacted and motivated candidates to accelerate their completion process.

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PREDICTING STUDENTS USAGE OF INTERNET IN TWO EMERGING ECONOMIES USING AN EXTENDED TECHNOLOGY ACCEPTANCE MODEL (TAM)

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ABSTRACT

This study employed an extended technology acceptance model (TAM) to predict Internet usage in two developing countries (Chile and United Arab Emirates (UAE)). In addition to investigating the impacts of perceived ease of use (PEOU), perceived usefulness (PU), and perceived Internet content (PIC) on students' usage of the Internet, it analyzed the direct impacts of external variables such as gender, educational background, income level, self-reported measure of computer knowledge, Internet cost, and Internet availability on Internet usage and their moderating role in the relationship between PEOU, PU, and PIC and Internet usage. To validate the research model, data was collected from 169 students from Chile and 194 students from United Arab Emirates (UAE). The results showed that only PU was a significant predictor of Internet usage for both Emirates and Chilean samples. Additionally, while gender significantly impacted Emirates students' usage of Internet, self-reported knowledge about computers significantly impacted Chilean students' usage of Internet. Income level was the only significant moderator for both countries. PU affected usage of the Internet more positively for students with high income level than it did for those students with low income. Discussion of practical implications of the results was included.

INTRODUCTION

Most studies of the Internet have focused primarily on adoption, e-commerce, and web design (e.g., Kim et al., 2005; Park, et al., 2004; Stanfield and Grant 2003; Ranganathan and Grandon 2002; Tan and Teo 1998; Teo and Pian 2004). Little research has been done on student usage of the Internet (Alshare et al, 2005a). Additionally, the majority of studies on Internet usage in the last decade have been carried out in developed countries. There is a need to understand not only why technology has or has not been adopted but also to comprehend the impacts of its adoption by developing countries. The Internet has major impacts upon the ability of developing countries and citizens to be more effective participants in the emerging global business environment.

The Technology Acceptance Model (TAM), introduced by Davis (1989), is the most popular model used in Information Systems (IS) literature to predict the intention or the usage of Information Technology (IT). According to the citation index of the Institute for Scientific Information (ISI

2005), by September 2005, there were 631 journal citations for the original Davis (1989) article. In his model, Davis introduced perceived ease of use and perceived usefulness as the two main factors that influence computer usage (e-mail). TAM has been used in predicting intention or usage of different computer applications primarily in the region of North America (Lapczynski 2004; Pijpers 2001). TAM was then extended by incorporating additional factors; see for examples, (Alshare et. al, 2004; Davis et al., 1989; Gefen and Straub 1997; Venkatesh et al. 2003; Venkatesh and Davis 2000; and Lucas and Spittler 2000). It is worth mentioning that there were few studies that tested TAM or extended versions outside the region of North America, primarily in developed countries (e.g., Al-Gahtani 2001, Huang et al., 2003; Lai and Wong 2003; Straub et al., 1997). Moreover, fewer studies applied TAM or extended versions to developing countries (e.g., Akour et al. 2006; Elbeltagi et al., 2005; Loch et al., 2003; McCoy et al. 2005; Parboteeah et al., 2005; Rose and Straub, 1998; Zakour 2004).

In this study, we extended the research that was conducted by Alshare et. al (2005a) by including more external variables such as Internet cost and Internet availability. Additionally, we tested a modified TAM model outside the region of North American in two developing countries, Chile and the United Arab Emirates (UAE). These two countries represent two emerging economies (The World Competitiveness Yearbook, 2002).

LITERATURE REVIEW OF CONSTRUCTS AND HYPOTHESES

Perceived Ease of Use (PEOU) and Perceived Usefulness (PU)

According to TAM, perceived ease of use refers to the extent to which a person feels that using a particular technology would be free of effort. On the other hand, perceived usefulness refers to the extent to which a person believes that using a particular technology would enhance his/her productivity and effectiveness (Davis 1989). TAM has been utilized in many studies and found that PEOU and PU were significantly related to computer usage (Adams 2002; Igbaria et al., 1997, Mccloskey (2003-2004); Seyal et. al. 2002; Venkatesh and Davis 2000). Seyal et al. (2002) developed a model to test whether PU, PEOU, and other variables determine Internet usage among college academics. They found that PU and PEOU were significant predictors of technology usage. In this study, we focused on PU and PEOU to explore their direct impact on Internet use. Thus, we developed the following hypotheses for testing:

- H1: Perceived ease of use (PEOU) has a significant impact on Internet usage.
- H2: Perceived usefulness (PU) has a significant impact on Internet usage.

Perceptions of Internet Content (PIC)

Many studies have focused on factors that make web sites more attractive to users (Liu and Arnett 2000; Park, et al., 2004; Ranganathan and Ganapathy 2002; Ranganathan and Grandon 2002). Internet content was found to be a major factor that influenced user usage of the Internet (Huizingh 2000; Torkzadeh and Dhillon 2002; Palmer 2002). However, Alshare et al (2005a) investigated students' usage of the Internet in the USA, and they found that PEOU and PU, but not PIC had significant influence on Internet usage. Since this study focused on students in Chile and UAE who represent two different cultural settings (Hofstede 1997), it was natural to think that some people perceived Internet content as a threat to their values and culture and avoided its usage, while others had a positive perception toward it and would continue or start to use it (Alshare 2005b). Thus, we proposed the following research hypothesis:

H3: Perception of Internet content (PIC) has a significant impact on Internet usage.

The Impact External Variables

Many studies have explored the effect of external variables on the relationship between PEOU, PU, and technology usage (Alshare et al., 2005a; Alshare et al., 2004; Venkatesh et al., 2003; Venkatesh and Morris 2000). For example, Alshare et al. (2005a) explored the direct effect of external variables (gender, income level, educational background, computer users' classification, and self-reported measures of computer knowledge) on Internet usage and their moderating effect on the relationship between PEOU, PU, and PIC and Internet usage. They found that gender was the only significant moderator (PEOU affected usage of the Internet more strongly for female students than it did for male students). However, they found that classification of computer users and self-reported knowledge about computers were significant predictors of Internet usage. Venkatesh and Morris (2000) explored the moderation effect of gender on the relationship between PEOU, PU, and subjective norm with the intention to use a system for data and information retrieval. They found that male technology usage decisions were more strongly influenced by their perceptions of usefulness, while females were more strongly influenced by perceptions of ease of use. It was also reasonable to assume that the cost and the availability of the Internet would influence students' usage of the Internet. For example, Alshare et al., (2003) found that there was a significant relationship between Internet cost and its usage. Based on the above discussion we proposed the following hypotheses:

H4: Gender has a significant impact on Internet usage.

H5: Educational background has a significant impact on Internet usage.

H6: Income level has a significant impact on Internet usage.

- H7: Self-reported knowledge about computers has a significant impact on Internet usage.
- H8: Internet cost has a significant impact on Internet usage.
- H9: Internet availability has a significant impact on Internet usage.

In this study, we followed the aforementioned research and proposed that gender, educational background, income level, self-reported measure of computer knowledge, Internet cost, and availability can be considered as moderating variables in the relationship between PEOU, PU, and PIC and Internet usage. Thus, we proposed the following set of hypotheses:

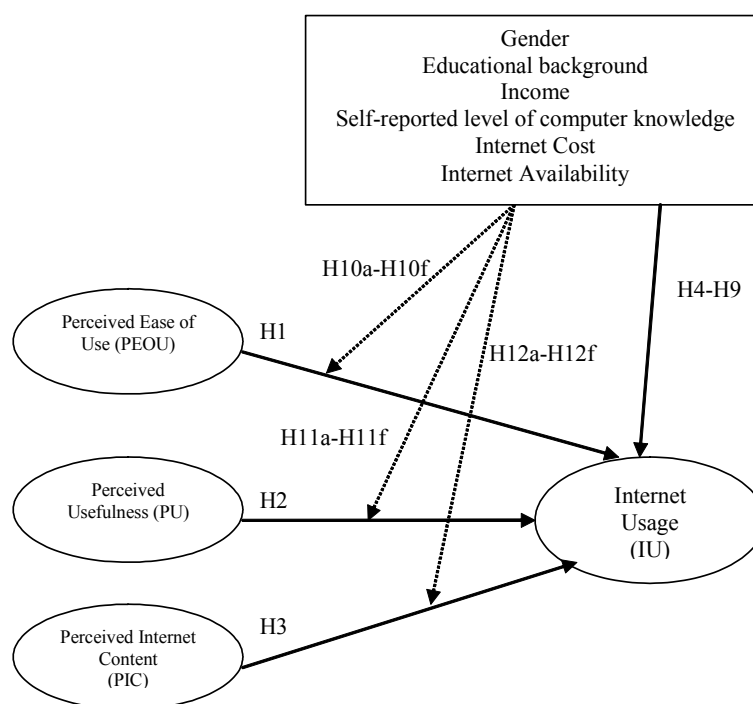
- H10a: The impact of perceived ease of use on Internet usage depends on gender.
- H10b: The impact of perceived ease of use on Internet usage depends on educational background.
- H10c: The impact of perceived ease of use on Internet usage depends on income level.
- H10d: The impact of perceived ease of use on Internet usage depends on self-reported knowledge about computers.
- H10e: The impact of perceived ease of use on Internet usage depends on Internet cost.
- H10f: The impact of perceived ease of use on Internet usage depends on Internet availability.
- H11a: The impact of perceived usefulness on Internet usage depends on gender.
- H11b: The impact of perceived usefulness on Internet usage depends on educational background.
- H11c: The impact of perceived usefulness on Internet usage depends on income level.
- H11d: The impact of perceived usefulness on Internet usage depends on self-reported knowledge about computers.
- H11e: The impact of perceived usefulness on Internet usage depends on Internet cost.
- H11f: The impact of perceived usefulness on Internet usage depends on Internet availability.
- H12a: The impact of perceived Internet content on Internet usage depends on gender.
- H12b: The impact of perceived Internet content on Internet usage depends on educational background.
- H12c: The impact of perceived Internet content on Internet usage depends on income level.
- H12d: The impact of perceived Internet content on Internet usage depends on self-reported knowledge about computers.
- H12e: The impact of perceived Internet content on Internet usage depends on Internet cost.
- H12f: The impact of perceived Internet content on Internet usage depends on Internet availability.

RESEARCH METHOD

The Proposed Model

Based on the previous analysis, we proposed the following theoretical model.

Figure 1: Proposed Theoretical Model Based on Alshare et. al. (2005a) Study Applied to Each Country



Survey Questionnaire

In addition to asking questions concerning demographic variables such as gender, age, educational background, and income level, the questionnaire solicited information about Internet usage, PEOU, PU, and PIC. Five items were used to measure each of the PEOU and PU constructs that were taken directly from Davis' (1989) scale and modified to measure Internet usage. The PIC construct was adopted from Alshare et al., (2005a). Four items were used to measure the construct PIC. The survey instrument was developed, reviewed for content as well as readability, and pilot

tested; then, the survey was modified accordingly. Survey participants responded to statements using a 5-point Likert scale ranging from strongly disagree to strongly agree. The Statistical Packages for the Social Services (SPSS) was used to compute frequencies, means, percentage, factor analysis, and reliability (Cronbach alpha coefficient). The regression procedure was utilized to test the hypotheses.

Samples and Data Collection

The survey questionnaire was administered to convenient samples of college students in the UAE and Chile during Fall 2003-Spring 2004. In Chile and UAE, colleagues of the authors were approached and asked to distribute the survey to students in their schools. Students completed the survey during class time; then the surveys were collected by the instructors and sent back to the USA via postage mail. The questionnaire was distributed to 300 college students in each country. Since English is the second spoken language in the UAE and students and instructors were familiar with it (AMIDEAST 2005), the questionnaire was administered in English to the UAE sample. In Chile, however, the questionnaire was administered in Spanish, since only 2% of Chileans older than 15 years were fluent in English (Miranda, 2004). Back translation procedure (Brislin, 1986) was used to ensure that the meaning of the questions was not lost during the translation process.

Measures of Variables and Constructs

The dependent variable Internet usage (IU) was measured with a single item that represented the number of hours devoted to the usage of Internet per day. The independent variables included three constructs: perceived ease of use (PEOU) measured using 5 items, perceived usefulness (PU) measured using 5 items, and perceived of internet content (PIC) measured using 4 items.

The external variables considered in this study were gender (GEN), educational background (EDBACK), family-monthly income (INC), self-reported knowledge about computers (KNOWL), Internet cost (ICO), and Internet availability (IAV). The above external variables were operationalized as follows:

Gender	is a dummy variable that takes on a value of 0 for males and a value of 1 for females.
EDBACK	is a dummy variable that takes on a value of 0 for business majors and 1 for other majors.
INC	is a dummy variable that takes on a value of 0 for low family-monthly income and 1 for high family-monthly income.
KNOWL	is a dummy variable that takes on a value of 0 for very good-to-excellent computer knowledge and 1 for poor-to-good computer knowledge.
ICO	is a dummy variable that takes on a value of 0 for expensive-very expensive and 1 for very cheap-fair.

IAV is a dummy variable that takes on a value of 0 for very good-excellent and 1 for fair-good.

Regression Models

Three regression models were used to test hypotheses (H1-H12f). The average of the items for each construct was used in the regression analysis. The external variables were included in the multiple regression equations as dummy variables. We evaluated their effects on the relationship between PEOU, PU, PIC and IU by adding the interaction term between the external variable and each of the independent variables.

$$\text{Model 1: } IU = a_1 + \beta_1 (\text{PEOU}) + \beta_2(\text{PU}) + \beta_3 (\text{PIC}) + e_1$$

$$\text{Model 2: } IU = a_2 + \beta_1 (\text{GEN}) + \beta_2 (\text{EDBACK}) + \beta_3 (\text{INC}) + \beta_4 (\text{KNOWL}) + \beta_5 (\text{ICO}) + \beta_6 (\text{IAV}) + e_2$$

$$\text{Model 3: } IU = a_3 + \beta_1 (\text{PEOU} * \text{GEN}) + \beta_2 (\text{PEOU} * \text{EDBACK}) + \beta_3 (\text{PEOU} * \text{INC}) + \beta_4 (\text{PEOU} * \text{KNOWL}) + \beta_5 (\text{PEOU} * \text{ICO}) + \beta_6 (\text{PEOU} * \text{IAV}) + \beta_7 (\text{PU} * \text{GEN}) + \beta_8 (\text{PU} * \text{EDBACK}) + \beta_9 (\text{PU} * \text{INC}) + \beta_{10} (\text{PU} * \text{KNOWL}) + \beta_{11} (\text{PU} * \text{ICO}) + \beta_{12} (\text{PU} * \text{IAV}) + \beta_{13} (\text{PIC} * \text{GEN}) + \beta_{14} (\text{PIC} * \text{EDBACK}) + \beta_{15} (\text{PIC} * \text{INC}) + \beta_{16} (\text{PIC} * \text{KNOWL}) + \beta_{17} (\text{PIC} * \text{ICO}) + \beta_{18} (\text{PIC} * \text{IAV}) + e_3$$

Where:

IU:	Internet usage
PEOU:	Perceived ease of use
PU:	Perceived usefulness
PIC:	Perceived Internet content
GEN:	Gender
EDBACK:	Educational background
INC:	Family-monthly income
KNOWL:	Self-reported knowledge about computers
ICO:	Internet cost
IAV:	Internet availability
e:	error term

DATA ANALYSIS

Characteristics of the Samples

One-hundred sixty nine Chilean students and 194 Emirates students returned completed surveys. This represented response rates of 56 and 65 percent respectively. A summary of frequency distributions by country for relevant variables is presented in Table 1.

Seventy-eight percent of Chilean students were males, compared with 49 percent in the Emirates sample. In both samples, students were undergraduate and younger than 30 years old. Forty-six percent of Chilean and 69 percent of Emirates students had business majors. Forty-seven percent of Chilean students and 25 percent of Emirates students had low family incomes. Ninety-five percent of students in Chile and 96 percent of students in UAE reported having a computer at home. Seventy-nine percent (127/160) of Chilean students who had computers at home also had access to the Internet from home, as did 72 percent (139/186) of the Emirates students.

Variable	Chile (n2=169)		UAE (n3=194)	
	No. of Responses	(%)	No. of Responses	(%)
Gender:				
Male	131	77.5	95	49.0
Female	38	22.5	99	51.0
Educational background:				
Business	78	46.2	133	68.6
Other	91	53.8	61	31.4
Family monthly income:				
Low income	79	46.7	48	24.7
High income	90	53.3	146	75.3
Having computer at home:				
Yes	160	94.7	186	95.9
No	9	5.3	8	4.1
Knowledge about computers:				
1. Excellent-Very good	51	30.0	115	59.3
2. Good	108	64.0	72	37.1
3. Fair – Poor	10	6.0	7	3.6
Using computer per day:				
Less than 2 hours	76	45.0	59	30.4
More than 2 hours	93	55.1	135	69.6
Having access to the Internet at home:				
Yes	127	75.1	139	71.6

Variable	Chile (n2=169)		UAE (n3=194)	
	No. of Responses	(%)	No. of Responses	(%)
No	42	24.9	55	28.4
Cost of Internet:				
1. Very Cheap-Cheap	11	6.5	43	22.2
2. Fair	69	40.8	101	52.1
3. Expensive-Very Expensive	89	52.7	50	25.7
Availability of Internet:				
1. Poor - Good	114	67.45	42	21.65
2. Very good - Excellent	55	32.55	152	78.25
Using Internet per day:				
Less than 2 hours	107	63.4	86	44.3
More than 2 hours	62	36.7	108	55.7
Internet applications usage:				
Class related activities	130	76.92	141	72.68
Communication	132	78.11	128	65.97
Entertainment	84	49.70	104	53.60
Other activities	78	46.15	116	59.79
Selling/buying	18	10.65	33	17.01

Thirty percent of Chilean, compared to 59 percent of Emirates students, stated that their knowledge about computers was very good to excellent. Six percent of Chilean compared to 4 percent of Emirates students reported that their knowledge was poor to fair. Some 64 percent of Chilean students compared to 37 percent of Emirates students indicated that their knowledge about computers was good. This should be of no surprise, since more than one-half of the students, in both countries, used computers over two hours per day. Thirty-seven percent of Chilean, compared to 56 percent of Emirates students, used the Internet for more than two hours per day, mostly for class-related activities and communication (e-mail). Shopping on line was reported to be the least-used activity on the Internet in both countries. However, approximately 50 percent of students in both countries used the Internet for entertainment activities. While the majority of students in Chile reported that the cost of the Internet was “expensive-very expensive”, the majority of students in UAE indicated that the cost of the Internet was “fair”. Additionally, two-thirds of Chilean felt that the availability of the Internet in their country was “poor-good”, while three-quarters of Emirates students felt that the availability of the Internet in their country was “very good-excellent”.

Validation of the Measures

Exploratory factor analysis and Cronbach's alpha were used to assess the psychometric properties of the scales. Factor analysis (Principal component, with Varimax rotation) was performed to confirm that the items loaded according to the proposed model. According to Hair et al. (2006), the acceptable value for factor loading for a sample size of 150 is 0.45. Thus, items with loading less than 50 percent were dropped from further analysis. As a result, two items were dropped from each of PEOU, PU, and PIC. Appendix A presents the results of factor analysis and Appendix B shows the items and their descriptions that were used in the computations. Scale reliability was measured using Cronbach's alpha coefficient. As shown in Table 2, the values of alpha for the two samples ranged from 0.62 to 0.83. These values are considered to be sufficient according to Hair et al., 2006.

Construct	UAE	Chile
Perceived Ease of Use (PEOU) (3 items)	0.83	0.65
Perceived Usefulness (PU) - (3 items)	0.76	0.70
Perceived Internet Content (PIC) - (2 items)	0.62	0.69

THE RESULTS OF THE STUDY

The results of the study are divided into three sections. The first section discusses the relationships between the usage of the Internet and PEOU, PU, and PIC. For each country, the multiple regression procedure was employed to test the hypotheses (H_1 - H_3). The second section analyzes the direct effect of the external variables of gender, educational background (business vs. non-business), income level (low vs. high), a self-reported measure of computer knowledge (very good-excellent vs. poor-good), Internet cost (very cheap-fair vs. expensive-very expensive), and Internet availability (fair-good vs. very good-excellent) on Internet usage (hypotheses H_4 - H_9). The third section reports the impact of the external variables on the relationship between PEOU, PU, PIC and usage of the Internet (hypotheses H_{10a} - H_{12f}).

Before testing the hypotheses, the assumptions of the multiple regression models were validated. Several tests such as multicollinearity, autocorrelation, plotted histogram, and the plots of the dependent variable against each of the independent variables were conducted. Multicollinearity was not a problem since the variance inflation factor (VIFs) were low (< 2.0) for both samples. Autocorrelation problem was not an issue since the D.W. values ranged from 1.80 to 1.96. The plotted histograms of the data depicted a normal distribution. Additionally, the plots of the dependent variable against each of the independent variables showed a linear relationship.

The Impact of PEOU, PU, and PIC on Internet Usage (IU)

Based on the regression results of Model 1 (Table 3), only the second hypothesis (H_2) was supported by the data for both samples. Thus, PU was a significant predictor of Internet usage ($t=2.068$, $p=0.04$ for UAE, and $t=2.104$, $p=0.037$ for Chile). On the other hand, PEOU ($t=1.292$, $p=0.198$ for UAE, and $t=0.151$, $p=0.880$ for Chile) and PIC ($t=-0.636$, $p=0.526$ for UAE, and $t=0.663$, $p=0.508$ for Chile) were not significant in predicting Internet usage.

The Impact of External Variables on Internet Usage

In this section, hypotheses (H_4 - H_9) were tested using multiple regression procedure as described earlier in Model 2. As shown in Table 3, two external variables had significant impacts on the Internet usage. Gender had significant impact on Internet usage for the case of the UAE sample ($t=2.312$, $p=0.022$). Female students in UAE would spend more time using the Internet compared to their male counterparts (H_4 was supported). For the case of the Chilean sample, self-reported knowledge about computers was a significant variable that impacted student's Internet usage ($t=-2.605$, $p=0.009$). Chilean students who rated their knowledge about computers as "poor-good" would spend less time using the Internet compared to those who rated their knowledge "very-good-excellent" (H_7 was supported).

The Moderating Effect of the External Variables

In Model 3, the interaction terms between PEOU, PU, PIC and the external variables (gender, educational background, family-monthly income level, self-reported knowledge about computers, Internet cost, and Internet availability) were regressed to determine the role of the external variable in moderating the relationship between PEOU, PU, and PIC and Internet usage (H_{10a} - H_{12f})

As shown in Table 3 at the end of the text, only one interaction term was significant that is (PU *income) for both samples; UAE ($t=2.132$, $p=0.035$) and Chile ($t=2.211$, $p=0.029$). Therefore, all hypotheses (H_{10a} - H_{12f}) were not supported with the exception of H_{11c} (The impact of perceived usefulness on Internet usage depends on income level). PU affected usage of the Internet more positively for Emirates and Chilean students with high-income level than it did for those students with low income.

DISCUSSION AND CONCLUSIONS

This study investigated the effect of PEOU, PU, and PIC on students' usage of the Internet in Chile and UAE. It also examined the direct impact of external variables such as gender,

educational background, family-monthly income, self-reported knowledge about computers, Internet cost, and Internet availability on Internet usage. Additionally, the study evaluated the moderation role of the external variables in the relationship between PEOU, PU, and PIC and IU.

Table 4 shows a comparison between the results of this study and the results of Alshare et al. (2005a) study that was conducted in the U.S. The results showed that while PU was the only significant predictor of Internet usage for both Emirates and Chilean students, PEOU and PU were significant predictors of Internet usage for American students. It seems that students in the three countries regardless of their differences of cultural backgrounds felt that the use of Internet would be beneficial to them. On the other hand, American students, compared to Emirates and Chilean students, felt that the ease of use of Internet motivated them to use it more frequently. An explanation for this finding is that Emirates and Chilean students, compared to American students, would be more dependent on their teachers according to Hofstede's cultural dimensions (Alshare et al. 2005b), and they expect support and help from their teachers. Thus, PEOU was not an important factor in predicting Internet usage. On the other hand, American students are more dependent on themselves in learning how to use the Internet; therefore, PEOU was a significant factor in predicting Internet usage. Another plausible suggestion might be that Emirates and Chilean students believed in the importance of using the Internet regardless of its learning difficulty. On the other hand, American students felt that the difficulty level of learning how to use the Internet was a major factor that influenced their usage of the Internet. According to the results of Alshare et al. (2005a) study, PEOU was the most influential factor that affected American students' usage of the Internet.

Variable	Alshare et al. (2005a)	This Study	
	USA	CHILE	UAE
PEOU	Sig.	Not Sig.	Not Sig.
PU	Sig.	Sig.	Sig.
PIC	Not Sig.	Not Sig.	Not Sig.
Gender	Not Sig.	Not Sig.	Sig.
Education background	Not Sig.	Not Sig.	Not Sig.
Income	Not Sig.	Not Sig.	Not Sig.
Self-reported knowledge about computers	Sig.	Sig.	Not Sig.
Internet cost	NA	Not Sig.	Not Sig.
Internet availability	NA	Not Sig.	Not Sig.
Gender*PEOU	Sig.	Not Sig.	Not Sig.
Income*PU	Not Sig.	Sig.	Sig.

*. The remaining of interaction terms were not significant.

Even though PIC was found to be a valid and reliable construct, it did not significantly affect students' usage of the Internet. Once again this finding was consistent with Alshare et al (2005a) findings. This outcome should be of interest to instructors. It appeared that students considered Internet content as a trusted source for class-related activities. The role of instructors becomes more important to show students the correct way for obtaining quality information on the Internet. One explanation for not having PIC as a significant factor could be the fact that the Internet is considered by many students to be the most convenient way of finding information for class-related activities; therefore, students may not have much concern about the actual content.

With respect to the impact of external variables, educational background (business vs. non-business), family-monthly income level (low vs. high), Internet cost (very cheap-fair vs. expensive-very expensive), and Internet availability (fair-good vs. very good-excellent) did not influence students' usage of the Internet in the three countries as shown in Table 4. One can say that most of the teachers in many academic majors do request their students to utilize the Internet as a source for information; thus, educational background was not significant. As mentioned earlier and as shown in Table 1 the majority of students used the Internet for class related activities and communication (email). Since access to the Internet is available to all students in the three countries at their schools, income level, Internet cost, and Internet availability were not significant factors.

While gender significantly influenced Emirates students' usage of the Internet, self-reported knowledge about computers (very good-excellent vs. poor-good) significantly influenced American and Chilean students' usage of the Internet as reported in Table 4. As expected students with greater knowledge about computers would feel at ease in utilizing computer applications such as the Internet; and therefore, use it more frequently. While it might be easier to explain, based on the "gender gap" concept, why male students, compared to female students, would spend more time using the Internet, it is not quite easy to explain why Emirates female students would spend more time using the Internet. One explanation could be based on the UAE culture. According to Hofstede's cultural dimensions, the culture of the Arab countries, which UAE is one of them, is a conservative society (Alshare et al. 2005b). Therefore, Emirates female students, compared to their male counterparts, would use more frequently the Internet for communication (email); especially with their teachers. Additionally, Emirates female students who live on campus are limited in their social interactions outside the campus; therefore, the Internet would be their social outlet.

As shown in Table 4, family-monthly income level was the only significant moderator in the case of UAE and Chilean samples. It moderated the impact of PU on Internet usage. On the other hand, gender was the only significant moderator in the case of the American sample. It moderated the relationship between PEOU and Internet usage. PU influenced usage of the Internet more positively for Emirates and Chilean students with high income level than it did for those students with low income. It is reasonable to assume that people with high income level would have access to the Internet at home or Internet shops; and thus, they use the Internet more often for a variety of reasons, and they would appreciate its usefulness. As a matter of fact, the majority of students with

high income level spend more than 4 hours per day using the Internet, while the majority of students with low income level spend less than 3 hours. On the other hand, Income level was not a significant moderator for American sample because the Internet cost, compared to the cost in UAE and Chile, is considered cheap. Thus, both groups of income levels could afford to have internet access at home; and therefore, appreciate its usefulness. As reported by Alshare et al., (2005a) PEOU influenced usage of the Internet more positively for American female students than it did for males. Female students felt that the ease of use of the Internet, but not necessarily its usefulness or its content, motivated them to use the Internet more frequently. However, for Emirates and Chilean students this was not the case. The impact of gender on the relationship between PEOU and Internet usage was not significant.

Finally, the results revealed that an extended TAM model was partially valid in non-western cultures such as Chilean and Emirates cultures. Only PU impacted student's usage of the Internet regardless of their cultural backgrounds. Therefore, educators need to reinforce this concept (perceived usefulness) especially when deciding to teach online classes. Instructors might request students to use the Internet more frequently and demonstrate how easy it is for them to find the desired information.

The limitations of the study includes: first, the reliance on self-reported data on all constructs. Thus, relationships among the constructs might be inflated. Second, the use of students as the target population restricts the ability to generalize the results. Therefore, future research might use a more detailed questionnaire survey with a follow up with subjects. Another future research might be targeting all population segments; and thus, results of the study could be generalized. Finally, another plausible future research could be examining the impact of cultural dimensions on the proposed model by including constructs that represents cultural dimensions.

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Appendix A
UAE and Chile

Rotated Component Matrix (Factor Analysis)			
	Component		
UAE	1	2	3
PEOU3	.880	.233	0.163
PEOU1	.803	.297	0.176
PEOU2	.723	.269	0.28
PU3	.131	.820	0.27
PU1	.276	.774	-0.009
PU4	.316	.694	0.172
PIC2	.105	.341	0.783
PIC1	.421	-.022	0.703
Total Variance Explained: 71.969%			
	Component		
Chile	1	2	3
PU1	.800	.211	-0.021
PU3	.794	.250	0.186
PU4	.717	.037	0.138
PEOU1	.339	.725	-0.068
PEOU2	.073	.719	-0.032
PEOU3	.115	.692	0.308
PIC1	-.033	.105	0.835
PIC2	.196	.228	0.702
Total Variance Explained: 62.434%			

Appendix B
Significant Items Considered in the Final Analysis

Construct	Item	Description
Perceived Ease of Use (PEOU)	PEOU1	Learning to use the Internet would be easy for me
	PEOU2	I would find it is easy to get the Internet to do what I want it to do
	PEOU3	I would find the Internet easy to use
Perceived Usefulness (PU)	PU1	Using the Internet would increase my productivity
	PU3	I would find the Internet useful in my career
	PU4	Using the Internet would make my communication with others more efficient
Perceived Internet Content (PIC)	PIC1	The information provided by the Internet is reliable
	PIC2	I am satisfied with the quality of the information provided by the Internet

Table 3: Results of Regression Analysis (Coefficient β , p-value)

Dependent Variable IU																		
Reg. Model	Independent Variables																	
Model 1 (R ²)	PEOU	PU	PIC															
UAE (6.2)	0.151 (0.198)	0.261 (0.04)b	-0.082 (0.526)															
Chile (4.1)	0.024 (0.88)	0.323 (0.037)b	0.113 (0.508)															
Model 2 (R ²)	Gen	Eedback	Inc	Knowl	Ico	Iav												
UAE (6.9)	0.340 (0.022)b	-0.12 (0.455)	0.145 (0.39)	-0.168 (0.249)	0.113 (0.447)	-0.228 (0.162)												
Chile (5.8)	0.088 (0.681)	-0.034 (0.849)	0.133 (0.475)	-0.502 (0.009)c	0.107 (0.554)	-0.101 (0.595)												
Model 3 (R ²)	(Peou* Gen)	(Peou* Eedback)	(Peou* Inc)	(Peou* Knowl)	(Peou* Ico)	(Peou* Iav)	(Pu* Gen)	(Pu* Eedback)	(Pu* Inc)	(Pu* Knowl)	(Pu* Ico)	(Pu* Iav)	(Pic* Gen)	(Pic* Eedback)	(Pic* Inc)	(Pic* Knowl)	(Pic* Ico)	(Pic* Iav)
UAE (17)	.127 (.676)	.163 (.565)	.020 (.946)	.093 (.325)	-.053 (.567)	.307 (.291)	.014 (.962)	.063 (.841)	.679 (.035)b	.413 (.143)	-.003 (.992)	.129 (.733)	.09 (.752)	-.071 (.805)	-.425 (.206)	-.324 (.255)	.151 (.557)	-.007 (.985)
Chile (16)	-.009 (.985)	-.088 (.81)	-.274 (.483)	-.1 (.807)	.452 (.258)	.515 (.207)	-.252 (.573)	.438 (.226)	.698 (.029)b	-.210 (.593)	-.574 (.14)	-.407 (.308)	-.127 (.799)	.131 (.77)	-.449 (.311)	-.164 (.243)	-.033 (.783)	.299 (.52)

Values in parenthesis represent the P-value: a = P < 0.1, b = P < 0.05, c = P < 0.01

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