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Michael Shurden and Royce Caines
Editors
Lander University

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Royce Caines and Michael Shurden
Editors
Lander University

AN EXAMINATION OF THE EFFECT OF A CODE OF CONDUCT ON BUSINESS STUDENTS' PERSPECTIVES REGARDING ACADEMIC FRAUD

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ABSTRACT

The purpose of this study is to examine the ethics education program of a military academy for potential enhancement of accounting ethics programs. The military academy emphasizes the core values of its honor code that are similar to the American Institute of Certified Public Accountants' (AICPA) Code of Professional Conduct. Using a survey describing two situations of academic fraud, the ethical perceptions of business students at the military academy are compared to those of accounting students at a control university to determine if there are any measurable differences attributable to the academy's ethics program.

This study found that military academy students were significantly more likely than the control group to perceive academic behavior as unethical when it directly violated their core values, but were not more likely to perceive academic behavior as unethical when it did not violate their core values. These results indicate that the ethics education program at the military academy may have been useful in aligning students' ethical perceptions with their code of conduct. This implies that ethics education in accounting programs may want to emulate aspects of the academy's ethics program, most notably emphasizing the accounting profession's code of conduct to accounting students.

INTRODUCTION

Recent years have seen an increase in the interest of teaching accounting ethics. Driving this interest are the significant changes in the ethical environment in which accountants work, and the profession's acknowledgment of the importance of education in the process of influencing ethical behavior of future accountants. Several well-publicized cases of fraudulent financial reporting caused the accounting profession to fund a study of the ethical education of accountants by the National Commission on Fraudulent Financial Reporting or the Treadway Commission (1987). Upon completion of the study, the Treadway Commission recommended more extensive coverage of ethics in accounting curriculums. In 1988, the American Institute of Certified Public Accountants (AICPA) adopted a new Code of Professional Conduct, which emphasizes the importance of education in ethics. What is especially noteworthy in this Code is that it emphasizes education as

a means for influencing the ethical behavior of future members of the accounting profession (Anderson & Ellyson, 1986). Another reason many business colleges are interested in teaching ethics is that the American Assembly of Collegiate Schools of Business (AACSB) has stressed the importance of increased ethics education in the business school curriculum (Karcher, 1996) and requires an ethical component in the business curriculum as a condition of accreditation. Certainly, the recent wave of widely publicized corporate scandals, such as Enron and WorldCom, has also underscored the importance of accountants behaving ethically (Melancon, 2002).

Many issues in teaching ethics to accounting students have been studied in prior research. For example, the questions of whether accounting professors should teach ethics (e.g., Oddo, 1997; McDonald & Donleavy, 1995), how ethics should be taught (e.g., Loeb, 1994; Armstrong, 1993), and the effectiveness of teaching ethics (e.g., Bay & Greenberg, 2001; Duizend & McCann, 1998) have all been addressed, often with no clear answers. The issues related to teaching ethics in the accounting curriculum are more than academic, as evidenced by research that documents the existence of unethical behavior among accountants (e.g., Gibson & Frakes, 1997; Schaefer & Welker, 1994), in addition to the recent corporate scandals.

The purpose of this study is to examine the ethics education program of a military academy for potential enhancement of accounting ethics programs. The core values of the honor code of the academy are described, noting their similarity to the AICPA's Code of Professional Conduct (2003). Then using a survey describing two situations of academic fraud, the ethical perceptions of students majoring in business at the military academy are compared to those of accounting students at a control university to determine if there are any measurable differences attributable to the academy's ethics program.

The remainder of this paper is organized as follows: first, a background is given, discussing the military academy's ethics program and the similarities between its core values and the AICPA's Code of Professional Conduct. Next, the hypotheses are developed and the research method is described, followed by a discussion of the results, implications, and limitations.

BACKGROUND

The military academy's ethics program was chosen for examination in this study because the three core values comprising its honor code closely parallel the AICPA's Code of Professional Conduct (2003). Core values can be thought of as a positive reconstruction of the institution's honor code. Core values are also being defined and used in public accounting firms. For example, KPMG has defined core values as "a screen through which every major decision we make is passed and a standard by which all of our employees are evaluated." KPMG then lists the following as its core values: "we lead by example; we work together; we respect the individual; we seek the facts and provide insight; we are open and honest in our communication; we are committed to our communities; above all, we act with integrity" (KPMG, 2004).

The military academy discussed in this paper has the following core values: "Integrity first, service before self, excellence in all we do." The four key principles found in the AICPA's Code of Professional Conduct are integrity, objectivity, due professional care, and a genuine interest in serving the public. All three of the academy's core values have a similar counterpart in the accounting profession's code of conduct ("integrity first" and "integrity"; "service before self" and "a genuine interest in serving the public"; and "excellence in all we do" and "due care"). Note that integrity is a guiding principle in both codes. In addition, the similarity between the academy's core value of "service before self" and the AICPA's principle of "a genuine interest in serving the public" is even more pronounced upon further reading of the AICPA's Preamble to the Code of Conduct, which states, "Principles call for an unswerving commitment to honorable behavior, even at the sacrifice of personal advantage." Finally, the parallel between the academy's core value of "excellence in all we do" and the AICPA's principle of "due care" becomes more apparent when one reads the AICPA's Code clarification of the meaning of "due care:" "The quest for excellence is the essence of due care."

The military academy examined in this paper has integrated a comprehensive ethics program throughout its curriculum. Ethics education takes place immediately upon arrival, both inside and outside of the classroom. At a rudimentary level, the academy requires that all students commit to memory the core values and the honor code ("We will not lie, steal, cheat, nor tolerate among us those who do"), and take an oath to abide by them. Over a four-year period, students attend 43 mandatory ethics lessons outside of class: 12 upon entrance to the academy, 11 more as freshmen, 10 as sophomores, five as juniors, and five as seniors. These ethics lessons are taught by student honor representatives (selected juniors and seniors who have expressed an interest in ethics education) and are based around the core values. Guided by the Character Development Center, teams of two honor representatives (a senior and a junior) are responsible for approximately 100 students each, divided into groups of approximately 25, based on class standing. A mentor faculty member volunteers to advise the student leaders in useful active teaching methods (e.g., case teaching, collaborative learning, simulations, and directed discussions) to enhance the traditional passive learning techniques. In addition to the ethics education outside of class, within the curriculum there is a required semester course on ethics provided by the philosophy department, and ethics is emphasized in one general studies course each year for all students (e.g., freshman English emphasizes ethics for first year students).

In addition, the academy has obtained the support of the ethics program from faculty across the curriculums. The Dean of Faculty encourages all faculty members to use "teachable moments" that arise in any class to emphasize the importance of the core values. Further, the Dean meets with the faculty of each department annually to inform them of the progress of the ethics development program and to solicit feedback from the faculty. Finally, most of the academic departments are represented by faculty who volunteer their time to serve as ethics advisors to the student honor representatives as discussed earlier.

Thus, the military academy has instituted a fairly comprehensive ethics program throughout its curriculum. Prior research has noted that most accounting programs, on the other hand, have not effectively integrated ethics into the accounting curriculum (Sisaye & Lackman, 1994). Thus, if there is any measurable difference in the effectiveness of the academy's ethics program (such as on the ethical perceptions of its students), it may provide a model for accounting programs to copy.

HYPOTHESES

To assess whether the military students had internalized the academy's code of conduct, a survey was designed with two hypothetical scenarios set in an academic environment (see appendix). The foundation for the survey was provided by fraud researchers, who have found that three elements must be present simultaneously for fraud to occur (Albrecht et al., 1995). These elements are pressure (or motive to commit the fraud); perceived opportunity to be able to perpetrate the fraud and remain undetected; and the ability to rationalize the action as acceptable behavior. These three elements are often referred to as the "fraud triangle," and if the risk of any one of those three elements occurring can be minimized, then the risk of fraud is minimized. Ethics education primarily affects rationalizations (Kleigman, 2004; Armstrong et al., 2003).

Academic dishonesty can be considered fraud in a classroom environment when one considers the definition of fraud. Fraud has been defined as "any and all means a person uses to gain an unfair advantage over another person" (Romney & Steinbart, 2003). Similarly, the American Heritage Dictionary (1991) defines fraud as "a deception deliberately practiced in order to secure unfair or unlawful gain; cheat." Finally, Black's Law Dictionary (1979) defines fraud as "a generic term, embracing all the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false representation. No definite and invariable rule can be laid down as a general proposition in defining fraud, as it includes surprise, trick, cunning and unfair ways by which another is cheated. The only boundaries defining it are those which limit human knavery." The common theme in all three definitions is that fraud entails deceit in order to gain an unfair advantage over another.

Cheating by students is essentially fraud in an academic setting, where the three elements of pressure, perceived opportunity, and rationalization must be present for the cheating to occur (Kleiner & Lord, 1999). The pressures or motives to cheat may stem from pressure for better grades, competition, academic stress in general, or inconsistent application of academic rules. The opportunity to cheat and remain undetected need not necessarily be present-what is required is that the student perceives that such an opportunity exists. Perceived opportunity can exist in countless ways, limited perhaps only by students' imagination. Likewise, rationalizations-or morally acceptable excuses that justify in the student's mind the academic dishonesty-are also probably countless.

Both scenarios describe situations of academic fraud, when fraud is considered to be "gaining an unfair advantage over another by means of deceit." In both scenarios, the pressure (or motive) present is to maximize one's grade. The perceived opportunity to be able to engage in the described behavior and remain undetected is also present. Thus, the only element needed in order for the student to perceive the described behavior as acceptable is that of a rationalization.

In order to determine whether the military students had internalized their code of conduct, the academy business students' ethical perceptions are compared with a control group of accounting students from a university that neither has a code of conduct nor emphasizes ethics education. It is expected that in the second scenario, where the described actions violate the academy's code of conduct, the academy students will be more likely than the accounting students to perceive the behavior as unethical because they will have greater difficulty in providing a rationalization for the behavior.

To provide assurance that there were no between-group differences which could account for any statistically significant differences found other than the academy's emphasis on ethics education, the first scenario in the survey was developed in which the described actions do not directly violate the academy's code of conduct. It is expected that in this scenario, the students' ethical perceptions will be similar. Additional tests to determine the equivalency of the two groups of students are described in the research method section. Thus, the hypotheses tested are (in the null form):

| H1A: | Given Scenario A, there is a difference between the control and treatment groups' ethical perceptions. |
| H1B: | Given Scenario B, there is no difference between the control and treatment groups' ethical perceptions. |

RESEARCH METHOD

Two groups of students participated in this experiment. The treatment group (military academy) consisted of 63 students from a diverse geographical region including most of the United States, enrolled in a core business management course at a military academy. Thirty-four of the students were underclassmen, 26 were upperclassmen, and three declined to provide their academic status. The treatment group was subject to the intensive ethics education program described earlier in the paper. The control group consisted of 78 students majoring in business (accounting option) enrolled in financial, managerial, and accounting information systems classes at a public university located in a non-metropolitan area of the northwestern portion of the United States, similar in size to the military academy. Thirty of these subjects were underclassmen and 48 were upperclassmen. Students in this group had not been required to take any ethics courses, nor were they subject to an ostensible honor code. On average, students in the treatment group were younger, had less college experience, and were more likely to be male. Basic demographics are provided in Table 1.

Table 1: Demographics		Control Group	Treatment Group
Age	Range:	19-45 years	18-22 years
	Mean:	24 years	20 years
	Median:	21 years	20 years
	Percent 18-22 years:	54%	95%*
Class	Range:	Freshmen to Graduate	Sophomore to Senior
	Mean:	Junior	Sophomore
	% Upperclassmen:	84%	35%
Sex	Male:	49%	76%
	Female:	51%	19%*
*5% did not respond to this question			

All subjects completed a survey (see appendix) consisting of two situations describing academic fraud, although such a sensitive term was not used. All subjects were familiar with the academic setting, adding experimental realism to the survey. Participants were provided anonymity in order to promote honest, candid responses.

The post-test only design with nonequivalent groups limits the causal statements that can be made because the absence of an equivalent pretest leads to the possibility that any post-test differences observed between the groups may be attributed to either a treatment effect or to selection differences (Cook & Campbell, 1979). Three steps were taken to eliminate the shortcomings of a post-test-only design.

First, a logistic regression model was developed for a more rigorous test of the effect of the treatment (ethics education) on influencing students' ethical perceptions. The general model is:

$$ETHICS_n = a + b_1 \ SAMPLE + b_2 \ AGE + b_3 \ CLASS + b_4 \ SEX$$

where:

ETHICS_n	=	*subject's perception of whether the described behavior is ethical (0 if unethical, 1 if ethical); subscript n identifies the scenario;*
SAMPLE	=	*0 if subject is from the control group, 1 if from the treatment group;*
AGE	=	*subject's age, continuous in years from 18-45;*
CLASS	=	*1 if freshman, 2 if sophomore, 3 if junior, 4 if senior, 5 if graduate student;*
SEX	=	*0 if male, 1 if female.*

The independent variable of interest is SAMPLE. The other independent variables (AGE, CLASS, and SEX) are demographic control variables. If SAMPLE is significant with the control variables included in the model, this will provide additional support for the argument that the observed differences in ethical perceptions are due to the ethics program in place, rather than due to other demographic student differences between the institutions.

The second method used to address the shortcomings of a post-test only design was to obtain pre-entry Defining Issues Test (DIT) scores for the students enrolled in the military academy. The DIT, developed by Rest (1979), has been used in hundreds of ethical studies, and is considered a reliable psychometric instrument to assess an individual's level of ethical reasoning (Ponemon, 1992). The military academy students' P score average on the DIT for incoming freshmen was 34.2, falling between the P score average for high school seniors (31.8) and college students (42.3), as reported by Rest (1986). These scores suggest that with respect to ethical reasoning, there were no significant differences between students entering the military academy and students entering other universities.

In addition to giving an indication as to the cognitive moral development of military students, the DIT's P score sheds light on whether or not the academy students' are more inclined to be authority-oriented (i.e., do as they are told). According to Rest et al. (1999), "The DIT's P score is especially sensitive to the shift from maintaining norms schema to the postconventional schema. This shift in moral schema is accompanied by a shift in attitude toward authority (shifting from unquestioning support to holding authorities accountable). Furthermore, there is also a change in attitudes about the importance of maintaining established social norms (shifting from supporting all established practices to supporting only those practices that serve the community's shared moral ideals). Therefore, development in moral judgment is accompanied by shifts in political attitude." Also, DIT scores are highly correlated (in the .60s) with various measures of political attitudes and political identity. In sum, the similarity of military academy students' DIT P scores upon entrance to the academy with other students their age suggests that these students had similar attitudinal and political orientations to their peers in general.

The final method used to address the shortcomings of a post-test-only design was to obtain Keirsey-Bates Temperament Sorter (KBTS) (Keirsey & Bates, 1978) scores for the students at the military academy. The KBTS is a questionnaire that is widely used by sociologists to get a rough indication of personality, allowing researchers to understand individuals' personalities and predict what they will do. The KBTS sorts individuals into four temperaments. SJs (sensing/judging) are serious, traditional, loyal and dependable. They need to know what to expect and don't like those who can't be trusted. SPs (sensing/perceiving) are spontaneous, happy-go-lucky, really value freedom, and distrust rules and authority. For them, gratification delayed is gratification denied. NFs (intuitive/feeling) are seeking, ever-changing, and value authenticity above everything else. They value creativity more than dependability, and value intense individual interaction. NTs

(intuitive/thinking) are intellectual, clever, and cool, sometimes lacking interpersonal skills or sensitivity. They are motivated by the need to know how things work.

Students' KBTS scores at the military academy were 28% SJs, 21% SPs, 24% NFs, and 28% NTs, a surprisingly even distribution (more so than the general population). Moreover, while it might be expected that many of the military students would be SJs (e.g., 66% of the military trainers were SJs), instead they were less likely to be SJs than the general populace. The military students were also more likely to be NTs than the general populace, similar to their academic faculty (60% of the faculty were NTs). Overall, the military students' KBTS scores indicate that their temperaments are diverse, relatively even across temperament categories, and considerably removed from an authority-oriented military stereotype one might expect.

RESULTS

Recall that the first hypothesis (in the null form) stated that given Scenario A, there would be a difference between the control and treatment groups' ethical perceptions. Scenario A described an academic situation where some students in an afternoon section of an accounting principles class would check with friends in the morning section to determine if the professor had collected homework that day. If so, the afternoon students would do the assignment, otherwise the afternoon students would not. Homework was graded on completion/effort only and after dropping the two lowest homework scores, made up a total of 10% of the students' semester grade.

As shown in Table 2, in the control group 48 of 78 respondents (61.5%) viewed the behavior of the Scenario A students as unethical. In the treatment group, 31 of 63 respondents (49.2%) viewed the behavior as unethical. As predicted, there were no significant between-group differences, as shown by Pearson's Chi-square test (chi-square statistic = 2.1513, p = 0.1424).

Table 2: Students' Ethical Perceptions Cross-Tabulated with Group Affiliation (Scenario A)		
Students' Perception of Behavior in Scenario A	Control Group	Treatment Group
Unethical	48 (61.5%)	31 (49.2%)
Ethical	30 (38.5%)	32 (50.8%)
Chi-square statistic = 2.1513, p = 0.1424		

This result was more rigorously verified by the logistic regression model shown in Table 3. The model chi-square (likelihood ratio statistic) was not significant (Chi-square statistic = 4.941; p = 0.2935). Also, within the logit model, the variable of interest (SAMPLE) was not significant (Wald statistic = 0.7203; p = 0.3961).

Table 3: Logistic Regression Model (Scenario A)							
$ETHICS_n = a + b_1\ SAMPLE + b_2\ AGE + b_3\ CLASS + b_4\ SEX$							
Variable	b	S.E.	Wald	df	Sig.	R	Exp(b)
SAMPLE	.4123	.4858	.7203	1	.3961	.0000	1.5102
AGE	.0899	.0609	2.1793	1	.1399	.0316	1.0940
CLASS	-.2173	.2800	.0624	1	.4377	.0000	.8047
SEX	-.2980	.3982	.5602	1	.4542	.0000	.7423
Constant	-1.3085		1.1880		1.2133		1.2707
Model Chi-square statistic = 4.941, df = 4, p = .2935							

These findings support the contention that the ethical perceptions of the control group and the treatment group are essentially homogeneous when there is no direct violation in the scenario of the military students' core values. Therefore, H1A is rejected.

Recall that the second hypothesis (in the null form) stated that given Scenario B, there would be no difference between the control and treatment groups' ethical perceptions. Scenario B described another academic situation where the professor of a senior-level business law class preferred to let his students keep their graded exams every semester because the exams served as a useful study aid for the upcoming CPA exam. However, because he had developed such good exam questions, he used several of the same questions on exams in subsequent years. Despite the fact that the professor clearly stated that students were not to find and use exams from previous semesters to study for his current exams, some students directly violated the professor's instructions and found friends who had taken the professor's class during an earlier semester. These friends let the students use their old exams, which resulted in these students scoring quite high on the professor's exams with very little studying.

The behavior described in Scenario B directly violated the military academy's honor code. Therefore, significant between-group differences were expected. As shown in Table 4, in the control group 39 of 78 respondents (50%) viewed the behavior of the Scenario B students as unethical. In the treatment group, 54 of 61 respondents (88.5%) viewed the behavior as unethical. (Only 61 of the 63 respondents in the treatment group completed this question on the survey. Inclusion of the two nonresponses in either category would not lead to results significantly different from what is reported in this paper.)

As predicted, there was a highly significant between-group difference, as shown by Pearson's Chi-square test (Chi-square statistic = 23.0789, p < 0.0001).

Table 4: Students' Ethical Perceptions Cross-Tabulated with Group Affiliation (Scenario B)		
Students' Perception of Behavior in Scenario B	Control Group	Treatment Group
Unethical	39 (50%)	54 (88.5%)
Ethical	39 (50%)	7 (11.5%)
Chi-square statistic = 23.0789, p = 0.000002		

This result was more rigorously verified by the logistic regression model shown in Table 5. The model chi-square (likelihood ratio statistic) was highly significant (Chi-square statistic = 19.903; p = 0.0005). More importantly, within the logit model the variable of interest (SAMPLE) was highly significant (Wald statistic = 13.7103; p = 0.0002), suggesting that most of the explanatory power of the logit model came from that variable. In addition, CLASS was found to a have a positive relationship with the dependent variable. However, it was not significant, suggesting that most of the difference in the military group's ethical perceptions occurred prior to their junior year.

Table 5: Logistic Regression Model (Scenario B)							
$ETHICS_n = a + b_1\ SAMPLE + b_2\ AGE + b_3\ CLASS + b_4\ SEX$							
Variable	b	S.E.	Wald	df	Sig.	R	Exp(b)
SAMPLE	-2.0936	.5654	13.7103	1	.0002	-.2642	.1232
AGE	.0176	.0461	.1453	1	.7031	.0000	1.0177
CLASS	.1961	.2808	.4876	1	.4850	.0000	1.2166
SEX	.2606	.4347	.3595	1	.5488	.0000	1.2977
Constant	2.6873	1.1513	5.4481	1	.0196		
Model Chi-square statistic = 19.903, df = 4, p = .0005							

As noted earlier (see Table 1), there were several demographic differences between the treatment and control groups. On average, students in the treatment group were younger, had less college experience, and were more likely to be male. Formal tests for multicollinearity were performed to determine if something other than SAMPLE caused the significance in the model. First, an examination of the bivariate correlation matrix was performed, and as expected, each of the demographic variables (AGE, CLASS, and SEX) was found to be significantly related (p < 0.001) to student group classification (SAMPLE). The highly significant correlations suggested the possibility of multicollinearity masking the significance of one or more of the demographic variables

related to SAMPLE, or falsely inflating the significance of SAMPLE. To test for the first possibility, SAMPLE was deleted from the model. The resulting model was not significant (model Chi-square statistic = 4.356; p = .2255), nor were any of the individual variables found to be significant. The reduced model demonstrates that multicollinearity between SAMPLE and the demographic variables did not mask the demographic variables' significance. Further, since the reduced model was not significant, the demographic variables could not have inflated the significance of SAMPLE.

In addition, the bi-variate correlation analysis revealed a highly significant positive correlation between CLASS and AGE. When AGE was dropped from the original model, the model remained significant (model Chi-square statistic = 20.502; p < 0.0001) without CLASS obtaining significance (p = .5641). Similar results were obtained by replacing CLASS with AGE.

Together, these findings reject H1B. That is, given Scenario B, there is a significant difference between the control and treatment groups' ethical perceptions. Further, our results suggest the observed difference is due to the academy's ethical training, rather than other demographic factors of sex, class standing, or age.

DISCUSSION

Students were asked to provide reasons for why they perceived the described behavior in Scenarios A and B as ethical or unethical. These comments added depth to understanding the students' rationalizations.

Recall that in Scenario A, there were no significant differences between the ethical perceptions of the control and treatment groups. Likewise, the rationalizations provided were similar among both groups. For those students who found the behavior to be unethical, their reason was almost unanimously based on one theme: the students in the afternoon session were gaining an unfair advantage over their peers in the morning session. A few respondents also pointed out that passing homework collection information on to friends in the afternoon class was not the way the method was intended to operate. Finally, several students noted the afternoon students were cheating themselves of their education. Representative examples for each of these reasons follow:

> *"If college transcripts were designed to reflect group performance, then this would be OK. However, they are designed to indicate an individual's performance. This practice gives an advantage to the afternoon students and therefore creates an 'uneven' playing field."*

> *"They were to be graded on effort and completion only so all they really needed to do was try, which they did not."*

> *"Students are only cheating themselves, and basically that's what life is all about. If you cheat yourself it becomes habit and easy to cheat others. Also, what kind of behavior will this exhibit in the working world?"*

A wider variety of responses existed among students who found the behavior to be ethical. Several general themes emerged, and they centered around how students were simply using available resources, no specific rule was violated, cooperation among peers is best for all, no serious harm was done, the students were making logical and efficient use of their time, everything balances out, and the professor is at fault. Representative responses of these rationalizations follow:

"As students, we are expected to perform as we would in the real world. In order to get ahead, one must use all of the information available to them. The info about the collection of homework was readily available."
"The professor never said not to do this. Besides, the students were not checking answers - they were merely checking on the day's happenings."
"For all we know, the students in the afternoon section could have been doing the same thing for the students in the morning section for a different class. It all works out. This is a great example of teamwork and what it takes to 'cooperate to graduate.'"
"It is only hurting themselves, not society or other class members."
"Homework is supposed to help you learn. If some students feel they don't need that extra practice, that should be their decision. Accounting students are very busy with much homework so why do the homework if you don't need the practice and it won't be graded?"
"While this might be somewhat unfair to the students in the morning class, they might in turn be receiving some other rewards by being in the morning section (i.e., the professor teaches better in the morning)."
"This is 'unethical' behavior on the part of the professor. He has created an unfair advantage for the afternoon class. The students did nothing wrong. It's not as if they copied the homework; they still had to put forth the effort to get the assignment done."

Recall that in Scenario B, there were significant differences between the ethical perceptions of the control and treatment groups. There was almost unanimous agreement among the treatment group that the described behavior was unethical. Almost without exception, these students responded that they were told not to use old exams and to do so would be gaining an unfair advantage over their peers (e.g., "Since the professor has specifically asked the students not to use prior exams for studying, this is unethical to do so"). Only a handful of the treatment group disagreed by stating that the behavior was ethical. Their rationalizations varied, but included the right to use available resources, others would do it, which would leave them at a disadvantage, and that the professor was to blame. Examples of each of these rationalizations follow:

"Students are on their honor not to use old tests if the request is made, but this is like putting a fox in charge of the hen house. Students will use all available resources to gain an advantage if they are clearly given one as in this situation."

> *"The professor expecting the students not to use past exams is the impossible dream. The practice would put honest students at a disadvantage and only lead to a disregard for rules."*

> *"This is not unethical because of the stupidity on the side of the professor."*

Within the control group, those who believed the behavior was unethical responded in a similar, but less uniform fashion than the treatment subjects, with only a few stating that going against the express wishes of the professor was unethical. Instead, most of these students viewed it as unethical because the students were not learning the material on their own and because other students in the class did not have access to these old exams. Representative examples for these responses follow:

> *"Students are in the class to learn, not to just memorize answers that will be on the test."*

> *"I believe this is unethical behavior because all students are not given the same opportunity to score high."*

Those students in the control group who perceived the behavior to be ethical focused on finding fault with the professor and on the importance of good grades to students. A few students noted that since no one had to actually steal the exam to gain access to it, nothing unethical occurred. Other students noted that this behavior was ethical because it was efficient. Finally, some students focused on the frequency of such behavior as making it ethical. Representative responses for each of these rationalizations follow:

> *"I believe that past tests are very good study aids, and if a professor is too lazy to change questions from year to year it is his own fault!"*

> *"I believe this is not unethical due to the fact that the one thing a student needs is a good grade. If that means using past exams then they will probably do it. They may still learn."*

> *"The exams are there and easy to get. The professor should rewrite his tests each year or not give back the tests. If a test is available to students, and they don't have to steal it to get it, of course they are going to use it to study."*

> *"To me this is not unethical because that's the same as telling a runner you can't wear different shoes if it makes you run faster."*

> *"This happens all over campuses today. It is hard to consider it unethical when you encounter this every semester."*

The students' comments, taken as a whole, seem to indicate that core values build consensus in students' inability to rationalize fraudulent academic behavior, to the extent that the ethical dilemma closely parallels principles given in core values. Further, the treatment students seemed to internalize the core values, at least as far as their perceptions indicate. Conversely, when an

academic situation did not closely parallel the treatment students' core values, they were no more likely to view a situation as ethical or unethical as the control group.

SUMMARY

This study found that military academy students were much more likely than other college students to perceive academic behavior as unethical when it directly violated their core values. However, when academic behavior did not directly violate the academy's core values, students' ethical perceptions about the behavior were similar in both groups. These results indicate that the ethics education program at the military academy may have been useful in aligning students' ethical perceptions with their code of conduct. Further, since students were provided anonymity and were instructed to offer their own opinions rather than parroting those of the university, the findings support the contention that the academy's core values were internalized. These results suggest that ethics education in accounting curriculums may want to emulate aspects of the academy's ethics program, most notably emphasizing the accounting profession's code of conduct to accounting students.

The results of this study suggest some avenues for future research. First, in light of the significant difference in ethical perceptions between groups, future research could investigate whether these differences continue to hold throughout a number of additional scenarios. Second, an equivalent pretest-posttest design could provide additional evidence that the results are not driven by selection bias. Since by the sophomore year most of the internalization of the core values by the military academy's students had taken place, a broader-based sample (particularly including pre-freshmen and freshmen) would be helpful in identifying when the change in student perceptions most frequently occurs. Third, a longitudinal study will provide evidence on the effectiveness of such an ethics program over the long-term (e.g., by examining accountants' actual behavior). Finally, while this study makes it clear that the alignment of students' ethical perceptions with a profession's core values is achievable through an integrated comprehensive ethics program across the curriculum, future research is necessary to determine which factors have the greatest influence on students' perceptions, and when the factors should be introduced into the curriculum.

The results of this study should be interpreted in light of its limitations. First, this study is limited to students' perceptions, rather than actions, so generalizing these results to students' actions may not be valid. Second, the post-test only design with nonequivalent groups is not always a strong methodology because selection bias cannot be completely removed from the treatment effect. However, the threat of selection bias was minimized in this study by: 1) the normality of the academy students' pre-entrance DIT P scores, 2) the relatively even distribution of the academy students' Keirsey-Bates Temperament Sorter scores, 3) the lack of between-group differences in the scenario where the treatment group's core values were not directly violated, and 4) the non-significance of independent variables controlling for between-group demographic differences.

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APPENDIX: RESEARCH INSTRUMENT

This survey is part of a project to determine students' attitudes toward ambiguous academic situations. Please answer all questions.

Your completed questionnaire will be considered confidential and your responses will not be used to evaluate you in any manner. When your opinion is asked, please do not hesitate to answer honestly and candidly; this questionnaire cannot and will not be traced to you. The anonymity of your responses is absolutely guaranteed.

This questionnaire consists of two parts. The first part contains two independent scenarios in which your opinions are asked about the situations. The second part consists of demographic questions.

Thank you for your participation.

SCENARIOS

(1)   Professor Debit's homework policy in his accounting course was to randomly collect homework throughout the semester and grade it on effort/completion only, rather than on having the correct answers. The two lowest homework scores were dropped at the end of the semester and the overall homework score then made up 10% of the student's total semester points. Professor Debit taught two sections of this accounting course every semester, and preferred to grade his two sections together overall. Thus, when Professor Debit collected homework in his morning section, he also collected the assignment in his afternoon session. At the end of the semester, it was privately brought to Professor Debit's attention that several of the students in the afternoon session regularly checked with their friends in the morning session to see if homework had been collected. If so, the afternoon students did the assignment; otherwise, they did not.

1.   Do you believe this is unethical behavior on the part of the students?
_____   No, I do not believe this is unethical behavior.
_____   Yes, I do believe this is unethical behavior.

2.   Please explain why you do or do not believe this is unethical behavior.

(2)   Professor Tort teaches the senior-level business law class for accounting students. Much of the material covered in this class appears in the Business Law portion of the CPA Exam. Professor Tort likes to let his students keep their graded exams every semester since he believes it is a good study aid. However, because Professor Tort has developed such good exam questions, he usually will not rewrite an entire exam the following year. This results in several (although not all) of the same questions appearing on the exams in future years. Professor Tort has clearly stated that students are not to use past exams in preparation for current exams. Some current students have friends who took the class last year and these friends let them have their old exams. Consequently, these students are consistently scoring quite high on Professor Tort's exams with little studying.

1.   Do you believe this is unethical behavior on the part of the students?
_____   No, I do not believe this is unethical behavior.
_____   Yes, I do believe this is unethical behavior.

2.   Please explain why you do or do not believe this is unethical behavior.

DEMOGRAPHICS

Please answer the following demographic questions:

Sex: _____ M   _____ F
Age: _____
Major: _____ Accounting   _____ Finance
                 _____ Management   _____ Marketing
                 _____ Other (_____)
Year in college:
                 _____ Graduate   _____ Senior   _____ Junior
                 _____ Sophomore   _____ Freshman

ABSENTEEISM AND ACADEMIC PERFORMANCE
IN AN INTRODUCTION TO BUSINESS COURSE

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ABSTRACT

The relationship between absenteeism and academic performance was investigated among 172 students enrolled in an Introduction to Business course. The students who were absent from class on the random days attendance was taken performed significantly lower on subsequent tests. In addition, the total number of days absent from class was negatively correlated with performance on a comprehensive final exam. Finally, the number of days absent was found to be the second most important factor after GPA, in predicting student performance on the final exam. These findings suggest there may be some value in adopting intervention strategies designed to encourage attendance.

INTRODUCTION

In a traditional university setting, class meetings are the primary means of delivering educational services. However, as almost anyone who has ever taught a large section of an introductory course can confirm, student attendance at these meetings is far from perfect. As educators, we want our students to attend class. We enjoy teaching and interacting with students and work hard to make our classes worthy of the students' time and energy. We know who our best students are because they attend class regularly, but we often have a hard time putting a face to the names of the students that fail. Based on this anecdotal evidence, we assume that students who attend class regularly benefit from the lectures, films, and learning activities designed to facilitate their acquisition of knowledge. Conversely, we assume that excessive absences from class results in poor academic performance. These assumptions, however, are not based on empirical evidence.

To encourage class attendance, we have always spent part of the first class meeting telling our students that it is important for them to attend class, that they will learn more if they attend class, and that students who attend class regularly generally earn higher grades for the course and vice versa. Unfortunately, when we searched the literature for empirical evidence to back up our claims, we failed to find any studies specifically examining the relationship between students' absenteeism during an Introduction to Business course and their subsequent performance on exams. Moreover,

studies over the past fifteen years that have examined the relationship between absenteeism and academic achievement in related fields such as economics, finance, and operations management have produced different, sometimes contradictory, results.

Several studies have linked class absences with lower grades. For example, Brocato (1989) found a strong negative correlation between absences and grades among undergraduate students enrolled in Principles of Macroeconomics and Intermediate Macroeconomics courses he taught over a four-year period. Park and Kerr (1990) also found that attendance was a determinant of student performance in a Money and Banking course, but not as important as a student's GPA and percentile rank on the American College Test (ACT).

Browne et al. (1991), however, found that students who studied on their own did just well as students that attended a typically structured Principles of Microeconomics class on the Test of Understanding College Economics (TUCE). Their conclusion: "Apparently, instructors' classroom activities have negligible impacts on student performance, measured by multiple choice items tapping memory, application and simple analysis competencies" (Browne et al. 1991, p. 29).

Based on attendance counts taken in all undergraduate economics courses taught at three "relatively elite" universities, Romer (1993) concluded that absenteeism was rampant, with typically about one-third of the students absent from class. (This finding may explain why so many studies of absenteeism and academic performance have students who are enrolled in economics course as their subjects.) Romer also reported that regression estimates of the relation between attendance and performance in one large Intermediate Macroeconomics course suggested that attendance might substantially affect learning. Considering only students who did all of the problem sets (in order to control for the impact of student motivation to do well in the course) and controlling for prior grade point average, he found the difference in performance between a student who attends class regularly and one who attends class sporadically to be approximately one full letter grade.

Durden and Ellis (1995) also found that attendance does matter for academic achievement in a Principles of Economics course. However, their findings suggest that the effect is nonlinear, becoming important only after a student misses four classes during the semester. They concluded that what really seems to matter is excessive absenteeism.

Chan, Shum and Wright (1997) studied the effect of class attendance on student performance in a Principles of Finance course using Tobin's (1958) TOBIT model and a two-stage equation developed by Heckmen (1976, 1979). They found a significant positive relationship between attendance and student performance in the TOBIT model, but only a weak relationship between attendance and student performance in Heckman's two-stage model. Furthermore, they found that a mandatory attendance policy did not improve performance.

Lai and Chan (2000) also examined the relationship between mandatory class attendance and student performance in two sections of a Principles of Microeconomics course, one with a mandatory attendance policy and the other without one. Attendance was found to be positive and statistically significant at the 1 percent level. For every 1 percent attendance, an average student

received almost a 1 percent increase in his/her course average (on a 100 percent scale). In contrast to Chan, Shum and Wright (1997) findings, however, they found a mandatory attendance policy boosted an average student's performance by 6.7 percent.

More recently, Marburger (2001) investigated the relationship between students' absenteeism during a Principles of Microeconomics course and their subsequent performance on exams. He found that students who missed class on a given day were significantly more likely to respond incorrectly to questions relating to material covered that day than students who were present. In contrast, Peters, Kethley, and Bullington (2002) found that class attendance did not affect students' exam performance in an introductory operations management course. Finally, Durden and Ellis (2003) found that class attendance and motivation were related in their study of 252 students enrolled in a Principles of Economics course. However, they note that if motivation is not controlled for, the effect of absence from class on performance may be overstated.

After reviewing the literature, we began to question our assumptions about attendance and academic performance. Like many university professors who teach large, introductory courses, we had no attendance policy. After all, taking attendance in large classes is difficult and time consuming. Moreover, we prefer to treat our students as adults who are responsible for their choices and attending class is one of those choices.

We began to wonder, however, if our laissez faire approach to attendance was actually encouraging students to miss class. Although we told our students on the first day of class that attendance was important, we kept our comments relatively brief and only repeated them after reporting the results of tests. Attendance was sometimes poor, suggesting that many students did not believe our claims about its importance.

Thus, this study set out to answer three important questions as they related to our Introduction to Business course. First, what was the extent of absenteeism? Second, how much, if any, does absenteeism affect student learning? Finally, in light of our research findings as they relate to answering the first two questions, should we make any changes to our course policies to combat absenteeism?

METHOD

Subjects and Setting

The subjects were 172 undergraduate students enrolled in a large section of Introduction to Business at a medium-size, state university located in the upper Midwest. An equal number of men and women were enrolled in the course. A review of university records revealed that 70 students were classified as freshman, 80 as sophomores, 15 as juniors, and 7 as seniors. In terms of their major, forty-five of the students had declared business majors (30 in Business Administration, 6 in Marketing, 5 in Accounting, and 1 each in Economics, Finance, Human Resources Management,

and Management Information Systems). Seventy-one students were non-business majors. The three most popular non-business majors for students enrolled in the course were Education (15 students), Mass Communication (13 students) and Nursing (eight students). A further 56 students enrolled in the course had yet to declare a major. Table 1 presents an academic profile of the subjects based on their high school (percentile) rankings, ACT scores, grade point averages (GPA), number of credit hours attempted, number of credit hours completed, and current credit hours (i.e., course load).

Table 1: Subjects' Academic Profile						
	High School Rank	ACT	GPA	Credit Hours Attempted	Credit Hours Cumulative	Current Credit Hours
Mean	62.93	21.81	2.51	40.82	38.19	15.50
Max	99.42	33	4.00	162	133	22
Min	11.39	13	0.12	12	3	10
SD	20.58	3.19	0.81	22.42	22.93	1.88

The course was taught over a 15-week semester in the spring of 2003. The teaching methods included lectures, video case presentations, and large-class discussions. At the first meeting of the class, the instructor stressed that class attendance was an important component of the educational environment and that students were expected to be present for each class session. It was further explained to the students that attendance would be randomly checked throughout the semester; however, no incentives were offered for class attendance nor were students penalized for not attending class. Thus, while class attendance was monitored, it was neither rewarded nor punished.

Academic Performance and Attendance Measures

The assessment activities in the course included four individual case write-ups (approximately 500 words in length), four tests consisting of 50 multiple-choice questions, and a comprehensive final examination consisting of 100 multiple-choice questions. Each case write-up accounted for five percent of a student's overall grade for the course and students were required to complete a minimum of two case write-ups. Each test accounted for 10 percent of a student's overall grade for the course and students were required to sit a minimum of three tests. For students exceeding the minimum assessment requirements, only the scores greater than their final exam score were included in the calculation of their overall grade for the course. Thus, the final exam was weighted at 40-60 percent of a student's overall grade for the course.

All the questions on the tests and final exam came directly from a test bank written by the authors of the textbook, which was required reading for the course. Thus, a student who had never attended class and relied exclusively on the textbook to prepare for the tests could have answered all the questions correctly.

Using an unannounced random schedule, class attendance was recorded at four points during the semester, once prior to each test. On the days attendance was taken, a sign-up sheet was circulated on which students were required to print their name and student number as well as sign their name. A head count was also taken to insure that no one signed in for a student who was absent.

RESULTS

Academic Performance

Of the 172 students who enrolled in the course, 21 withdrew and three did not sit the final exam, yielding an overall retention rate of 86.05 percent. The overall class average for the course was 76.51 percent, with a high of 94.85 percent, a low of 31.50 percent, and a standard deviation of 10.88. The distribution of grades was as follows: A - 11 (7%); B - 57 (39%); C - 45 (30%); D - 20 (14%); F - 14 (11%). The overall pass rate for the course was 89.86 percent.

Absenteeism

Table 2 presents the absenteeism rates recorded on the four random days that class attendance was taken. The percentage of the students absent on the days attendance was taken ranged from a high of 35.98 percent to a low of 30.60 percent, with an overall weighted average of 32.49 percent. However, class attendance did improve as the semester went on. Table 1 also presents the absenteeism rates by gender, which shows that male students where far more likely than female students to be absent from class.

Table 2: Absenteeism Rates									
Day 1		Day 2		Day 3		Day 4		Overall	
35.98%		31.17%		31.69%		30.60%		32.49%	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
43.37%	28.40%	36.71%	25.33%	35.62%	27.54%	33.33%	27.69%	37.50%	27.24%

Absenteeism and Test Performance

Students' scores on Tests 1-4 were classified into two groups based on whether they were present in class the unannounced random day attendance was taken prior to each test. We used t-tests to test for the differences in the mean test scores for those students present and absent. The results of these t tests are presented in Table 3. Clearly, the students present in class outperformed the students absent from class on each test. An examination of the range of scores also reveals that no students who were absent from class on the random day attendance was taken scored 90 percent or above (the cutoff for a grade of A) on the subsequent test. Thus, class attendance appears to be a necessary condition for scoring an A on a test in this course. Furthermore, a student's total number of absences was negatively correlated with his or her final exam score ($r = -.47$, $p<.0001$).

Table 3: Student Test Performance						
	N	Range	Mean	t statistic	df	p-value
Test 1						
Present	105	94 - 42	70.63	3.103	162	.0023
Absent	59	88 - 36	64.92			
Test 2						
Present	106	100 - 44	77.75	4.511	152	.0001
Absent	48	82 - 48	69.83			
Test 3						
Present	97	90 - 36	69.15	3.412	140	.0008
Absent	45	82 - 34	62.13			
Test 4						
Present	93	92 - 42	68.54	4.004	132	.0001
Absent	41	86 - 30	59.66			

The Relative Impact of Absenteeism on Performance

To assess the impact of absenteeism relative to other factors that may explain a student's final exam performance, we developed a regression model that incorporated the following factors: High School Rank, ACT score, GPA, Credit Hours Attempted, Credit Hours Earned, Current Credit Hours, Case Count, Test Count, Gender, Absent Overall and Major (Business versus non-business).

Unfortunately, the student records accessed for this study had 25 missing values for high school rank and 15 missing values for ACT score, so missing values for these variables were inputted using regression on each other along with GPA. The initial regression model parameter estimates are presented in Table 4. A cursory look at Table 4 suggests that GPA, number of absences, ACT, and high school rank are the significant explanatory variables.

Table 4: Parameter Estimates from Initial Regression Model				
Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	44.757707	9.971578	4.49	<.0001
HS Rank	-0.110657	0.043247	-2.56	0.0116
ACT	0.7711715	0.242873	3.18	0.0019
GPA	9.8958012	1.321115	7.49	<.0001
Credit Hours Attempted	0.0386792	0.053653	0.72	0.4722
Credit Hours Earned	-0.013917	0.052088	-0.27	0.7897
Current Credit Hours	0.1554181	0.354358	0.44	0.6617
Gender [Female]	0.371662	0.678264	0.55	0.5846
Case Count	-0.127628	0.778061	-0.16	0.8699
Test Count	-0.495223	1.874011	-0.26	0.7920
Absent Count	-1.980165	0.602504	-3.29	0.0013
Major [Business]	-0.465244	0.709629	-0.66	0.5132

Using stepwise model selection methods, we arrived at the following parsimonious model predicting final exam performance.

E(Final Exam | GPA, ACT, H.S. Rank, Absent Count) =
    46.24 + 9.85*(GPA) + .744*(ACT) - .104*(H.S. Rank) - 1.85*(Absent Count)
        (<.0001)   (.0018)   (.0116)   (.0014)
            N = 148 R^2 = .614   adj-R^2 = .603   (p-values in parentheses)

Here we can see that a student's GPA, Absent Count, ACT score, and High School Rank explain 61.4 percent of the variation in their final exam score. The partial correlations of the covariates are presented in Table 5. These partial correlations indicate that the number of days

absent from class is the second most important factor after GPA in predicting student performance on the final exam.

Table 5: Partial Correlations of the Covariates with Final Exam Score	
Covariate	Partial Correlations
Absent Overall	-0.2626
GPA	0.6038
Imputed ACT	0.2574
Imputed HS Rank	-0.2092

DISCUSSION

In this study, we set out to answer three questions with regard to our Introduction to Business course: What was the extent of absenteeism? How much, if any, does absenteeism affect student learning? And considering the answers to the first two questions, should we make any changes to our course policies to combat absenteeism?

Concerning the first question, on a typical class day roughly one-third of the students enrolled in the course were not in class. This figure is comparable to the rate of absenteeism reported by Romer (1993) in economics courses and leads to the same conclusion - "absenteeism is rampant" (p 173). In regard to the second question, we found a very strong statistical relationship between absenteeism and academic performance. Specifically, the students who were absent from class on the random days attendance was taken performed significantly lower on subsequent tests. In addition, the total number of days absent from class was negatively correlated with student performance on the comprehensive final exam. Finally, after GPA, the number of days absent was the second most important factor in predicting student performance on the final exam.

Faced with similar research findings regarding the relationship between absenteeism and academic performance, Romer (1993) suggested experimenting with making class attendance mandatory. We caution against such an approach. Mandatory attendance policies, which impose an academic penalty for failure to attend class regularly, may have some unintended consequences. For example, the quality of classroom decorum may decline, due to the presence of resentful and disinterested students. As Stephenson (1994) notes, "a captive audience is not an ideal learning environment" (p.307).

Having found a significant negative relationship between absenteeism and academic performance, as educators we feel challenged to identify measures that will encourage class attendance. Approaching the problem of student absenteeism from an organizational behavior

modification perspective (Luthans & Kreitner, 1985), we offer the following suggestions based on a functional analysis of the antecedents and consequences of the desired behavior - class attendance:

1.	To establish the proper antecedents, at the first class meeting students should be informed of the empirical relationship between class attendance and academic performance.
2.	Applying the business axiom, "What gets measured gets done," we recommend instructors take attendance at the beginning of every class session. Fortunately, there are a of variety interactive student response systems on the market today (e.g., EduCue, eInstruction, and TurningPoint) that make the task of taking attendance, even in large classes, a relatively quick and simple exercise.
3.	Instructors should consider awarding bonus points for class attendance to positively reinforce the desired behavior. Beaulieu (1985), for example, found attendance rates of students enrolled in a sophomore-level, undergraduate management course were higher for those experiencing positive consequences versus those experiencing negative consequences, although the difference was not statistically significant. Alternatively, one might base a small portion of the overall course grade (e.g., 5-10 percent) on class participation. In order to eliminate the element of compulsion, the class participation mark would be dropped when computing the course grade if it were a student's lowest component grade.
4.	Instructors may also want to consider giving short quizzes at the end of every class session. Again, this is relatively easy to accomplish with an interactive student response system. Such in-class assessments serve to reinforce the day's lesson as well as class attendance. To eliminate the element of compulsion, alternative homework assignments should be made available for students needing to make up any quizzes they missed due to an absence. .
5.	Finally, we recommend instructors maintain records on class attendance and provide feedback to students on their behavior. For example, when reporting test results, also report correlation between attendance and test performance to reinforce the message that students who attend class regularly generally perform better on tests than those who do not.

In formulating the above recommendations, we placed the emphasis on positive reinforcement, which should enhance students' learning by encouraging class attendance. It should be noted, however, that class attendance alone does not guarantee that learning will take place. Some students who attend class regularly still struggle academically. However, the best instructor, no matter how clear in providing explanations and examples, will certainly not be successful in teaching the academically challenged student who fails to show up for class. Future research should assess whether strategies designed to increase class attendance actually do so, and if so, whether academic performance improves.

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THE MBA: DOES IT DO THE JOB?

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ABSTRACT

Controversy exists within the business community concerning whether a business school education is congruent with the needs of business. This quantitative study answered the question - do business professionals in the Columbus, Ohio area perceive graduate schools of business as adequately preparing employees with the skills considered important to the business organization?

INTRODUCTION

Controversy exists within the business community concerning whether a business school education is congruent with the needs of business. As the American Council on Education found in their 1997 study,

A chasm separates the academic and corporate worlds. Corporate leaders are convinced that university employees-including administrators and faculty members-do not understand the requirements of the private sector and the need for students to be better prepared for the demands of a changing global economy. Academic leaders are equally sure that corporations have little respect for the campus and that U.S. universities are, in fact, world class (p. 3).

The issue was also brought into focus by Elliott, Goodwin, and Goodwin who described MBA graduates:

> As likely encountering employers questioning the value of the traditional MBA program. Many perceive the MBA degree as emphasizing quantitative abilities and analytical skills while neglecting the development of other essential skills that enable a person to function in a business organization. Corporate critics say there should be a broader approach, with more focus on qualitative management and the ability to deal with people in an organization (1994, p. 55).

Business degrees, considered prestigious in the early 1980s, declined in prestige in the early 1990s when the debate arose over the effectiveness and appropriateness of MBA programs and business education. Stimulating the debate was a study by Porter and McKibbin (1988) that highlighted the disillusionment of corporations with MBA programs and their graduates. Employers criticized business schools and business graduates as generally unable to transfer content knowledge to real situations in a fast-paced global work place (Ainsworthy & Morley, 1995).

Today there are more students entering graduate school and receiving graduate degrees than ever before in the United States (Henderson, 1996). The number of master's and doctoral degrees granted between 1986 and 1996 increased by an annual average of 3%. In 1996, 313,551 master's and 41,801 doctoral degrees were conferred (Syverson & Wesch, 1998), and nearly one third of the master's degrees were in business administration or other management areas.

The growing number of MBA graduates has dramatically altered the supply and demand relationship for the degree. Does this mean there is less need for MBA graduates? In a report prepared by the Batelle Center for Public Health Research and Evaluation as part of a continuing GMAT registrant survey, 66.6% of MBA graduates surveyed in 1999 indicated the degree did not enhance their ability to secure employment. In fact, a Michigan State University national college employment survey predicted a full 5% decline in hiring for graduates with MBA degrees for the class of 2004 (EdFund, 2003). Those numbers were a marked change from just a decade ago when there was a clamor for such graduates. Senior executives have recognized that knowledge and learning represent the preeminent source of sustainable advantage in a fast-moving, highly competitive world (Oblinger & Verville, 1998). As work itself changes, there is much greater emphasis on workplace knowledge or the collection of experiences, values, and cognitive frameworks that are embodied in individuals. Prusak (1997, p. 10) wrote, "Workforce mobility, falling educational standards, and the rapid rate of business change mean that individuals can no longer be relied upon to provide constant, comprehensive insight." Instead, the realities of exposure to the vortex of modern business practice is what students need. Too often graduate schools of Business Administration buffer the students' real-life experiences, or fail to provide any exposures. The results are naive students, armed with a graduate degree and false expectations, who are thrust upon a process of learning that often times has marginal resemblance to their MBA experiences. The axiom of sink or swim becomes an everyday credo.

Business is experiencing the globalization of markets, computer networking, and the dismantling of management hierarchy. The cold war has given way to the age of globalization, and human resources are now the competitive difference for companies and countries alike (Hahs, 1999). Although managers still need the hard, or quantitative skills typically taught in MBA programs, they need additional tools to be effective. Today's managers need a variety of soft skills in communication, negotiation, and team-building to effectively manage technological change and corporate stress resulting from downsizing and rapid growth.

Today, employers are questioning the value of the traditional MBA program, because the business world no longer is structured according to functional specialties and departmental isolation but relies upon integration and collaboration. Accordingly, graduate management education must include (a) integration of theory and practice so that complex management issues can be handled effectively, (b) internationalization for ease in handling other cultures and countries, and (c) implementation of knowledge for practical and useful action.

Business leaders are convinced that students are not prepared to enter into today's fast-moving global business environment. What business needs from higher education is a more responsive, learner-centered environment (Oblinger & Vercille, 1998). To achieve more congruency between academic rigor and the needs of business, MBA programs need to be better attuned to the needs of business and incorporate qualitative skill development into the curriculum.

CONTEXT OF THE PROBLEM

The frequently cited criticisms of business schools and MBA curricula that appeared in the business press in the late 1980s warned that traditional functionally oriented MBA programs were failing to provide graduates the skills needed in the changing and demanding world of modern business (Chapman, 1998; Gallows, 1996). Bruzzes stated "Some corporate executives charge that many schools are manufacturing scores of graduates ill equipped to compete in today's constantly changing corporate climate" (1991, p. 29).

Elliott, Goodwin, and Goodwin said, "Many perceive the MBA as emphasizing quantitative abilities and analytical skills while neglecting the development of essential skills that enabled a person to function in a business organization" (1994, p. 55).

Business is highly competitive. Being good enough today is no guarantee of surviving tomorrow. As business changes, jobs change. As jobs change, the types of graduates needed by business changes. With the rapid changes in technology, the existence of global economics, and the approaching dominance of niche marketing, business needs people who can deal with change and be effective. To meet the educational needs of the future, educational institutions would have to educate and train people to qualify for jobs and upgrade the skills of the 146 million people currently in the U.S. workforce, and do so in a way that met the current and future expectations of employers (US Department of Labor, 2002).

Sternberg (1996) said business needed people who were "successfully intelligent." To be successfully intelligent, people had to think well in three different ways: analytically, creatively, and practically. Analytical thinking was required to solve problems and judge the quality of ideas. Practical intelligence was needed to use the ideas and analyses in an effective way.

The dilemma is educational organizations appear to value analytical intelligence above all else, while industry proclaims a need for "soft skills". Unfortunately, analytical intelligence has been most readily recognized as smart, but might be less useful to students in their working lives than either creative and/or practical intelligence. In this respect, it is possible to erroneously cultivate and reward skills valued in school that have less practical importance. Education needs to prepare students to live in a world where what matters is a balance of analytical, practical, and creative skills, not just inert, analytical intelligence.

Employers have complained graduation requirements fail to ensure graduates have the personal qualities and skills needed to succeed in the workplace. Such skills include customer

orientation, decision-making, leadership, the ability to negotiate and resolve conflict, effective oral communication skills, and team building abilities. According to Langenbergl "many educators will claim that our colleges already provide just such preparation. But if we listen to those who employ our graduates or to educators in graduate and professional schools, we hear that an enormous chasm exists between what higher education claims it is doing and what is actually achieved" (1997, A64).

Relevant management and leadership literature does not contain a definition of reported actual skills called for by business, but a common thread runs through many of the concerns. The trend emphasizes a need for soft or human skills rather than hard, conceptual, or analytical skills. The implications of such criticism might be profound. First, the spigot of jobs for MBA graduates could be turned off, and impacts could have a domino-like reaction. Second, corporate entities could elect to assume the requisite preparation traditionally performed by the MBA programs.

Identifying the skills perceived to be important to business organizations and the skills perceived to be acquired as a result of graduate business education can provide vital information for the supply chain of higher education.

THE STUDY

The perception of individuals hiring MBA graduates gives the degree its special value. If a disparity exists between skills MBA programs are teaching and those perceived as important to business managers, it is likely new graduates will encounter difficulties securing employment commensurate with their expectations. Identifying the existence of such a disparity is important for the students of MBA programs and their respective programs of academic preparation. If not addressed, the end result is likely to be an oversupply of MBA graduates and an eventual decline in the demand for such preparation. The effects could be expected to subsequently create viability questions for many academic programs.

Many business people believe MBA programs unduly emphasize quantitative abilities and analytical skills while neglecting essential human relations skills. It is the latter that enable a person to function well in a business organization (Davis & Lomo-Davis, 1994). MBA programs have been charged and convicted in the print media of being too technical, too quantitative, not sufficiently oriented toward developing people skills, lacking in quality, increasingly irrelevant, behind the times and out-of-date by not being globally-oriented, by ignoring ethical issues in management, and by not developing students' capabilities in leading, creating, and communicating (Chapman, 1998). Critics claim the approach followed by MBA programs should be broader, with more focus on qualitative management and dealing with people. As employers question the value of the traditional MBA program, it becomes important to establish the skills business perceives as important or essential to the organization and the skills business perceives graduate business education should be teaching potential employees.

This study sought perceptions of service industry business managers relative to the knowledge and skills displayed by employees holding an MBA. A survey was distributed to a purposeful sample of professional business managers located in the Columbus, Ohio area, requesting they render judgments on compatibility between the nature and degree of business school preparation and the needs of the corporate world.

METHODOLOGY

A 40.5% (n = 193) response rate was achieved with four mailings, and follow-up telephone calls to a pre-determined percentage of non-respondents. Several notable demographic trends were observed: 56.5% of respondents were male (n = 109). Approximately one-third (30.0%, n = 58) of the participants were under forty years of age, a third were 40-49 years of age (34.2%, n = 66), and the rest were over fifty (35.8%, n = 69). Of the participants 40-59 years of age, the representation of men and women was fairly equal (male 51.3%, n = 61; female 48.7%, n = 58). A majority had either a bachelor's degree (39.3%, n = 76) or a master's degree (40.9%, n = 79). Of the respondents possessing a master's degree, 48.1% (n = 38) held an MBA degree. None of the participants reporting an educational achievement of doctorate indicated possessing an MBA degree. Of the 79 respondents possessing a master's degree, less than half, 48.1% (n = 38), reported having an MBA degree.

The 193 participants came mostly from management (32.6%, n = 63) and consulting organizations (18.7%, n = 36). Respondents indicating the nature of company as Other included: government (3.1%, n = 6), sales/retailing (7.3%, n = 14), information technology (3.6%, n = 7), education/training (1.6%, n = 3), and entrepreneurial (1.0%, n = 2). The four respondents indicating the nature of company by selecting more than one category were: accounting/consulting (.0055%, n = 1), investment/management (1.0%, n = 2), and finance/investment (.0055%, n = 1).

Of the participants coming mostly from management (32.6^, n = 63), more than one-half (57.8%, n = 37) had a master's degree.

The mode for the number of employees in an organization for the entire sample, was 1-24 employees (46.1%, n = 89). Of the respondents reporting 1-24 employees, 16.8% (n = 15) reported having some college, 39.3% (n = 35) a bachelor's degree, and 42.7% (n = 30) a master's degree.

RESEARCH QUESTIONS

Identifying the skills perceived to be important to business organizations and the skills perceived to be acquired as a result of graduate business education can provide vital information for the supply chain of higher education. This study focused on twelve selected skills categorized as either hard skills or soft skills. The quantitative or hard skills were analytical/quantitative, computer, entrepreneurial/initiative, planning/organizing, risk taking, and written communication.

Skills considered as qualitative or soft were customer orientation, decision-making, leadership/interpersonal, negotiation/conflict resolution, oral communication, and team building.

The following research questions were investigated to determine whether graduate business programs emphasize quantitative abilities and analytical skills while neglecting the development of skills perceived as essential for an employee in a business organization.

Question 1.	What skills (hard vs. soft) do business managers perceive to be most essential to the business organization?

The literature review indicated a mismatch between the output of business schools and the competencies business organizations required. A Porter and McKibbin (1988) landmark study of management education and development identified the need for more "soft" or people skills. They found the most important factors for business leaders were oral communication, interpersonal skills, leadership skills, written communication, and decision-making ability. In a 1997 study, Eberhardt, Moser, and McGee conducted a survey of business leaders (n = 113) in which respondents were asked to rate, individually the importance of 13 characteristics they considered when hiring MBA graduates. The most important factors were oral and written communication and interpersonal and leadership skills. The 1997 results were consistent with Porter and McKibbin's earlier findings.

The results of this study revealed a statistically significant difference between agreements on how essential hard skills were compared to essential soft skills, $F (1,192) = 10.11, p < .01$. It also found participants agreed that soft skills (M = 6.12) were slightly more essential than hard skills (M = 5.99). The skill factors in rank order were: oral communication, computer usage, written communication, customer orientation, analytical/qualitative, decision-making, leadership/interpersonal, team building, planning and organizing, negotiation/conflict, entrepreneurial/initiative, and risk taking.

Question 2.	What skills (hard vs. soft) do business managers perceive graduate schools of business to be doing an adequate job of preparing students?

MBA students work hard to acquire an education that will help them either find employment or improve their current employment status. Corporate America searches for employees who will make it productive. Recently, the popular and business press has noted an apparent gap between the skills and abilities of business school graduates and the needs of U.S. businesses (Linder and Smith, 1992; Capon, 1996; Eberhardt et al., 1997; Smallwood, 2001). Grimbly stated many MBAs are "dimmer" than the gloss of their pedigree. They are slaves to formulas and maddeningly dogmatic. Linder and Smith (1992) indicated companies' biggest concern is the extent to which they have to retrain the MBAs they hire. Grimbly wrote areas of business dissatisfaction included "lack of even

a rudimentary understanding of information technology, lack of supervisory skills, and lack of management techniques" (1993, p. 32). According to Linder and Smith (1992), businesses wind up putting recruits in a corporate classroom to teach them things they should have learned in business school.

The Eberhardt et al. study (1997) found respondents were most satisfied with the MBA recruits' leadership potential and least satisfied with their written communication skills. Overall, the survey said, respondents were slightly satisfied to satisfied with the quality of MBA preparation.

The results of this study were interpreted to mean a statistically significant difference existed between agreements on the preparation of hard skills versus the preparation of soft skills, $F (1, 192) = 23.31$, $p < .01$. It was also found that participants agreed better preparation was given in hard skills ($M = 5.58$) compared to soft skills ($M = 5.36$). The skills in rank order were: analytical/quantitative, planning/organizing, decision making, computer usage, leadership/interpersonal, oral communication, written communication, risk taking, negotiation/conflict, team building, entrepreneurial/initiative, and customer orientation.

Question 3.	Is there a difference between the skills perceived to be essential to the business organization and the level of preparation provided by graduate business education?

In his 1998 dissertation, Ferketich asked the question: In what areas are MBA programs providing the best skill preparation for students, as identified by business managers? The results of his study indicated "the managers believe that MBA programs prepare students fairly well. There is, however, a considerable gap between the skill preparation mean of 4.91 and the essential skill mean of 5.94" (p. 93-4). His study found hard and soft skills inversely clustered. Specifically, the hard skills were rated higher in preparation and soft skills were rated more essential to the organization. Ferketich's findings were consistent with findings cited in this study's literature review, and that set up the directional hypotheses.

A repeated-measure ANOVA was conducted to determine whether differences existed between agreement on essential soft skills and agreement on the perceived preparation of soft skills. An essential soft skills composite score was computed by averaging the six soft skills. A similar composite score was computed for the perceived preparation of soft skills. The results were interpreted to mean a statistically significant difference existed, $F (1, 192) = 100.44$, $p < .001$. Examination of the means shows participants agreed ($M = 6.12$) soft skills were essential, and participants somewhat agreed ($M = 5.36$) MBA programs prepared students with these skills.

A repeated-measure ANOVA was conducted to determine whether differences existed between agreement on essential hard skills and agreement on the perceived preparation of hard skills. An essential hard skills composite score was computed by averaging the six hard skills. A similar composite score was computed for the perceived preparation of hard skills. The results were interpreted to mean a statistically significant difference existed, $F (1, 192) = 65.38$, $p < .001$ (Table

5). Examination of the means shows participants agreed (M = 5.9) hard skills were essential, and participants somewhat agreed (M = 5.58) MBA programs prepared students with these skills.

Unlike the Ferktich report, this study did not find an inverse relationship between the skills identified as essential to the business organization and the level of preparation provided by graduate business management education. Instead, this study found both soft and hard skills to be essential to business with soft skills being deemed slightly more essential. On the other side of the question, participants were not enamored with the degree of preparation being provided by MBA programs. Whereas respondents only somewhat agreed that MBA programs prepare students in both skill sets, they perceived MBA programs as preparing students better in the hard skills than the soft skills.

CONCLUSIONS

The results from this study supported the earlier findings of Porter and McKibbin (1998) and Eberhardt, Moser, and McGee (1997). Business perceived soft skills to be more essential to the business organization than hard skills. The results led to a conclusion business managers rate MBA programs as better preparing students in the hard skills as compared to the soft skills.

Consistent with the Ferktich (1998) study, it was found that business managers rated soft skills more essential to the organization than hard skills, and that skill preparation was rated higher for hard skills than soft skills. The issue on which this study parts company with the Ferketich study is on hard essential skills and hard skill preparation. It was hypothesized that students would be better prepared in the hard skills which would be less essential to an organization. Examination of the data allowed for making the conclusion hard skills were deemed more essential than was the perception of their emphases during student preparation.

The data were interpreted to mean business managers agreed the 12 skills are essential to an organization, but only somewhat agreed MBA programs adequately prepared graduates in those skills. Overall, employers were satisfied with MBA graduates. The relevant literature indicated businesses were dissatisfied with recent graduates because they were overly analytical, unskilled in decision-making; untrained in "soft skills," and so forth (Porter & McKibbin, 1988; Linder & Smith; Grimbly, 1993 Elliott, Goodwin, and Goodwin, 1994; Capon 1996; Eberhardt et al., 1997; Ferketich, 1998). Contrary to popular press reports, respondents in this study indicated overall satisfaction with graduates across the six soft skill categories.

RECOMMENDATIONS

The mismatch between the skills business professionals perceived as necessary for their organizations to function and the MBA skills with which students are being prepared was apparent. The following recommendations outline three strategies for reform in graduate business education to narrow this gap. The first strategy is to redesign curricula to ensure skills being developed in

graduate business education are reflective of skills required by business. The second strategy is to form alliances with practitioners, and the third is to redesign teaching methodologies.

Business schools need to continually reassess the goals of their graduate management programs. They need to be flexible in revising assessment procedures and adopt a more comprehensive, dynamic, and timely strategy to ensure they are teaching the skills that need to be taught. Otherwise, it can be argued that as business schools scramble to meet the needs of a rapidly changing society, they could be offering students too little, too late. Business schools must also develop methods for strengthening soft or people skills while continuing to prepare students in the hard or quantitative skills.

A FINAL WORD

As the business press continues to question the relationship between graduate business education programs and the needs of business organizations, Capon's epilogue addressing the well documented "mismatch" of needs is worth noting. He wrote:

During the next year,

Somebody will suggest surveying businesses to see what they really want and somebody will be foolish enough to undertake such a survey, with vast corporate and government funding. The results will show that businesses want people with strong communication and interpersonal skills, an ethical sense, a global perspective, and an understanding of more than just finance.

Consequently, somebody will announce that business schools should become more concerned with communication, interpersonal skills, personal development, ethics, globalism, and service to society.

And some business schools will reply by pointing out that they already teach these things. Others will reply by establishing, with vast corporate and government funding, centers for the study of each of them.

Finally, somebody will declare that the MBA degree is past its prime and about to wither into oblivion, pointing out not just that the job market is weak but that other countries, much more sensible than the United States, have never had any use for graduate study in business from the beginning (1996, p. 287-288).

and meanwhile, the MBA will continue to be one of the most popular degrees offered in universities in America and around the world.

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ACADEMIC CHAIRPERSON EVALUATION INSTRUMENT: A POTENTIAL DESIGN

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ABSTRACT

The professional literature seems to contain a deluge of descriptions of the ever- increasing complex academic chairperson functions, but there was substantially less information about chairperson evaluation procedures. Consistency in evaluation seems important give the consistency of the annual evaluation, the need for formative data, and the argued benefit of development through dean-chairperson collaboration. Therefore, the Leadership Evaluation Instrument for Academic Chairpersons (LEIFAC) was developed, piloted, and suggested as a tool for future research. The 39-item scale, completed by faculty members using a likert-scale, measures five areas: 1) Managerial, 2) Interpersonal, 3) Communication, 4) Academic, and 5) Political. Estimates of internal consistency ranged from .77 to .99. Cautious recommendations for practice and directions for future research are included.

INTRODUCTION

An annual enigma and source of anxiety exists in academic departments in most institutions of higher education: the by-law mandated chairperson evaluation. Despite the consistent frequency of this event, and perhaps because of a diversity of expectations for the chairperson, there seems to be no commonly accepted procedure with which it can be conducted (McGlone & Kovar, 1992). The first author of this current article recently completed his fifth year as chairperson of an academic department in a mid-sized, Mid-Western, doctoral/research intensive university, and, as such, has been evaluated by the departmental faculty four times. However, those efforts provided disappointing feedback that was neither useful nor substantial.

The author's ascension to the position of chairperson resulted from the previous chairperson's resignation to accept a promotion, at which time no other faculty member was interested in serving the department in this capacity. Others have described chairperson recruitment experiences similar to the one illustrated above (Bowman, 2002, Tucker, 1993, Lucas, 2000). Tucker (1993) stated, "most department chairpersons are drawn from faculty ranks and have had, at best, very little administrative experience" (p. 1). Peltason, in his introduction to Tucker (1984), pointed out that

"the selection of chairperson is often based more on academic considerations or the person's reputation as a scholar than on his or her management qualifications" (p. xi.). This is problematic given that institutions of higher education are increasingly complex systems, and the chairperson's responsibilities continue to expand and increase (Hecht, Higgerson, Gmelch, & Tucker, 1998). The conflict between expectations and appropriate evaluation is made even clearer when the extensive list of published material regarding chairperson functions (Bowman, 2002; Creswell, Wheeler, Seagren, Egly & Beyer, 1990; Gmelch, & Miskin, 1993; Hecht, Higgerson, Gmelch, & Tucker, 1998; Lucas, 2000) is contrasted with the lack of discussion of chairperson evaluations from the same sources. Tucker (1993) devoted a chapter to the discussion of chairperson evaluation. He concluded that "Chairs should welcome good and frequent feedback as a source of information about how they can do their jobs better" (p 538) but offered few specifics of evaluation content or an actual process or instrument.

Another interested party in this muddle of expectation and evaluation for department chairpersons is the academic dean. The dean is responsible for leadership of the entire college, so the success of each individual department is vital to that of the college and, ultimately, of the dean as measured typically by evaluations from the provost and president of the university. Under the best of circumstances, the dean has come through the ranks as a faculty member moving from tenure-track assistant professor to tenured professor and from department chair to dean. While the same lack of mentoring and useful evaluations may have proven problematic for the dean in the role of chairperson, a realization of such problems should make the dean more sensitive to the needs of newer, less-experienced chairpersons for guidance and of more experienced chairpersons for support. This is not, however, always the case (Bennett, J. B., 1990). At times academic deans, feeling the press from above for college-level success, attempt to micromanage every detail of departmental leadership, ignoring or circumventing chairpersons in the process. In other instances, deans are distracted (again presumably because of presidential pressure) with development and fund-raising responsibilities and in working with external constituencies. Any available time for the college may only be spent with those "problem children" of the college.

Ideally, however, deans will attempt to establish a team mentality so that department chairpersons and dean are working collaboratively to succeed programmatically, to address existing problems, to envision potential growth areas, and to reach out to constituencies. A team approach is much more likely to produce the mentoring (Edmonson, S., Fisher, A., & Brown, G., 2002) that is so important to newer chairpersons, mentoring that can be shared between the dean and more experienced chairpersons in the college.

The first author of this article was sincerely interested in serving the colleagues who had selected him, but the lack of extensive previous administrative experience combined with the absence of anyone with chairperson experience within the department, did not allow for mentoring or individual professional development about how to become an effective chairperson.

One aspect of the lack of published material that seemed especially problematic was the aforementioned lack of a consistent evaluation process. Lunenburg and Ornstein (1996) described several performance appraisal methods. One of the most common methods identified was evaluator judgment using graphic rating scales in which several aspects of performance are rated on a likert numerical scale. This was compared to result-oriented approaches, which, while less judgmental, could only assess one aspect of the job performance (Lunenburg & Ornstein, 1996). McGlone and Kovar (1992) asked who should conduct the chairperson evaluation and concluded that the answer was "practically everybody" (p. 123). They further stated that direct personal interviews were preferable to an exchange of written messages, although it would be unrealistic to involve everyone served by the chair in a face-to-face evaluation. Therefore, written formal evaluations can be an efficient way to conduct the process. In fact, rating scales have been described as the single most commonly used measure of job performance (Murphy & Davidshofer, 2001). Salvia and Ysseldyke (2003) described rating scales as the "most formal type of interview" (p. 28) with standardized questions and answers that assured the consistency of the format between respondents. Although there have been attempts to develop different performance-appraisal systems, Landy and Farr (1980) evaluated 30 years of research and concluded that no appraisal format was more psychometrically sound than rating scales.

As stated earlier, a review of the professional literature revealed few instruments that could be used to complete a written evaluation of the academic chairperson, instruments that would make the process more consistent, objective, and efficient (Hickson & Stacks, 1992). Therefore, in response to this identified need, the Leadership Evaluation Instrument For Academic Chairpersons (LEIFAC) has been developed. The process of developing this scale is described below.

THE SCALE

Tucker's (1993) model was used to devise a five-category scale consisting of the following skill divisions: 1) Managerial, 2) Interpersonal, 3) Communication, 4) Academic, and 5) Political. Tucker (1993) suggested that managerial skills necessary for effective leadership by an academic chairperson were problem solving, goal setting, fiscal guidance, and the maintenance of departmental resources. Thus 12 items were written to assess these skills. Interpersonal Skills also included 12 items encompassing the social interactions between the chair and department personnel, conflict resolution, timely transmission of important information, and the ability of the chair to function effectively under stressful circumstances, as listed by Tucker (1993). The section on Communication assessed the chairperson's ability to convey important messages in both verbal and written form with all the department's constituents; this section was addressed with six items. Tucker's (1993) Academic section, measured with five items on the scale, included academic pursuits such as professional involvement and the support given to the departmental faculty regarding their professional activities. The last category assessed the chairperson's Political acumen

with 4 items and included feedback for the chairperson concerning interactions within the university as a whole.

Figure 1 **Leadership Evaluation Instrument for Academic Chairpersons**						
Name of person being evaluated:						
Check the appropriate box for each item. **SD = Strongly Disagree, D = Disagree, U = Uncertain, A = Agree, SA = Strongly Agree, UJ = Unable to Judge**						
Managerial	**SD**	**D**	**U**	**A**	**SA**	**UJ**
1. Can determine important elements of a problem.						
2. Able to adapt leadership style to fit different situations.						
3. Seeks out relevant information when problem solving						
4. Identifies needs and sets priorities.						
5.. Uses resources in an optimal manner.						
6. Effectively addresses heavy demands on one's time.						
7. Able to recognize when a decision is required.						
8. Acts with appropriate swiftness when making decisions.						
9. Facilitates departmental goal setting.						
10. Motivates faculty to achieve departmental goals and objectives.						
11. Is fiscally responsible.						
12. Manages departmental resources.						
Interpersonal Skills	**SD**	**D**	**U**	**A**	**SA**	**UJ**
1. Makes an effort to get appropriate others involved in problem solving.						
2. Recognizes when a group requires further direction.						
3. Effectively interacts with a group to guide them to accomplish a task.						
4. Perceives needs, concerns, and personal problems of others.						
5. Skillful in resolving conflict.						
6. Exhibits tact in dealing with persons from different backgrounds.						
7. Deals effectively with people concerning emotional issues.						
8. Recognizes what information needs to be communicated to others.						

Figure 1 **Leadership Evaluation Instrument for Academic Chairpersons**						
Name of person being evaluated:						
Check the appropriate box for each item. **SD = Strongly Disagree, D = Disagree, U = Uncertain, A = Agree, SA = Strongly Agree, UJ = Unable to Judge**						
9. Performs effectively under pressure.						
10. Performs effectively during opposition.						
12. Handles positive and negative feedback appropriately.						
Communication	**SD**	**D**	**U**	**A**	**SA**	**UJ**
1. Makes clear oral presentations of facts or ideas.						
2. Expresses ideas clearly in writing.						
3. Interacts well with students.						
4. Communicates effectively with other academic units within the University.						
5. Works effectively with office professionals.						
6. Communicates effectively with alumni.						
Academic	**SD**	**D**	**U**	**A**	**SA**	**UJ**
1. Actively participates in his/her professional discipline.						
2. Demonstrates a clear sense of the academic and professional norms of the department.						
3. Facilitates faculty intellectual pursuits.						
4. Facilitates faculty excellence in teaching.						
5. Fosters achievement and development among students.						
Political	**SD**	**D**	**U**	**A**	**SA**	**UJ**
1. Has an effective working relationship with the Dean and University administrators.						
2. Represents department interests in communication within the university.						
3. Effectively communicates college and university directives and decisions to department.						
4. Fairly distributes resources within the department.						
Based on Tucker, A. (1993). *Chairing the academic department: Leadership among peers* (3rd ed.). Phoenix, AZ: American Council on Education and the Oryx Press.						

Thirty-nine total items were written to address the five skill factors identified, each using a five-point likert scale of Strongly Disagree to Strongly Agree, as recommended by Lunenburg and Ornstein (1996). An Unable to Judge Option was also included for faculty who felt they could not adequately rate the chairperson's performance on a given item.

The LEIFAC was used by the first author as part of his own annual chairperson evaluation process and to conduct an initial field-testing of the scale. Each of the 11 faculty members in the first author's academic department received a copy of the scale. Eight of the faculty members (73%) were female, and three (27%) were male, with 73% holding a doctoral degree and a rank of Assistant, Associate, or Full Professor. Thus, 27% held a Masters degree as their highest degree obtained.

The scale was delivered to all participants with a letter asking them to complete the scale in regards to the current department chair and return it to a designated faculty member in an enclosed envelope. No names were placed on the survey, and the completed form was returned to a designated faculty member, not the chairperson, to protect confidentiality of the respondents.
Upon receiving the completed forms, scores were tallied for each factor after assigning a neutral value of three to items that were rated as Unable to Judge. Scores were reported by average rating for each item and by totaling the scores for factor and dividing by the total number of items in the factor.

The internal consistency of the scale was estimated using Cronbach's coefficient alpha, which resulted in a reliability coefficient of .99 for all of the 39 items. Estimates of internal consistency were computed for the five factor scores and resulted in coefficients of .98 for Managerial, .95 for Interpersonal Skills, .88 for Communication, .77 for Academic, and .85 for the Political factor. These coefficients exceeded minimum standards for decisions about individuals suggested by several scholars (Anastasi & Urbina, 1997; Murphy & Davidshofer, 2001; Nunnally & Bernstein, 1994). Thus, the tool seems sufficiently reliable to warrant further investigation, but use in practice can only be recommended if done so cautiously. Further, the data from the Academic factor seem only marginally reliable, which suggests omitting these data from evaluations in practice and the need for additional research to clearly identify and measure the academic expectations of chairperson.

DIRECTIONS FOR PRACTICE AND FUTURE RESEARCH

The primary objective of this article is to propose a tool to make the evaluation of academic chairpersons more consistent, comprehensive, and objective. However, use of this tool without additional research should be conducted cautiously.

The LEIFAC proved to be an effective formal evaluation instrument. All faculty members completed the instrument, and the chair was able to glean a body of reliable data involving his performance as chair. The chairperson is also expected to submit a written yearly self- report, and

the formal evaluation was useful for reminding the chairperson of accomplishments long forgotten and tasks that remained to be finished. The evaluation instrument also provided a method of teasing out a number of individual faculty preferences that had remained hidden while still providing an overall picture of the health of the department. Additionally the information gleaned from this process provided the basis for a formal report to the dean.

Assessment scholars have called for more formative data, as opposed to summative, for evaluations. Therefore, data generated from the LEIFAC should be used for professional development purposes and not simply for evaluation. Furthermore, the survey provides written expectations that could be shared with new chairpersons upon election or appointment to the position.

The information available through the LEIFAC, when used in a formative manner, can be particularly effective for the academic dean. A dean clearly experiences no manner of success in causing department chairs, faculty, or staff to fail; success for the dean comes only through assisting the entire unit to move forward productively. Successful chairpersons are a key to this movement forward, and it is a responsibility of the dean to identify areas of strength and potential weakness for department chairs, and then to help in building on these strengths and addressing areas of need. The use of the LEIFAC findings can be critical in providing assistance for the design of a professional development plan for a department chairperson at any career point. The plan should be mapped out collaboratively between the dean and chairperson, and the dean should actively contribute in whatever way necessary to ensure that the chairperson can carry out the plan designed.

As mentioned earlier, very often department chairpersons are selected initially because of their academic success rather than the other four skill areas evaluated by the LEIFAC. While these other skill areas clearly need to be addressed as an individual matures as a chairperson, the academic role cannot be ignored. Frustration at their inability to continue to grow academically is often a cause for chairpersons returning to their faculty lines. How ironic that the success that initially led to their promotion is ignored in any kind of professional growth plan to sustain their productivity and professional health. Of course, while attention should be given to continued academic success, department chairpersons often do need assistance with interpersonal and communication skills, with overall management strategies, and with the ability to maneuver effectively in the highly political world of academia, as identified in the other categories of the LEIFAC.

These successful academics are often very much unprepared to deal with the petty demands and complaints made by some of their less successful colleagues. Described by one newly promoted, and ultimately very successful, department chairperson, these demands for such things as taking one class already assigned to a faculty member and giving it to the one complaining or moving another faculty member's class from a time or location that the complaining faculty member wants, are not unlike those of children. "Johnny has a red ball, and I want it. Take it away from him and give it to me." The new department chair, faced with such demands, was convinced that no other faculty members in other departments could act in such self-centered and self-serving ways.

Only through discussion with other department chairs and deans, part of the mentoring process, did the new chairperson realize that such behavior was not a new thing. He also arrived at a wonderful solution to faculty demands for such special treatment. He always offered very seriously to take the request to the entire faculty for a vote, at which time the request was almost always immediately withdrawn. Again, the kind of information to be garnered from the LEIFAC data can provide essential guidance to the dean and the department chairperson not only in designing a professional growth plan to address identified needs but in planning together how they can best achieve the goals established, including workshops, seminars, and observations of and consultations with fellow chairs. Continued use of the LEIFAC can assist both chairperson and dean in measuring growth made toward established goals and identifying areas of in need of continued development.

Interpretation of data from the LEIFAC is somewhat speculative at this time and needs additional research to develop a meaningful rubric. Until those data are collected, we suggest computing mean scores for each item and using the five-point scale for interpretation (e.g. a mean score of 4.00 or higher suggests that the faculty perceive adequate skill for this item). However, a perhaps preferable approach may be to compute factor scores by determining the mean item score within the factor. For example, the Academic Factor contains 5 items. The mean score for those items could be compared to the five-point scale and could be used for an intraindividual analysis to suggest areas of relative strength and areas in need of further development.

Although the preliminary data presented here suggest a tool with potentially sound psychometric properties, additional research is needed before it can be recommended for formal evaluative use. Reliability estimates with a larger and more nationally representative sample size are needed. Additionally, research is needed to examine the validity of data provided by the LEIFAC and to investigate meaningful criteria to which the data can be compared.

Perhaps the LEIFAC may provide an empirical operational definition of department chairperson efficacy. This could allow for research into effective practices of department chairpersons, something that the literature and profession greatly need.

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FACTORS THAT PROMOTE AND IMPEDE FACULTY WILLINGNESS TO DEVELOP AND DELIVER INTERNET-BASED (ONLINE) COURSES: AN ADOPTION MODEL

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ABSTRACT

Recent statistics reveal that the number of online courses and degree programs offered by many institutions has significantly increased over the last few years. Despite this growth, factors affecting faculty adoption and satisfaction with online course development and delivery are not well known, in particular across different disciplines. Due to the growing demand for high quality online courses and degree programs, it is important for institutions to identify factors that are likely to contribute to and impede faculty satisfaction with online course development and delivery.

The result of our data analysis suggests that the following are among the factors that contribute to faculty adoption of and satisfaction with online course development and delivery: higher number of online courses previously taught, higher rating of the majority of students' technical sophistication, higher quality of education that faculty believe online students receive, and improvement in traditional teaching ability through online teaching. On the other hand, among the factors that impede the adoption of and satisfaction with the online mode of instruction are the amount of time spent on grading and the time spent on technical adjustment. Based on the findings of this study, the paper will suggest an adoption model.

INTRODUCTION

To meet the educational needs of working individuals with limited available travel time, and for those who live in rural areas and away from campuses, many institutions of higher education are using technology innovations to expand on their Internet-based courses and degree program development and delivery. Yet, some faculty members continue to resist developing and offering online courses. This paper reports findings based on an analysis of data collected from faculty who have and have not taught online courses. The data were collected over the spring and fall 2003 semesters from a campus of a major state university where there has been a high level of faculty

involvement in online course development and delivery although the distribution of involvement has admittedly not been uniform across disciplines (Table 1).

Table 1: Fall 2003 - Distribution of Online Courses and Enrollment by College				
Colleges	Number of online courses	Enrollment	Credit Hours	Percentage
Business and Management	11	186	744	13.4%
Education and Human Services	26	259	850	15.3%
Liberal Arts and Sciences	65	890	3382	60.7%
Public Affairs and Administration	6	148	592	10.6%
Total	108	1483	5568	100%

We will first present a summary of the available literature in this area and then present a brief background about the institution at which this study took place. Next, we present our research method and the results of our data analysis and findings based on a survey instrument used for this study. In the last part of the paper we suggest an adoption model based on our survey results and discuss the implications of our findings.

LITERATURE REVIEW

Factors that are cited in the literature as the reasons behind the significant growth of Internet-based course and degree program development and delivery include competition for students (Tsichritzis, 1999; Rahm & Reed, 1997), and life long learning and continuous professional education and growth (Confessore, 1999). One can also argue that developing online content and making it available to face-to-face as well as online students may facilitate improving the traditional face-to-face instruction.

Numerous studies (Flanagin, 2000; Thong, 1999; Chau & Tam, 1997; Teo, Tan & Buk, 1997; Damanpour, 1991; Tornatzky & Klein, 1982) have tried to identify factors that influence organizations' adoption of innovations in general and information technology in particular. Downs and Mohr (1976) classify factors that influence adoption of innovation as characteristics of organizations, the environment, or the perceived advantages of the innovation.

Many institutions of higher education are attempting to assess and ensure quality while coping with the significant growth in the demand for online programming. The Alfred P. Sloan Foundation's Sloan Consortium, known as Sloan-C, about 1997 recognized and publicized its Five Pillars (Mayadas, 1997) for high quality online education: learning effectiveness, student satisfaction, faculty satisfaction, cost effectiveness, and access. The focus of this paper is on faculty satisfaction with online course development and delivery.

A few studies have attempted to determine factors that contribute to faculty satisfaction with Internet-based course development and delivery. Thompson (2003) suggests institutional support, personal rewards and professional recognition as requirements for faculty satisfaction with developing and delivering online course and degree programs. Boschmann (2003) relates faculty satisfaction with online instruction to faculty training, involvement, support, and strong advocacy. Fetzner (2003) advocates faculty support in the areas of course development, technical, operational and administrative training.

Shea, Pelz, Frederickson, and Pickett (2002) link faculty satisfaction to the availability of technical support and training for online course development and delivery, better student performance, frequent interaction with students, scheduling flexibility, getting to know students better, better course design and assessment, and better ability to measure learning. Some concerns still cited (Shea et al., 2002) include the level and availability of the required technology on the learner side, the ability to verify authenticity of work done and submitted by the students, assurance of quality and learning, and an appropriate approach to guide students into face-to-face instruction when their learning style does not fit with the online mode of delivery.

Almeda and Rose (2000) reported the satisfaction of faculty in fourteen online freshman-level courses in composition and literature, business writing, and English as a second language. Based on a survey of faculty teaching those courses, they reported that these writing courses are suitable for online mode of delivery and the faculty members are satisfied with the development and delivery of these courses using this mode of delivery.

Arvan, Ory, Bulock, Burnaska, and Hanson (1998) and Arvan and Musumeci (2000) studied faculty attitudes regarding online courses in the areas of Spanish, microbiology, economics, mathematics, chemistry, and physics. They reported faculty satisfaction with online course development and delivery in those areas. They further reported that online courses could result in some efficiency gains in some high enrollment courses without negatively affecting quality of instruction. Franklin (2001) advocates a mixed mode model as a point of synergy between online and face-to-face course development and delivery.

BACKGROUND

A major public higher education system, in the Fall of 1998, started its system-wide initiative to develop and deliver high-quality Internet and Web-based courses, certificates, complete degree programs and Internet-based public service. The system consists of three campuses. The system currently offers 50 fully online degree programs, about 350 fully online courses, and enrolls more than 5000 online students.

The campus where this study was conducted has a high proportion (about 45 percent) of its faculty involved in Internet-based course development and delivery compared with about 10 percent on the other two campuses. Internet-based course offerings on this campus started in the Fall of

1998 with one course and an enrollment of 30 students. In the Fall of 2003, there were 1483 students enrolled in 108 fully Internet-based courses.   Figure 1 shows the enrollment growth.

Figure 1: Online Enrollment Growth
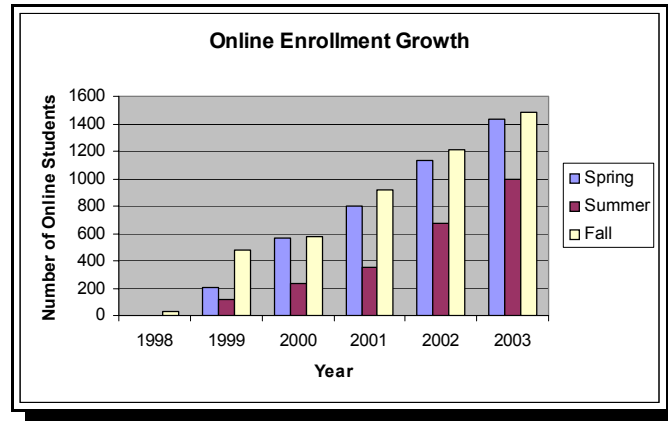
This campus currently offers fully online a Master of Science in management information systems, Master of Arts in educational leadership with a concentration in master teaching and leadership, a graduate certificate in career specialist studies, and undergraduate degree completion programs in liberal studies, English, computer science, history, and philosophy, as well as many individual online courses in other disciplines.

The student body on this campus consists of the traditional full-time as well as part-time students who are employed full or part-time. Technical support and a help desk are available to students who are enrolled in the online or face-to-face courses. Online and face-to-face assistance using the teaching and collaborating tools such as course management systems employed in the online courses is available to students who are new to online learning. Other services such as online access to library resources and publications and a database of library collections as well as access to online course catalogues are available to students.

More than 90% of the online courses are developed and delivered by full-time faculty on this campus. In many cases, the same faculty member offers the online and face-to-face section of a given course. The faculty members who teach the courses develop the majority of the online courses. Faculty who are new to online teaching and learning are usually encouraged to develop an online version of a course that they have taught face-to-face before as their first attempt to develop and deliver an online course. Various campus units with professional staff are available to provide any needed technical and instructional design assistance to faculty during the development and delivery of the courses on this campus. Enrollment in each online course is usually limited to 20-25 students. A well-organized and structured set of statewide online courses and a master online teacher certificate are also available for faculty who are new to online teaching to learn how to teach

online. New faculty who plan to teach online courses also have access to a sample of live online courses so that they can better prepare themselves for online course development and delivery.

Course delivery on this campus is mainly via a Web browser but variation exists from course to course in the use of other tools and technologies. Some faculty distribute CDs with course content in addition to the Web while others make streaming audio of lectures as well as course related text and graphics available to students.

This campus operates on a semester basis and the duration and schedule of the online courses are identical to the traditional face-to-face courses. The online courses are delivered asynchronously but a significant amount of interaction exists between faculty and students and among students via e-mail and conferencing tools. The majority of the courses have mandatory or optional synchronous components built into them.

METHODOLOGY

An instrument was designed to identify factors that influence and impede faculty satisfaction with online course development and delivery. The instrument used is a survey questionnaire consisting of thirty-two questions. The survey questions deal with issues such as faculty years of experience with online teaching, the subject matter they teach, teaching workload, time spent on development and delivery of courses, online teaching and learning activities, instructional materials they use, amount of faculty-student and student-student interactions, development of rapport with students, the ability to get to know students, advantages and disadvantages of online teaching, students' and faculty satisfaction with online teaching, major reasons behind adopting or not adopting the online mode of teaching, and faculty familiarity and level of comfort with using instructional technology.

The survey instrument consists of both open-ended and close-ended questions. A Likert scale is used to determine the level of agreement with the stated assertions for the close-ended questions. The responses to the open-ended questions are coded and grouped together for statistical analysis.

The subjects in the study were about 170 full-time faculty on this campus. About 45 percent of the faculty have developed, taught and/or are currently developing and/or teaching at least one online course. Sixty-four usable responses were received which represents a 37.4% survey return.

DATA ANALYSIS

Data from the survey questionnaire were analyzed to determine the degree of willingness of faculty to participate in online course and degree program development and delivery. Factors that are hypothesized to affect faculty members' willingness to teach online courses are:

A faculty member's background
The faculty member's perception of students' ability and performance
Time required of the faculty member
Improvement of faculty member's teaching ability
Perceived presence or absence in the course of a "human touch"
Amount and quality of administrative and technical support

Willingness of faculty to teach online courses was treated as a dependent variable. For factors that are interval or ordinal measurements, correlation analysis was applied to determine whether a significant correlation exists between willingness and each factor. If a significant correlation exists, regression analysis was used to determine how the factor influences willingness. For factors that are nominal measurements, analysis of variance was applied to determine whether a significant difference exists in average willingness within a factor. Analysis of variance was also used to analyze faculty rankings of the advantages and disadvantages of teaching/taking online courses. When a significant difference in the average ranks exists, Duncan's new multiple range test was applied to group the advantages/disadvantages.

Willingness to Teach Online Courses and Faculty Member's Background

The following hypotheses were tested:

The gender of the faculty members does not affect willingness to teach online courses.
Years of teaching experience do not affect willingness to teach online courses.
Number of online courses previously taught does not affect willingness to teach online courses in the future.
Teaching discipline does not affect willingness to teach online courses.
Course level does not affect willingness to teach online courses.

Conclusion:

Gender (P-value=0.7745), years of teaching experience (P-value=0.2150), teaching discipline (P-value=0.3345), and course level taught (P-value=0.3744) do not affect faculty members' willingness to teach online courses in the future. However, the number of online courses previously taught has a positive correlation (P-value=0.0345) with faculty members' willingness to teach online

courses in the future. The more online courses taught, the higher the member's willingness to teach online courses (Figure 2).

Figure 2
Relationship between Number of Online Courses Taught and
Willingness to Teach Online in the Future
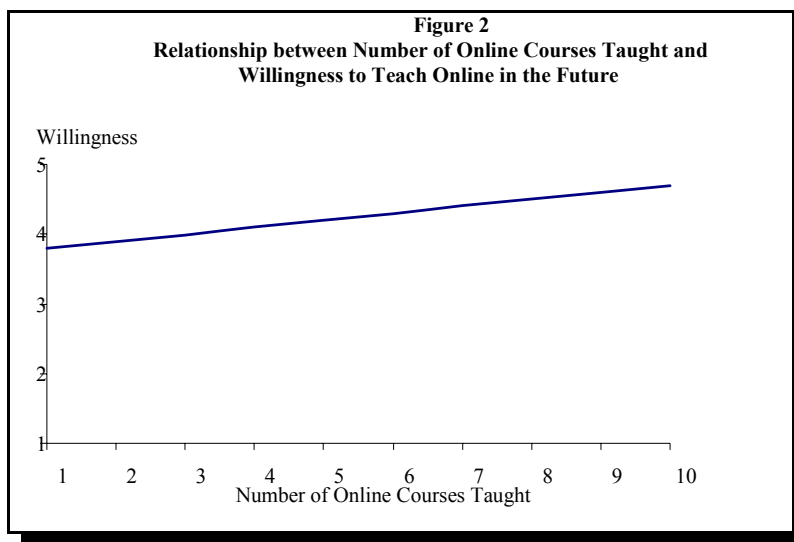
Willingness to Teach Online Courses and Faculty Member's Opinion about Students' Ability and Performance

The following hypotheses were tested:

Faculty members' ratings of students' technological sophistication is not related to willingness to teach online courses.
Faculty beliefs about whether students receive a better education online do not affect faculty willingness to teach online courses.

Conclusion:

The higher a faculty member's rating of the majority of students' technological sophistication, the higher the member's willingness to teach online courses (P- value=0.016) (Figure 3). The better the education that faculty believe online students receive, the higher a member's willingness to teach online courses (P-value=0.0008) (Figure 4).

Willingness to Teach Online Courses and Time Required of Faculty Members

Figure 3
Relationship between Willingness to Teach Online and Technological Sophistication of Students

Figure 4
Relationship between Willingness to Teach Online and Perceived Quality of Education Students Receive
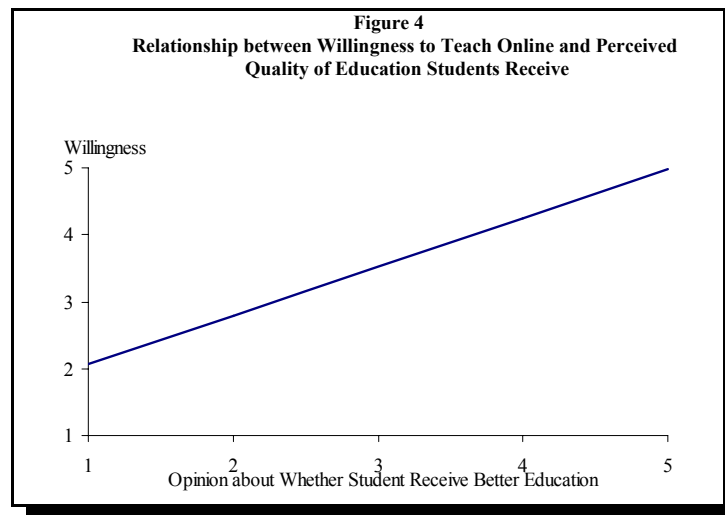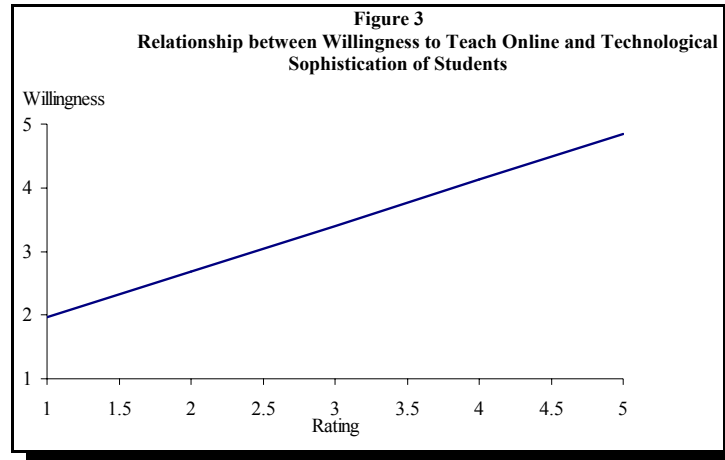
The following hypotheses were tested:

The amount of contact time is not correlated with faculty willingness to teach online courses.
The amount of grading time is not correlated with faculty willingness to teach online courses.
The amount of time spent on systematic instructional design is not correlated with faculty willingness to teach online courses.
The amount of preparation time is not correlated with faculty willingness to teach online courses.
The amount of time originally anticipated to write materials is not correlated with faculty willingness to teach online courses.

The amount of time originally anticipated in meeting with support staff is not correlated with faculty willingness to teach online courses.

The amount of time spent on technical adjustments for online delivery is not correlated with faculty willingness to teach online courses.

Conclusion:

The more time a faculty member spends on grading, the lower the faculty member's willingness to teach online courses (P-value=0.0441) (Figure 5). The more time a faculty member spends on technical adjustments, the lower the faculty member's willingness to teach online courses (P-value=0.0324) (Figure 6). Amount of contact time (P-value=0.8159), amount of time spent on systematic instructional design (P-value=0.9432), amount of preparation time (P-value=0.4702), amount of time required to write materials (P-value=0.2562), and amount of time required to meet with support staff (P-value=0.8372) do not affect willingness to teach online.

Figure 5
Relationship between Willingness to Teach Online and Time Spent on Grading
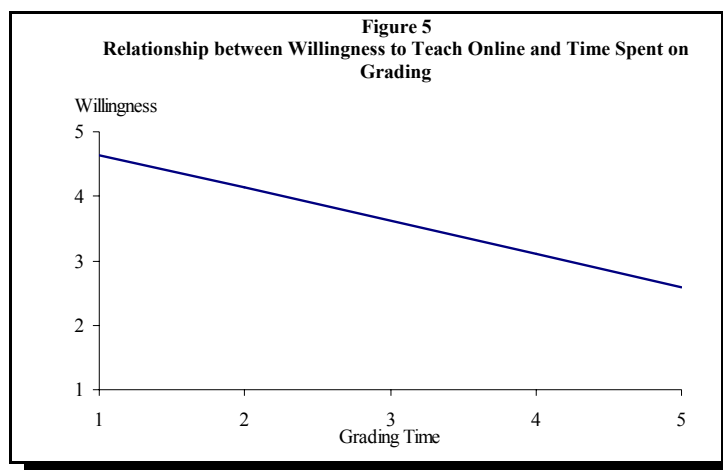
Willingness to Teach Online Courses and Improvement in Faculty Members' Teaching Ability

The following hypotheses were tested:

The amount of improvement in online teaching ability is not correlated with faculty willingness to teach online courses.

The amount of improvement in traditional teaching ability as a result of the online teaching experience is not correlated with faculty willingness to teach online courses.

Figure 6
Relationship between Willingness to Teach Online and Time Spent on Technological Adjustment
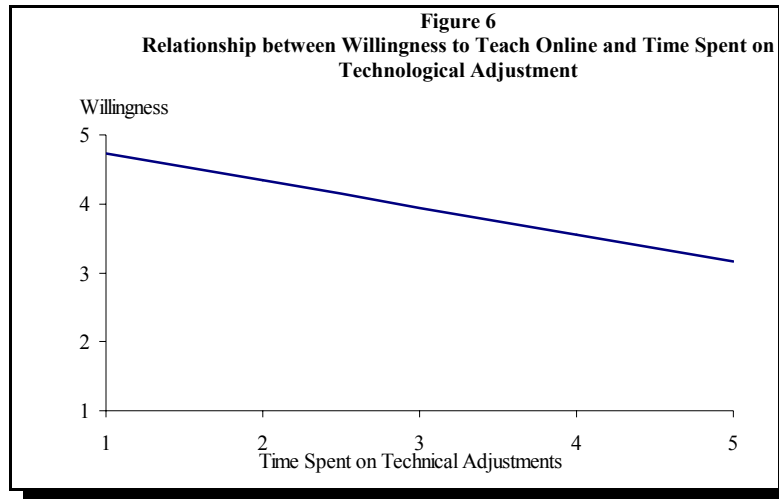
Conclusion:

The more faculty members believe online teaching improves their traditional teaching ability, the higher of faculty member's willingness to teach online courses (P-value=0.0055) (Figure 7). However, faculty members' beliefs about improvements in their online teaching abilities do not affect the faculty member's willingness to teach online courses in the future (P-value=0.0997).

Willingness to Teach Online Courses and the "Human Touch" in Online Courses

The following hypotheses were tested:

Faculty members' opinions about their getting to know students better in online courses do not affect faculty willingness to teach online courses.

Faculty members' opinions about whether students get to know faculty better in online courses does not affect faculty willingness to teach online courses.

Conclusion:

Neither Faculty beliefs about whether or not they get to know students better (P-value=0.4963) nor whether students get to know them better (P-value=0.7806) affects faculty willingness to teach online courses in the future.

Figure 7
Relationship between Willingness to Teach Online and Improvement
in Traditional Teaching

Willingness

[Figure: Line graph showing Willingness (y-axis, scale 1 to 5) versus Improvement of Traditional Teaching Ability (x-axis, scale 1 to 5). An upward-sloping line rises from about 2.75 at x=1 to 5 at x=5.]

Improvement of Traditional Teaching Ability
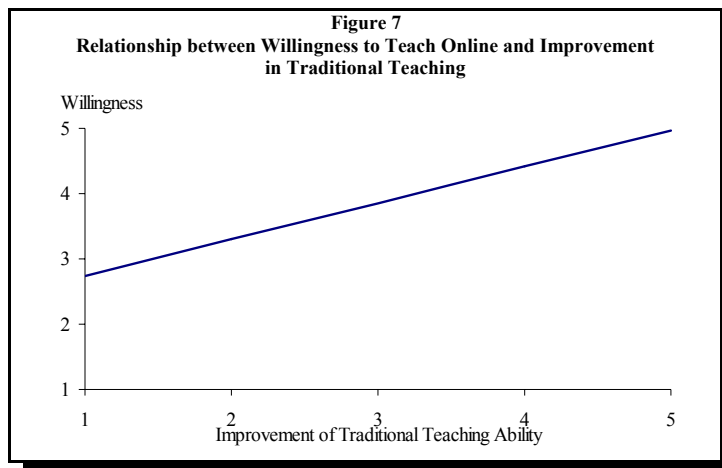
Willingness to Teach Online Courses and Satisfaction with Support for Online Courses

The following hypotheses were tested:

The level of satisfaction with technical help does not affect faculty willingness to teach online courses.

Level of satisfaction with administrative support does not affect faculty willingness to teach online courses.

Conclusion:

Neither level of satisfaction with technical help (P-value=0.4055) nor level of satisfaction with administrative support (P-value=0.4987) affects faculty willingness to teach online courses. This result is probably related to the high levels of satisfaction with technical help and administrative support reported by survey respondents (Technical Help average = 4.2222; Administrative Support average = 3.64 on a scale of 1 to 5, with 5 being very satisfied).

Faculty Views of the Advantages and Disadvantages of Teaching/Taking Online Courses

The following hypothesis was tested:

There is no significant difference in faculty opinions about the advantages of teaching online courses.

Conclusion:

Faculty opinions about the advantages of teaching online courses do not differ significantly (P-value = 0.5675) (Table 2).

Table 2: Factors Faculty Consider an Advantage when Teaching Online Courses		
Item	Average Advantage	Grouping*
The ability to give students feedback at any time	3.7225	
The ability to perform class duties without having to come to campus every class day.	3.5336	
The individual attention faculty can give students	3.4966	
The privacy of communication between students and between each student and the instructor	3.2474	
* Items covered by the same line are not significantly different at the 0.05 level of significance.		

Disadvantages of Teaching Online Courses

The following hypothesis was tested:

There is no significant difference in faculty opinions about the disadvantages of teaching online courses.

Conclusion:

Faculty opinions about the disadvantages of teaching online courses are significantly different (P-value=0.0001) (Table 3). On average, faculty believe the amount of time required to teach online courses is the greatest disadvantage and faculty lack of familiarity with hardware/software is the least disadvantageous issue.

Faculty Views of the Advantages for Students of Online Courses

The following hypothesis was tested:

Faculty views about what they believe students may consider advantages of online courses do not differ significantly.

Table 3: Factors Faculty Consider a Disadvantage when Teaching Online Courses		
Item	Average Disadvantage	Grouping *
The amount of time required to teach online courses	3.7241	
Lack of the "human touch"	2.7931	
The limitations of the hardware and/or software	2.6897	
Lack of group meetings and the resulting immediate crosstalk and exchange	2.4483	
Students' lack of familiarity with the hardware and/or software	2.4138	
Faculty lack of familiarity with the hardware and/or software	1.6207	
* Items covered by the same line are not significantly different at the 0.05 level of significance.		

Conclusion:

Faculty beliefs about these advantages for students of taking online courses differ significantly (P-value=0.0001) (Table 4). On average, faculty believe that students' not having to come to campus every class day and their ability to perform the class work at other than set times are the most advantageous issues for students.

Table 4: Factors Faculty Consider an Advantage for Students Taking Online Courses		
Item	Average Advantage	Grouping*
Not having to come to campus every class day.	4.6552	
The ability to perform the class work at other than set times	4.5862	
The ability to get feedback from the teacher at any time	3.7931	
Individual attention from the teacher	3.4828	
The privacy of communication between students and between each student and the instructor	3.2759	
* Items covered by the same line are not significantly different at the 0.05 level of significance.		

Faculty Views of the Disadvantages for Students of Online Courses

The following hypothesis was tested:

Faculty views about what they believe students may consider disadvantages of online courses do not differ significantly.

Conclusion:

Faculty beliefs about the disadvantages for students of taking online courses do not differ significantly (P-value=0.5902) (Table 5).

Table 5: Factors Faculty Believe Students Consider a Disadvantage when Taking Online Courses		
Item	Average Disadvantage	Grouping*
Lack of familiarity with the hardware and/or software	2.5862	
Lack of the "human touch"	2.5172	
Lack of group meetings and the resulting immediate cross talk and exchange	2.2759	
The limitations of the hardware and/or software	2.2069	
The difficulty of learning the software	2.1724	
The amount of time required to take online course	2.1034	
* Items covered by the same line are not significantly different at the 0.05 level of significance.		

Reasons that Faculty Have Not Yet Offered an Online Course

The following hypothesis was tested:

There are no significant differences in average ranking among the reasons that faculty have not yet offered an online course.

Conclusion:

Average rankings for reasons that faculty have not yet offered an online course are significantly different (P-value=0.0001) (Table 6). The most significant reason for not yet offering an online course is "My other duties require so much time that I simply haven't had the time to adapt my materials or develop a course."

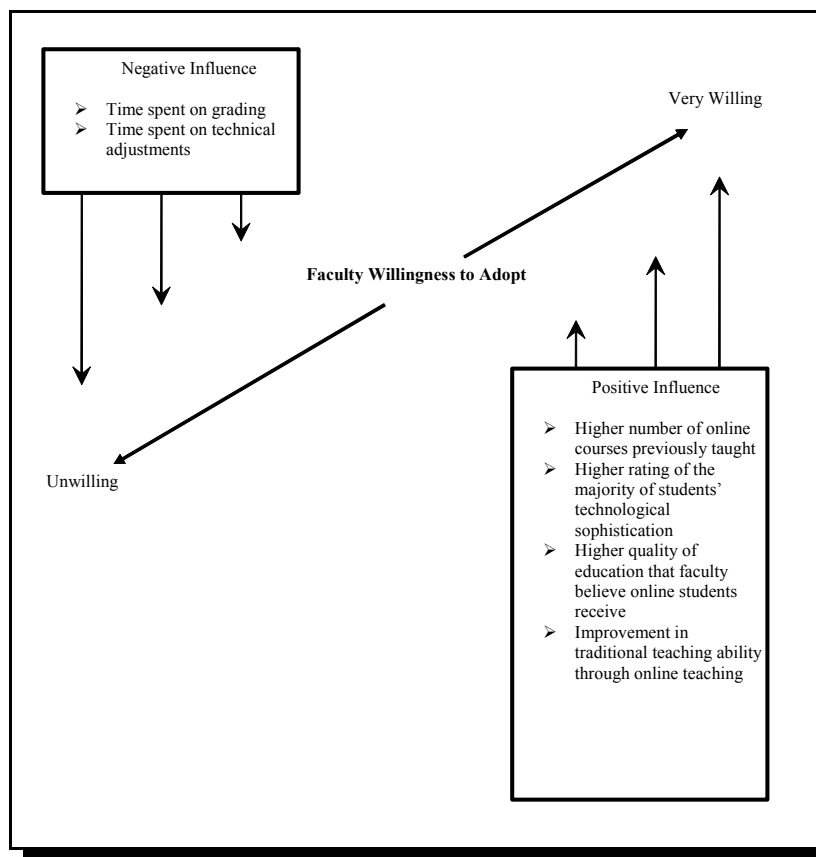## A Framework for Faculty Adoption of Internet based Course Development and Delivery

Downs and Mohr (1976) classify factors that influence adoption of innovation as characteristics of organizations, the environment, or the perceived advantages of the innovation. We propose a similar framework with the addition of the perceived disadvantages of the innovation as an impediment to adoption. From the institutional and managerial viewpoint, our adoption model identifies factors that faculty consider critical in adopting online course development and delivery. It also identifies factors that impede such adoption. Figure 8 depicts our adoption model. It should help faculty and institutions in their adoption decisions.

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Faculty members are among the major stakeholders in online course development and delivery, and adoption of this mode of course delivery may depend on various factors. The entire faculty at a campus of a major state university was surveyed to identify factors that influence their decision whether to adopt online course development and delivery. The data were analyzed to determine if these influential factors depend on faculty characteristics such as gender, field of study, course subject, quality perception, and time requirements. Study of other institutions may also reveal geographic differences that affect success of and willingness to teach online courses.

Gender, years of teaching experience, teaching discipline, and course level did not influence faculty decisions to develop or deliver courses online. Perceptions of quality and the time required of faculty to develop and deliver the courses did influence the choice of whether to adopt the online mode or not. More specifically, higher number of online courses previously taught, higher rating of the majority of students' technical sophistication, higher quality of education that faculty believe online students receive, and improvement in traditional teaching ability through online teaching contribute to the faculty adoption of and satisfaction with online mode of instruction. These findings are consistent with better student performance and the level and availability of the required technology on the learner side as factors for faculty adoption of and satisfaction with online instruction indicated by Shea, et al. (2002). On the other hand, our analysis shows that the amount of time spent on grading and the time spent on technical adjustment impede the adoption of and satisfaction with the online mode of instruction. The above tendencies suggest an adoption model similar to what is proposed in this paper that encompasses both the advantages and disadvantages

that faculty perceive when considering adopting the online mode of course development and delivery.

The fact that the faculty members at only one campus of a university were surveyed constitutes a limitation for this study. Further research at other universities and colleges should reveal ways to encourage faculty to adopt online teaching.

Table 6: Ranking of Reasons Faculty Have Not Yet Offered an Online Course		
Reason	Average Ranking	Grouping*
My other duties require so much time that I simply haven't had the time to adapt my materials or develop a course.	4.1176	
I believe my courses are not appropriate for online delivery.	2.2294	
I need to learn more first about the technology involved.	1.4706	
I'm relatively new on this campus so I haven't had the opportunity yet	1.4118	
Others	0.8058	
I believe the benefits of an online course are outweighed by the disadvantages.	0.7000	
I've tried but the technical and/or pedagogical help was inadequate.	0.3529	
I am too far along in my career now to change.	0.3176	
I have applied for one of the grants to put a course online, but my application wasn't approved.	0.2647	
I don't believe my students or I would gain anything by putting any of my courses online because they work just fine as they are.	0.1882	
I don't trust the technology.	0.1412	
I think the whole online push is merely a fad.	0.0000	
* Items covered by the same line are not significantly different at the 0.05 level of significance.		

Figure 8: A Framework for FacultyAdoption of Internet-based Course Development and Delivery

Negative Influence

➢ Time spent on grading
➢ Time spent on technical adjustments

Very Willing

Faculty Willingness to Adopt

Unwilling

Positive Influence

➢ Higher number of online courses previously taught
➢ Higher rating of the majority of students' technological sophistication
➢ Higher quality of education that faculty believe online students receive
➢ Improvement in traditional teaching ability through online teaching

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AN EXAMINATION OF THE GAP BETWEEN SUPERVISORY JOB EXPECTATIONS AND STUDENT PERCEPTIONS OF THOSE EXPECTATIONS USING THE KANO MODEL OF CUSTOMER SATISFACTION

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ABSTRACT

A principle complaint of today's supervisors is that graduating seniors do not understand job expectations. This study examines the validity of this argument using the Kano Model of customer satisfaction to clarify and quantify the gap between supervisor job expectations and student perceptions of those expectations. Supervisor and student expectations are examined in terms of "basic needs", "satisfiers", and "delighters" as well as a variety of demographic variables. The findings indicate that the students have a relatively strong understanding of supervisory expectations. Differences in the understanding of job expectations are examined and recommendations are provided to reduce the gaps and improve the supervisor's communication with newly hired college graduates.

INTRODUCTION

A supervisor's primary responsibility is to influence his or her employees to accomplish organizational goals. The clear communication of expectations is central to this process of influencing or motivating the employees. While most supervisors understand their responsibility to communicate expectations, the employees may not understand how critical it is that they understand the supervisor's expectations. This misunderstanding seems to be particularly apparent in newly hired college graduates (Kruger, 2004). In a sense, the employee (or the newly hired college grad) must view "the supervisor as the customer." As such, subordinate employees are the providers and it is their responsibility to determine and satisfy their supervisor's (customer's) expectations. However, it is not enough for the subordinates to merely understand customer needs or expectations; they must be able to quantify them. All needs or expectations are not created equal, and the resolution of all needs does not have the same impact on customer satisfaction or in this case, the employee's acceptance by the supervisor and performance rating or promotion.

Research in higher education indicates that students who better understand the vagaries of professor expectations get higher grades in that particular course and maintain higher grade point averages (Emery, 2002). As such, it is reasonable to believe that employees, who better understand their supervisor's expectations, will perform better. The purpose of this study is to examine the gap between supervisory job expectations and student perceptions of those expectations. Recommendations will be offered to higher education for reducing the gap and thereby improving the communication of job expectations between supervisors and potential job candidates.

LITERATURE REVIEW

The setting and evaluation/control of expectations, as well as the degree of employee awareness, are important parts of any performance model. Surprisingly, the supervisor's role in communicating performance expectations to subordinates has been relatively neglected in leadership research. Bass's (1990) revised and expanded edition of Stogdill's Handbook of Leadership exhausts the topic of "Leaders as Molders of Expectations" in one short paragraph including only three references. Early researchers stressed the communication of expectations as a key responsibility of a leader and critical to influencing employee performance. For example, Likert (1961) stressed the communication of clear and high expectations by supervisor to subordinates as an important component of leadership behavior. Similarly, Edwards (1973) showed that the most effective supervisors are those who create high performance expectations for subordinates. House (1977) included the communication of high expectations for follower performance as an important feature of charismatic leadership. In addition to these declarations by noted researchers of leadership, the setting and communication of expectations is solidly grounded in the Expectancy Theory, Goal Theory, Leader-Member Exchange Theory and the Theory of Self-fulfilling Prophecy. Further, the notion of the "supervisor as the customer" suggests that customer satisfaction theories and literature are relevant to the supervisor-subordinate dyad. A discussion of the Kano Model for determining and classifying customer requirements is used to illustrate that all customer expectations are not created equal. As such, one might infer that under the "supervisor as the customer" paradigm, the achievement of supervisor expectations provide varying levels of reward and recognition.

Goal Theory

The Goal Theory proposes that goals and the process of setting goals are the primary determinants of behavior. Goal setting has four motivational mechanisms: (1) directing one's attention, (2) regulating one's effort, (3) increasing one's persistence, (4) encouraging the development of goal-attainment strategies or action plans (Locke & Latham, 1990). Goal specificity and the communication thereof are essential to the goal setting process. A supervisor's expectations

are nothing more than his/her behavior goals. As such, it is critical that the supervisor clearly communicate his/her expectations.

Expectancy Theory

The Expectancy Theory holds that people are motivated to behave in ways that produce desired combinations of expected outcomes. Critical to the magnitude of motivation is the concept of instrumentality. Instrumentality represents a person's belief that a particular outcome is contingent on accomplishing a specific level of performance or expectation. As such, it is essential that the employee understands the supervisor's expectations and that employee believes that his or her goals can be achieved by meeting or exceeding the supervisor's expectations (Vroom, 1964).

Leader-Member Exchange Theory

The Leader-Member Exchange Theory suggests a leader classifies subordinates into in-group members and out-group members based on how well they match the leader's values and expectations (Sparrowe & Liden, 1997). Research indicates that in-group members are likely to receive more challenging assignments and more meaningful rewards. In-group members, in turn, are more positive about the organization culture and have higher job performance and satisfaction than employees in the out-group. An out-group member isn't considered to be the type of person the leader prefers to work with, and this attitude is likely to become a self-fulfilling prophecy. Out-group members receive less challenging assignments, receive little positive reinforcement, become bored with their jobs, and may ultimately quit (Engle & Lord, 1997).

Self-Fulfilling Prophecy Theory

Important variations of the theory of Self-Fulfilling Prophecy (Merton, 1948) are the Pygmalion (Rosenthal & Jacobson, 1968) and Galatea (Eden, 1984) effects. Basically, these two effects suggest that a leader's (teacher or supervisor) expectancies affect a subordinate's performance and a subordinate's expectations affect his or her performance. While not much research on these effects has been done in a work situation, evidence from classroom experimentation indicates that expectations have a profound affect on raising productivity.

Kano Model

The Kano model (Kano et al., 1984) was developed within the Japanese manufacturing industry to determine and prioritize/weight customer requirements or expectations. It illustrates that all needs are not created equal, and the resolution of all needs does not have the same impact on

customer satisfaction or a performance report. Referring to Figure 1, the horizontal axis shows the extent to which customers' expectations are achieved. The vertical axis shows the customer satisfaction associated with this achievement. Three types of needs are identified in this model: BASIC NEEDS, SATISFIERS, and DELIGHTERS.

Customer Satisfied

Delighters

Satisfiers

Service   Service
Dysfunctional   Fully Functional
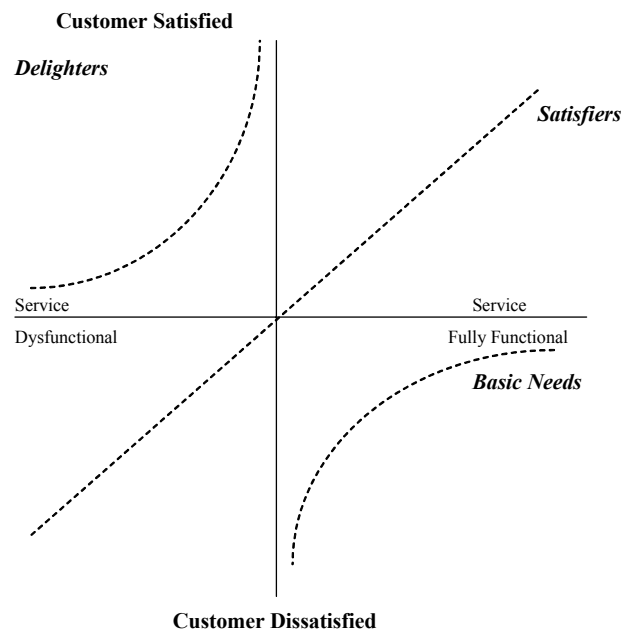
Basic Needs

Customer Dissatisfied

Figure 1. The Kano model of customer satisfaction

The first type expectation is the "basic need" or assumptions that customers have about a service (e.g., the availability of a restroom in a restaurant or clean silverware). In a management setting, the manager may have a basic need of employee punctuality. While achievement of these needs do not satisfy the customer (supervisor), their absence quickly causes dissatisfaction. The second type of expectation is the "satisfier" or the list of items that customers (supervisors) would normally mention as keys to their satisfaction, i.e. a responsive server in a restaurant or employees who meet deadlines in a management setting. Achievement of the satisfiers increases customer satisfaction, but only at a linear rate. The third type of expectation is the "delighter". These are needs that a customer does not have conscious knowledge of or fall into the category of "wouldn't it be great if someday an employee provided…." For example, a fine restaurant that provides baby-sitting facilities or an employee that synthesizes material into new way of looking at things. A provider that does not provide delighters will still have satisfied customers (supervisors), but those that provide delighters will experience a nonlinear increase in customer satisfaction. The dotted

lines graphically depicted that all needs are not created equal, and the resolution of all needs does not have the same impact on customer satisfaction. For example, the additive effect of failing to fulfill basic needs or expectations is a geometric increase in dissatisfaction. The additive effect of providing "delighters" is a geometric increase in satisfaction. Lastly, the additive effect of providing "satisfiers" is tantamount to a linear increase in the customer's satisfaction.

This model suggests four important points to the employees wishing to successfully market their product. First, all basic needs must be fulfilled. Failure to satisfy a basic need has a dramatic affect on customer satisfaction. In other words, one "ah shucks" outweighs ten "atta boys". Second, the provider must determine and provide as many linear satisfiers as possible. Each satisfier has an additive effect toward total customer satisfaction or customer loyalty. The customer will enter a zone of moderate satisfaction if the provider fulfills all of the customer's "basic needs" and a few of the satisfiers. Third, the provider needs to create "delighters," since it is through their production that real service differentiation can be created. Each time a provider produces a "delighter" it is a memorable event for the customer and his or her satisfaction is geometrically increased. As such, one might say that one "delighter" outweighs a number of "satisfiers". Fourth, any advantage gained by delighting customers only holds temporarily until the competition catches up. Continuous innovation is necessary in order to maintain an edge. Lastly, this model suggests to supervisors the notion that all employees should clearly understand their expectations. Employees that don't understand the subtleties of expectations have a low "pattern sense" and as such, will have poor performance.

METHOD

The supervisory survey and expectation results were taken from a study by Emery and Tolbert (in press) which examined the expectations of 270 first level supervisors using the Kano model of customer satisfaction and across a wide variety of variables (e.g., organizational discipline, the type of business and industry, number of direct and indirect subordinates, gender, experience, and age). The survey contained the following list of 32 typical expectations: Accountability, Appearance, Attendance, Attitude, Behavior, Commitment, Competitiveness, Continued Learning and Goal Setting, Customer-Oriented, Decision-Making, Entrepreneurial Spirit, Improvement-Oriented, Initiative, Innovativeness, Integrity, Interpersonal skills, KSAs (knowledge, skills and abilities), Leadership, Multitasking, Oral Communication, Performance, Personality, Planning, Problem-Solver, Resource Management, Safety, Social Responsibility, Stress Management, Team Player, Time Management, Written Communication, and Willingness to Change. In turn, the survey used in the Emery and Tolbert study was administered to 673 undergraduate business seniors at four universities and colleges. Students were asked to pretend that they were first level supervisors when completing the survey. In other words, they were asked to clarify and quantify the expectations that they would have of employees. Subsequently, a

comparison was made between the supervisor and student expectations to determine gaps in the students' understanding of the "real world." Further, the expectations and the relationships between the expectations and demographic variables were examined for variances (p>.05) using SPSS cross-tabulation and chi-square analysis and PHstat chi-square analysis of proportions.

RESULTS

Usable questionnaires were obtained from 662 business seniors across the following demographic variables: (1) State university (437) -- Private college (225); (2) Male (310) -- Female (352); (3) GPA above 3.0 (163), between 2.5 and 3.0 (282), 2.5 and below (217); and (4) Working while attending school (at least 10 hours per week) (158) - Not working (504). A chi-square analysis of the demographic variables indicated two significant differences in the perceptions of expectations. There was a significant difference (p<.001) in the perception of job expectations between those students who worked while attending college and those who did not. The perceptions of students who worked while attending school were more closely aligned with the supervisors' expectations. Also, there was a significant difference (p<.001) in the perception of job expectations between those students who had above a 3.0 GPA and those that had below a 2.5 GPA. Work expectations of those students with the higher grade point average were more closely aligned with the supervisors' expectations.

Table 1: Supervisor and Student Expectation Frequencies by Expectation Levels			
Supervisor Basic Needs	Percent	Student Basic Needs	Percent
Attendance	17.3%	Attendance	19.4%
Attitude	12.5%	Appearance	10.2%
Performance	8.7%	Accountability	9.1%
Accountability	5.6%	Attitude	8.6%
Supervisor Satisfiers		Student Satisfiers	
Initiative	13.8%	Performance	8.6%
Team Player	9.2%	Commitment	7.6%
Time Management	9.1%	Team Skills	7.6%
Learning & Goals	6.0%		
Supervisor Delighters		Student Delighters	
Innovative	16.9%	Problem-Solving	10.8%
Leadership	9.0%	Initiative	8.6%
Problem-Solving	5.8%	Leadership	8.1%
		Improvement	8.1%

Overall, however, there were surprising similarities in the attributes that first-level supervisors and students expected of employees on the job. In fact, eight of the eleven work attributes (73%) chosen by the supervisors were also selected by the students. Specifically, both groups selected attendance, attitude, performance, accountability, initiative, leadership, problem-solving, and team player/team skills. There were, however, some notable gaps or disagreements. For example, the supervisors listed time management, learning and goals, and innovation as important work attributes while the students listed appearance, commitment, and improvement. Also, surprisingly, the supervisors and students agreed on the level of expectations (e.g., basic needs) in most cases. The two exceptions were that the supervisors saw "performance" as a "basic need" and the students saw it as a "satisfier" and the supervisors saw "initiative" as a "satisfier" and the students saw it as a "delighter."

DISCUSSION

Overall, there is little evidence to support claims that business seniors don't understand the expectations of the workplace. The findings indicate that students have a reasonably accurate perception of what is expected of them and have a good understanding of expectation levels. This was particularly apparent in the students with higher GPAs and/or students who were working (more than 10 hours per week) while attending college. This isn't surprising because students with higher GPA have a higher "pattern sense" and more readily discuss expectations with a superior (Emery, 2002). Further, those with more work experience have a better understanding on what it takes to survive and prosper in the "work world." Also, it was particularly reassuring to note the lack of perceptual differences between genders and types of universities. Additionally, it was particularly reassuring to note that the students recognized "attendance", "accountability", and "attitude" as the same "basic needs" chosen by the supervisors. This indicates that the students understand the essential requirements of "real world" employment and as such, won't be completely out-of-step with management.

There were, however, some differences between the students and supervisors that merit discussion. The students failed to see "time management" as a critical attribute. According to the supervisors, the essence of time management is the setting of priorities and then organizing and executing resources to satisfy them. Many supervisors believe that "self-management" may be a better term, because it implies that we manage ourselves, in the allotted time, for maximum effectiveness. This is no doubt a key in today's highly competitive environment and the reason that recruiters often look for evidence of "time management" in a candidate's background. Also, it is interesting to note that the students, who did suggest "time management" as a critical attribute, were the small percentage who had both a high GPA and part-time employment.

Also, students failed to see "learning and goal setting" as a critical job attribute. Supervisors see this attribute as evidence of one's desire to be challenged, willingness to learn and motivation

and process for self-improvement. Many believe this attribute is central to the culture of a "learning organization" and as such, have placed it high on recruiters' checklists. Most students, however, have not grasped the importance of how continued learning affects an organization's success. Students also failed to see "innovation" as a critical attribute. They did, however, identify "improvement" as a critical attribute. Perhaps this difference occurred because the students failed to understand the true nuances between innovation and improvement.

On the other hand, the students selected two interesting attributes that the supervisors didn't. Specifically, the students selected "appearance" as the second most popular "basic need" while the supervisors didn't select this attribute in the "top three" at any expectation level. This difference may be partially explained because "appearance" in the work force has been often emphasized to students whose appearance in the classroom has been less than business-like. Further, students must understand that while "appearance" is important in the workforce, it doesn't take the place of some other more important attributes (e.g., performance). The other difference was that the students listed "commitment" as a key attribute while the supervisors didn't select this attribute in the "top three" at any expectation level. The question concerning this difference is why didn't the supervisors believe this was a key attribute? Most of the literature on successful organizations suggests that you get the right people on the bus and that commitment is part of the definition of "right people" (Collins, 2001). Perhaps first level supervisors aren't looking for commitment as much as they are just looking for performance.

Additionally, it is interesting to note that the students saw two job attributes at higher levels of expectation than the supervisors. The students saw performance as a "satisfier" rather than as a "basic need." This is particularly worrisome because the supervisors see this attribute as a "basic need" or something expected without question. In other words, if satisfactory job performance isn't provided, the supervisor is dissatisfied. Also, since job performance is expected, it is particularly hard to "delight" the supervisor in this area. Also, the students saw "initiative" as a "delighter" rather than a "satisfier." This suggests that the students believe that "initiative" is a rather rare commodity and something that isn't really expected by supervisors. This is also worrisome because "initiative" is a "satisfier," i.e., one of the attributes that a supervisor uses to mentally judge a subordinate's overall performance.

Lastly, the levels of supervisory expectations (e.g., basic needs, satisfiers, delighters) have a strong correlation with the research conducted by Parasuraman, et al. (1988) on how customers judge service quality. They indicated that the expectation of "reliability" (e.g., dependable and accurate performance as promised) was the key "deal breaker", not "deal maker". In other words, one expects "reliability" and therefore you are not rewarded for meeting the expectation. This thought process is analogous to Kano's level of "basic needs". One is not rewarded for meeting the "basic needs". In order to receive rewards, one needs to concentrate in areas where the expectations are lowest. This is the realm of the "delighters". Meeting or exceeding expectations in this area geometrically increase the customer's (supervisor's) satisfaction

CONCLUSION

Determining the customers' needs and measuring the gap between expected service and perceived service is a routine customer feedback process that is practiced by leading service companies. Employees provide service to their supervisors and therefore, should be subject to the theories and strategies governing service quality and customer satisfaction. As such, a key to developing improvement strategies within the supervisor-subordinate dyad lies in examining the discrepancy between customer (supervisor) expectations and the provider's (subordinate's or student's) perceptions of those expectations. Strategies for closing this gap or discrepancy can be approached from several aspects by higher education.

The first step is to insure that the students understand their organizational success is dependent upon how well they view their "supervisors as the customer." In other words, students should consider supervisor expectations as a road map for their organizational success. The second step is to insure that the students understand the typical first-level supervisor's expectations. Further, students need to be reminded to discuss their supervisor's expectations with them. The third step would be to train the students to recognize the levels of various expectations using a Kano seminar. Once the training is accomplished, students should discuss the implications of gaps between the supervisor's expectation and the subordinate's perception of those expectations. Also, it is important to insure that the students understand the importance of meeting the "basic needs" while attempting to understand those attributes that delight the supervisor (e.g., leadership, innovation, and problem-solving).

In closing, communication is the glue that holds organizations together. The communication of expectations affects organizational performance (e.g., behavior, productivity, change, coordination, etc.) and culture. While it is important for subordinates to understand the expectations on their performance evaluation instrument, it is equally, if not more import to understand the expectations in the supervisor's mind. As noted in the Leader-Member Exchange Theory (Engle & Lord, 1997), it is the supervisor's mental software that determines whether the employee is in the "in group" or the "out group", not the formal performance ratings. Understanding what's on the supervisor's mind requires listening, pattern analysis and asking questions. In other words, the transmission, translation and performance of expectations require all the functions of a successful communication model. In short, it is paramount for organizational and personal success that the newly hired employees' understand their supervisor's expectations.

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INTERNET USAGE IN THE ACADEMIC ENVIRONMENT: THE TECHNOLOGY ACCEPTANCE MODEL PERSPECTIVE

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ABSTRACT

This study examined the impacts of perceived ease of use (PEOU), perceived usefulness (PU), and perceived Internet content (PIC) on students' usage of the Internet. Additionally, it investigated the impacts of these variables on usage of the Internet as moderated by gender, educational background, income, computer users' classification, and self-reported measure of computer knowledge. We modified the original technology acceptance model (TAM) and created a theoretical model to better understand the hypothesized relationships. To validate the research model, we collected data from 170 students at a regional Midwestern university. The results showed that PEOU and PU, but not PIC, were significant factors in influencing usage of the Internet. Additionally, gender was the only significant moderator. PEOU affected usage of the Internet more strongly for female students than it did for male students.

INTRODUCTION

Although much research has been conducted on Internet adoption in business environments (e.g. Tan & Teo, 1998; Stanfield & Grant, 2003; Teo & Pian, 2004), few have examined the adoption of the Internet in academic environments. Educational institutions, especially colleges and universities, are trying to take advantage of the decreased costs that delivering course content over the Internet may provide (Karelis, 1999; Valentine, 2002). As Lundgren and Nantz (2003) mentioned, about 500,000 courses were available on the Internet in 2003. However, before starting a project of this nature, educational institutions need to understand factors that motivate and determine Internet usage among students. The study intends to address this research gap by focusing on establishing the factors that influence Internet usage by college students.

A large percentage of the research on technology adoption/usage has used Davis's (1989) technology acceptance model (TAM). In his parsimonious model, Davis stated that perceived ease of use (PEOU) and perceived usefulness (PU) are the most salient beliefs in determining individual

acceptance intention and behavior. Lederer et al. (2000) summarized sixteen articles published from 1991 to 1999 in leading MIS journals that tested the TAM model for different technologies (e.g. ATM, e-mail, Netscape, Access, Internet, Word, and Excel). TAM has been shown to explain a significant amount of the variance in intentions to use a technology and/or actual use of a technology. Among the studies that focused on TAM, most have followed Davis's (1989) assumption that external variables (such as gender, experience, and other demographic variables) influence technology adoption/usage through beliefs about PEOU and PU. These external variables have been considered to have a direct influence on PEOU and PU. In this study, however, we are extending the unified model proposed by Venkatesh et al., (2003) which introduced some external variables (such as gender, age, experience, and voluntariness) as moderators between the hypothesized antecedents of intention (such as performance expectancy, effort expectancy, social influence, and facilitating conditions) and behavioral intention. Additionally, we included perceptions of Internet content (PIC) as another antecedent of Internet usage. In other words, we speculated that external variables may affect the direction and/or strength of the relations between PEOU, PU, and PIC and technology usage.

The paper is organized as follows. In the next section, we briefly review related studies, propose a theoretical model for the factors that influence Internet usage, and present the hypotheses to be tested. Then, we describe the research method and report the results. The last section presents conclusions, implications, limitations, and future research questions.

LITERATURE REVIEW OF CONSTRUCTS AND HYPOTHESES

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

The technology acceptance model (TAM) proposed by Davis (1989), is a well-established model of IT adoption and use. TAM theorizes that PEOU and PU are the key determinants of computer usage. It suggests that external variables indirectly influence the decision to use technologies through their impact on PEOU and PU. PEOU is defined as "degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). PU is defined as the "degree to which a person believes that using a particular system would enhance his or her performance" (Davis, 1989, p. 320). TAM has been tested in numerous studies (Adams et al., 1992; Hendrickson et al., 1993; Igbaria et al., 1997; Riemenschneider et al., 2003; Subramanian, 1998; Szajna, 1994) and shown to explain a reasonable amount of the variance in actual use of the technology. For example, Davis (1989) found that PU was significantly correlated with self-reported current usage (r=0.63) and self-predicted future usage (r=0.85). PEOU was also significantly correlated with current usage (r=0.45) and future usage (r=0.59).

The application of TAM in the academic environment has not been investigated as thoroughly. Mccloskey (2003-2004) applied TAM to test whether PEOU, PU, and security concerns

influenced electronic commerce participation among college students. Seyal et al. (2002) developed a model to test whether PU, PEOU, and other variables determine Internet usage among college academics. In both cases, PU and PEOU were found to be significant predictors of the technology in question. In this study, and based on the importance of Internet usage/adoption among college students as mentioned earlier, we focused on PU and PEOU to explore their direct impact on Internet usage. Thus, we stated the following hypotheses:

H1:	There will be a positive correlation between perceived ease of use and Internet usage.
H2:	There will be a positive correlation between perceived usefulness and Internet usage.

Perceptions of Internet Content

Internet content has been widely studied, especially in research that has focused on how web site content influences its success (Torkzadeh & Dhillon, 2002; Scheffelmaier & Vinsonhaler, 2002-2003; Palmer, 2002). As Huizingh (2000) defined it, "content refers to the information, features, or services that are offered in the web site" (p. 123). Many studies have also considered web site content as one of the most important web site design characteristics (Liu & Arnett, 2000; Ranganathan and Ganaphaty, 2002; Ranganathan & Grandon, 2002). To the best of our knowledge, perceptions of Internet content, which we defined as positive or negative feelings, and their relationship with Internet usage have not yet been studied.

A different stream of research has focused attention on exploring the pathological side of the Internet based on the content to which Internet users are exposed (Armstrong, 2001; Boschert, 2001; and Grohol, 2003). Soule et at. (2003) defined the term "Internet addiction" to explain the "various technological disorders described by psychologists" (p. 64). Some of these disorders included cybersexual addiction, net compulsion, and information overload, all of which are related to Internet content. It seems natural to think that some people may perceive Internet content as a threat to their mental health and may try to avoid its usage, while others may have a positive perception toward it and will continue or start to use it. Thus, we proposed the following research hypothesis:

H3:	There will be a positive correlation between positive perceptions of Internet content and Internet usage.

The Impact of Moderator Variables

In his original model, Davis (1989) suggested that external variables indirectly influence technology usage through perceptions of ease of use and usefulness. Based on this assertion, many studies have explored the direct effect of external variables on PEOU and PU and examined the role

of PEOU and PU as mediators in the relationship between the external variables and technology usage. For instance, Alshare et al. (2004) explored the direct effect of external variables (gender, age, income level, educational background, student classification, and self-reported measures of computer knowledge) on computer usage and their indirect effect through PEOU, PU, computer literacy, and negative attitude toward computers. They found that the relations between gender and PU; age and computer literacy; and income and negative attitudes were significant. Income was the only external variable that influenced computer usage directly. Gefen and Straub (1997) found that gender had a significant impact on PEOU and PU but no direct effect on usage behavior. In a similar line of inquiry, Agarwal and Prasad (1999) reported that PEOU and PU "fully mediated" the effects of individual differences (level of education, tenure in workforce, prior similar experience, participation in training, and role with regard to technology) on intention of users to use a new information technology. Contrary to Agarwal and Prasad's (1999) findings, Hubona and Burton-Jones (2003) reported that perceived ease of use and perceived usefulness "partially mediated" the influences of individual differences (level of education, employment category, and length of time since first use) on e-mail usage. In other words, they found that these external variables directly and indirectly influenced usage of e-mail.

The studies cited above followed Davis's assumption that the external variables influence technology usage through beliefs of PEOU and PU. There are few exceptions that introduced moderator variables in the original TAM. As mentioned earlier, Venkatesh et al., (2003) tested whether gender, age, experience, and voluntariness affect the relationship between the antecedent of technology adoption and its usage. The results showed that gender and age were significant moderators between performance expectancy, effort expectancy, and social influence and behavioral intention. Additionally, they found that experience was a significant moderator between effort expectancy and social influence and behavioral intention. In another study conducted by Venkatesh and Morris (2000), the authors explored the relationship between PEOU, PU, and subjective norm with the intention to use a system for data and information retrieval and studied how these relationships changed by considering gender as moderator. They found that men's technology usage decisions were more strongly influenced by their perceptions of usefulness, while women were more strongly influenced by perceptions of ease of use.

From a theoretical view point, there is reason to expect that computer knowledge (very good to excellent vs. poor to good) and income (high vs. low) will influence Internet usage differently (Alshare et al., 2004). There is also some evidence to think that student background (business vs. non-business) will influence the use of the Internet in a different way. It seems that business students have more computer-related classes to take than non-business students which, in turn, may influence Internet usage. For example, in a survey conducted by Hindi et al. (2004) to AACSB schools, it was found that 100 percent of respondent schools required at least one computer literacy course, 60 percent required a second computer literacy course, and 14 percent required a third

computer literacy course for all business majors. These percentages may differ from non-business students nation wide.

In this study, we extended the aforementioned research and proposed that gender, computer user classification, educational background, self-reported measure of computer knowledge, and income can be considered as moderator variables in the relationship between PU, PEOU, PIC, and Internet usage. We proposed the following set of hypotheses:

H4a:	Perceived ease of use will influence Internet usage more strongly for women than it will for men.
H4b:	Perceived usefulness will influence Internet usage more strongly for men than it will for women.
H4c:	Perceived Internet content will influence Internet usage more strongly for women than it will for men.

H5a:	Perceived ease of use will influence Internet usage more strongly for heavy users than it will for light users of computers.
H5b:	Perceived usefulness will influence Internet usage more strongly for heavy users than it will for light users of computers.
H5c:	Perceived Internet content will influence Internet usage more strongly for heavy users than it will for light users of computers.

H6a:	Perceived ease of use will influence Internet usage more strongly for students with business majors than it will for students with non-business majors.
H6b:	Perceived usefulness will influence Internet usage more strongly for students with business majors than it will for students with non-business majors.
H6c:	Perceived Internet content will influence Internet usage more strongly for students with business majors than it will for students with non-business majors.

H7a:	Perceived ease of use will influence Internet usage more strongly for students with very good-excellent computer knowledge than it will for students with poor-good computer knowledge.
H7b:	Perceived usefulness will influence Internet usage more strongly for students with very good-excellent computer knowledge than it will for students with poor-good computer knowledge.
H7c:	Perceived Internet content will influence Internet usage more strongly for students with very good-excellent computer knowledge than it will for students with poor-good computer knowledge.

| H8a:	Perceived ease of use will influence Internet usage more strongly for students with high-income levels than it will for students with low-income levels.

H8b:	Perceived usefulness will influence Internet usage more strongly for students with high-income levels than it will for students with low-income levels.
H8c:	Perceived Internet content will influence Internet usage more strongly for students with high-income levels than it will for students with low-income levels.

RESEARCH FRAMEWORK

The Proposed Model

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

Figure 1: Proposed Theoretical Model
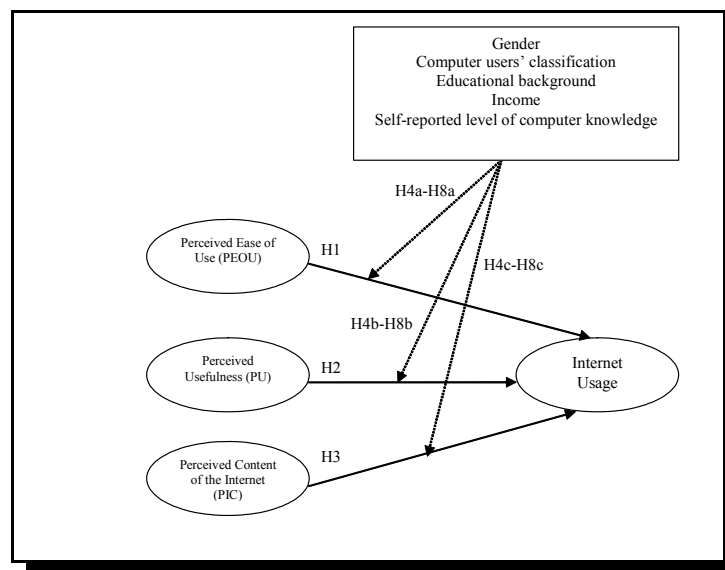
Sample and Data Collection

Data were obtained from a survey questionnaire, which was administered to college students at a regional Midwestern University during Fall 2003. In addition to asking questions concerning demographic variables such as gender, age, educational background, students' classification, and income level, the questionnaire requested information about Internet usage, PEOU, PU, and PIC. The construct of Internet usage was defined in terms of number of hours devoted to the Internet. PEOU and PU were taken directly from Davis' (1989) scale and customized to measure Internet

adoption. We used 5 questions to measure each of the constructs PEOU and PU. Due to the lack of previous scales to measure PIC (positive or negative perceptions of Internet content), we created a scale with 4 items. Survey participants responded to statements using a 5-point Likert scale ranging from strongly disagree to strongly agree. SPSS was used to compute frequencies, means, percentage, ANOVA, a reliability test (Cronbach coefficient), Pearson correlation, and discriminant analysis.

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. (1998), 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. Appendix A presents the factor analysis results. Appendix B shows the final items and descriptions that were used in the computations. The Cronbach's coefficient was used to determine reliability of questionnaire items. Table 1 shows the values of alpha. The reliabilities for PEOU and PU are comparatively high for an exploratory study (Nunnally, 1978).

Table 1: Reliability Analysis	
Construct	Cronbach Coefficient
Perceived Ease of Use (PEOU) (4 items)	0.85
Perceived Usefulness (PU) - (4 items)	0.85
Perceived Content (PIC) - (3 items)	0.67

DATA ANALYSIS

During Fall 2003, the questionnaire was distributed to 300 college students at a regional Midwestern university. One hundred seventy students returned the survey. This represented a response rate of 57 percent. A summary of frequency distributions for relevant variables is presented in Table 2.

Table 2: Frequency Distributions of Key Variables (n=170)		
Variable	No. of Respondents	Percent (%)
Gender:		
Male	81	47.60
Female	89	52.40
Educational background:		
Business	120	70.58
Non-business	50	29.42

Table 2: Frequency Distributions of Key Variables (n=170)		
Variable	**No. of Respondents**	**Percent (%)**
Family monthly income:		
Low (<=24, 000 per year)	66	38.80
High (over 24, 000 per year)	104	61.20
Having a computer at home:		
Yes	165	97.10
No	5	2.90
Having e-mail accounts:		
Yes	167	98.20
No	3	1.80
Knowledge about computers:		
Very good - Excellent	93	54.70
Good	67	39.30
Poor - Fair	10	6.00
Using computer per day:		
0.1 - 1 hour	24	14.10
1.1 - 2 hours	54	31.80
2.1 - 3 hours	35	20.60
more than 3 hours	57	33.50
Computer user classification:		
Light users (<= 2 hours per day)	78	45.90
Heavy users (> 2 hours per day)	92	54.10
Access to Internet:		
Home	150	88.23
Work	80	47.05
Schools	153	90.00
Friends	106	62.35
Computer Shops	13	7.064
Other	4	2.35
Internet cost:		
Expensive - very expensive	34	20.00
Fair	108	63.53
Cheap - very cheap	28	16.47

Table 2: Frequency Distributions of Key Variables (n=170)		
Variable	No. of Respondents	Percent (%)
Internet availability:		
Fair - Unacceptable	6	3.53
Good	28	16.47
Very good - excellent	136	80.00
Usage of the Internet per day:		
0.1 - 1 hour	50	29.41
1.1 - 2 hours	59	34.71
2.1 - 3 hours	26	15.29
more than 3 hours	35	20.59
Internet user classification:		
Light users (<= 2 hours per day)	109	64.11
Heavy users (> 2 hours per day)	61	35.89
Internet applications usage:		
Class related activities	109	64.12
Communication	105	61.76
Entertainment	84	49.41
Other activities	60	35.29
Selling/buying	38	22.35

Forty-eight percent of the sample was males. The vast majority of students was under 30 years old (traditional students) (90 percent). Seventy-one percent of the participants were majoring in business. Eighty-one percent of the students were full-time students. Sixty-one students reported that their monthly family incomes were high. Only five students (3 percent) reported that they did not have computers at home. More than 54 percent of the students stated that their knowledge about computers was very good to excellent, while six percent reported that their knowledge was poor to fair. Approximately, 40 percent indicated that their knowledge about computers was good. This should be of no surprise, since more than one-half of the students used computers over two hours per day. Only three students did not have e-mail accounts. Thirty-six percent of the 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 (22 percent). However, 49 percent of students used the Internet for entertainment activities.

The majority of students had access to the Internet either from school or home (90 percent and 88 percent respectively). Sixty-two percent had Internet access from homes of friends; 47

percent had access at work. Only 7 percent of the participants reported that they used these computer shops to access the Internet. The vast majority of students indicated that the availability of the Internet was good to excellent; only 4 percent felt that the availability of the Internet was fair to unacceptable. The majority of students reported that the cost of the Internet was fair. Twenty percent felt it was expensive or very expensive, and 16 percent considered the Internet to be inexpensive or very inexpensive.

THE RESULTS OF THE STUDY

The results of the study are divided into two sections. The first section discusses the relationships between the usage of the Internet and PEOU, PU, and PIC. The hypotheses (H1-H3) were tested using the Pearson correlation procedure. The second section analyzes the effect of moderator variables such as gender, educational background (business vs. non-business), income (high vs. low), classification of computer users (heavy vs. light), and a self-reported measure of computer knowledge (very good-excellent vs. poor-good) on the relationship between PEOU, PU, and PIC and usage of the Internet. The hypotheses (H4a-H8c) were tested using ANOVA.

Based on Pearson correlations (Table 3), the first two hypotheses (H1-H2) were accepted, but the third hypothesis was rejected. Thus, PEOU and PU were significant factors affecting Internet usage. While PEOU was the most influential variable that affected Internet usage, PIC was not a significant factor.

Table 3: Correlations between Main Constructs and Internet Usage	
Factor	Pearson Coefficients
Perceived Ease of Use	0.266*
Perceived Usefulness	0.205*
Perceived Content	0.046
*. $p<0.05$;	

To measure the power of the above three variables (PEOU, PU, and PIC) in predicting (classifying) the students into two groups of Internet users (heavy and light users), a discriminant analysis (Huberty, 1994) was conducted. The dependent variable, Internet usage, was measured as a dichotomous variable: light users of the Internet (those who used the Internet less than or equal to 2 hours a day) and heavy users (those who used the Internet more than 2 hours a day) (Soule et al., 2003). The set of three independent variables corresponded to PEOU, PU, and PIC. Each independent variable represented the average of its respective items.

The independent variables were considered simultaneously in the analysis. Thus, the discriminant function was computed considering all of the independent variables, regardless of the discriminating power of each one. The Wilk's lamba was significant (Chi-square = 8.059, p<0.018) indicating that overall the three factors differentiated among the two groups (light users and heavy users). By using the cut-off value for factor loading of 0.3 suggested by Hair et al. (1998), only two variables (PEOU and PU) showed significant values (see Table 4). The rank of importance, given by the value of the loading, involved "perceived ease of use" followed by "perceived usefulness."

Table 4: Structure Matrix	
Factors	Factor Loadings
Perceived Ease of Use (PEOU)	0.997
Perceived Usefulness (PU)	0.703
Perceived Content (PIC)	0.240

The Impacts of Moderators Variables on Internet Usage

In this section, hypotheses (H4a-H8c) were tested using ANOVA. This approach was consistent with prior research (Pearson et al., 2002-2003 Winter; Baron and Kenny 1986). Only significant results of ANOVA are reported.

To use ANOVA analysis, we converted the three factors (PEOU, PU, and PIC) into categorical variables. We divided the average of response scales into three groups: the median, below the median, and above the median. Therefore, each factor of PEOU, PU, and PIC had three levels. Gender, educational background (business vs. non-business), income level (low vs. high), self-reported level of knowledge about computers (very good - excellent vs. poor - good), and computer users' classification (light vs. heavy) were considered moderators between PEOU, PU, and PIC and usage of the Internet. Then, we evaluated the moderator effect of these variables by adding the interaction term between each of them and PEOU, PU, and PIC.

All hypotheses (H4a-H8c) were rejected with the exception of H4a. As a result, educational background, income, self-reported level of knowledge about computers, and computer users' classification were not significant moderators in the relationships between PEOU, PU, and PIC and usage of the Internet. On the other hand, gender was a significant moderator for the relationship between PEOU and usage of the Internet (PEOU*gender F=3.803, p<0.05). For each subgroup (male and female), regression analysis was used to check the direction and strength of the relationship between PEOU and Internet usage (H4a). The direction of the relationship is given by the sign of beta coefficient, while the strength is given by the absolute value of the same coefficient. The sign of beta coefficient was the same for both groups; however, beta for the female subgroup (0.839) was

greater than the beta coefficient for the male subgroup (0.061). Thus, PEOU affected usage of the Internet more strongly for female students than it did for males. Therefore, H4a was supported.

DISCUSSION AND CONCLUSION

This study examined the effect of PEOU, PU, and PIC on students' usage of the Internet. In addition, it investigated the impacts of these variables on usage of the Internet as moderated by gender, educational background, income, computer users' classification, and self-reported computer knowledge.

PEOU, PU, but not PIC, significantly affected Internet usage. PEOU was the most influential factor in affecting students' usage of the Internet. Additionally, gender was the only significant moderator. Students' usage of the Internet was affected by PEOU and PU. Therefore, educators need to reinforce these two concepts (ease of use and usefulness) especially when deciding to teach online classes. Institutions need to make certain that students are willing to take online courses and are ready to embark on distance learning using the Internet. This might be accomplished by showing students how the Internet can be used as valuable source of information. Additionally, instructors might ask students to use the Internet more frequently and demonstrate how easy it is for them to find the desired information.

Even though PIC was found to be a valid and reliable construct, it did not significantly affect students' usage of the Internet. This outcome should be of interest to instructors. It appeared that students considered Internet content as a trusted source for class-related activities. However, other studies found that Internet content was a significant factor in affecting consumer buying/selling behavior (Huizingh, 2000; Ranganathan and Ganapathy, 2002). 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 it may have been perceived to be something other than what was defined in this study. Another possible explanation is that the Internet could be 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.

The other significant finding was the fact that PEOU influenced usage of the Internet more strongly for female students than it did for male students; this confirmed results from previous research (Venkatesh & Morris, 2000). However, gender did not seem to impact how PU influenced Internet usage. It was believed that males would be significantly influenced by PU, as it impacted their Internet usage as reported by other research (Venkatesh & Morris, 2000). Once again, previous studies targeted consumers, while this study targeted college students. It is a fair assumption that both male and female students considered the Internet as useful to them, at least for primary class-related activities. Thus, gender was not a significant moderator in the relationship between PU and Internet usage.

Other significant findings of this study were that educational background, income, Internet users' classification, and self-reported computer knowledge did not impact how PEOU, PU, and PIC influenced Internet usage. These findings were not anticipated. The authors initially believed that PEOU, PU, and PIC would influence Internet usage more strongly for students with higher incomes, who were business majors, heavy users of computers, and more knowledgeable about computers. This expectation was not supported by the data. However, computer users' classification and self-reported knowledge about computers were found to be direct predictors of Internet usage (F= 104.9, p< 0.01; F=7.475, p< 0.01 respectively). Therefore, the more frequently students use computers, the more likely they are to use the Internet. Also, with greater knowledge about computers, there is a greater likelihood that students will utilize the Internet to a greater extent.

The findings of this study are also helpful to business leaders, since students represent future employees. The Internet becomes an essential tool for selling, buying, and advertising. These findings provide employers with information about significant factors that might influence capabilities of future employees. Organizations may decide to establish training workshops for new employees to educate them about the Internet and reinforce the importance of PEOU, PU, and PIC. Future research might include more factors that might influence students' usage of Internet such as social influence and perceived behavioral control and more moderators such as age, experience, availability, and cost of the Internet. Another direction for future research is to conduct a comparison between graduate and undergraduate students. A third plausible direction is to develop a similar study of respondents in different countries to test other factors that might impact students' usage of the Internet, such as culture and government regulations.

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Appendix A			
Rotated Component Matrix (Factor Analysis)			
Items	Component		
	1	2	3
PU3	0.839	0.279	0.047
PU2	0.830	0.290	0.019
PU1	0.797	0.295	-0.063
PU4	0.688	0.176	-0.092
PEU1	0.264	0.806	-0.027
PEU2	0.184	0.804	0.060
PEU3	0.307	0.777	0.004
PEU4	0.494	0.670	-0.044
PC1	-.101	-0.146	0.870
PC2 (inv.)	-0.106	0.015	0.862
PC3 (inv.)	0.263	0.405	0.562

Appendix B		
Significant Items Considered in the Final Analysis		
Construct	Item	Description
Perceived Ease of Use (PEOU)	PEU1	Learning to use the Internet would be easy for me
	PEU2	I would find it is easy to get the Internet to do what I want it to do
	PEU3	I would find the Internet easy to use
	PEU4	It would be easy for me to become skillful at using the Internet
Perceived Usefulness (PU)	PU1	Using the Internet would increase my productivity
	PU2	Using the Internet would enhance my effectiveness in my career
	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)	PC1	The information provided by the Internet is reliable
	PC2 (inv.)	I question the quality of the information provided by the Internet
	PC3 (inv.)	The credibility of the information provided by the Internet is a concern for me

ENCOURAGING FACULTY DEVELOPMENT BY QUANTIFYING FACULTY PERFORMANCE

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ABSTRACT

This paper will summarize how a quantifiable faculty annual performance rating system has been used to assess faculty performance and development, assist faculty in planning, ensure faculty currency, and provide a consistent database for decision making regarding merit increments, tenure, and promotion. In the paper, we will discuss how the Faculty Annual Performance Rating System was created, its administration, how it assists faculty, faculty's acceptance of the system, and how it has positively affected faculty performance.

INTRODUCTION

Clayton College & State University (CCSU) is a technology focused, progressive university located in southern metropolitan Atlanta. The School of Business currently has 20 faculty members, including a Dean, Associate Dean, and endowed chair position. The School is currently completing its fourth year in candidacy for AACSB accreditation. As a part of the candidacy process, the Faculty Development & Intellectual Contribution Committee (FDIC) was formed in 1999 to develop a faculty evaluation system that promoted faculty scholarship and rewarded faculty performance. The Committee's main responsibility was to develop a comprehensive faculty evaluation system that would ensure faculty activities are in line with the mission of the school, accurately measure and reward performance, and assist in the creation of customized development plans for individual faculty members. The Committee's constraints were that the evaluation system had to be quantifiable, acceptable to faculty and evaluators, and consistent with the University's tenure and promotion requirements.

The Committee met on a bimonthly basis throughout the 1999 - 2000 academic year and in September of 2000 presented a draft of the Faculty Annual Performance Rating System (FAPRS) to the entire School of Business faculty. The FAPRS consists of four forms, the Summary of Professional Activity Form (partially displayed in Figure 1), the Faculty Annual Performance Rating Form (FAPRF) (Figures 2, 3, 4), the Two-Year Development Plan (Figure 6), and the Faculty Publication Matrix (Figure 7). While developing this evaluation system, the Committee recognized

that an effective evaluation system requires faculty agreement on numerical ratings for certain measures of teaching, scholarly activity and service.

The proposed FAPRS was accepted by the faculty with some minor changes and was put into use in the 2000-01 academic year. Since then, the Committee has continued to revise and refine the evaluation system based on the refinement of the School's Mission Statement, faculty feedback, and lessons learned. The FAPRS is intended to measure the annual performance of faculty by providing a reliable and consistent database to assist in faculty evaluation so that important decisions regarding retention, merit, tenure, and promotion can be made in a fair, efficient and timely manner. In addition, it is intended to serve as a mechanism to assist in faculty development by identifying strong and weak areas in teaching, scholarly activity or service. The model uses a point system that is meaningful within the School of Business and useful in University-wide tenure and promotion decisions.

The Faculty Development & Intellectual Contribution Committee at the outset recognized that faculty evaluation requires subjectivity. However, the FAPRS is objective, i.e., it seeks to measure faculty performance and reports a numerical rating. These apparent opposites are reconciled by using the concept of controlled subjectivity. The concept requires faculty agreement on numerical value ratings for certain measures of teaching, scholarly activity and service.

Figure 1

Each year, each faculty member prepares the Summary of Professional Activity Form (Figure 1 above; due to space constraints, only the first page is shown), which reviews in detail all relevant professional activities that transpired during the year being evaluated. Based on the activities, the Faculty Annual Performance Rating Form is completed. Along with these two forms the faculty member completes his/her publication matrix listing refereed journal publications over the last 5-year period. Based on the information contained in the above three forms and the faculty member's prior year development plan, the evaluator (Associate Dean), in consultation with the faculty member, outlines a two-year development plan for that faculty member. Thus, all completed forms eventually become part of a faculty member's portfolio. Once the portfolio is submitted, it becomes part of the official file maintained in the Dean's office for that faculty member.

FACULTY ANNUAL PERFORMANCE RATING SYSTEM (FAPRS)

The FAPRS is based on the following assumptions:

♦   All faculty have a responsibility for teaching, scholarly activity, and service.
♦   All faculty members are expected to meet minimum standards for performance in each of these components, hereafter referred to as Minimum Expected Performance (MEP).
♦   The highest valued activity is teaching. Scholarly activity is second and service is third.

The levels of effort that business faculty may allocate are as follows:

Teaching	60 percent	480 points
Scholarly Activity	25 percent	200 points
Service	15 percent	120 points
		800 points

Since the campus-wide faculty evaluation at CCSU is based on an 800-point system, the composite score for faculty efforts in teaching, scholarly activity, and service is computed out of a maximum of 800 points.

THE FACULTY ANNUAL PERFORMANCE RATING FORM (FAPRF)

The FAPRF (figures 2, 3, and 4) requires four steps. Using the sequence below, faculty determines:

1.   If they have met all the requirements for achieving minimum expected performance (MEP) in each component.

2.   The number of additional points earned.
3.   The total points earned during the academic year in each component.
4.   A composite score, based on the total points reported in step 3. The composite score for faculty will normally range from 400 - 800 points.

Steps 1-3 are briefly discussed below:

1.   The *Concept of Minimum Expected Performance* (MEP): The MEP concept is developed based on the shared value that all faculty members have responsibility for performing teaching, scholarly activity and service. Accordingly, a minimum standard is recommended for each component. The requirements for meeting the standards for each component are explained in later sections of this paper.
2.   *Additional Points*: Additional points may be earned in each component. The additional points earned in each component, broken down by types of activities, are shown on the FAPRF.
3.   *The Determination of Total Points Earned for the Academic Year*: A faculty member can earn a maximum of 480, 200, and 120 points in the teaching, scholarly activity, and service components, respectively (for a total of 800 points). If MEP is achieved, 70 percent of points are earned in each of the three components, i.e., 336 points for teaching, 140 points for scholarly activity, and 84 points for service activities. In addition to the base points in each component, additional points can be earned (as indicated in (2) above). If MEP is not achieved, 50 percent of points possible are awarded for faculty efforts in each of the three components, to which additional points can be added to reach a maximum of 69 percent of points in each of the three components. There are three separate sections to the FAPRF, each of which is described in detail below.

TEACHING COMPONENT

For a faculty member to meet the minimum expected performance in the teaching area, he or she must accomplish the following on a yearly basis: (1) have a simple average of 70% or above in the *frequently and/or almost always* categories for all classes on all questions of the CCSU Student Evaluation of Course & Faculty Form, (2) develop and use syllabi according to School's guidelines - incorporating course objectives, course outcomes, student assessment, clear discussion of all assignments, due dates, exam dates and times, office hours, e-mail address, office phone number, and policies on administering make up exams and academic dishonesty, (3) completion of course assessment portfolio related requirements for at least one course (4) participate in one instructional development activity every year. (Examples include participation in workshops,

sessions and seminars, within or outside the university.), and (5) apply technology to the instructional process.

Figure 2

Name _____ Year _____	POTENTIAL POINTS	ACTUAL POINTS
SCHOOL OF BUSINESS **FACULTY ANNUAL PERFORMANCE RATING FORM**		
Teaching (Effort Allocation = .6; maximum of 480 points [.6 x 800 = 480])		
MINIMUM EXPECTED PERFORMANCE: (.75 x 480 = 360)	360	
1. Student Evaluations: At least 70% *Frequently, Almost Always* on questions 1 - 20, and		
2. Syllabi Must Meet School Guidelines; and		
3. Attendance at one Instructional Development Activity, and		
4. Completion of course assessment portfolio related requirements for at least one course****, and		
5. Applications of technology in instruction		
ADDITIONAL POINTS: If 70% is not reached, start at 240 points.		
Measures of Quality		
2.0 points for each % point in *Almost Always* and *Frequently* over 70%	60	
Instruction of Students		
Direction of Individual Research or Internships (2.0 points per registered student - not part	10	
New Preparations (20 points per new preparation)		
Enhanced Learning Environment through Guest Lectures, Speakers, Field Trips, etc. (A	10	
Incorporation of Skill Building, as outlined in the Mission of the School of Business, as a pedagogical tool* (A maximum of 10 points per year)	10	
Lectures delivered in other courses (2 points per lecture; max. of 10 points)	10	
Other**		
Planning, Development, and Evaluation of Programs, Courses, and Materials		
New Course Development(s) (only courses accepted as part of the curriculum) (25 points		
Course Revision(s) (10 points for each significant course revision)***		
Participation in Team Teaching/Cross Disciplinary/Collaborative Instructions (A maximum of 10 points per year)	10	
Course Preparations (2 points per course per delivery per year)		
Participation in an Instructional Developmental Program: 2.5/session (A maximum of 10 points per year)	10	
Other**, ****		
Total for Teaching		0

*Points are awarded (once for each activity per course) for activities in all courses in areas such as communications, ethics, and technology.
** Up to 25 points per year may be given for extraordinary accomplishments in the teaching area.
***Includes changes in mode of course delivery (on-line/hyrid) and/or change in content
**** This includes completing the following assessment tasks:
    (1) completing the required course portfolio including assessment activities (where appropriate) for the course
    (2) evaluating a colleague's Course Portfolio

If the minimum threshold is not reached, the score will be calculated with a base score of 240 points with the same additional points utilized as listed. However, the score will not exceed 69 percent of 480 (331 points).

Additional points in the Teaching area are awarded based on activities during the preceding calendar year. They include three separate measures of teaching performance: *measure of quality, instruction of students, and planning, development, & evaluation of programs, courses, & materials*. The recommended points to be assigned to each activity are shown on the actual teaching component page, and an overview of the evaluation system is given to faculty members so that they might have a thorough understanding of how to arrive at point totals in each category.

SERVICE COMPONENT

Minimum expected performance in the service component area requires at least one professional service commitment and participation in a student advisement type activity such as the new student orientation activities (NSAT), student open house, student informational forum etc. In addition, an additional 36 points can be earned in one or any combination of the categories listed in that area. If the minimum threshold is not reached, but there is some indication of service, the score will be calculated on a base score of 60 points, but cannot exceed 69% of 120 (83 points).

Figure 3

	POTENTIAL POINTS	ACTUAL POINTS
SERVICE (Effort Allocation = .15; maximum of 120 points, .15 x 800 = 120])		
MINIMUM EXPECTED PERFORMANCE: (.70 x 120 = 84)	84	
1. One Professional Service Assignment, 2. Participation in an NSAT, New/Transfer Student Open House, or Informational Forum:		
ADDITIONAL POINTS: 36 points for any of the following: Maximum points = 36		
Officer in a professional organization		
Discussant at a conference		
Track Chair at a conference		
Editorial Board member for a journal or Proceedings		
Reviewer of articles or textbooks		
Community Service		
Service to the University		
Conference Proceedings Editor (professional as well as academic)		
Conference Coordinator (professional as well as academic)		
Public Services Work (prof. views quoted in newspapers, other recognition)		
Other*		
Total for Service		0

* Up to 25 points per year may be given for accomplishments in the Service area for activities that are recognized in AACSB Standards.

SCHOLARLY ACTIVITY COMPONENT

As shown in figure 4, to achieve minimum expected performance in the scholarly component area, faculty must have one refereed journal article/scholarly book (in print) every two years, and one other intellectual contribution (refereed or non-refereed) every year. If the minimum threshold is not reached, but some research effort is apparent, the score will be calculated with a base score of 100 points with the same additional points utilized as listed below. However, the score may not exceed 69 percent of 200 (138 points). Additional points, based on the criteria stated, are awarded based on activities during the preceding 12 months.

Figure 4

	POTENTIAL POINTS	ACTUAL POINTS
SCHOLARLY ACTIVITY (Effort Allocation = .25; maximum of 200 points, .25 x 800 = 200])		
MINIMUM EXPECTED PERFORMANCE: For Two Consecutive Calendar Years -- (.70 x 200 = 140	140	
1. One refereed^ journal article/scholarly book (accepted for publication or in print) every 2 calendar years; **Citation of publication and acceptance date:**		
2. One other intellectual contribution (refereed^ or non-refereed^) every year		
ADDITIONAL POINTS: If 70% is not reached, start at 100 points.		
Refereed^ Journal Article (in print, that is applied and/or instructional development in nature.) ***		
20 Percent or Below Acceptance (60 points per article)****		
21 - 30 percent (45 points per article)****		
31 - 49 percent (30 points per article)****		
50 Percent or Above Acceptance (20 points per article)****		
Refereed^ Textbook/Scholarly Book (45 points per book)		
Refereed^ Book Chapter/Cases (20 points per article)		
Revision of Same (12 points)		
Refereed^ and Published Software/Instructors Manual/Study Guide (15 points per activity)		
Int'l or Nat'l. Refereed^ Conf. Paper : Presentation and Proceedings (15 points per paper)*****		
Regional refereed^ Conf. Paper: Presentation and Proceedings (10 points per paper)*****		
Best Paper Award (for best paper recognition at a conference) (10 points per paper)		
Best Paper Award (for best paper recognition in a track) (5 points per paper)		
Refereed^ Published Book Review in a journal (10 points per review)		
Non-refereed Journal Article (8 points per paper)		
Non-refereed Professional Output; Presentation and/or Paper (e.g.., providing training and CPE; * (4 points each) (A maximum of 12 points per year)	12	
Funded Grants (12 points per grant)		
Other**		
Total for Scholarly Activity		0
Grand Total		0

* Points awarded only once per presentation per year
** Up to 25 points per year may be given for accomplishments in the Scholarly Activity area for activities that are recognized in AACSB Standards.
*** As the date of publication of refereed journal articles is at times hard to predict, points earned for published refereed^ journal articles, which are not counted in the year published, may be counted once during the next four subsequent years. Points <u>cannot</u> be carried over for any other categories.
**** Points will only be awarded for articles having three or less authors
^ The term "refereed" refres to all-peer reviewed publications and all publication outlets listed in Cabell's
***** Points will be awarded for up to three International, National, or Regional publications in any given year. The points will also be given for prestigious conferences that do not publish Proceedings but require a full paper to be peer reviewed prior to the conference.
Note: Course reductions will be determined as follows:
  For articles having only two authors, each author will earn one course load reduction
  For articles having three authors, each author will earn 1/2 of a course load reduction

In consideration of cases of faculty members amassing a large number of articles in a single year followed by a "dry spell," individuals are allowed to bank refereed journal articles for up to five years in determining MEP. This time period was chosen based on the time period included in AACSB reviews. For example, if an individual were to get three refereed journal articles accepted in year 1, he/she would be able to meet the minimum required performance for the next five years provided they were able to make one other intellectual contribution every year. To further illustrate this scenario, consider the following timeline (Figure 5):

Figure 5					
2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007
3 refereed journal articles* and 1 other intellectual contribution Score is MEP (140) + bonus for 1 article	1 conference paper and 1 other intellectual contribution Score is MEP (140) + score for conference paper	1 carried article and 1 other intellectual contribution Score is MEP (140) + bonus for article	1 conference paper and 1 other intellectual contribution Score is MEP (140) + score for conference paper	1 carried article and 1 other intellectual contribution Score is MEP (140) + bonus for article	1 conference paper and 1 other intellectual contribution The MEP is not met, so score may not exceed 138 points

Note that the three journal articles meet the MEP for five years, i.e., through 2005 - 2006, and that any and all refereed journal articles can be counted toward MEP and for bonus points for five years from the date of publication.

ADMINISTRATION OF FAPRF

The FAPRF is to be completed by each faculty member. Information included in the FAPRF is to be substantiated by the faculty member with attachments where necessary. The evaluation percentage for teaching is calculated by the Office of Institutional Research and provided to the Associate Dean. It is the responsibility of the faculty member to supply additional information for consideration of additional points for teaching, scholarly activity, and service.

When a faculty member lists an activity for points on the FAPRF, it has to be documented on the Summary of Professional Activities and substantiated, if necessary. This makes the evaluation process clear and straightforward.

Upon submission of the FAPRF by the faculty member to the Associate Dean, the Associate Dean will review the document and then will meet with the faculty member. Resolution of reported

information (if necessary) should occur at that meeting. Should differences remain between the faculty member and the Associate Dean, the faculty member may appeal in accordance with faculty governance policies. Should further review be requested, the Dean will act as the final arbiter in evaluation decisions within the School.

Based on the activities listed on the Summary of Professional Activities Form and reported on the FAPRF, the Associate Dean discusses developmental activities with the individual faculty member. Based upon this discussion and other relevant issues, the faculty member develops his/her two-year development plan (see figure 6) and submits it to the Associate Dean.

Figure 6

CCSU SCHOOL OF BUSINESS
TWO-YEAR INDIVIDUAL FACULTY DEVELOPMENT PLAN (January 1, 2004 – December 31, 2005)

Name:_____ Rank:_____ Evaluated by:_____ Date:_____
Ensure that your plan meets and exceeds the Minimum Expected Performance (MEP) in Teaching, Professional Development & Scholarship, and Service for each of the two years. *(Note: Evaluation is to be completed by evaluator)*

1. TEACHING - Weight Factor 60.
A. *Instruction of Students (Weight Factor = 25- 40)*

Year	Activity	Measurement	Meets MEP	Evaluation *(by evaluator)*
2004			Yes (or) No	
2005			Yes (or) No	

B. *Planning, Development, and Evaluation of Programs, Courses, and Materials (Weight Factor = 20-35)*

Year	Activity	Measurement	Meets MEP	Evaluation *(by evaluator)*
2004			Yes (or) No	
2005			Yes (or) No	

2. PROFESSIONAL DEVELOPMENT AND SCHOLARSHIP - Weight Factor 25.

A. *Scholarship*

Year	Activity	Nature Applied/ Instructional Devt./ Basic	Expected Submission Date	Type of Review Peer/Editorial/ Other (specify)	Within the Field of Expertise/ Teaching	Meets MEP	Status	Evaluation *(by evaluator)*
2004					Yes / No	Yes (or) No		
2005					Yes / No	Yes (or) No		

B. *Professional Membership, Leadership, & Service*

Year	Activity	Nature	Within the Field of Expertise/ Teaching	Current Status	Evaluation *(by evaluator)*
2004					
2005					

3. SERVICE - Weight Factor 15.

Year	Activity	Measurement	Meets MEP	Evaluation *(by evaluator)*
2004			Yes (or) No	
2005			Yes (or) No	

FACULTY PUBLICATION MATRIX

One of the rewards for refereed journal publication is a one-time course-load reduction for the faculty member. Therefore, the Faculty Publication Matrix (see figure 7) is completed by each faculty and submitted to the Associate dean requesting course-load reductions in specific semesters. The information contained in this form is also used to compile School-wide data for AACSB candidacy related reporting purposes.

Figure 7

FACULTY PUBLICATION MATRIX

It is necessary that the table below be completed and updated on a yearly basis.   Please fill in appropriate boxes by using the representations below:

> P = year in which article was published
> C = year used for course load reduction
> M = year in which article is counted as part of the minimum expected performance.
> Y = in field
> N = not in field

Faculty: _____   Year

CITATION	ACCEPTANCE RATE	IN FIELD	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009

IMPORTANCE OF MEETING THE MINIMUM EXPECTED PERFORMANCE REQUIREMENTS

Faculty who does not met the Minimum Expected Performance requirements in any of the three areas (teaching, scholarly activity, and service) will not be eligible for merit increases during the evaluation period. It should be noted, however, that if the minimum standards for a component are met, then the faculty member automatically earns 70 percent of the maximum allowed points.

If the minimum standards are not met, only 50 percent of the points are earned in that category. In addition, any faculty member who does not meet the MEP more that once will not receive a favorable recommendation for tenure and/or promotion. So far, three our eighteen faculty members have missed meeting the MEP once.

BENEFITS AND OUTCOMES OF FACULTY ANNUAL PERFORMANCE RATING SYSTEM

Since its implementation in 2000, the FAPRS has enhanced faculty productivity through customized faculty development activities. The average student evaluation of the business faculty has increased from a favorable rating of 89% in 2000 to 95% in 2003, and the number of refereed publications and presentations by business faculty increased over 400 percent between 1999 and 2003. The number of professional service activities by the faculty more than doubled during the same period. The performance of the graduating class of students on ETS's national Major Field Exam in Business increased from the 69th to 87th percentile during the same time period. Some of the specific outcomes of the systems are as follows:

♦ Peer-reviewed publications & presentations increased from less than 15 in 1999 to over 70 in 2004.
♦ Nine invited presentations on best practices at AACSB-International conferences in the last four years. (As far as we know, no other schools have been selected so many times in this time period.)
♦ Three out of the last four Smith Faculty Award Winners at the University. (The Smith Award is the highest award given to a faculty member at Clayton College & State University. Prior to 2000, no business faculty had ever won the Smith Award. However, the winners for 2001, 2003, and 2004 were faculty members from the School of Business.)
♦ SAM Outstanding Faculty Advisor Awards were given to Dr. Michael Deis, a faculty member in the School of Business, in 2001, 2002, and 2004.

Student satisfaction: According to EBI (Education Benchmarking), student satisfaction in the following areas has increased substantially over the last two years:

♦ Placement and career services within the School
♦ Faculty accessibility and responsiveness
♦ Quality of faculty instruction
♦ Breadth of the curriculum
♦ Overall satisfaction with the program

RECOGNITION AND INTEREST FROM OTHER SCHOOLS

AACSB is the premier accrediting agency for Schools and Colleges of Business. Faculty and the Associate Dean from CCSU have presented synopsis of the Faculty Annual Performance Rating System to over 200 faculty and administrators at the 2001 AACSB International Continuous Improvement Symposium in St. Louis, Missouri, the 2002 AACSB International Continuous Improvement Symposium in Washington, D.C., the 2003 Southern Business Administration Association (SBAA) conference, and the 2004 AACSB Learning from the Leaders Conference in Denver, Colorado. Presentations at the SBAA, 2002 and 2004 AACSB conferences were requested because of the interest expressed by participants at the previous conferences. In addition, administrators from several other universities have contacted the CCSU School of Business about adapting the program to their respective programs.

From discussions and research we have found that increasing number of business schools are attempting to institute some type of a score-card system to quantify faculty performance. In talking with deans and faculty from other schools at AACSB conferences it has become clear that this evaluation system is quite unique. We have not been able to find any other evaluation system that is similar or as objective as the FAPRS. So far, this system seems to generate interests from others schools and colleges.

LESSONS LEARNED

After using the FAPRS for four years, we have learned that the evaluation system needs to be continuously revised based on faculty feedback and other relevant inputs, the relationship between MEP and merit increases must be continuously clarified, there needs to be clear descriptions and instructions about each aspect of the system and they need to be discussed on a yearly basis with faculty. Finally, we have realized that a database of faculty data is necessary for reporting purposes. Therefore, we are looking into developing a web-based database system in house.

UNIVERSITY AND SCHOOL MISSION STATEMENT REVISION: A STRUCTURED PROCESS

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ABSTRACT

A process designed to improve an organization's mission statement in terms of both completeness and quality is presented. Further, the results of process application at both university and business school levels are described. The process generally incorporates use of a Mission Statement Evaluation Scale to improve completeness and a brainstorming, multi-voting technique to improve quality of the mission statement.

INTRODUCTION

Fayol's unity of direction principle requires that all organizational activities be focused on fulfillment of the organization's mission (Fayol, 1916). Prior analysis done by the authors indicates that the completeness and quality of a mission statement impacts organizational performance. All organizations must periodically review and revise existing mission statements. The process is difficult and often painful to the participants (especially if the process is a haphazard one) but critical to the effectiveness and acceptance of the mission statement (Bart, 1997; Ireland and Hitt, 1992). To minimize the difficulty and pain associated with mission statement revision, a structured process is offered and the results of its application at the university and school levels are described. Organization's that adopt this process to improve existing mission statements can expect improved organizational performance in the future.

LITERATURE REVIEW

Definitions and Roles

Strategic management texts include a process of strategic management that incorporates mission development as one of the vital tasks in the strategic planning process (Hill and Jones, 2003; David, 2003; Thompson and Strickland, 2001; Wheelen and Hunger, 2000). In addition, mission

statements are presented as important tools for communicating the mission to internal and external stakeholders. A number of definitions of mission statements exist. Bart and Tabone (1998), Rigby (1998), and Drohan (1999) all provide definitions that essentially say that mission statements should reflect an organization's purpose and the means by which that purpose will be accomplished.

Pearce (1982) states that the mission statement should include the ultimate aims of the firm thus providing unity of direction for managers, shared expectations by employees, and a projection to customers of what the firm provides and represents. Calfee (1993) says that mission statements answer the questions of what business the firm is in, what its objectives are, and how the company will win. This will ensure that all managers understand their role in executing the mission.

Relationship to Performance

Research studies attempting to link mission statements to organizational performance have been conducted. Pearce and David (1987) compared mission statements of higher financial performing Fortune 500 firms to those of lower financial performing companies. Higher performing organizations "prepared written statements for public distribution giving special attention to their corporate philosophy on the firm's 1. basic beliefs, values, aspirations, and priorities, 2. desired public image, and 3. self-concept, including competitive strengths."

Mission statements are often customer-focused. Germain and Cooper (1990) found that firms that have customer service missions are more likely to seek input from customers and are also more likely to develop and maintain customer service measures. Also, customer service activities by the company are more likely to be monitored by firms with customer service mission statements. Forehand (2000) studied firms within the healthcare industry. It was concluded that, within this particular industry, "solid mission statements can improve the performance of mangers, employees, and the healthcare organization."

A number of studies concluded that there was no evidence to support the idea that mission statements are positively related to company performance. Bart and Baetz (1998) found no empirical evidence to support the concept that outstanding organizational performance is related to a firm's mission statement–even though they concluded that some specific characteristics of a mission statement may be selectively related to higher levels of performance.

The impact of planning sophistication and implementation on firm performance was investigated by Hahn and Powers (1999). Development of a mission statement was one determinant of planning sophistication. It was determined that high levels of sophistication (of which mission statements were a part) did not have an impact on organizational performance.

O'Gorman and Doran (1999) replicated Pearce and David's 1987 study using small and medium-sized Irish firms. Results do not support the findings of the earlier study. It was concluded that organizational performance was not positively correlated with mission statements.

THE STRUCTURED REVISION PROCESS

The mission statement revision process as applied at the university and school level incorporates the following steps and is designed to improve the organization's mission statement in terms of both completeness and quality.

1. Assess the current mission statement for completeness using the Mission Statement Evaluation Scale (Appendix A). Assessment both by service providers and by service consumers is necessary. The scale includes nine items that collectively assess both purpose and vision for the organization. The scale was analyzed in a previous study and the results of the factor analysis indicated that the first four items on the scale relate to organizational purpose and the remaining five to organizational vision. Respondents indicate degree of disagreement/ agreement with each of the nine statements.

2. Analyze results from the completeness assessment to determine individual item scores and an overall score. Rank individual item scores from low to high to identify areas that require further attention. Since respondents score each item on a seven-point Likert scale with anchors 1=strongly disagree and 7=strongly agree, items with average scores below five are identified as needing improvement.

3. Under the direction of a facilitator, attack each deficient area (average score below 5) using a brainstorming, multi-voting technique designed 1) to generate a maximum of ideas related to improvement from all involved and 2) to build a consensus concerning which of the ideas should actually be incorporated in the improved mission statement. The work done during this portion of the process impacts the quality of the mission statement. The technique follows a specific process:
    a. the area of concern is carefully described and all participants are asked to focus solely on improvement in that area,
    b. participants are asked to list three ideas that they believe will correct the deficiency,
    c. participants are polled and each idea is listed until all ideas are exhausted,
    d. the total number of ideas is divided by three to determine the initial number of votes to be allocated to each participant,
    e. participants consider the list of ideas and vote for those they believe merit remaining on the list,
    f. votes are tallied and ideas receiving none or only a few votes are removed from the list,
    g. the number of remaining ideas is divided by three to determine the number of votes to be allocated,
    h. participants are again asked to multi-vote,
    i. the votes are tallied and the remaining ideas ranked from high to low,
    j. participants are asked to consider the top three to five ideas,
    k. participants are asked "If these ideas are incorporated into the mission statement, are you satisfied that the mission statement will be improved in terms of completeness and quality?"

4. Revise the mission statement incorporating the prioritized recommendations of the management team.

5. Reassess revised mission statement using the evaluation scale.

6. Analyze the results to determine individual item scores and an overall score. Statistically compare these scores to those of the original assessment and note improvements and remaining deficiencies.

7. Present the revised statement and the results of the reassessment for minor revision and approval.

8. Communicate the revised mission statement to all stakeholder groups.

Application of the process practically results in an improved mission statement in terms of both completeness and quality. Additionally, the process assists organizational members to both become familiar and internalize the components of the organization's mission statement. Members that have internalized the mission act instinctively to fulfill it. This supports Fayol's (1916) unity of direction principle that requires all organizational members be focused on successful completion of the organization's objectives and fulfillment of the organization's mission.

RESULTS AT THE UNIVERSITY LEVEL

The structured revision process was applied to revise the existing mission statement (Appendix C) at a small southern liberal arts university. The existing mission statement was assessed for completeness using the evaluation scale by both the university's top management team and by students enrolled in strategic management classes at the university. Results of this initial assessment are presented in Table 1. Results from the analyses of the top management and student groups were consistent in identifying the same four primary deficiencies in giving the existing statement similar overall scores of 67% and 68%.

A group consisting of the vice-president for academic affairs, the dean of the graduate school, and the deans of the schools of arts and sciences, education and business was selected to participate in the brain-storming, multi-voting stage of the improvement process. A faculty member from the school of business experienced in applying this consensus building technique was selected as facilitator. Each of the four deficient areas was subjected to the technique. One of the group members was asked to incorporate the prioritized ideas for each area of deficiency into the mission statement. In this case, the writing skills of the dean of the graduate school (a former English professor) were called upon. The revised statement is presented in Appendix C.

The revised statement was then reassessed by the top management team and the group of students. Results of the reassessment are presented in Table 2. It should be noted that completeness scores for each of the deficient areas significantly improved as did the overall scores. The overall scores improved for the top management and student groups from 67.57% to 77.28% and from 66.49% to 83.57%, respectively. It should also be noted that, while the deficient areas improved, several of the other item scores also improved. While the nine items identified in the scale are distinct, they are also complimentary. Just as exercising one muscle also strengthens surrounding muscles, attention to one factor can be expected to improve the others.

RESULTS AT THE SCHOOL OF BUSINESS LEVEL

The structured revision process was applied to revise the existing mission statement (Appendix D) of the school of business at a small southern liberal arts university. The business school offers both undergraduate and graduate programs in business and is AACSB accredited. The

process of revising the mission statement was undertaken to meet AACSB requirements and because of the belief that an improved mission statement will result in improved program and service offerings.

Table 1: Results of Initial Assessment of University Mission Statement Pre-Revision Student Responses (in ascending order by mean)		
Scale Item	N	Mean
(9) FACTORS	45	3.67
(4) SCOPE	45	4.09
(2) SERVICES	45	4.36
(3) ADVANTAGE	45	4.56
(6) VISION	45	4.6
(7) EXPECTATIONS	45	4.67
(5) PHILOSOPHY	45	5.13
(1) PURPOSE	45	5.33
(8) IMAGE	45	5.49
Average		4.65
Score		66.49%
Pre-Revision Executive Team Responses (in ascending order by mean)		
Scale Item	N	Mean
(3) ADVANTAGE	11	3.63
(9) FACTORS	12	3.91
(6) VISION	11	4.63
(4) SCOPE	12	4.67
(2) SERVICES	12	5.08
(8) IMAGE	12	5.17
(5) PHILOSOPHY	12	5.25
(7) EXPECTATIONS	12	5.5
(1) PURPOSE	12	5.75
Average		4.73
Score		67.57%

The existing mission statement was assessed for completeness using the evaluation scale by both the business school's faculty and staff and by students enrolled in strategic management classes at the university. Results of this initial assessment are presented in Table 3. Results from the

analyses of the faculty and student groups were consistent in identifying the same four primary deficiencies in giving the existing statement similar overall scores of 64.73% and 60.85%.

Table 2: Results of Reassessment of Revised University Mission Statement		
Post-Revision Student Responses		
Scale Item	N	Mean
(3) ADVANTAGE	49	5.35
(9) FACTORS	49	5.39
(6) VISION	49	5.59
(2) SERVICES	49	5.63
(4) SCOPE	49	5.65
(7) EXPECTATIONS	49	5.9
(5) PHILOSOPHY	49	6.2
(1) PURPOSE	49	6.31
(8) IMAGE	49	6.61
Average		5.85
Score		83.57%
Post-Revision Executive Team Responses		
Scale Item	N	Mean
(3) ADVANTAGE	12	5.08
(6) VISION	11	5.09
(4) SCOPE	12	5.17
(9) FACTORS	12	5.17
(7) EXPECTATIONS	12	5.25
(2) SERVICES	12	5.42
(5) PHILOSOPHY	12	5.67
(8) IMAGE	12	5.67
(1) PURPOSE	12	6.08
Average		5.41
Score		77.28%

All faculty and staff members of the school participated in the brain-storming, multi-voting stage of the improvement process. A faculty member from the school of business experienced in applying this consensus building technique was selected as facilitator. Each of the four deficient

areas was subjected to the technique. The facilitator incorporated the prioritized ideas for each area of deficiency into the mission statement. The revised statement is presented in Appendix E.

Table 3: Results of Initial Assessment of School of Business Mission Statement		
Pre-Revision Student Responses (in ascending order by mean)		
Scale Item	N	Mean
3) COMP ADVANT	36	3.83
6) VISION	36	3.86
5) PHILOSOPHY	36	4.13
9) FACTORS	36	4.19
7) EXPECTATIONS	36	4.38
4) SCOPE	36	4.61
2) SERVICES	36	4.94
8) IMAGE	36	5.08
1) PURPOSE	36	5.72
Average		4.53
Score		64.73%
Pre-Revision Faculty and Staff Responses (in ascending order by mean)		
Scale Item	N	Mean
3) COMP ADVANT	18	2.88
6) VISION	18	2.94
4) SCOPE	18	3.5
9) FACTORS	18	3.83
5) PHILOSOPHY	18	4.5
7) EXPECTATIONS	18	4.66
2) SERVICES	18	5.05
8) IMAGE	18	5.16
1) PURPOSE	18	5.77
Average		4.25
Score		60.85%

The revised statement was then reassessed by an additional group of students. Results of the reassessment are presented in Table 4. It should be noted that completeness scores for each of the deficient areas significantly improved, as did the overall scores. The overall scores from the student groups improved from 64.73% to 92.43%. It should also be noted that, while the deficient areas

improved, several of the other item scores also improved. While the nine items identified in the scale are distinct, they are also complimentary. As of this writing, the faculty and staff have not yet reassessed the revised mission statement. The dean of the school has decided to formally present the revised mission to an external group of alumni and professionals for comments prior to finalizing the mission statement and reassessing completeness and quality.

Table 4: Results of Reassessment of Revised School of Business Mission Statement Post-Revision Student Responses		
Scale Item	N	Mean
3) COMP ADVANT	50	6.54
6) VISION	50	6.52
5) PHILOSOPHY	50	6.24
9) FACTORS	50	6.22
7) EXPECTATIONS	50	6.24
4) SCOPE	50	6.42
2) SERVICES	50	6.76
8) IMAGE	50	6.5
1) PURPOSE	50	6.8
Average		6.47
Overall Score		92.43%

CONCLUSIONS

In both situations (university and school of business), the mission statements were strengthened in terms of completeness and quality. In each case, process participants became thoroughly familiar with the mission of their organization and took important steps to internalize the mission's components. This improved focus supports the Fayol's (1916) unity of command principle and will likely result in improved organizational performance at both the university and schools levels. These successful implementations of the mission statement evaluation process recommend the process to other organizations wishing to improve performance by improving organizational focus.

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APPENDIX A	
MISSION STATEMENT EVALUATION SCALE	
Based on a thorough review of the organization's mission statement, circle the number that best represents your agreement with each of the following statements.	
The *purpose* or reason for the organization's existence is clearly identified.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The *services* and/or *products* provided society is clearly identified.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The *fundamental, unique competitive advantage* that sets the company apart from other firms of its type is clearly identified.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The *scope of the company's operations* in terms of *products and services offered* and *markets served* is clearly identified.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
There is a clear description of the *firm's philosophy* about how it does business and treats its customers.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
There is a clear description of *what the organization* wants to become.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The statement promotes a *sense of* shared expectations in employees.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The statement communicates a *positive* public image to important stakeholder groups.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The importance of factors such as *technology,* creativity and *innovation* is emphasized.	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
Total the scores on each question and divide by 9 to compute an overall score for the organization's mission statement. Then, divide the overall score by 7 and multiply it by 100 to compute the overall percentage score. Overall Score = _____ Overall percentage = _____	

APPENDIX B
UNREVISED UNIVERSITY MISSION STATEMENT

State University is a public liberal arts university. True to the century-long tradition that has distinguished this University since its founding, the University remains dedicated to providing excellent undergraduate curricula in the arts and sciences. Further, the University is committed to offering strong professional programs in teacher education and business administration at both the undergraduate and graduate levels. Believing that a liberal education is essential for all undergraduates, regardless of their specific educational interests, this University has developed a program based on a comprehensive core of courses in the arts and sciences.

Through this common core of courses, as well as through the more specialized curricula, the University fosters the maximum growth and development of each student. More specifically, this University endeavors to provide an education which will nurture in each student the capability

◆ To think logically and critically;
◆ To communicate effectively;
◆ To appreciate the complexity and diversity of world cultures;
◆ To understand the physical universe;
◆ To participate as a concerned, intelligent citizen;
◆ To acquire mastery of a particular field of study; and
◆ To mature intellectually, emotionally, and physically.

As the above statements indicate, the University's primary mission is to excel in undergraduate education, always striving to enrich the quality of learning and teaching. In pursuit of this major goal, the University selects a diverse student community, actively recruiting, challenging, and supporting those students who are highly motivated toward achieving academic success. Quality in undergraduate education is fostered not only by a positively motivated student body, but by a faculty and staff distinguished for their continuing commitment to excellence. Care and concern, positive student response--these characteristics are the heart of this University.

Because scholarly and creative endeavors are essential complements to excellence in teaching, the University encourages and supports such efforts on the part of both its faculty and its students. In addition to enriching the University, these endeavors form the foundation from which this University builds appropriate programs in response to the needs of the various communities which it serves. In close concert with these communities, this University applies its expertise to develop those programs which will promote the preservation and improvement of the quality of life in our State.

APPENDIX C
REVISED UNIVERSITY MISSION STATEMENT

State University is a public liberal arts university. True to the century-long tradition that has distinguished This University since its founding, the university remains dedicated to providing excellent undergraduate curricula and strong graduate programs in selected areas. Primarily a regional, comprehensive university, this University prides itself on a growing international student community to enrich its collegiate atmosphere. Believing that an education strong in liberal arts is essential for all undergraduates, regardless of their specific educational interests, this University is committed to a program based on the arts and sciences.

Through this common core of courses, as well as through the more specialized curricula, the university fosters the maximum growth and development of each student. More specifically, This University endeavors to provide an education that will nurture in each student the capability

- ♦   To think logically and critically;
- ♦   To speak and write effectively;
- ♦   To appreciate the complexity and diversity of world cultures;
- ♦   To understand the physical universe;
- ♦   To participate as a concerned, intelligent citizen;
- ♦   To acquire mastery of a particular field of study;
- ♦   To discern appropriate uses of technology; and
- ♦   To mature intellectually, emotionally, and physically.

As the above statements indicate, this University's primary mission is to excel in undergraduate education, always striving to enrich the quality of learning and teaching. In pursuit of this major goal, the university selects a culturally rich and diverse student community, actively recruiting, challenging, and supporting those students who are highly motivated toward achieving academic success. This University is committed to a strong Honors Program, attracting excellent students from all academic areas. Quality in education is fostered not only by a positively motivated student body but by a faculty and staff distinguished for their continuing commitment to excellence. University care and concern, positive student response, small class sizes, and a personal, friendly atmosphere — these characteristics are the heart of this University.

Because scholarly and creative endeavors are essential complements to excellence in teaching, the university encourages and supports such efforts on the part of both its faculty and its students. In addition to enriching the university, these endeavors form the foundation from which this University builds appropriate programs in response to the needs of the various communities that it serves. In close concert with these communities, this University applies its expertise to develop those programs that will promote the preservation and improvement of the quality of life in our State.

APPENDIX D
UNREVISED SCHOOL OF BUSINESS MISSION STATEMENT

We are dedicated to providing our students with the highest quality educational experiences in business concepts and skills that are needed to meet the challenges of today's complex and changing environment, to compete effectively in the global marketplace, and to make positive contributions to their chosen professions. The school focuses on the development of leaders with entrepreneurial capacity to effectively initiate, manage and implement change in a dynamic business environment. In consonance with State University's liberal arts mission, we seek to promote our students' growth through the attainment of knowledge and the acquisition of necessary skills in a manner that will develop in each student the capability to think logically and critically, communicate effectively, and appreciate the complexity and diversity of world cultures.

Our unique challenges are the following:

♦ To provide an educational environment where the teaching and preparation of students is top priority;
♦ To develop in our students positive attitudes toward quality work, self discipline, personal motivation, ethical behavior, effective leadership, and teamwork;
♦ To serve as a resource for the business community in the areas of counseling, training, and economic development;
♦ To maintain a faculty actively involved in their respective professions and who actively produce intellectual contributions on a continuing basis;
♦ To model effective organizational performance that is based on commitment, individual competence, integrity, self-management, and pride.

APPENDIX E
REVISED SCHOOL OF BUSINESS MISSION STATEMENT

We are dedicated to providing our students with the highest quality educational experiences in business concepts and skills that are needed to meet the challenges of today's complex and changing environment, to compete effectively in the global marketplace, and to make positive contributions to their chosen professions. We believe that our unique competitive advantage is an open, collegial atmosphere that fosters a "personal education" experience for our students.

We provide the educational services necessary to support undergraduate majors in accounting, computer information systems, and business administration. Business administration majors may chose from emphases in general business, marketing, finance or human resource management. Additionally, we provide services to support both MBA and Executive MBA programs. The undergraduate and graduate programs are primarily intended to serve local and State populations of both traditional and non-traditional students. The Executive MBA is designed primarily for international cohorts.

We focus on the development of leaders with capacity to effectively initiate, manage and implement change in a dynamic business environment. In consonance with Henderson's liberal arts mission, we seek to promote our students' growth through the attainment of knowledge and the acquisition of necessary skills in a manner that will develop in each student the capability to think logically and critically, communicate effectively, and appreciate the complexity and diversity of world cultures.

We strive to develop a School that is highly connected with regional businesses and institutions and that is recognized locally and regionally for the provision of cutting edge, relevant educational services. More precisely, we strive to build a School that produces the best business graduates in this State.

Our unique challenges are the following:

- ♦ To provide an educational environment where the teaching and preparation of students is top priority;
- ♦ To develop in our students positive attitudes toward quality work, self discipline, personal motivation, ethical behavior, effective leadership, and teamwork;
- ♦ To serve as a resource for the business community in the areas of counseling, training, and economic development;
- ♦ To maintain a faculty actively involved in their respective professions and who actively produce intellectual contributions on a continuing basis;
- ♦ To model effective organizational performance that is based on commitment, individual competence, integrity, self-management, and pride.

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