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AN INNOVATIVE APPROACH FOR INTEGRATING THE SARBANES OXLEY ACT INTO THE UNDERGRADUATE BUSINESS CURRICULUM

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ABSTRACT

The Sarbanes Oxley Act of 2002 or “SOX” has permanently changed the way the business community operates. As a result, it is important for business students to understand this legislation so that they can add value to future employers. Currently SOX is seen as an accounting rule and so is taught to accounting majors and not business students. This paper offers an alternative approach to teaching SOX, as we believe that SOX is a business issue not only an accounting issue. We firmly believe that all business students should be exposed to the significant requirements of the Sarbanes Oxley Act as required for all management in publicly traded companies. Resources are provided to help all business instructors increase their knowledge of this legislation to ensure that SOX is fully integrated into the business school culture.

INTRODUCTION

“SOX” refers to the Sarbanes Oxley Act of 2002 (the “Act”) that was enacted into law by the United States Congress. It applies to all Securities and Exchange registrants (i.e., public companies) and their external auditors. The key sections of the law includes requirements for (a) the establishment of the Public Company Accounting Oversight Board or PCAOB, (b) Auditor Independence, (c) Corporate Responsibility, and (d) Enhanced Financial Disclosures.

From first glance this might lead one to believe that SOX is of interest only to accounting professionals. In reality, most professionals in all publicly traded companies are affected by SOX and they should be aware of what their responsibilities are under the Act. This article is meant to acquaint those who need to know about SOX and its place in a university business curriculum: business deans, business faculty and book publishers.

The SOX Act resulted from the mounting accounting and corporate scandals in the late 1990s and early 2000s. These scandals resulted in the loss of investor confidence in corporate financial reporting. The bad news was nonstop as firms such as Adelphia Communications, Global Crossing, Rite Aid, Xerox and Tyco revised their earnings reports to reflect the impact of earnings management, management fraud and other ‘creative accounting’ practices. As a result, SOX was passed into law and signed by Congress and the President in record time.

Perhaps the two organizations that had the biggest impact on the passage of SOX were Enron and WorldCom. Management fraud at Enron forced the company to file for bankruptcy protection in December 2001, the largest bankruptcy in the country at that time. This company reported assets of approximately \$62 billion and spectacular and consistent earnings growth for many years. However, management inflated earnings by approximately \$600 million for the six years prior to its bankruptcy filing. Seven months later, Enron’s bankruptcy filing was overshadowed by the

collapse of WorldCom in July 2002. This company, with \$100 billion in assets, was forced into bankruptcy by a massive management fraud. Both Enron and WorldCom were given clean audit reports that were distributed to the investment community for many years with the underlying financial statements audited by Arthur Anderson.

With the mounting bad news reported by these premier companies whose financial statements were audited by the Big Five accounting firms, the investing public demanded some reform from the legislators to bring credibility to corporate financial reporting. The Sarbanes Oxley Act was enacted into law in response to this demand.

OVERVIEW OF SOX

SOX was implemented to strengthen and improve corporate responsibility. The area of corporate responsibility should be of interest to all business students, since corporate responsibility affects all levels of upper management in all public companies. This includes accountability by executives, boards of directors, and auditors. Another purpose of the Act was to improve companies' communications to investors regarding their activities and the financial climate, again an area not just relegated to accounting personnel.

There is now a clear requirement for all members of the audit committee to be independent members of the board of directors and not management personnel of the corporation. Section 302 of SOX requires the Chief Executive Officer (CEO) and Chief Financial Officer (CFO) of each company to make specific certifications in their quarterly and annual reports. These individuals face significant financial penalties and/or long prison terms for making false certifications. As a result, these executives must rely on personnel throughout the organization to assist in this certification process. Today's business students will not only be part of the SOX process in the future, but will be the future executives responsible for corporate governance in their companies.

The Foreign Corrupt Practices Act of 1977 placed the responsibility of the organization's internal controls on management. Section 404 of the SOX Act now requires that public companies' annual reports include an internal control report specifically stating that management is responsible for establishing and maintaining an effective system of internal control, and management's assessment of the effectiveness of its controls. The external auditor is specifically responsible for attesting to management's internal control environment and for issuing a separate report on the effectiveness of those controls.

Business students should have a working understanding of the implementation issues faced by management in implementing and maintaining an effective internal control structure in response to Section 404.

CLASSROOM APPLICATION

Most courses in the business school have SOX implications. However, SOX is often only taught in accounting courses, so accounting majors are the only ones exposed to its requirements. Business students could potentially leave college without working knowledge of SOX and how it could impact them in the workplace. Appendix 1 presents a summary of the key provisions of SOX, the related sections and the authors' perspectives on the impact of SOX on the business curriculum.

Since SOX is far reaching, we propose the following curriculum inclusion to increase business students' knowledge of it with special emphasis on those areas that are subject to Section 404 attestation. Our ideas are presented in this section and summarized in Table 1.

[Insert Table 1 here]

Business Foundation Course - This is the foundation course for introducing business students to the operations of a typical business organization. Course content usually includes a discussion of business cycles found in typical organizations. Such cycles include: revenue and collection, acquisition and expenditure, production and payroll, and finance and investment.

This is the course where the general requirements of the Sarbanes Oxley Act should be discussed. Specifically, sections 101, 302 and 404 should be discussed in the business foundation course.

Discussions should include the reasons for the establishment of the PCAOB and how it has affected businesses (Section 101); what is corporate responsibility and who is responsible for the corporate responsibility over financial reporting (Section 302); and what are internal controls and the fact that management is responsible for designing and operating those controls (Section 404.)

Coverage should also include an introduction to risk assessment and the use of a control framework to assess the effectiveness of a company's control environment. The most common control framework used in business in the United States is the Committee of Sponsoring Organizations of the Treadway Commission or the "COSO" framework. Therefore, students should have a working knowledge of this framework.

Marketing – Marketing majors often believe that understanding accounting concepts is pointless since they are not involved in the financial statement process. While this misconception was okay in the past, it is no longer appropriate under SOX since all activities that impact financial reporting and disclosures in an organization are now subject to SOX Section 404 attestation. Marketing programs often include courses (or sections of courses) on selling practices and product management. These areas are revenue-generating activities and are critical to an organization's success. Since they are part of the financial reporting process these areas are considered part of the Section 404 attestation scope and marketing majors need to be able to recognize and design controls for their areas of expertise.

In discussing these areas, instructors should ensure that students have a good understanding of the underlying business processes and the typical controls that exist over such processes. For instance, to incorporate SOX in courses instructors might focus class room discussions on the controls that should be in place in an organization to ensure that sales made by sales personnel are (a) appropriate and (b) reported and recorded in the general ledger.

Accounting - As financial statement preparers, accountants are impacted by all SOX provisions especially corporate responsibility and enhanced financial disclosures. The typical accounting program already includes sufficient coverage of generally accepted accounting principles in such courses as Intermediate and Advanced Accounting. However, instructors should ensure that students are knowledgeable of the related disclosures in their coverage of the financial statement components since they are a critical element of SOX. For instance, the coverage of leases should include the accounting for capital and operating leases in the financial statements and disclosures made in the footnotes to those statements.

The Auditing and Accounting Information Systems courses typically expose students to internal controls. Instructors should expand their coverage in this area to include the disclosure and certification (Section 302) and attestation (Section 404) requirements of SOX. One suggestion is for students to complete an assignment in which they review the SEC's website and obtain the CEO and CFO certifications for a particular organization (certification). A Section 404 assignment might include providing students with the description of a management process and the controls in place as identified by management. Students would then identify procedures they might perform to independently validate management's controls.

Management – Managers are responsible for managing people and processes. Therefore, management majors clearly need to understand SOX and business processes and controls. While all areas of SOX are applicable to management majors, the sections surrounding corporate responsibility and enhanced financial reporting should be clearly emphasized. For instance, SOX

has placed greater responsibilities on the board of directors of public companies to improve oversight of the organizations. Corporate governance and the role and responsibility of boards of directors are topics covered in the typical management curriculum. Instructors should ensure that SOX is fully integrated in the coverage of corporate governance issues.

In classroom discussion on the role of the board of directors, instructors should emphasize that the audit committee is now directly responsible for the appointment, compensation and oversight of the work of the external auditor under SOX. Also, in discussing corporate governance activities in an organization, management students should complete an assignment similar to accounting students by visiting the SEC's website and obtaining the CEO and CFO certifications for a particular organization (certification). Instructors should then emphasize that corporate executives are now responsible for corporate oversight under SOX and the certification process is one way of demonstrating this responsibility.

Information Systems/Management Information Systems (MIS) – Information systems form the backbone of any business process. A firm cannot be Section 404 compliant unless the underlying information systems are reliable. Instructors therefore need to ensure that SOX is integrated into their course coverage. Potential areas in which SOX could be discussed are the general controls in the data processing environment and the application controls over specific systems, systems design and development (including program and system change management, and interface controls), database management, system recovery and information security. For instance, classroom discussion could focus on controls that exist in system and/or database design to ensure that only authorized personnel have access to certain system functionality.

Finance - The financial function in an organization is responsible for investing excess funds and borrowing from creditors to cover shortages. These activities clearly have an impact on the financial statements and are subject to Section 404 attestation. It is imperative that finance instructors incorporate SOX in their coverage of this subject area. For instance, classroom discussions may include controls that exist in the organization to ensure that investments brought or sold are reported and recorded in the general ledger. The financial profession is also responsible for making sure that related investment transactions are adequately disclosed in the financial statements, including any related footnotes.

Business Law - The legal and regulatory aspect of business is covered as part of a required course for most business majors. Clearly, the failure of an organization to comply with laws and regulations could have a significant financial impact and would be reflected in the general ledger, hence the Section 404 implication. Current business law text includes the role of audit committees, code of ethics disclosures and regulation of CPA firms in its coverage of SOX. Therefore, to integrate SOX into the course, instructors could include a classroom discussion of the above areas and its impact on an organization, as well as the processes and controls that exists in an organization to ensure compliance with applicable laws and regulations.

Economics - Most business students are introduced to this subject through two courses – Macro and Micro Economics. Macroeconomics covers broad economic activities while micro covers economic decisions on a low level such as individual consumers. On the surface, these activities do not appear to directly affect an organization's general ledger, so the assumption then is that SOX coverage is not important. However, environmental issues are topics covered in this discipline. The failure of an organization to comply with such issues could result in fines and penalties that are then reflected in the general ledger, hence the Section 404 implication. Therefore, economics instructors could discuss the processes and controls that an organization has in place to ensure compliance with the environment issues at its various locations as part of their discussion of SOX.

CONCLUSION

This paper presents the authors' views on the necessity for including the Sarbanes Oxley Act into all business disciplines. It also offers an approach that instructors can use to introduce SOX to a wider audience of business students. Clearly, this knowledge will allow students' to be better prepared for the demands of today's work environment. We believe that students entering the job market with this knowledge will have a competitive advantage over their colleagues.

One challenge is to ensure that instructors have the appropriate knowledge of SOX to share with their students. There are a number of resources available for instructors to learn more about SOX and PCAOB. Such resources include (i) the summary and details of SOX on the AICPA's and SEC's websites (www.aicpa.com) and (www.sec.gov), and (ii) the role and responsibilities of the PCAOB's at its website (www.pcaobus.org). By obtaining knowledge of SOX and sharing it with students, instructors will ensure that SOX is truly not just something we wear, but something we teach.

REFERENCES, TABLE 1 AND APPENDIX ARE AVAILABLE UPON REQUEST

INTEGRATING ICT INTO HIGHER EDUCATION: A STUDY OF ONSITE VS ONLINE PROFESSORS' PERCEPTIONS

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ABSTRACT

For the past two decades, information and communication technologies (ICT) have transformed the ways professors teach and students learn. The purpose of this study is to investigate the perceptions of onsite professors (hybrid or blended mode) and of those teaching the same courses on the Internet (online mode). We have conducted structured interviews with 16 professors teaching onsite and online in eight undergraduate and graduate courses offered at the Faculty of Administration of a large Canadian university. The qualitative data analysis was performed following a thematic structure using QSR NVivo. The results emphasize the themes extracted from the onsite and online professors' responses, as well as their interrelation.

INTRODUCTION

For the past two decades information and communication technologies (ICT) have transformed the ways professors teach and students learn. Some professors have actively shifted the information flow from a face-to-face mode (student listening, onsite presence) to an entirely online mode (student reading, onsite non presence); that is, they have designed courses and curricula offered completely online using the Internet and the Web. Others have developed the hybrid or blended mode (a combination of face-to-face and online activities; less student onsite presence, ongoing use of ICT both inside and outside the classroom). Hence, knowledge acquisition and dissemination have been reconceptualized, and new methods developed in order to satisfy the rapidly evolving needs of a population of individuals in search of more knowledge, more and more heterogeneous, in a geographically distributed environment.

In today's global economy, organizations (including universities) who want to survive and strive to stay highly competitive must continually innovate at the human, material, and technological levels. Alavi and Leidner (2001) pointed out that, during the past decade, universities and corporate training facilities have at an increasing rate invested into ICT to improve education and training. Marshall (2002) added that actual classrooms are more and more enriched by technology. Further, Giddens (1999) argued that one of the more important functions of the university is to allow people to play a significant role in today's new economy. Thus, universities, faculties, and professors are currently looking for ways to improve teaching and curricula, as well as develop new modes capable of satisfying the actual and future needs of organizations and societies. Out of their recursive attempts, the four fundamental questions often revisited are the following: (1) What are we teaching? (2) What should we be teaching? (3) What is the best way to teach it (pedagogy)? and (4) What are the impacts on students?

This study aims at helping universities to stay highly competitive in the current global shift in higher education, an approach that is innovative in its exploration of new directions as regards the last two above-mentioned questions related to pedagogy and student impact. Indeed, this study compares the perceptions of professors teaching into technology-rich hybrid or blended learning

environments with those of other professors teaching into online environments, whereas until now the body of research compares different aspects of online environments vs conventional environments (face-to-face without ICT use). Further, an interrelation between onsite and online professors' perceptions is established in order to emphasize similarities and differences.

LITERATURE REVIEW

ICT can act as tools allowing knowledge acquisition, dissemination, and sharing. Since the technology itself is, by definition, continually in a shift of "change", ICT can also help universities to be more innovative, allowing them to stay highly competitive in the current global shift in higher education. It is now evident that ICT can be used to improve quality of courses, curricula, and students' learning. In an outstanding paper on the subject, Kozma and Johnston (1991) unequivocally showed, from a certain number of disciplines and a variety of educational institutions, the role of ICT as a "catalyst" in the qualitative improvement of the learning experience. Palloff and Pratt (2001) indicated that most educational institutions are now using technology in some forms to improve face-to-face courses. Wang and Chen (2003) strengthened Palloff and Pratt's assertion, adding that the benefits of online learning technologies go beyond the courses offered at a distance. According to these authors, when integrated into face-to-face courses, online learning technologies can then transform and extend students' learning experiences by a significant improvement in student/student, student/professor, and student/material interactions. As Marshall (2002) pointed out, technology can improve learning environments by promoting the establishment of links with that which is already known in providing access to new challenges, contexts, and informations. Throughout text, sound, and video, users can virtually experience individuals, places, and things completely inaccessible without technology. These multiple media can create rich environments favoring knowledge acquisition. In short, it is becoming clearer in the last years that ICT allow the establishment of rich networks of interconnections and relations between individuals (Rifkin, 2000). Some authors maintain that technology has the power to change the ways students learn and professors teach (Barker & Taylor, 1993; Barker et al., 1995; Breuleux et al., 1996; Carpenter et al., 1995; Dos Santos et al., 1997; Kozma & Johnston, 1991). Still other authors posit that technology can "revolutionize" the learning process (Bernstein, 1998; Ives & Jarvenpaa, 1996; Schank, 1997; quoted in Yoo et al., 2002, p. 140). In other words, ICT extend professors' and students' capabilities, and their well determined use can transform roles and rules in the classroom (Bracewell et al., 2000; Breuleux et al., 1998; Laferrière et al., 2001; Lamon et al., 1997; quoted in Laferrière, 2002, p. 33). Clearly, this short literature review shows that ICT are now an integral part of the teaching and learning processes in higher education.

METHODOLOGY

Sample and Data Collection

This study has been conducted at the Faculty of Administration of a large Canadian university. The sample was composed of professors of five undergraduate and three graduate courses, which were offered in the two modes taken into account in the study: hybrid mode and online mode. For each course selected, the onsite and online professors were asked to participate in the study. Each course had to meet the four following criteria: (1) to use a similar set of ICT in the two modes (computer, e-mail, chat, discussion forum, Web browser, Internet-based software, videoconferencing system, etc.); (2) to be taught by a different professor in the two modes; (3) to have the same course content in the two modes; and (4) to have, as much as possible, a similar group size in the two modes. In addition, each course was selected so that groups of students in the two modes were the most homogeneous possible in terms of age and ICT experience. And professors

were also relatively homogeneous in terms of age, gender, degree, ICT used, and computer experience. Finally, the course selection was made in order to cover a large area of disciplines offered at the Faculty of Administration of the university chosen for the study. A total of 18 professors were asked to participate in a structured interview. The 18 professors for eight courses were selected because one of the onsite courses was taught by three professors, each of them teaching a third of the semester. From these 18 professors, 16 (nine teaching onsite and seven teaching online) agreed to take part in the study for a response rate of 88.9%.

From time to time during the winter semester, two or three professors were asked by e-mail to participate in a structured interview and to provide us with their schedule. According to their free time, an appointment was set up with each professor in a room of the faculty. Thus, 16 structured interviews were conducted with professors. All of the interviews were conducted using the French language in a relaxed atmosphere by the primary author of the study. The interview duration ranged from 1h15 to 2h35. Each structured interview as such was organized in the following way. First, questions were asked of the professors in order to complete the demographic data section of the structured interview. Then, with regard to the open-ended questions, permission was requested of the professors to record their responses in order to ease the data input and analysis. The professors were then informed that they could express themselves freely given their names would not be revealed in the results of the study, that is, they were ensured complete anonymity. Without any reservation, all of the professors that participated in the study agreed to the recording of their interview.

Data Analysis

The data analysis of the study was made using the Qualitative Solutions & Research NVivo software (QSR NVivo 2.0). We performed thematic analyses on the qualitative data collected from professors; the results are presented on the form of within-case/cross-case matrix as suggested by Miles and Huberman (1994). The results of the analyses are presented and interpreted in the full version of the paper.

CONCLUSION

The purpose of this study was to investigate the perceptions of onsite professors (hybrid or blended mode) and of those teaching the same courses on the Internet (online mode). We have conducted structured interviews with 16 professors teaching onsite and online in eight undergraduate and graduate courses offered at the Faculty of Administration of a large Canadian university. The qualitative data analysis was performed following a thematic structure using QSR NVivo.

Grosso modo, the results are the following: ICT improved professors' teaching and students' learning; professors were satisfied enough with their use of ICT in their teaching; students' onsite presence is again advantageous when using ICT, but according to some conditions, among others, onsite professors must perform and be capable to bring value-added to students in the classroom; ICT use increases the level of autonomy, motivation, participation, and anxiety in students (the level of anxiety can also decrease according to the circumstances in which the student is placed to take the course); professors can use ICT to organize themselves and organize their courses, to promote student/student and student/professor interaction, and to provide prompt feedback to students; and some technical and/or pedagogical formations were offered to professors with regard to the use of ICT in their teaching.

Finally, much more research will be needed as technology-rich environments unfold. Better understanding of their impacts on students, professors, and educational institutions will be required in order to improve them or design new ones still better adapted to higher education students. We will continue to inquire into this exciting innovative field.

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References are available upon request

INTEGRATING ICT INTO HIGHER EDUCATION: A STUDY OF ONSITE VS ONLINE STUDENTS' PERCEPTIONS

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ABSTRACT

For the past two decades, information and communication technologies (ICT) have transformed the ways professors teach and students learn. The purpose of this study is to investigate the perceptions of onsite students (hybrid or blended mode) and of those taking the same courses on the Internet (online mode). To guide the study, a moderator-type theoretical research model was developed, out of which nine hypotheses were formulated. The model was tested in a field experiment. To collect data, we used a multimethod approach, that is, a Web survey involving open- and close-ended questions. The sample was formed of 313 onsite and online students from eight undergraduate and graduate courses offered at the Faculty of Administration of a large Canadian university. The quantitative data analysis was performed using a structural equation modeling software, that is, Partial Least Squares (PLS); the qualitative data were analyzed following a thematic structure using QSR NVivo. In this paper we present a summary of the quantitative results (close-ended questions) supported and enriched by the qualitative results of the students (open-ended questions).

INTRODUCTION

For the past two decades information and communication technologies (ICT) have transformed the ways professors teach and students learn. Some professors have actively shifted the information flow from a face-to-face mode (student listening, onsite presence) to an entirely online mode (student reading, onsite non presence); that is, they have designed courses and curricula offered completely online using the Internet and the Web. Others have developed the hybrid or blended mode (a combination of face-to-face and online activities; less student onsite presence, ongoing use of ICT both inside and outside the classroom). Hence, knowledge acquisition and dissemination have been reconceptualized, and new methods developed in order to satisfy the rapidly evolving needs of a population of individuals in search of more knowledge, more and more heterogeneous, in a geographically distributed environment.

In today's global economy, organizations (including universities) who want to survive and strive to stay highly competitive must continually innovate at the human, material, and technological levels. Alavi and Leidner (2001) pointed out that, during the past decade, universities and corporate training facilities have at an increasing rate invested into ICT to improve education and training. Marshall (2002) added that actual classrooms are more and more enriched by technology. Further, Giddens (1999) argued that one of the more important functions of the university is to allow people to play a significant role in today's new economy. Thus, universities, faculties, and professors are currently looking for ways to improve teaching and curricula, as well as develop new modes capable of satisfying the actual and future needs of organizations and societies. Out of their recursive attempts, the four fundamental questions often revisited are the following: (1) What are we

teaching? (2) What should we be teaching? (3) What is the best way to teach it (pedagogy)? and (4) What are the impacts on students?

The study described in this paper aims at helping universities to stay highly competitive in the current global shift in higher education, an approach that is innovative in its exploration of new directions as regards the last two above-mentioned questions related to pedagogy and student impact. We examine the relation between students' learning outcomes (undergraduate and graduate students) and learning environments integrating ICT. Specific relations between student onsite presence and student online presence are examined as to identify their effect on the basic relation between learning environments and students' learning outcomes. In particular, this study compares onsite technology-rich hybrid or blended learning environments and online learning environments. Moreover, this study brings to the foreground several moderator variables related to students' characteristics (psychology) and professors' pedagogy in order to better understand the relation between learning environments and students' learning outcomes.

Building on the two last questions raised previously, this innovative study focuses on the following three research questions: (1) Are there differences between learning outcomes of onsite students and of those taking the same courses online? If so, which ones? (2) Do student characteristics influence the relation between learning environments and students' learning outcomes, and are there differences in this influence between onsite and online students? If so, which ones? and (3) Does professors' pedagogy influence the relation between learning environments and students' learning outcomes, and are there differences in this influence between onsite and online students? If so, which ones?

THEORETICAL BACKGROUND

This study is theoretically-based on Leidner and Jarvenpaa's, and Phipps and Merisotis' key research works. On the basis of three case studies, Leidner and Jarvenpaa (1993) developed a theoretical research model for other researchers to test in future studies. And, in a literature review, Leidner and Jarvenpaa (1995) inventoried numerous educational variables to be examined in future studies according to different scenarios using ICT. Several of the variables suggested by these authors are used in this study.

In their literature review on distance learning effectiveness in the 1990's, Phipps and Merisotis (1999) pointed out that the studies that compared the distance ICT-based learning environments with the conventional learning environments (face-to-face without ICT use) fall into three categories: (1) students' results (performance); (2) students' attitude toward learning in these two types of environments; and (3) students' general satisfaction. We use these three categories as dependent variables in this study.

Of the 8,110 papers over a period of 15 years that were published in the journals and reviews examined, Chin et al. (2003) found only 74 that contained moderator variables. Moreover, several IS dominant theories (e.g., Davis' 1989 Technology Acceptance Model (TAM) and Doll and Torkzadeh's 1991 user participation/involvement model; quoted in Chin et al., 2003, p. 192) as well as the streams of research that have extended these models (e.g., Carswell & Venkatesh, 2002; Davis & Venkatesh, 2004; Hartwick & Barki, 1994; Venkatesh & Davis, 2000; Venkatesh & Speier, 1999; Venkatesh & Speier, 2000; Venkatesh & Johnson, 2002; and Venkatesh et al., 2003) suggest that moderator variables are an important avenue of future development. Furthermore, numerous researchers within the IS field have suggested that models using moderator variables be tested (Anderson, 1985; Doll & Torkzadeh, 1989; Ives & Olson, 1984; McKeen et al., 1994; Sambamurthy & Zmud, 1999; Tait & Vessey, 1988; quoted in Chin et al., 2003, p. 192) as have researchers in other fields (Chin et al., 2003). Hence, most of the variables identified by Leidner and Jarvenpaa (1993, 1995) are used as moderator variables in this study. The resulting theoretical research model is shown in Figure 1.

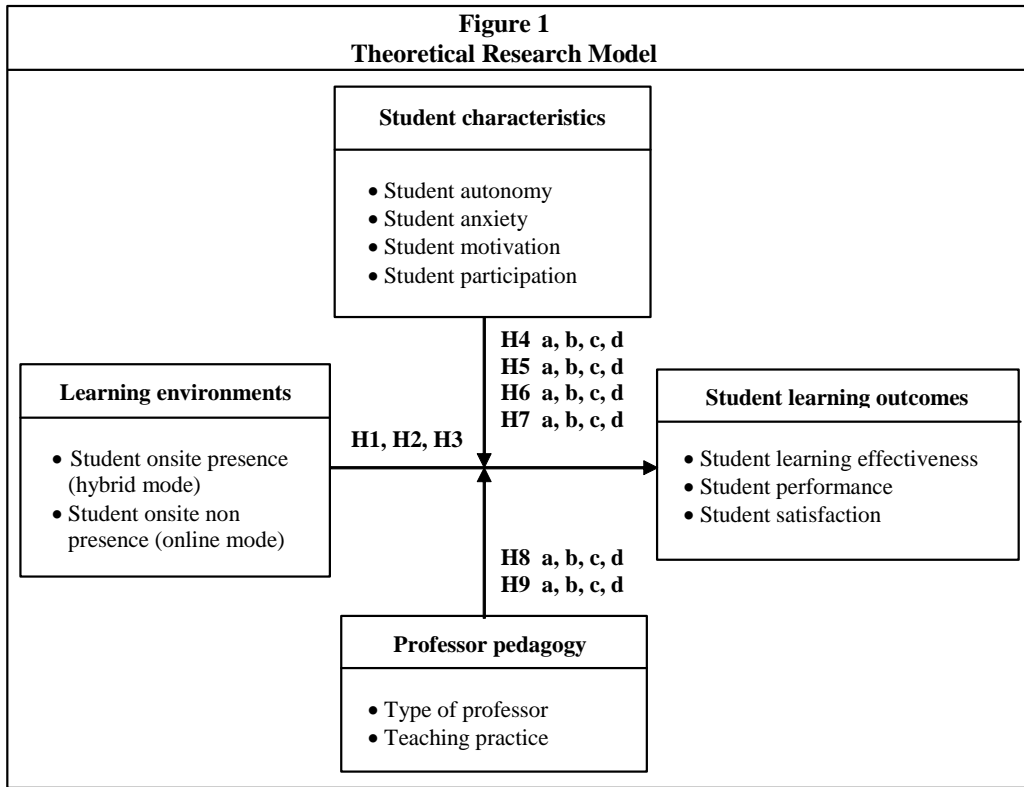


Figure 1 shows that the theoretical research model that guide the study is articulated around an independent construct, learning environments, a dependent construct, student learning outcomes, as well as two moderator constructs, student characteristics and professor pedagogy. The constructs and their variables are defined, and the research hypotheses are formulated in the full version of the paper.

METHODOLOGY

Sample and Data Collection

The theoretical research model depicted in Figure 1 was tested in a field experiment at the Faculty of Administration of a large Canadian university. The sample was composed of students of five undergraduate and three graduate courses, which were offered at the same university in the two modes taken into account in this study: hybrid mode and online mode. Students were not randomly assigned, that is, for each course selected, the students were asked to participate in the study. The study was spread over two semesters, fall and winter, and in each semester four courses were studied. Each course had to meet the four following criteria: (1) to use a similar set of ICT in the two modes; (2) to be taught by a different professor in the two modes; (3) to have the same course content in the two modes; and (4) to have, as much as possible, a similar group size in the two modes. In addition, each course was selected so that groups of students in the two modes were the most homogeneous possible in terms of age and ICT experience. Finally, the course selection was made in order to cover a large area of disciplines offered at the Faculty of Administration of the university chosen for the study. Thus, the sample of the study consisted of 841 students, 438 (242

in fall and 196 in winter) in hybrid mode courses and 403 (198 in fall and 205 in winter) in online mode courses.

Three weeks before the end of each semester of the data collection, students were asked to fill out an electronic survey on a Web site. To that end, an e-mail, including a URL and a password allowing access to the electronic survey, was sent to students. As follow up, ten days after the students had been asked to fill out the survey on the Web site, an e-mail was sent to students relating the importance of filling out the electronic survey for the advancement of scientific knowledge on integration of ICT into higher education. Finally, a few days later, all professors were asked to relay the importance of the study to students during class or in the discussion forums of the online courses. In the fall semester, 174 students (113, hybrid mode; 61, online mode) out of 440 completed the electronic survey for a response rate of 40%; in the winter semester, 139 students (70, hybrid mode; 69, online mode) out of 401 completed the electronic survey for a response rate of 35%. Overall, 313 students (183, hybrid mode; 130, online mode) out of 841 completed the electronic survey on the Web site for a global response rate of 37%. And, of these 313 students, 262 (156, hybrid mode; 106, online mode) completed the qualitative section (open-ended questions) of the Web survey for a response rate of 84%.

Data Analysis

The quantitative data analysis was performed using a structural equation modeling software, that is, Partial Least Squares (PLS-Graph 3.0). To ensure the stability of each model developed in order to test the research hypotheses, we used the PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial sample (313 students). Some analyses were also performed using the Statistical Package for the Social Sciences software (SPSS 11.5). As for the qualitative data analysis, it was carried out using the Qualitative Solutions & Research NVivo software (QSR NVivo 2.0). We performed thematic analyses on the qualitative data of students; the results are presented on the form of within-case/cross-case matrix as suggested by Miles and Huberman (1994). The results of the analyses are presented and interpreted in the full version of the paper.

CONCLUSION

The purpose of this study was to investigate the perceptions of onsite students (hybrid or blended mode) and of those taking the same courses on the Internet (online mode). To guide the study, a moderator-type theoretical research model was developed, out of which nine hypotheses were formulated. The model was tested in a field experiment. To collect data, we used a multimethod approach, that is, a Web survey involving open- and close-ended questions. The sample was formed of 313 onsite and online students from eight undergraduate and graduate courses offered at the Faculty of Administration of a large Canadian university. The quantitative data analysis was performed using a structural equation modeling software, that is, PLS; the qualitative data were analyzed following a thematic structure using QSR NVivo.

The results indicate that onsite students have not found learning more effective than their peers taking the same courses online. Onsite students performed better than those online. Online students were more satisfied than onsite students. As regards to students' characteristics, students' autonomy had an influence on the relation between learning environments (hybrid mode and online mode) and the effectiveness of their learning, and this influence was more pronounced for online students. Students' anxiety and motivation had an influence on the relation between learning environments and their performance, and this influence was more pronounced for onsite students. And students' participation had an influence on the relation between learning environments and the effectiveness of their learning, their performance, and their satisfaction, and this influence was more pronounced for onsite students.

As for the qualitative results, grosso modo, they are the following: the elements the most appreciated by students were professor and course usefulness; the elements that the students suggested to improve are professor and presentation of the material; students' onsite presence is again advantageous when using ICT as it allows a better understanding of the material and promotes student/student and student/professor interaction; ICT use at the university increases the level of autonomy and motivation in students, and students' characteristics (autonomy, anxiety, motivation, and participation) have an influence on their learning outcomes; and when using ICT at the university, professors must be dynamic to keep students' interest, make a good use of ICT to bring motivation to students, use active learning techniques, and be there for students.

Finally, much more research will be needed as technology-rich environments unfold. Better understanding of their impacts on students, professors, and educational institutions will be required in order to improve them or design new ones still better adapted to higher education students. We will continue to inquire into this exciting innovative field.

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References are available upon request.

COURSE EMBEDDED ASSESSMENT AND ASSURANCE OF LEARNING: EXAMPLES IN BUSINESS DISCIPLINES

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ABSTRACT

Accrediting bodies, including AACSB, have aggressive standards that require universities to assess student learning. Many institutions initially responded by developing multiple measure plans that assess general satisfaction of instruction within a major, student performance on a nationally normed business knowledge exams, and curriculum content and coverage through the use of focus or stakeholder groups. Unfortunately, these multiple measure plans do not adequately assess student learning goals specific to the university's program, nor do they provide direct information that would help a faculty member improve student learning in his or her course. Because of these drawbacks, many universities are now turning to Course Embedded Assessment (CEA) as their primary method to assess student learning. AACSB standards specifically identify course-embedded measurement of student learning as one of three approaches that can be used to achieve their Assurance of Learning Standards. This paper describes the Course-Embedded Assessment process and provides examples of how it can be used to assess student learning in business disciplines. It will be particularly useful for universities applying for initial accreditation, or for universities engaged in the reaccreditation process.

CONTEXTUAL LEARNING MAY BE A BETTER TEACHING MODEL: A CASE FOR HIGHER ORDER LEARNING AND TRANSFER

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INTRODUCTION

Modern teaching methods in management education suggest that active learning is better. Contemporary education begins with knowledge as the foundation and the substantive part of learning occurs in the transfer of learning to applications and to new situations. The ideal learning outcome is for the students to learn the applications of their knowledge learning. Contrast this with educational practices of a more traditional perspective of management education that view education in more passive ways. Teaching is telling; learning is acquiring facts; learning is teacher-centered and the classroom is hierarchical with the teacher at the top (Bilimoria, 1995). Students do not learn the applications of knowledge.

Porter and McKibbin (1988) challenged management educators to focus on improving students' problem solving, decision making, management and leadership skills by promoting the use of complex, uncertain and ambiguous learning environments.

A new teaching model is needed to prepare a different type of graduate, a graduate who can operate independently, work within a group situation, solve problems, and make group decisions. This paper presents an active, contextual learning model that places the student in an active role of applying and using subject matter. It asks students to translate abstract concepts into concrete applications while they work on semester-long authentic approximations of real time workplace context assignments.

Students work in teams collaborating with each other attempting to complete the team projects. They are involved in joint problem solving, group planning, group discussions and other types of collaborative learning activities. The learning activities require social interaction and as such, a social system develops. The social system creates another contextual learning opportunity; that is, a *social-based learning context*. There are *two contexts*: one is the collaborative Team Project's assignment that simulates a *work assignment context* and the other one is the *social-based learning context* of the group as they work on their Team Project. The purpose of this type of learning model is to provide an environment for applications-based learning. The student will transfer their knowledge learning to applications.

The *traditional learning* model is one in which the student is the passive recipient: the professor in the front of the classroom conveys the factual knowledge and the student receives it. One study reported short retention rates for traditional teaching methods as low as 30% for "hearing" and 10% for "reading" (Cognitive Science, 1989). Research on the *transfer of passive learning to other contexts* is full of reports on failure (Marini & Genereaux, 1995). We can draw inferences and some conclusions from the work of Spiro, Bispoel, Schmitz, Samarapungavan, & Boerger, (1987). Students experience an education that is segmented into subject matter content, taught without reality contexts to ground it and without guidance to inter-relate the segments. Students experiencing such an education will have extreme difficulties transferring their learning to applications. They will have difficulties in transferring it into new situations.

Contextual learning conditions require students to learn in dynamic environments that simulate the reality of the work place. They learn by doing. It facilitates understanding, retention, recall as well as two key types of learning transfer (applications and use in new situations).

The students learn in collaborative processes within a *social-based learning context* that the students produce as they begin to approach the Team Project. This social-based learning context also becomes the location for a *behavioral laboratory* for trying out new behaviors in leadership and team building. The results from previous research on this *behavioral laboratory* found that students achieve *behavioral learning of effective team building behaviors and leading behaviors* when the members feel comfortable and can experiment with new behaviors, receive peer feedback and use the peer feedback to change and eventually improve their leadership and team building behaviors (Miller, 2006).

The *social-based learning context* and the *behavioral laboratory* are framed as distinct concepts/entities. The learning is active, *socially* engaging others and mostly *behavioral*: they collaborate, share information, discuss issues, identify problems, locate useful subject matter content, make team decisions, turn knowledge into reality, find applications for concepts, improve social skills, try out leadership skills and try team building skills.

Transfer of learning is a complex process; otherwise, it wouldn't continue to haunt researchers throughout modern history (Pedersen and Liu, 2002-2003). There are several types of learning transfer: the types of interest and examined in this research are 1) transferring previous learning to applications and 2) transferring learning to new situations.

Active learning demands "mindfulness from the student which is a prerequisite for learning and for *learning to transfer*," (Pedersen and Liu, 2002-2003, p. 304). Because active learning occurs within a context and has a requirement that the student is aware of his/her process of solving problems, the learning is linked and associated with the transfer of learning to new situations.

This paper presents research that compares the results of student learning in two conditions: one is in traditional learning (lecture and discussion) and the other is in active, contextual learning (collaborative learning on authentic work assignment context in a social-based learning context).

METHOD

Sample and Statistics in the study are described: two groups of demographically similar undergraduate students enrolled in organizational behavior courses were the two sample groups and the differences were measured by comparing the mean scores of each variable. A two-tailed t-test for independent sample means at the .05 level of significance was calculated. Correlations between the variables were examined for relationships between the variables. The primary focus of the study was to measure and compare student learning in performance and transfer of learning between the students in the two learning conditions; i.e., *active, contextual learning* and *passive, traditional learning*. The differences between the two conditions of learning in the use of two learning strategies were measured and compared.

In the active contextual learning condition, students were in teams working on their Team Projects using collaborative learning, experimenting with new leadership and team building behaviors in the behavioral laboratory. The teacher facilitated collaborative learning, fostered the *behavioral laboratory*, trained and coached the students in leadership and team building. The contextual learning teacher rarely lectured. In the *passive, traditional learning condition*, students were also in teams completing semester-long authentic Team Projects. The students were encouraged to work together as much as possible; however, the class was taught primarily using a traditional teaching method of the lecture with some class discussion. This teacher also provided training in leadership and team building. This teacher encouraged but did not facilitate collaboration, building of the teams nor learning how to lead. This teacher did not assist in developing the social-based learning context and did not facilitate the behavioral laboratory.

The students in both conditions learned about self-managed work teams (Fisher, 1993), behaviors to observe within their teams (Schein, 1982) and the characteristics of effective teams (Cohen & Bailey, 1997). Much of the factual learning about teams came from supplementary

materials and some of the behavioral learning was acquired through a process of modeling based on social learning theory (Bandura, 1977).

Variables and Hypotheses

The *Examination Scores*, *Reflection* (a learning strategy), *Linking of Experience to Subject Matter* (another learning strategy), the deliverable for the *Semester Project* (a measure of learning transfer to applications) was a Market Plan/Business Plan and three measures of *Transfer of Learning* to new situations were the variables in the study. The Hypotheses were the following: a) the measure of knowledge learning (exam scores) would be higher, b) transfer to applications (Team Project's deliverable) would be higher, c) learning strategies (reflection and subject matter linking) would be higher and d) the transfer of learning to new situations would be higher in active contextual learning condition compared to traditional learning condition.

RESULTS

As hypothesized all of the variables are significantly higher in active contextual learning conditions. This indicates that active learning results in higher learning, higher levels of *transfer to applications*, higher use of the *two learning strategies* and higher *transfer of learning to new situations*. The students in active learning achieve higher examination scores and submit Marketing Plans indicating superb applications of concepts. The students seemed to utilize both learning strategies and their use promotes a deeper understanding of the knowledge/concepts and also promotes transfer of learning to applications as well as transfer to new situations.

In the active contextual condition, the significant correlations between the variables in the study demonstrate a pattern of relationships that support the chain of learning events described above. While attempting to conceptualize the pattern of relationships, two variables stand out; i.e., *Experience Link/Subject Matter* and *Reflection*. Both of these are *learning strategies* and both involve *reflective writing*; however, each one involves a markedly different focus in the writing. Their significant correlations to other variables may suggest future research directions to pursue. These two are not related to each other. Both are related to the Team Project as would be expected because the topic-source for writing in the journal was the Team Project. Each one impacts the Team Project in a slightly different way due to the focus of the writing into the journal.

Experience Link/Subject Matter was significantly related to Exam scores as would be expected. *Experience Link/Subject Matter* is writing that connects knowledge/concepts to experiences so that the student can 1) more fully understand the experiences and 2) the experiences provide concrete examples to illustrate the abstract knowledge/concepts. It impacts the Team Project by giving the concepts more vivid concreteness and the principle of learning reinforcement is working here also.

Reflection is *reflective writing* that is guided and directed by specific behavioral learning objectives: the purpose of reflection is to generate increasingly complex descriptions of the learning experiences within team's social-context. The student perceives more of the current learning context; therefore, the student will perceive more in future learning contexts. In terms of the theory of transfer of learning, the student will see more cues in the new situation that will prompt the use of old learning. Active learning is based on educational constructivism (Savery & Duffy, 1995). *Reflection* is related to the *Team Project's* deliverable, Market Plan/Business Plan, and two *Transfer of Learning* variables, *Task* and *Goal*. It would impact the Team Project by giving it more depth and complexity. It probably impacts the *Transfer of Learning* by the principle of learning reinforcement and reinforcement of the complexity which helps the students perceive the complexity in the new situation.

DISCUSSION

The relationships between knowledge learning, context of learning (while completing the project) and the Project's deliverable Marketing Plan/Business Plan (applications) may be moderated by the learning strategies of *Reflection* and *Experience Link/Subject Matter*. This study suggests that these relationships are moderated by learning strategies. Since there wasn't an attempt to differentiate between the characteristics of the *social-based learning context* of the Project and the Project's deliverable itself, moderated regression analyses was not possible. This suggests future research directions to pursue. The *social-based learning context* and the *Behavioral Laboratory* should be included and measured in future research.

CONCLUSION

What was important from the present research is that active, contextual learning is superior to traditional learning in knowledge learning, applications and the transfer of learning to new situations. Interestingly, results show that specific purposeful, goal-directed journal writing facilitates learning. It facilitates subject matter learning, higher order learning of applications and transfer of learning to new situations. The present findings show there is more involved than merely reflective writing. The secondary benefits observed in active contextual learning are the following: more depth of understanding of concepts, independent learners, more responsible learners, more ability to deal with ambiguity, demonstrated behavioral skills of problem solving and decision making, risk-taking, initiative taking, demonstrated leadership behaviors and team building behaviors.

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USING GAMES AND CLICKERS TO ENCOURAGE STUDENTS TO STUDY AND PARTICIPATE

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ABSTRACT

The Net Generation has grown up being entertained and educated through fast-paced media that can make traditional lectures seem dull. However, learning games and "clickers" can help instructors meet their pedagogical objectives while engaging students in active learning. This study examines students' perceptions of games and clickers based on their self-reported study habits. It is determined that even some students who "never" study their notes before class would study for a game, while the majority of students, regardless of study habits, would be more likely to participate if clickers were used.

INTRODUCTION

Learning games provide an effective way to teach Millennials (those born in the 1980s or later) because they create an interactive learning experience in which students are active players who know immediately how they are doing (Prensky, 2001; Sugar & Takacs, 1999). This study analyzes students' motivation to study to be better prepared to play a learning game, their willingness to participate when using clickers (electronic response devices), and their normal study habits. The results show that those who study "sometimes" or "always" are more likely to study for a game, and even some students who "never" study their notes before class report that they would study for a game. The majority of students reported that they would be more likely to participate in class if clickers were used. The following section reviews the literature on learning games and clickers, with the methodology and results of this study then presented.

LEARNING GAMES

Games create an interactive learning experience by creating learning episodes in which the learners are active participants, and can reinforce critical information while avoiding rote practice (Dewey, 1994; Doyle, 2001; Rotter, 2004; Ruben, 1999; Sugar & Takacs, 1999). By making learning fun, negative anxiety, especially pertaining to an upcoming test, can be turned into more positively-charged excitement (Blake & Goodman, 1999; Revere, 2004). Play (fun) can even activate different parts of the brain and help improve learning (Bekoff & Byers, 1998).

One issue with learning games is that they can result in apparent confusion and an increased noise level (Cruickshank & Telfer, 1980, Robinson & Ritzko, 2006). Indeed, it seems to be "the nature of the beast" that the noise level in a class increases as students interact with teammates and compete with each other during the game. An important factor in minimizing noise is minimizing "down time" (Ritzko & Robinson, 2006). Students are more likely to engage in private conversations during the times in which they are not actively involved in answering a question or otherwise participating in the game. Therefore, the key to reducing noise is decreasing the time during which only one or a few students are involved in answering a question. The use of clickers is one way to allow all students to actively participate more often and reduce down time.

CLICKERS

Clickers, the common name for student response systems (also called personal or audience response systems), are small electronic devices approximately the size of a half deck of playing cards. In response to questions shown through presentation software such as PowerPoint, students press buttons on the clickers, sending signals to a receiver, which tabulates and graphically displays the results. Although clickers are not always used to play games per se, the activity of using the clickers is often perceived as fun.

Anonymity is one feature of the clicker system that may help to increase participation. Students' answers are displayed in an aggregated form, providing privacy for respondents. This encourages shy or self-conscious students to participate, especially when discussing personal or controversial issues (Chickering & Ehrmann, 1996; Davis, 2003; Draper & Brown, 2004). Increased participation would likely lead to increased engagement and learning and could be a reason why El-Rady (2006), who also reported higher attendance rates, associated clicker use with increased student retention of course material.

However, the use of technology to make class more engaging is not whole-heartedly embraced by everyone because of frustrations with the technology or general objections to the increased use of technology in classes (Hatch, Jensen & Moore, 2005; Okan, 2003). Carlson (2005, p. 37) quoted a Millennial student who stated that "technology is a 'hook' for people who aren't going to study anyway." Although it has been shown in some studies (El-Rady, 2006; Robinson & Ritzko, 2006) that the use of clickers, and learning games in general, increase students' motivation to study for class and to participate more during class (which could lead to more active learning and better retention of material), the question of which students benefit most is a valid one. To explore this issue further and attempt to answer this question, this study analyzes students' responses to clickers and learning games based on their self-reported study habits of students. In the following section, the methodology of this study is presented, followed by the results and analysis.

METHODOLOGY, RESULTS AND ANALYSIS

Based on the concept that Net Generation students would appreciate greater interactivity, review games that involved the use of clickers were created. The clickers were also used when new material was presented and opinion-based questions were asked during the lecture. Students indicated their answers by choosing from a multiple-choice list, and pressing the appropriate keys on the clickers. The entire class could then see the proportion of the class that chose each answer. Review games such as Jeopardy were also played, using the system's "first responder" capability that indicated the first team to "buzz in" to answer a question.

Students in seven sections of business classes at a small campus of a large public university in the northeast United States were included in this study. Respondents ranged from freshmen to seniors, and were mostly of traditional college age. Although some students were in more than one class, their responses were included only once. Of the 120 unique respondents surveyed, 49 (41%) were women. The survey itself was conducted through the use of the clickers or paper surveys.

Students were asked to indicate how often they reviewed their notes before class, how motivated they would be to study for an in-class game, and whether they would participate more in class if clickers were used. After the data were collected, two answer categories to the notes review question were collapsed, with "1-5 times per semester" and "Couple of times per month" merged into "Sometimes", and "Once per week" and "Every class" merged into "Always" resulting in 29 students in the "never" category, 55 in the "sometimes" category, and 36 in the "always" category. Students were also asked how often they read their textbooks, but responses were virtually the same. Therefore, only the question regarding notes was used for this study. The frequencies for each response are shown in Tables 1 and 2.

| Motivation | Frequency of Notes Review | | |
|----------------|---------------------------|-----------|--------|
| | Never | Sometimes | Always |
| No, not at all | 44.8% | 20.0% | 13.9% |
| Somewhat | 38.3% | 47.3% | 41.7% |
| Yes | 6.9% | 32.7% | 44.4% |

| Response | Frequency of notes review | | |
|-------------------------------------|---------------------------|-----------|--------|
| | Never | Sometimes | Always |
| No, already participate fully | 6.9% | 10.9% | 11.1 |
| No, won't participate unless forced | 6.9% | 9.1% | 16.7% |
| Probably yes | 48.3% | 41.8% | 30.6% |
| Absolutely yes | 37.9% | 38.2% | 41.7% |

The results of this study are encouraging in that even some students who stated that they never study for class would be motivated to study for a game, despite the 44.8% who would still not study. Among those who already study frequently, 86.1% would be at least somewhat motivated to study for a game. This proportion drops to 80.0% among those who sometimes study, and 45.2% among those who never study. These findings are not surprising as it seems reasonable that those who already study frequently would be the most likely to become motivated to study more.

In regard to increased participation, the majority of students indicated that they would probably or absolutely be more likely to participate in class when clickers are used. It is important and encouraging to note that the highest percentage of people who would participate more is found amongst those who never study (86.2%), with a similar percentage (80.0%) among those who sometimes study. Among those who always study, 72.3% are likely to participate more if clickers are used. Therefore, the lowest increase in participation would be expected among those who study the most, but even in this group, almost three-quarters of the students would participate more. Interestingly, the highest proportions of students who state that they won't participate unless forced are found in the category of "always" study. Overall, these results clearly indicate that the use of clickers would be likely to increase participation among most of the students, even those who never study.

DISCUSSION AND CONCLUSION

These results show that games can also motivate many students--even those who do not normally study for class--to study for games. Millennial students are highly motivated by competition, even when the only prize is the glory of being proclaimed winners (Ritzko & Robinson, 2006). The competition level that is involved in some types of learning games, such as Jeopardy, stimulates an interest that may not be achievable with other teaching methods, especially among men, who tend to enjoy competitive activities. This competition may be linked to another important

factor to students--fun. Together, these factors could lead to the motivation to study for a review game. It is significant that approximately half of the students who never review their notes--potentially the most difficult students to motivate--would be at least somewhat motivated to study for a game and participate in class. However, the greatest gains are likely to be seen among those who sometimes study, and are motivated to study more with the encouragement of a game.

Students who have grown up being entertained present particular challenges to teachers. This study has shown that clickers can be used to create a more learner-friendly environment for Millennials. If students accurately reported their future behaviors, participation should increase with the use of clickers in the classroom. It was expected that those who never study would also be the least likely to participate (unless forced). On the contrary, those who always study were more likely to refuse to participate. One limitation of this study is that it does not take different learning styles into account. Some students may learn better by reviewing notes they have taken while sitting quietly in class, while others may benefit more from socially participating in class rather than reviewing notes individually. Indeed, it is because of differences in learning styles that various methods should be used in class in order to reach out to all students. Future research should continue to investigate the use of games and clickers, especially in regard to related changes in student behaviors.

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WEEKLY TRAINING EVENT: INNOVATIVE APPROACH TO ADVANCED-LEVEL SELF-STUDY OF FOREIGN LANGUAGES

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ABSTRACT

This article presents a pioneering program in advanced online language and area studies created by the Defense Language Institute Foreign Language Center. Weekly Training Event (WTE) is the first in the world fully automated system of teaching productive skills (including speaking, translation, and interpreting) at higher levels (ILR 2+/3). The WTE has created a new sample-based concept of automated feedback to develop self-contained, computer-delivered (CD-based or online) language lessons for independent post-basic learners. By offering a variety of feedback forms, stimulating reflective thinking, and facilitating self-evaluation, we are creating a new type of learner-the expert learner.

INTRODUCTION

Electronic communication and artificial intelligence have created an unprecedented explosion of information. Thus the ability to evaluate and interpret information is ever more critical in every field of analysis, from financial forecasting to military intelligence. Despite rapid advances in technology, recent history has proven time and again that "human intelligence"-intelligence gleaned from verbal or written communication-remains the most valuable form of information. Intelligence, therefore, is fundamentally language. This means that the more fluent our linguists and analysts are in their respective foreign languages-and, by extension, cultures-the better we can understand and forecast international events in an age of increasing globalization, complexity and uncertainty.

This proposal presents a pioneering program in advanced online language and area studies. Tens of thousands of military and government personnel-many of them graduates of the Defense Language Institute Foreign Language Center (DLIFLC)-need continual training to maintain and improve their language proficiency. This proposal summarizes the unique environments, needs and challenges of these linguists, and the creative solutions developed to assist and inspire them. It is a computer-assisted (CD- or web-delivered) curriculum for intermediate and advanced levels (2, 2+, 3). Students use these online lessons to improve productive skills (speaking and writing) and practice professional Final Learning Objectives (e.g. the Final Learning Objectives of transcription, summarizing, interpreting and translating) in self-instructional settings.

STUDENTS AND MISUSE OF CREDIT

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ABSTRACT

A recent article in the Wall Street Journal declared that over half of the college students surveyed in a new study have at least one credit card (July 18, 2006). Credit cards are easy to obtain, and this is one reason so many students have credit cards in their own names. Furthermore, as credit card use and subsequent debt soared in the 1980s, most of today's college students were growing up, watching their parents' frequent use and abuse of credit cards. Students at 14 colleges in three states from randomly selected classes were asked to complete a survey pertaining to their use of credit cards. Three of the schools were in Arkansas, five in California, and five in Ohio with a total of 4,469 participants from 58 different classes. A regression analysis was conducted to determine which of the following dependent variables were significant at the .01 level of testing: gender, age, major, GPA, marital status, number of credit cards, amount of student loans, employment, hours worked each week plus 18 other criteria. The Independent Y variable was the response to the question "Do you consider your debt out of control?"

INTRODUCTION

According to a recent article in the *Wall Street Journal*, over half of the college students surveyed in a new study have at least one credit card (July 18, 2006). Mark Dolliver (2003) reports that two-thirds of all students have at least one credit card. And a 2004 study by Nellie Mae, a well-known lender of student loans, found that 76% of undergraduate students have at least one credit card (Undergraduate, 2005).

No doubt about it: Credit cards are easy to obtain, and this is one reason so many students have credit cards in their own names. Furthermore, as credit card use and subsequent debt soared in the 1980s, most of today's college students were growing up, watching their parents use credit cards, often on a daily basis, to purchase everything from back-to-school clothing to dinners out. Perhaps this lifestyle influenced these children so that as they grew up and entered college, they continued the family tradition of buying now and paying later (Braunsberger, Lucas, & Roach, 2005).

Credit cards can offer many conveniences for today's students. Some of these conveniences include, for example, an easy method of paying tuition and buying textbooks if the student's financial aid arrives later than the student anticipated. In fact, the *Wall Street Journal* article (July 18, 2006) reports that about 25% of the students with credit cards have used their cards to pay tuition. Of course, students might also use a credit card to purchase other necessities (e.g., gasoline, food, clothing) while waiting, perhaps, for their paychecks. Thus, credit cards can often provide much convenience and usefulness for today's students while allowing them to remain in college.

Unfortunately, the convenience and usefulness of credit cards also bring potential dangers for the students if the students do not pay their credit card balances in full each month. For example, Jacqueline King, Director of the American Council on Education Policy Center, discusses students who use their credit cards to pay tuition. According to King, credit cards can be a very convenient method of paying tuition if the students pay their balance in full each month. However, King points out, for those students who pay tuition with a credit card and carry the balance each month, there

are other, much less expensive forms of credit the students could be using to pay for their tuition (Weisbaum, 2006). Apparently many students are using this high-cost form of credit according to a study by the American Council on Education, which found that 55% of the students who are paying their tuition with credit cards do indeed carry a balance (WSJ, July 18, 2006).

Depending on the sources reviewed, the use of credit cards among college students as well as the balances they carry may have declined slightly or continue to be on the rise. The latter appears to be the consensus. However, what is not disputed is that too many college students who are using credit cards do not understand the real costs involved. Bianco and Bosco (2002) write "students accept the credit card's easy access to cash and merchandise, but then seem unable to interpret statements and/or make payments on these credit cards" (p.45). As Waggoner (2005) points out, students are often "cash poor and susceptible to the promise of ready-to-use credit" (1).

THE STUDY

The purpose of this study was to determine the status of student and credit card use. The results would help develop recommendations for faculty and staff who wish to help educate students about appropriate credit card use as well as the dangers involved with misuse of the cards.

Participants

Students at twelve AACSB-accredited schools of business and two non-AACSB schools in three states from randomly selected classes were asked to complete a survey pertaining to their use of credit cards. Schools participating in the survey ranged from Henderson State University, with fewer than 4,000 students enrolled, in Arkadelphia, Arkansas, to Ohio State University with almost 60,000 students and one of the largest enrollments in the USA. The universities surveyed in Arkansas included Henderson State University, the University of Arkansas at Little Rock, and Arkansas State University. Of these three schools, 768 students in 39 classes were surveyed.

The five California schools included Allan Hancock Community College, Cal Poly San Luis Obispo, Chico State, and UCLA. At these California schools, a total of 1,376 students in 17 classes were surveyed. In Ohio, five schools were surveyed: Ohio State, The Ohio University-Athens, Cleveland State, Miami University, and the University of Akron. The Ohio students totaled 2,304 from 15 classes.

The cover letter on the survey clearly told the students that the survey was voluntary and anonymous and also gave information about how to contact the IRB board, which had approved an exempt status for the survey as it pertained to human subjects. A total of 4,469 surveys were completed. Demographically, the students surveyed included 19.4% freshmen, 18.66% sophomores, 22.25% juniors, and 27.11% seniors and 12.58% Graduate students. We also surveyed 123 non-students in the same age group 19-25 as a control group. A regression analysis was conducted to determine which of the following dependent variables were significant at the .01 level of testing: gender, age, major, GPA, marital status, number of credit cards owned, amount of student loans, employment, hours worked each week plus 18 other criteria. The Independent Y variable was the response to the question "Do you consider your debt out of control?"

Using a Likert scale for eight questions, the students were asked to indicate their level of agreement with selected questions. On other questions, the students were asked simple Yes or No questions (e.g., if they carried a balance on their credit cards), which were treated as two response dummy variables. Some were open-ended questions such as the amount of any credit card balance they might have accrued.

RESULTS

The criteria which were not significant at the .01 level were gender, GPA, and major. Evidently in this study, these factors did not seem to be related to the number of credit cards the students owned or the credit problems the students reported having. However, credit card ownership seems to spell problems for the students surveyed. Of the students who reported not owning any credit cards, only 1.02% of them also reported having serious debt problems, while 18.89% of students with four or more cards reported having serious debt problems. This statistic was significant at the .01 level of testing and seemed to indicate that the more credit cards the students own, the more likely they were to report serious debt problems.

Classification in school was also significant. For example, as shown in Table 1, freshmen had a relatively high average ownership of credit cards with an average of 1.46 cards per student. Sophomores, though, had a smaller average of 1.17 and a reported slightly less debt problem. However, as students continued in college, their debt and number of credit cards held increased significantly, up to an average of 3.04 cards per graduate student. The study does not reveal the causes for the difference in ownership depending on the students' classifications. Perhaps credit difficulties during their freshmen year caused some students to reevaluate their use of credit during the sophomore year while other circumstances may led the students to obtaining more credit cards in subsequent years. Interestingly, lowest use of credit cards and credit problems was among the control group, who did not have any college background. While the study does not reveal the reasons for this, it could be that the expectation of a higher salary after graduation among college students caused them to over use credit more than the control group. Another possibility is that the college students had more debt and less money from employment since they were in school.

In our survey, 25.39% of all subjects had at least one credit card, which is line with other research. Even more serious is the fact that 35% of all students carried two or more cards. As indicated in Table 1, there was, however, a significant difference among students in the three states. Students in Arkansas had a significantly lower ownership rate with an average of 1.03 cards per student. Ohio students average 2.04 cards per student, and California 1.83 cards each. Arkansas students were less likely to note significant credit problems at 7.12% as compared to the other two state of Ohio with 14.36% and California at 15.09%. It also should be noted that students in Ohio and California were likely to have twice as much tuition debt as Arkansas Students. Obviously, this could be the result of higher priced tuition in those states. Arkansas Tuition [average of the schools \$5,890] was significantly lower than Ohio [average \$18,523 per year] or California [average \$16,274 per year]. Increasing tuition can be one reason students might begin to abuse credit. The high and growing price of education is a significant factor in rising debt among students.

Students with significant student loans were also more likely to report problems with credit, and they also had an average of 2.79 cards as compared to students without tuition debt who only had 1.14 cards per person. They were also more likely by 3 to 1 to pay the minimum interest payment each month.

CONCLUSIONS

The results from our survey indicate that in each year of college, except for the sophomore year, students attain more credit cards in their names. Furthermore, the more credit cards students own, the more likely they were to report having serious debt problems.

Too many of today's brightest college graduates are beginning life with a significant debt; and too often, they are not dealing with this debt properly. Although our students surveyed are from three states, the literature indicates that this is a national issue. Based on our study as well as the literature review, we highly recommend that some type of mini-course or unit on person finance should be required of all entering freshmen to help educate them on the proper use and potential dangers of credit cards and other types of student debt.

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Table 1: Credit Cards Use by State and Class

| | 0 credit cards | 1 credit card | 2 credit cards | 3credit cards | More than 4 cards | Average number of cards |
|-------------|----------------|---------------|----------------|---------------|-------------------|-------------------------|
| Freshmen | 38.12% | 33.44% | 12.19% | 16.33% | 10.25% | 1.46 |
| Sophomore | 39.04% | 33.13% | 11.11% | 15.19% | 1.53% | 1.17 |
| Junior | 35.13% | 32.47% | 12.23% | 18.04% | 16.30% | 1.74 |
| Senior | 32.15% | 23.01% | 21.08% | 15.51% | 8.25% | 2.44 |
| Grad School | 21.14% | 38.42% | 19.03% | 11.99% | 9.42% | 3.04 |
| no college | 73.41% | 8.33% | 7.13% | 6.34% | 4.79% | .96 |
| Arkansas | 51.23% | 30.24% | 7.99% | 2.14% | 8.4% | 1.03 |
| California | 31.04% | 29.02% | 19.01% | 13.14% | 7.79% | 1.83 |
| Ohio | 32.42% | 17.84% | 21.42% | 11.02% | 17.03% | 2.04 |
| Total | 38.44% | 25.39% | 16.37% | 10.11% | 9.69% | 1.97 |

| TABLE 2: STATISTICAL ANALYSIS | | | |
|---|----------------------|---------------|-----------------|
| Factor/significance | R2 SIGN AT .01 LEVEL | F-STATISTICS | T-RATIOS |
| GENDER | R2=.6634 NS | a.(.0001) | ..00204 (.0381) |
| AGE | R2= .8006 NS | 14.13* (0021) | 1.909 (0091) |
| MAJOR | R2= .5341 NS | 2.14 (0701) | .0076 (0321) |
| STATUS | R2=.9977 S | 25.09* (0001) | 3.146 * (0031) |
| # OF CREDIT CARDS | R2=.9866 S | 23.07* (0001) | 2.941 * (0028) |
| MARITAL STATUS | R2=.9694 S | 11.09* (0002) | 2.776 * (0055) |
| ANOUNT OF STUDENT LOAN | R2= .9991 S | 36.71* (0001) | 4.801* (0032) |
| HOURS WORKED | R2=.9874 S | 19.91* | 3.123* (0029) |
| # OF LATE PAYS | R2=.9963 S | 20.24* (0001) | 4.006* (0031) |
| SIGN. BALANCE | R2= .9801 S | 18.12* (0001) | 2.911* (0047) |
| USED CREDIT COU. | R2= .9531 S | 6.34* (0001) | 2,745* (0018) |
| SAVE | R2=.9997 S | 27.12* (0001) | 5.123* (0001) |
| CHECKED CREDIT | R2=.9889 S | 19.37* (0001) | 54.23* (0027) |
| VALUE IN () IS THE SIGNIFICANCE LEVEL OF THE F-STATISTIC | | | |
| VALUE IN () IS THE SIGNIFICANCE LEVEL OF THE 2-TAILED T TEST | | | |

DO PREREQUISITES MEASURE SUCCESS IN A BASIC FINANCE COURSE? A QUANTITATIVE INVESTIGATION

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INTRODUCTION

Most principles classes of all disciplines have few, if any, formal prerequisite class requirements. The principles of finance class is usually the exception requiring prerequisites in both economics and accounting and often a math or statistics course. Since principles of finance is by nature a very quantitative course, it would seem that a student's success in the prerequisite classes should carry over to the finance course.

Making this topic more interesting are the ever-changing requirements necessary for colleges of business to attain AACSB accreditation. Even a casual glance through the latest AACSB Eligibility Procedures and Standards for Business Accreditation (2003) reveals an increased emphasis on standards related to the assurance of learning. Thus, the design of courses used as prerequisites for the basic finance course as well as the design of finance curriculums in general have taken on an increased level of importance.

This paper seeks to determine if student success in courses that serve as prerequisites to the principles of finance course is carried over to success in the actual finance course. Also, additional variables, such as sex of the student and time between classes, are analyzed to determine if they have a direct impact on final grades.

LITERATURE REVIEW

A study of the factors that determine performance in business related courses is not necessarily groundbreaking research. The area of economics, for example, includes papers by Schuhmann, McGoldrick, and Burrus (2005), Laband and Piette (1995), Anderson, Benjamin, and Fuss (1994), Bosshardt and Watts (1990), and Borg, Mason, and Shapiro (1989). Studies that examine factors related to performance in accounting classes include Gracia and Jenkins (2003), Drennan and Rohde (2002), Murphy and Stanga (1994), Graves, Nelson, and Deines (1993). Other studies related to student preparedness and student performance include one on business communications (Marcal and Roberts, 2000) and a study concerning performance on the Educational Testing Service Major Field Exam in Business (Bagamery, Lasik, and Nixon, 2005). However, the very few studies performed on the area of finance have mostly focused on self-reported qualitative factors such as student effort and test anxiety. Papers that study the quantitative relationship between student success in a principles of finance course and student success in the prerequisites needed for this class are very few. Only one paper by Didia and Hasnat (1998) touches on this subject. They found that a student's cumulative GPA has a statistically significant positive impact on success in the finance course. They also noted that a student's prior performance in accounting, economics, and math tended to carry over to success in finance. There are other variables not considered in the Didia and Hasnat study that may foretell success or failure in the basic finance course, of which this study includes.

DATA AND METHODOLOGY

This study uses academic transcript data for students enrolled in six sections of the introductory finance course in the fall 2004 and spring 2005 semesters. All sections were taught by the same instructor so faculty influence is not an issue. Student performance is measured by the semester average for each student and is obtained from the instructor. All other information is obtained from student transcripts. One hundred forty out of 189 observations are usable.

Didia and Hasnat (1998) explain the grade received in a principles of finance class as a function of maturity, background, aptitude, effort, and faculty contribution. They find all of these factors significantly influence student performance in the principles of finance course. Our study concentrates on the background component in detail. Didia and Hasnat use GPAs of prerequisite courses to measure student background. Specifically, they use the average GPA for the first two accounting courses, the average GPA for the first two economics courses (micro and macro), and the highest GPA of all math courses taken. Our present study expands on these variables.

The principles of finance course usually requires prerequisites courses in the areas of math, accounting, and economics. Our measures of student background relate to the grades, quantity, and timing of these prerequisites courses. Some students may have more exposure to these prerequisite areas than others which may lead to a better finance grade. For instance, students that have taken more than the first two accounting or economics courses, regardless of grade, may have a better grasp of these principle areas such that their performance in finance is enhanced. However, a student's ability to harness prerequisites knowledge may be limited by the length of time since the prerequisites class was taken. Thus, the average grade of all prerequisite work as well as the number of prerequisites courses taken and the time since they were taken should be used.

Variables related to prerequisites grades include the average GPA for all accounting courses taken, the average GPA for all economics courses taken, and the average GPA for all math courses taken at the College Algebra level and above. Using only the GPAs in the math classes at or above the College Algebra level reduces any grade inflation from developmental math courses. New students in the university that are determined to be weak in the area of math are enrolled in developmental math courses to prepare them for College Algebra. The weaker the student the more developmental math courses that are taken. High grades in developmental math courses are obviously not on par with high grades in College Algebra and above. A student may have many high developmental math grades but only mediocre algebra and calculus grades. Using all math grades to include the developmental math grades would not provide an accurate measure of a student's math background.

Variables related to the quantity of prerequisites use the number of math, accounting, and economics courses for which the student has taken. A variable is also included to indicate if any developmental math courses were ever taken.

Variables related to the timing of the prerequisites simply indicate the number of semesters since the last prerequisites course in each of the areas (math, accounting, and economics) was taken. A similar variable is used by Austin and Gustafson (2006). As in Didia and Hasnat, we use cumulative GPA at the time of enrolling in the principles of finance course not only as a measure of student aptitude but also as a means of controlling the other GPA-related independent variables. Variables are also included to indicate gender and transfer status, and in addition to Didia and Hasnat, variables are included to indicate if the student is a finance, accounting, or economics major. Although not usually a formal prerequisite, the area of statistics may also be useful, especially when studying measures of risk such as variance and beta. Since statistics is not a formal prerequisite for the principles of finance course, the majority of students had not taken any statistics courses (only 71 out of 189). Using variables related to grades and timing of a student's statistics course severely limits the sample size. A variable that measures the quantity of statistics courses taken, however, would use the full sample size. Therefore, the variable measuring the quantity of statistics courses

taken is used with the full sample, and the variables measuring the GPA and timing of a student's statistics course is used with the reduced sample (69 usable observations).

Two models are used. The first limits the measurements of statistics background to only the number of statistics courses taken while the second adds variables that measure the grades and timing of statistics courses. The first model is given as:

$$\begin{aligned} \text{GRADE} = & C + \text{GENDER} \\ & + \text{ACC_MAJOR} + \text{ECON_MAJOR} + \text{FIN_MAJOR} \\ & + \text{MATH_AGE} + \text{MATH_GPA} + \text{MATH_Q} \\ & + \text{ECON_AGE} + \text{ECON_GPA} + \text{ECON_Q} \\ & + \text{ACC_AGE} + \text{ACC_GPA} + \text{ACC_Q} \\ & + \text{STATS_Q} + \text{GPA} \end{aligned} \quad \text{Equation (1)}$$

The second model follows that:

$$\begin{aligned} \text{GRADE} = & C + \text{GENDER} \\ & + \text{ACC_MAJOR} + \text{ECON_MAJOR} + \text{FIN_MAJOR} \\ & + \text{MATH_AGE} + \text{MATH_GPA} + \text{MATH_Q} \\ & + \text{ECON_AGE} + \text{ECON_GPA} + \text{ECON_Q} \\ & + \text{ACC_AGE} + \text{ACC_GPA} + \text{ACC_Q} \\ & + \text{STATS_AGE} + \text{STATS_GPA} + \text{STATS_Q} + \text{GPA} \end{aligned} \quad \text{Equation (2)}$$

Where C is a constant; GENDER is a dummy variable that equals 1 if the student is male and 0 if the student is female; ACC_MAJOR, ECON_MAJOR, and FIN_MAJOR are dummy variables that each equal 1 if the student is an accounting major, economics major, or finance major, respectively, and 0 otherwise; MATH_AGE, ECON_AGE, ACC_AGE, and STATS_AGE equal the number of semesters since, respectively, a math, economics, accounting, or statistics course was taken, MATH_GPA, ECON_GPA, ACC_GPA, and STATS_GPA equal the average GPA for the student's math, economics, accounting, and statistics courses, respectively, MATH_Q, ECON_Q, ACC_Q, AND STATS_Q equal the number of, respectively, math, economics, accounting, and statistics courses were taken, and GPA equals the cumulative GPA. Descriptive statistics for each of the variables are presented in Table 1.

RESULTS

In Equation 1 three variables are significant, two of which, MATH_Q and ACC_AGE, are unique to this study. MATH_Q indicates that a student's final semester average in principles of finance increases by about 3 percentage points for each math class taken. ACC_AGE indicates that the semester average decreases by about 1 percentage point for every semester since the student has taken an accounting class. Not surprisingly, GPA contributes largely to the student's semester average.

Equation 2 adds STATS_AGE and STATS_GPA to the model with a cost of a reduced sample size. GPA still remains the largest significant contributor to student scores, but MATH_Q and ACC_AGE lose their significance. This could be a result of the reduced sample size, the inclusion of the two additional variables, or both. Notice that the new variable, STATS_GPA, is positively significant. STATS_Q was not significant in Equation 1. This may show that a proficient statistics knowledge and not just an exposure to a statistics background is important to a student's performance.

A concern for Equation 2 is the large number of variables in the model compared to the sample size. A stepwise regression could be performed, but Greene (1997) p. 401 notes the possible faulty

inference procedures associated with it. The solution should hold to the theoretic necessity of variable inclusion and at the same time use the mechanical nature of the stepwise regression process. For our purposes this is a mute point. Additional regressions were run (not reported here) that excluded various groups of variables. In each of these regressions STATS_GPA and GPA retained their level of significance, and in the vast majority of the regressions the adjusted R-squared was even higher.

CONCLUSION

As in Didia and Hasnat (1998) cumulative GPA has been found to contribute significantly to a student's performance in the principles of finance class. This research identifies the quantity of math classes taken, the age of a student's last accounting class, and the GPA in a student's statistics classes as additional determinates of performance. Of course, different instructors teach in different ways, and what contributes to one instructor's students may not contribute to another's. However, instructors and program developers need to be aware that a student's performance in the principles of finance course may be a function of such factors as the timing and quantity of certain prerequisite courses, and not only the GPA in those courses.

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E-LEARNING: ATTITUDES AND BEHAVIORS OF END-USERS

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ABSTRACT

Distance or electronic learning (E-learning) has become very popular on university and other academic campuses. Various distance learning technologies are being utilized for the delivery of courses and entire degree programs. With the advancement of instructional technology in education, both the courses and the duties of instructors are changing. Researchers have called for more attention to end-users' perceptions and satisfaction with online courses and the effectiveness of such offerings. This research surveys 113 business students in regards to perceptions concerning and satisfaction with distance education. The survey showed 88% reporting a positive E-learning experience and 79% would recommend E-learning courses to others. Concerns were expressed over lack of communication with the instructor and other students. Younger students desired more contact with other students. Females desired better communication with instructors and clearer instructions.

INTRODUCTION

During the last few decades, the world has undergone significant changes in terms of technological advancements and the exchange of information. Advancements in information and communication technology led to distance learning becoming a focus of global attention (Pye, 1999). As a result of an increasingly competitive environment due to tightening budgets and lower enrollments, universities must continually review their curriculum and the methods by which instruction is delivered to students. Universities have tried to increase enrollment numbers, decrease the number of extra-hire teachers and offer a more flexible schedule to people seeking education and training (Zapalska, Shao, & Shao, 2003). This trend has resulted in educational institutions reaching students in remote locations and allocating the costs and expertise across multiple locations. The growth of part-time, non-residential, non-traditional students has fueled the demand for distance options. Due to these developments being fairly recent phenomena, little research exists investigating the effectiveness of, and student reaction to, distance education.

The most commonly used distance education tool would be e-learning (online) courses. E-learning courses provide the student with an opportunity to continue their education or pursue personal and career development without a rigid schedule of assignments and class meetings. The online format offers the student a great deal of flexibility in terms of when they study, how they study, and how quickly they cover and master the material.

METHOD

A survey was administered to 113 business students at a southeastern university with the purpose of obtaining information of these students' opinions toward distance education courses. A five-point Likert scale with rankings from 1 (strongly disagree) to 5 (strongly agree) was used to measure these attitudes.

DEMOGRAPHICS

Participants in the survey are described by the following demographic information. The gender of participants was 58% female and 42% male. The age groups were 5% under 21 years of age; 47% aged 21 to 30; 25% aged 31 to 40; 16% aged 41 to 50; and 7% over 50. Type of degree sought by participants was 42% for undergraduate, 43% for a master's degree, and 15% for other degrees or certification programs. Eighty-eight percent reported being actively employed while 12% did not work. Of the respondents who were employed, 80% worked 30 or more hours per week. Forty-eight percent have at least one child while 52% reported having no children. Forty-nine percent have previously obtained a college degree prior to being enrolled in this course while 51% were pursuing an initial college degree or other certification.

EXPERIENCE IN DISTANCE EDUCATION

Two questions were used to measure participants' level of expertise and experience toward distance education. First, participants were asked to self-evaluate their level of technological expertise. The results were as follows: beginner (6%); medium (26%); intermediate (58%); and advanced (10%). Various delivery methods of distance learning technologies were reported by respondents as follows: 89% reported experience with an internet based course; 26% with interactive video or teleconferencing; and 18% with computer-based software training modules.

REASONS FOR ENROLLING IN A DISTANCE EDUCATION COURSE

Respondents reported various reasons they decided to enroll in a distance education course. Ninety-two percent reported that convenience was a factor for enrolling in a distance education course; 49% cited accessibility; 22% responded adaptability; 76% flexibility; and 18% reported that their reason for enrollment was simply because the course is offered solely by the university in a distance education format. These responses sum to more than 100% because participants were allowed to select multiple reasons for enrolling in a distance education course.

STUDENT TO INSTRUCTOR INTERACTION

Two questions were used to solicit participants' perceptions of student to instructor interaction in a distance education course. The first question asked participants to describe the quantity of the student to instructor interaction. Forty-three percent stated the quantity of interaction was less than a traditional class format, 35% stated the quantity was about the same, and 22% felt the interaction was greater than a traditional course format. The second question asked participants to describe the quality of the student to instructor interaction. Seventeen percent responded that the quality of student to instructor interaction is less than experienced in a traditional class, 44% stated the quality was about the same, and 39% responded the quality of interaction was better than a traditional course. Interestingly, we found more students rating the quality of student to instructor interaction positively in distance education classes, while, as expected, students rated the quantity of interaction as less in distance education classes.

EFFORT APPLIED TO COURSEWORK

Respondents were asked to quantify the amount of effort applied in a distance education course toward learning new lecture material. Eleven percent reported expending less effort toward learning new material than in past traditionally-formatted courses, 35% reported the effort was the same, and 54% responded that they spent more effort learning new material than in a traditional course.

COMMUNICATION WITH INSTRUCTOR

Students were asked to identify the types of communication used when corresponding with the instructor for the course. The following types of communication (followed by the percentages of participants using that specific type) were reported: telephone (50%); email (98%); discussion board (76%); virtual chat (56%); group pages (23%); on-campus meeting (35%); fax (12%); and U.S. mail (19%). These responses sum to more than 100% because participants were allowed to select multiple types of communication.

COMMUNICATION WITH CLASSMATES

Eighty percent of participants reported communication with other students enrolled in the same course while 20% answered no communication. Of those reporting communication with classmates, the following types of communication were used: telephone (27%); email (61%); discussion board (64%); virtual chat (43%); group pages (22%); on-campus meeting (16%); fax (4%); and U.S. mail (6%). Again, these responses sum to more than 100% because participants were allowed to choose multiple types of communication.

LIKERT SCALE QUESTIONS

Two questions addressed perceptions toward interaction between students, classmates and their instructors. Ninety percent of participants agreed that student interaction with the instructor in a distance education course is of vital importance, while 8% had no opinion and only 2% disagreed on the importance of this interaction. Fifty-one percent agreed that interaction with classmates was important, while 17 % disagreed and 32% had no opinion.

Two questions dealt with communication problems with classmates and the instructor during a distance education course. Sixty-six percent of participants reported no communication problems between themselves and their instructor, while 23% reported communication problems and 11% reported no opinion. Fifty-seven percent of participants reported no communication problems with their classmates while 21% reported problems. The number one recommended change for distance learning was to have more interaction with the instructor followed by improved technology to overcome communication challenges (i.e., update servers, increase accessibility of sites, make site simpler, etc).

Three questions measured participants' attitudes toward the difficulty of course material and expectations of learning. Fifty-nine percent agreed that they learned as much as they would in a traditional class format while 21% felt they learned less. Sixty-eight percent preferred class projects and assignments that forced them to learn new things while 15% did not. This indicated to us that students were accepting a higher level of responsibility for their success in distance classes. Eighty-one percent felt they were challenged as much in a distance education course as they would be in a traditional format; 12% reported they were less challenged.

One question addressed the clarity of instructions in a distance learning environment. Seventy-two percent agreed the instructions toward learning were clear in distance environment while 13% felt instructions were unclear.

Two questions measured participants' perceptions toward future courses in distance learning. Seventy-nine percent would recommend a distance education course to their peers; only 9% would not recommend this course format. An overwhelming majority of participants expressed satisfaction with distance learning in that they would participate in a similar format in the future. Eighty-eight percent would participate in another distance education course while 7% would not.

DIFFERENCES BY GROUPS

Chi-square analysis was conducted to examine any differences in responses to the twelve Likert-scale questions used to analyze respondents' perceptions toward distance learning. These analyses were conducted within three demographic items: gender, age, and student classification (undergraduate or graduate).

Significant differences were found within gender for survey items one (When taking a distance education course, I had no problems communicating with my instructor when I have questions or concerns) and ten (The instructions are clear with the distance learning environment). The significant difference in item one [Chi-square = 15.60, $df = 2$, $p < .01$] indicated that females experienced more problems in communicating with the course instructor to address questions or concerns. The significant difference in item ten [Chi-square = 11.59, $df = 2$, $p < .01$] indicated that males perceived the instructions within distance learning to be more clear than females.

Significant differences in perceptions were found within age for items one (When taking a distance education course, I had no problems communicating with my instructor when I have questions or concerns) and nine (It is important to me to have interaction with my distance education classmates). The significant difference in item one [Chi-square = 6.63, $df = 2$, $p = .04$] indicated that respondents age 30 and under experienced fewer problems than those 31 and over in communicating with the course instructor to address questions or concerns. The significant difference in item nine [Chi-square = 10.46, $df = 2$, $p < .01$] indicated that respondents age 30 and under felt that interaction with distance education classmates was more important than those respondents 31 and over.

Significant differences were located by student classification for survey item one and eleven (I have more flexibility with distance learning than the traditional classroom setting). The significant difference in item one [Chi-square = 10.19, $df = 2$, $p < .01$] indicated that respondents classified as graduate students experienced fewer problems than undergraduate students in communicating with the course instructor to address questions or concerns. The significant difference in item eleven [Chi-square = 7.17, $df = 2$, $p = .03$] indicated that graduate students reported more flexibility with a distance education than undergraduate students, who reported less flexibility in the distance education format than a traditional classroom format.

CONCLUSION

Electronic learning has advanced to the point of being a major component of the curriculum in many institutions of higher education. Cost savings and the opportunities for significant enrollment increases will continue to drive these methods of instructional delivery. Ultimately, electronic learning training or education will only be effective if the perceptions of the end-users are understood. The technology is only beginning to reveal its potential. Based on our study, we concluded that most (88%) of our students were satisfied with distance learning. In addition, 88% would take another distance learning course and 77% would recommend it to their colleagues. Evaluation of students' opinion is an area where faculty can frame a course to assist students in becoming more efficient. Using the information from student surveys assist a university in offering what their customers want in a format that satisfies them. With competition being keen for students, the university who listens to the students and adjusts courses to meet their needs will be the one experiencing a viable student body and a healthy bottom line.

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LEADERSHIP. DOES CULTURE MATTER? COMPARATIVE PRACTICES BETWEEN ARGENTINA AND UNITED STATES OF AMERICA

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ABSTRACT

The topic of leadership in the global marketplace has received a high degree of attention among scholars and practitioner over the past few years. Leadership of organizations and employees has definitely become more important as managing across borders and the advent of the virtual team has become increasingly prevalent. Paper explores impact of culture on leadership practices in two countries from culturally and economically different regions: Argentina and the United States of America. It uses the visionary approach to leadership developed by Kouzes and Posner (1987) which identified five leadership practices (actions or behaviors) employed by effective leaders: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. Using the Kouzes and Posner LPI-Self (Leadership Practices Inventory, 1993) instrument for data collection, the authors compared the results between MBA respondents in the two countries. The results of the study indicate that a number of significant differences do exist among respondents in the two cultures, with Argentine respondents consistently scoring higher than United States counterparts. The information may be of value in understanding perceptions concerning leadership patterns between the two countries and useful in managing human resources in the respective countries.

INTRODUCTION

One of the most significant business trends of the new millennium is the emergence of the stateless corporation and increasing interdependencies among the world's economies. Until recently leaders were able to operate in the relative isolation of domestic markets but today leaders are constantly exposed to different cultures with different lifestyles.

The understanding of comparative leadership practices among cultures is paramount to successfully managing global business activities. An era of high technology characterized by outsourcing, restructuring, technological advances, and economic, social and political transitions require managers who are cognizant of the differing perceptions that exist across countries concerning leadership. Certainly an understanding of leadership and differences in leadership practices among cultures leads to increased efficiency and effectiveness in organizational performance.

This study is cross-cultural in nature, not merely because of the interest in international comparison per se, but because it is believed that such comparison is essential to a better understanding of comparative leadership practices between the United States and Argentina. This study should help both educational institutions and global business organizations more effectively teach students and/or manage corporate human resources around the globe. In particular, this study provides the management of United States-Argentina-based organizations with valuable information which may be helpful in selecting people to fill key leadership positions.

DATA AND RESEARCH METHOD

This study uses the neocharismatic, visionary approach to leadership developed by Kouzes and Posner (1993; 1995). The Leadership Practices Inventory-Self (LPI-Self) instrument (Kouzes & Posner, 1993) was used for data collection. Kouzes & Posner have identified five leadership practices (actions and-or behaviors) employed by effective leaders:

- ◆ Challenging the Process: Leaders search out challenging opportunities and experiment;
- ◆ Inspiring a Shared Vision: Leaders envision a future and enlist others to pursue that future;
- ◆ Enabling Others to Act: Leaders foster collaboration and empower others;
- ◆ Modeling the Way: Leaders set the example and achieve small wins that build commitment;
- ◆ Encouraging the Heart: Leaders recognize individual contributions and celebrate;

The LPI-Self instrument measures each of the five dimensions of leadership with 6 statements cast on a five-points Likert scale. The higher value on the five points scale represents greater use of the measured leadership behavior. Each leadership practice could be scored in the range of 6 to 30 points. Extensive testing by Kouzes and Posner (1993) revealed that the instrument exhibits sound psychometric properties. The instrument was administered to 110 MBA students in the United States (Southeast Missouri State University and Southern Illinois University-Carbondale) and 160 MBA students in Argentina (Universidad de Palermo). The questionnaires were administered during classes at each venue.

RESULTS

Results were analyzed between the two countries (Argentina and United States) and within each country. Between the countries, results are presented as: Aggregate Perceptions of MBA students in the two countries (without a gender distinction); Comparison between all Male MBA students and all Female MBA students (without a country distinction); Comparison between United States female MBA students and Argentina female MBA students; Comparison between United States male MBA students and Argentina male MBA students; Comparison between United States male MBA students and Argentina female MBA students and, Comparisons between Argentina male MBA students and United States female MBA students. The results of the perception of MBA students within each country are also compared and contrasted: Comparison between male and female students in United States; Comparison between male and female students in Argentina.

The LPI-Self scores of MBA students in the United States versus MBA students in Argentina definitely varied in the aggregate. Significant statistical differences existed on four of the five LPI dimensions: challenging the process, inspiring a shared vision, enabling others to act, and modeling the way, with Argentina respondents rating themselves higher than United States respondents in all dimensions. There was no significant difference between United States and Argentina respondents in Encouraging the Heart. A summary of mean scores and rank between United States and Argentina LPI respondents appears in Table 1.

| Leadership Practice | United States | | Argentina | |
|---------------------------|---------------|------|-----------|------|
| | Mean | Rank | Mean | Rank |
| Challenging the process | 21.95 | 4 | 24.26 | 3 |
| Inspiring a shared vision | 20.54 | 5 | 23.52 | 5 |

| | | | | |
|-----------------------|-------|---|-------|---|
| Enabling other to act | 23.56 | 1 | 25.21 | 1 |
| Modeling the way | 23.03 | 3 | 24.28 | 2 |
| Encouraging the heart | 23.44 | 2 | 24.11 | 4 |

Reasons for these differences may be attributable to the following:

Recent event in Argentina's history (e.g. economic crisis, lack of political leadership, labor strike, controversy concerning globalization and free market reforms, devaluation of currency, social demonstrations, etc.) may have created a sense of pride and hope in the nation. Argentina without clear leadership in the nation, may be determined to exhibit individual leadership patterns and, as a result, rank themselves higher on the LPI practices;

Leadership charisma is also important in Argentina (Leaman, 1999) and executive domination in the political sphere has been common. An emphasis on charismatic and powerful executive leadership rather than on representative institutions may transfer to perceived leadership practices in respondents. In other words, a feeling that strong leadership practices must be exhibited may be a characteristic of the populace;

This may also be related to the concept that being humble is an important leadership characteristic in the United States (Fineman, 1999). Individuals in the United States are often taught to be humble in approach and respectful of others. This may translate into placing a lesser self-rating on the LPI dimensions.

An analysis of the Hofstede dimensions: power distance (PDI), uncertainty avoidance (UAI), individualism (IDV), and masculinity (MAS) also demonstrates that the United States and Argentina differ significantly. This may also explain the higher scores recorded by Argentina respondents versus respondents from United States. This coupled with the population being predominantly catholic leads to a belief that there is an absolute truth and the individual possesses that truth. This may result in a higher self-rating of success in the leadership practices. Contrarily, in the United States there is much greater tolerance for uncertainty, diversity in religion, and a lesser belief in absolute truth.

Argentina also slightly higher on the power distance index than does the United States. Being more tolerant of power distance may result in greater glory and respect being placed on executive leadership. Since the respondents were primarily MBA students, this elevation in the self-ranking of leadership practices may result from respondents feelings of being better educated and more likely to be future leaders. In larger power distance cultures, employees also tend to expect more authoritative leadership. Argentina respondents may rate themselves higher than United States counterparts because it is expected that they have positive image and project stronger performance ratings in the leadership practices.

Argentina is also more collectivist than the United States. Being more collectivist, Argentina has closer ties between individuals than in the United States. In addition, about one-third of the population lives in and around Buenos Aires which provides a very homogenous group. This may lead to a higher perceived performance on the various leadership practices.

Differences in perceived ratings among the respondents in the United States and Argentina may be the results of the United States being a low context culture and Argentina being a high context culture. In the high context cultures participants are likely to establish social trust first, value personal relations and goodwill, make agreements on the basis of general trust, and conduct slower and more ritualistic business negotiations (Rodrigues, 2001). By contrast, in low context cultures participants get down to business quickly, value expertise and performance, like agreements by legalistic contract, and conduct business negotiations as efficiently as possible (Rodrigues, 2001).

It may be that high-context cultures have a tendency to develop better individual perceptions concerning the practice of exemplary leadership.

Trompenaars shows a similar result between the United States and Argentina on the Specific (individuals have a large public space they share with others and a private space they only share with close acquaintances) versus Diffuse (both public and private are guarded because entry into public space also permits entry into private space). According to Trompenaars the United States is a specific culture while Argentina tends to be a diffuse culture. In the United States people may rate themselves lower on the LPI dimensions since this correlates with openness, extroversion, and strong separation of work and private life. A lower LPI score may be expected. In contrast, a diffuse culture finds individuals to be more indirect, introverted, and work and private life are closely linked. A higher LPI score may be expected.

Tables illustrating all other "between" and "within" comparisons are available on request. A summary is also presented in the following section on conclusions.

CONCLUSIONS

In a rapidly changing and volatile world, leadership plays a major role in our work place, our schools, and in many other areas of our lives. All research which helps people enhance their understanding of leadership, whether it be an individual situation or a global situation, is beneficial. In brief, some of the major conclusions of this study are the following:

In the aggregate, the LPI-self scores of MBA students in the United States versus Argentina varied significantly with Argentina respondents rating themselves higher than United States respondents on four of the five dimensions;

In the aggregate, LPI-Self scores of male MBA students versus female MBA students showed females scoring higher than males on three of the five dimensions: Inspiring a Shared Vision, Enabling Others to Act, and Encouraging the Heart.

LPI-Self scores of women MBA students from Argentina was significantly higher than those of United States women on the dimensions of Challenging the Process, Inspiring a Shared Vision, and Enabling Others to Act. United States women scored higher on encouraging the Heart (although the difference was not statistically significant);

LPI-self scores of male MBA students in Argentina were significantly higher than male MBA students in the United States on all dimensions;

LPI-Self scores of female MBA students in Argentina were significantly higher than male MBA students in the United States on all dimensions;

LPI-Self scores of males MBA students in Argentina were significantly higher than female MBA students in the United States on the dimensions of Challenging the Process, Inspiring a Shared Vision, and Enabling Others to Act. United States women scored higher than Argentina males on Encouraging the Heart (although the difference was not statistically significant);

Women MBA students in the United States scored significantly higher on the leadership practices of Enabling Others to Act and Encouraging the Heart than did men MBA students in the United States;

No significant differences existed between Argentina Males and Females concerning perceived behavior on any of the leadership practices.

Cultural and institutional frameworks differ considerably among the two countries of the United States and Argentina. Some of these leadership practices may be culturally contingent and not universally practiced. Lastly additional research needs to be concluded with a broader population of respondent representing different age groups, different educational backgrounds, different organizational types, and different regions of the respective countries.

MANAGEMENT IMPLICATIONS

Leadership behavior can be changed and is a learnable behavior. The study of leadership practices is valuable to all organizations and all cultures. Education and training concerning the similarities and dissimilarities in leadership practices are valuable for all countries engaged in global business. Differences in leadership practices may dictate the amount of time, energy, and cost commitments necessary for educational training and development programs.

There are numerous management implications that flow from this comparative leadership study. Among these implications are the following:

An analysis of leadership feedback presents an opportunity to engage in conversation with groups (both within organizations and across cultures) concerning the importance of being different and practicing diversity;

Leadership feedback creates a cross-cultural discussion concerning the nature of different leadership practices and improves understanding of the leadership quotient in organizational success;

Developing an awareness of international leadership differences is an excellent place to begin an analysis of leadership strengths and weaknesses within organizations and across country clusters. An understanding of cross-cultural leadership differences should help in discussions concerning such issues as motivational approaches used with employees, the level of organizational performance attained, and the use of expatriates; Perceived differences in leadership practices between men and women are important in implementing efficient and effective work units (both within organizations and across cultures). The question: Does gender matter? It is important to all students of leadership.

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A STUDENT RUN ENTERPRISE CLASS: LEARNING BY DOING

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ABSTRACT

Student run businesses have a long history in higher education, primary through the cooperative extensions programs in agriculture (Gault, Redington, and Schlager 2000). Antidotal evidence suggests that many universities and business schools have a variety of student run businesses, from the more ad hoc in which student clubs periodically engage in fund raisers to on-going business that run restaurants, coffee shops, bookstores, or sell university logo goods. While some of these student run enterprises are extracurricular (Peltier, Schibrowsky, and Kleimenhagen (1995) others are offered for classroom credit (Daly 2001; Shinn 2003) integrating the practice with the learning of business. However, the pedagogical literature on using student run business to enhance student learning is extremely limited, especially compared to the prevalence of such enterprises. This paper details a student run business, exploring the lessons learned, and providing advice for others that wish to teach students business concepts by having them engage in the actual practice of business. The paper will be of interest to those that would like to try an experiential learning approach whereby classroom concepts are reinforced by the actual practice of running a business.

In this class students sell market research projects (secret shops, marketing plans, focus groups, etc.) Students are responsible for running all aspects of the business, including the functional sides of marketing and sales, finance, human resource management, and information systems. Students learn rapidly that nothing happens unless they do it. The class is built around a Win-Win-Win philosophy. First local businesses benefit from the high quality research provided by the students. This is research that is either not available or unaffordable for small business in the area. The students in the class win by gaining the invaluable experience of actually running a business. And finally, the general student body wins when the earnings of the class are given back to support field trips, career planning, extracurricular clubs, and scholarships

The business which will be detailed has proved very successful. Revenues for the fiscal year ending May 2006 were \$14,785.00. Further, the class serves as a service learning exercise with \$11,000 of the \$12,230 in earnings returned to the student body. Pedagogically however the experiences of the students have proved priceless. Students learn that business is about producing, everyday, the very best you can. That under competition nothing else is acceptable. Students learn and grow intellectually and professionally in this class.

The primary potential impact of the presentation and manuscript will be to set forth the pedagogical justification for a class heavy on practice (in which students employ the concepts they have learned in other classes) versus the more traditional theory and concept heavy approach of higher education. Further the manuscript will detail how the class can reinforce business theory. In addition, the presentation will demystify the process of developing a student run business, outlining the keys to success learned by this professor. Those interested in experiential learning, entrepreneurship, innovative pedagogy, and student run business will be most interested in the presentation.

STUDENT AND FACULTY OPINIONS OF PLUS-MINUS GRADING SYSTEMS

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ABSTRACT

Plus-minus grading systems and other systems that increase the grading options beyond the five traditional choices of A, B, C, D, and F are now in wide use. However, a number of schools continue to use the traditional whole letter system and changes in grading systems arouse strong emotions which can make implementation of a new system difficult or, in some cases impossible. This study first presents a review of the prevalence of alternative grading systems based upon examination of online catalogs. Then a survey of faculty and student opinions about implementation of a plus-minus grading system, including their reasons for their opinions, is presented. This study should be of interest to faculty and policy makers at schools contemplating a change in their grading systems.

INTRODUCTION

Many colleges and universities have changed to or are considering changing to a grading system that provides a larger number of marking choices than the standard A-F system. This usually takes the form of a plus-minus marking system in one version or another. A study by the American Association of College Registrar and Admissions Offices reported a 12% increase from 1982 to 1992 in institutions using a plus-minus system (Riley, Checca, Singer, & Worthington, 1994) with the trend continuing.

Motivations for the change take many forms. Grade inflation is widely identified as a problem in institutions of higher learning. One study (Levine, 1994) of college graduates from 1969 to 1993 found that the number of A's awarded had quadrupled and the number of C's had dropped by two thirds. A recent study concludes that the implementation of a plus-minus system halts and in some cases produces a minor reversal in grade inflation, but that this effect is not equal over all majors. Majors that traditionally have low GPA's are affected less by a change to a plus-minus system than majors in a high GPA major (Bressette, 2002).

Proponents of a plus-minus system also believe it better differentiates students and that it is fairer or more precise. The existence of grade inflation in combination with the traditional A-F grading system effectively reduces the grades available and widens the range of student performance represented by each grade. The introduction of plus-minus grades increases the grades available and narrows the interval for each grade (Singleton & Smith, 1978). It is also argued that students are motivated to work harder under a plus-minus system (Cullen et al, 1975). Evidence to the contrary is present in a study of economics classes at a mid-size Midwestern university that concluded students who chose plus-minus grading were not significantly more motivated than students who did not (McClure & Spector, 2005).

A major focus of this paper is the analysis of how faculty and student perceptions of the benefits of a plus-minus grading system differ. Perhaps the clearest evidence of how students view plus-minus grading versus traditional grading occurs when students have a choice in a particular class. In this situation, students overwhelmingly chose the traditional grading system over the plus-minus system, although student's who chose the plus-minus system earned more pluses than minuses (Dixon, 2004).

A survey of faculty documenting their actual use of a voluntary plus-minus grading system provides evidence of variation in faculty support (Malone, Nelson & Nelson, 2000). The survey asked graduate faculty how extensively they used the plus-minus system. Seventy-six percent indicated it was used considerably with assistant professors and those at the university for 1-4 years indicating the heaviest usage. Substantial variation in use across colleges was also noted. The differing perceptions of faculty by disciplines were noted in another study (Ekstrom & Villegas, 1994) that concluded "Faculty believed that the meaning of a grade varies more across disciplines than across institutions".

In the section that follows, we first look at alternative forms of plus-minus grading and the extent to which they are used and then turn to a survey of opinions about a proposed plus-minus grading system at a school that currently use a traditional, whole letter only, grading system.

STUDY RESULTS

In order to evaluate the extent of the use of plus-minus and other extended category grading systems, on-line catalogs of a representative sample of one fourth of all AACSB accredited business schools were reviewed to determine each school's undergraduate grading policy. A total of 99 schools were surveyed, 71 of them public and 28 private. Table 1 shows the distribution of grading systems used. Three basic grading systems were identified: systems using pluses and minuses, systems using a single intermediate grade and traditional whole letter grading systems of A, B, C, D, and either E or F. Note that about one third of the schools continue to use whole letter only grading systems. Among public schools, 30 of 71 (42.5 percent) use only whole letter grading.

Plus-minus grading systems are clearly the most prevalent type of grading system among this group of schools. To clarify the notation used below, the A+ to C+ system would use the grades A+, A, A-, B+, B, B-, C+, C, D, F, while an A+ to D- system would use A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F and so on. The plus or minus typically raises (lowers) the grade by .3 or .33 grade points. As the table indicate many schools do not allow pluses and minuses across their full range of grades. The grade of A+ creates the possibility of a GPA greater than 4.0 and, probably for this reason, only 9 of the 60 schools with a plus minus system include an A+. Four of the 9 schools using the A+ resolve the GPA problem by recording the A+ as a 4.0 when calculating GPAs, so that the A+ becomes just a notation on individual course grades. Schools also differ with respect to the bottom of the plus-minus range. Most frequently, pluses and minuses are used all the way down through the D-, however, perhaps due to issues relating to transfer grades and determining the grade required for satisfying prerequisites, a number of schools terminate the use of pluses and minuses with the D+ (they do not use a D-) and others stop at the C+ or even C- level.

Systems using a single intermediate grade are far less prevalent than the plus-minus systems. The single intermediate grade is typically listed either as the concatenation of the two grades it lies between, such as AB for the grade between an A and a B, or as a plus without a corresponding minus. In these systems the grade points awarded for the intermediate grade are half way between the two related whole letter grades (a 3.5 for and AB or a B+).

| | |
|---|----|
| Number of Schools Using Plus and Minus Grades | 60 |
| A+ thru C+ | 1 |
| A+ thru D- | 8* |
| A- thru C+ | 4 |
| A- thru C- | 3 |
| A- thru D+ | 16 |
| A- thru D- | 27 |
| B+ thru D- | 1 |
| Single Intermediate Grade | 7 |
| AB, BC & CD | 4 |
| AB and BC | 3 |
| Whole Letter Only | 32 |
| A thru F | 32 |
| * A+ grade is counted as a 4.0 for 4 of the schools using an A+ | |

The next portion of this study examines student and faculty opinions about the introduction of a plus-minus grading system at a mid-sized university in the Southwest. The university currently uses a traditional grading system which uses only the grades A, B, C, D, and F. The variant of plus-minus grading system being considered is one that adds grades of A-, B+, B-, and C+ to the set of potential grades with + grades being recorded at .3 points higher than the base grade (e.g. 3.3 for a B+) and - grades being recorded at .3 points less than the base grade.

Respondents were asked whether they Favored, Opposed or Didn't Know About or Care About a change to the grading system that would utilize the plus-minus grading scheme described above. Those who either Favored or Opposed were then asked to rate the strength of their opinions as either: care only slightly, care somewhat strongly or care very strongly. The results of these two questions were combined to produce a 7 point scale with values ranging from Very Strongly Support to Very Strongly Oppose (see Table 2). Respondents were also asked to describe the reasons for their support or opposition. Results of this open ended question were recorded and categorized with up to two reasons being recorded for each respondent. In addition, respondents were asked to provide additional information that might be related to their views of the proposed system. Students were asked to indicate their class standing, their GPA, and the college of their major. Faculty members were asked to indicate their college and their length of service at the university.

In analyzing the survey results, we will first look to see whether student and faculty opinions about the use of plus-minus grades differ. The results of Table 2 indicate that there is a strong divergence between student and faculty opinions about the proposed use of plus-minus grades. Over half of faculty respondents support plus-minus grades at least somewhat strongly while only 15 percent of students share this level of support. Almost half of the student respondents oppose plus-minus grades at least somewhat strongly, and most of the remaining students are indifferent to rather than supportive of plus-minus grades. A Chi-squared test of the null hypothesis that the distribution of faculty opinions and student opinions do not differ was conducted and the null hypothesis was rejected at the .0001 level indicating that there is a significant difference between the opinions of the two groups.

| | Students | | Faculty | |
|--------------------------------|----------|------------|---------|------------|
| | Count | Percentage | Count | Percentage |
| Support Very Strongly | 64 | 4.4% | 126 | 27.0% |
| Support Somewhat Strongly | 148 | 10.3% | 123 | 26.4% |
| Support Slightly | 145 | 10.1% | 48 | 10.3% |
| Don't Know / Care | 289 | 20.0% | 26 | 5.6% |
| Oppose Slightly | 129 | 8.9% | 18 | 3.9% |
| Oppose Somewhat Strongly | 332 | 23.0% | 57 | 12.2% |
| Oppose Very Strongly | 336 | 23.3% | 68 | 14.6% |
| | 1443 | 100.0% | 466 | 100.0% |
| Chi-Square test p-value 0.0001 | | | | |

The impact of student characteristics on their support or opposition to plus-minus grades was also analyzed. Sophomores and especially juniors were found to be more strongly opposed to plus minus grades than freshmen and seniors. Also students with higher GPAs were found to be more strongly opposed than students with poorer GPAs. Finally, Students in colleges within the university that issue high average grades were found to be more opposed to plus-minus grades than students in colleges with lower average grades. On the other hand, faculty demographic characteristics were not found to significantly affect opinions of plus-minus grades. Details of these analyses are not presented here, but are available from the authors.

Students and faculty were also asked to provide their reasons for supporting or opposing plus-minus grades. The top reasons for supporting the change were very similar for faculty and students. First, that grades will be more accurate/ refined (173 faculty and 145 students), and second that grades will be a fairer reflection of effort. The top reasons for opposing plus-minus grades were more divergent. Overwhelmingly students opposed the change because they believed it would hurt their grades (352 responses). Meanwhile faculty opposing the change felt that the benefits didn't justify the costs (39) or that the system would lead to more grading challenges (24).

CONCLUSIONS

This study examined the extent of use of plus-minus grades in AACSB accredited business schools by collecting data from 99 such schools. Sixty percent of the schools use some variant of a plus-minus grading system, 32 percent use only whole letter grading and the remainder use a single intermediate grade.

A survey of faculty and student opinions about a move to a plus-minus grading system at a mid-sized university in the Southwest provides a number of interesting insights. There is a strong divergence between student and faculty opinions with half of faculty respondents supporting plus-minus grades at least somewhat strongly while only fifteen percent of students do so. Half of student respondents oppose the change at least somewhat strongly with sophomores and juniors tending to be most strongly opposed as were students with higher GPA's.

Student and faculty opinions were collected through open ended responses and analysed to determine the reasons for supporting or opposing the change. Both students and faculty who supported the change indicated that grades will be more accurate and refined under a plus-minus system and that grades are fairer or better for students as their top two reasons for supporting the

change. Students who oppose the change believe there will be a negative impact on GPA's (352 students believe this versus 35 who believe grades would improve).

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QUALITY MANAGEMENT AND FINANCIAL AID SERVICES: A STUDY OF STUDENT PERCEPTIONS

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INTRODUCTION

In this paper, we examine the experiences of students receiving financial aid at a small, traditionally African American public college in the South. In contrast to much of the ongoing research in this area, which is broad-based and attempts to consider the experiences of many groups of students at a wide range of institutions, this research examines a small group in detail, with the intent to determine what, specifically, they are encountering in a specific set of financial aid issues, the financial aid appeals process, with the hope that our findings will, in turn, generate new research questions to guide ongoing research.

METHOD

Subjects

Subjects in the sample were approximately 242 students from a traditionally African American four-year public university in the South. The students were roughly 16% Freshmen, 23% Sophomores, 17% Juniors, 39% Seniors, and 5% graduate students. Of the group, 96 students reported going through the financial aid appeal process. Their experiences with this process will be reported in the next section.

RESULTS

What are the students' impressions of the financial aid appeal process? Of the 96 students who have gone through the financial aid appeal process, 51% had one appeal, 23% had two appeals, 18% had three appeals, and 9% had four appeals. When we asked the students how they learned about the right to appeal for financial aid benefits, 44% reported that they learned about it from the Financial Aid Office, followed by 29% from the Student Affairs Office, 17% from other students, 16% from the Retention Office, and 5% from the faculty advisor.

Why were the students initially denied financial aid? 69% of the students were denied because they had exceeded maximum number of credit hours limitations. In another words, they had taken a lot of hours but have not completed their degree requirements in order to graduate. 34% of them were denied due to low grades and 9% of the denials were due to lack of financial need. Of the students who were denied initially and filed for an appeal, 76 students (81%) won the appeal while 18 students did not. Of those 18 students, ten students were denied due to exceeding hour limitations, eight were cited for low GPAs, seven were for inadequate documentation, and two were for too many appeals.

How do they feel about the appeal process? Specifically, do they feel they were given adequate information? How long did they wait from submission of appeal until a final decision was

made? How were they treated throughout the whole financial aid appeal process? 63% of the students believed that they were given adequate information in order to prepare their appeal packages properly. 44% of the students waited a week or less for the final decision of the appeal, 27% waited 8 to 14 days, 10% waited 15 to 21 days, and 19% waited more than 21 days. Their satisfaction with the process is 3.59 (based upon a 5 point Likert scale). This implies they are slightly satisfied with their treatment which is reflective of 72% of the students reporting being treated fairly overall.

Is there correlation between their perceptions of fair treatment and whether they were given adequate information? If they win the appeal, will that affect their perception on if they were treated fairly? To consider these issues, we used a Chi-square test of independence. In both cases, the p-values are less than 0.05 which implies the two variables have statistical significance. Upon further investigation of the cross-tabulation table, we find that, proportionally, 94% of those who perceived that they were given adequate information regarding the appeal process also agreed that they were treated fairly. However, only 38.7% who perceived that they were not given adequate information believed that they were treated fairly. Similar findings appear for those whose appeals were approved. Students whose appeals were approved have a higher proportion (85.5%) than those who were denied (22.2%) agreement that they were treated fairly in the appeal process.

Are there any perceptual differences in student satisfaction with the appeal process for those who felt they were given adequate information, who won their appeal, and who felt they were treated fairly? In all three cases, we found significant results (p-values less than 0.05). When looking at the averages for each group, we found that those who perceived that they were given adequate information, who won the appeal, and who felt they were treated fairly have significantly higher satisfaction with the entire appeal process than those who did not.

DISCUSSION AND CONCLUSIONS

What do these findings suggest about the financial aid appeals process? One set of findings centers on the sources of information used by the students. A positive finding is that most of them are learning about financial aid appeals from the institution itself rather than through "word of mouth." Specifically, 83% found out through one of the college's offices, with most learning about financial aid from the Financial Aid Office itself. While Retention accounted for a relatively low 16%, Admissions was not directly mentioned as a source of information by any of the students, a finding which may support the ideas of the researchers who are calling for a broader view of financial aid and for closer integration with offices such as Admissions (Binder & Aldrich-Langen, 1995; Borus, 1995; Harris, 2006; Kurz, 1995).

An interesting set of findings centers on the students' successes in having the denials overturned. An impressive 81% of them were successful in their appeals, even though, at least on the basis of a superficial review, the denials did not appear to be unwarranted in that they involved reasons such as not making adequate progress toward graduation or low grades. In turn, the students' successes are likely to reflect strong work by the college in helping them prepare for and make the appeals. Note, however, that a relatively low 61% of them felt they were adequately prepared. Moreover, their ratings of satisfaction with the process were moderate at best. Is the college doing enough to publicize its work? Or perhaps the students are simply engaging in the all-too-human tendency to give themselves the credit for their successes, where others would be blamed for their failures (for elaboration of this "self-serving bias," see Epley & Dunning, 2000).

The time waits could have been a source of frustration as well, but, again, in a situation where 44% received notification in a week or less in a seemingly nationwide "epidemic" where bureaucratic delays appear to be the norm, these delays do not appear to be unreasonable. Perhaps they appear so to a group of young people who are waiting anxiously for some indication of whether they will have the funds to enable them to continue their educations. Certainly, these findings are

consistent with research which has pointed to the central position of financial aid for African American students (St. John et al, 2005).

Perceptions of fair treatment are central to any financial aid program, and in this study, the importance of fair treatment is apparent. Our cross-tabulations and our ANOVA results consistently point to the relationships between the need for adequate information, fair treatment, and satisfaction with the process. While self-serving bias may be a factor here as well (Epley & Dunning, 2000), note that these results hold for students who were successful as well as for those who were unsuccessful.

In this research, we have focused on gaining an understanding of one key financial aid issue in one historically African American college. We have looked at issues surrounding appealing denials of financial aid – a critical financial aid issue in that it directly impacts the student's ability to continue with higher education – and have reported findings which require consideration and further examination by those concerned with the financial aid process. First, we have suggested that the college we examined appears to be doing a good job of getting students to gain information through "official" channels rather than word of mouth. There may be some evidence of lack of integration among departments such as Financial Aid and Admissions, however.

We are intrigued, however, by the evidence – at least as we interpret it – that students are receiving high quality services in terms of being helped to make successful appeals but that they do not appear to fully recognize the key role played by the organization in their successes. What does appear important are receiving adequate information and the perception that the process as a whole is fair. Thus, an initial point of emphasis for financial aid officials is to make certain that students understand the process and feel it is transparent, and are given the information they need. How much information is needed and exactly how much do they need to know to feel that the process is fair? Perhaps future research, with a focus on student attributions, can provide further guidance.

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LEARNING AND ASSESSMENT IN AUDITING

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ABSTRACT

The auditing course is unique in the accounting curriculum for several reasons: auditing is the only defined profession in the curriculum; the auditing section of the CPA exam is the only section to come entirely out of one text; the actual practice of auditing closely follows the textbook model; and it is the only course which can be easily divided into two distinct segments; the audit environment, i.e., those things which affect the audit, and the audit examination.

We have, for several years, used this model at our university. We split the textbook into two separate courses. We believe that by covering fewer chapters in each course, we are better able to address issues of importance in the profession and to better assess a student's mastery of the skills deemed necessary to success in auditing/accounting: understanding, research, analysis, judgment and communication.

The first course covers the audit environment, e.g., standards, ethics, liability, planning, internal control and evidence. Learning and skills are assessed through multiple choice quizzes and written problem assignments at the end of each chapter, a rubric graded ethics case, and periodic written exams.

The second course covers the audit examination. Two person teams complete a practice set which covers all elements of the examination including planning, internal control evaluation, audit program preparation, work paper preparation, and preparation of the financial statements and accompanying footnotes. Assignments are collected, graded and returned to the audit team at the end of each assignment. The completed practice set is collected and reviewed at the conclusion of the semester.

There is also a segment of the second course devoted to fraud risk assessment. Students present oral and written responses to cases involving both financial reporting and employee fraud.

We believe this model does an excellent job of preparing our students for both the work place and the Auditing section of the CPA exam. We believe this is borne out by our success in placing students with public accounting firms, their success in passing the Auditing section of the exam and the comments of former students who feel this model made their entry into, and their success in, public accounting easier and less stressful than they anticipated.