USE OF INSTRUCTIONAL TECHNOLOGY IN FINANCE CLASSROOMS AND STUDENT LEARNING: PERCEPTIONS OF FINANCE FACULTY

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ABSTRACT

Recently we conducted an online survey of finance faculty worldwide on the use of instructional technology in the finance classroom and finance faculty perceptions of its impact on student learning. The response rate has been about 23.5%. In this paper, we present the preliminary results of our survey, which sheds light on various technologies used by finance faculty, their opinions of its impact on student learning, and incentive structures at their institutions for integrating technology in the classrooms.

Introduction

The use of instructional technology in the classroom has grown significantly in recent years. With the explosive growth of information technology worldwide, universities are under tremendous pressure to integrate its use in the classrooms. A number of studies in various disciplines have been conducted on the use and effectiveness of integrating technology in the
classroom [Peluchette & Rust (2005), Celsi & Wolfinbarger (2002), Young (2001), Summers & Vlosky (2001), Bryant & Hunton (2000), and Johnston & McCormack (1996)]. To the best of our knowledge, no paper has appeared in the literature to date on the use of instructional technology by finance professors and their opinions regarding its impact on student learning.

The objective of this paper is three-fold: i) to document the various levels of instructional technologies used by finance professors globally, ii) to document their opinions regarding the effectiveness of integrating this technology in the classroom in enhancing student learning, and iii) to document administrative support and incentive structures for integrating instructional technology in the classroom

Finance offers a wide variety of opportunities for the productive use of technology in the classroom. In addition to providing an efficient delivery system with the use of smart classrooms, there are many other areas where technology can be used productively. From the use of software for financial analysis and portfolio construction to the use of the Internet for instant access to global financial data, bank simulations, stock simulations, and many sophisticated online tools like beta calculations, portfolio analysis (Sharp's, Jensen's index, etc.), and the possibilities are endless. Online interactivity through the use of discussion boards and chats has also extended the learning experience beyond the classroom.

We believe that our research will allow us to see where Finance faculty stand with regard to integrating technology into the classroom learning experience. Current research most often focuses on technology mediated distance education. Our research differs in that we will be documenting the way in which technology is being used in the classroom. When current research focuses on technology in the classroom it tends to rely on anecdotal evidence or the experience of individual universities. Our results are global. In addition, our results will also shed light on the perceptions of the faculty regarding the effectiveness of this technology relative to the personal costs involving in using such technology. The implication of which may shed light on why faculty use technology at the level they currently use it.

Literature Review

There is extensive literature on instructional technology and student learning, especially in education and psychology discipline. Here, we review a few articles regarding the use of instructional technology and student learning in business disciplines.

Peluchette and Rust (2005) investigate management faculty members’ preference for instructional technology in the classroom. They report that most of the faculty surveyed preferred using some sort of technology, but preferred low level technology such as overhead transparencies, power point, black board /white board. Clark III et al (2001) in the context of marketing students report that students have differing opinions on the impact of instructional technology on their learning, ability to get a job and job performance.

Young (2001) investigates the impact of implementing a technology rich learning environment in a marketing class. Celsi and Wolfinbarger (2002) explore the evolution of innovation in the
marketing classrooms due to new instructional technologies and the process of faculty adoption of these technologies.

Bryant and Hunton (2000) offer recommendations to accounting instructors regarding instructional technology use and research areas in instructional technologies. Similarly, Johnston & McCormack (1996) in the context of an Australian university state that the real changes in teaching and student learning because of the use of instructional technology is far less than expected. As mentioned before, we could not find any papers investigating instructional technology use in finance classrooms. This paper fills this gap in the literature.

Methodology

We document technology use by Finance faculty and their perceptions about its effectiveness, through the use of online and paper surveys altogether there are 25 questions.

We sent the survey to 1,972 finance professors worldwide listed in FMA directory on 11/15/04. To explore the difference in the response rates between a regular paper-mail survey and an online survey, we selected 500 subjects randomly and sent out paper copies of this survey. For the remaining 1,472 subjects, we sent an e-mail directing them to an online version of the survey.

For the online version of the survey, we received 230 responses within a few days. After three weeks, we sent a reminder to all the subjects, which resulted in additional 71 responses. Out of the original 1,472 e-mails sent, 200 were undeliverable. Excluding these undeliverable mails, the response rate is about 23.5%. This response rate is typical of survey studies [Alreck & Settle (1985), Peluchette & Rust (2005)]. For the regular-paper mail survey, we received 72 responses out of 500 sent. That gives a response rate of about 14.4%.

Preliminary Results

Demographic Information: Of the 301 respondents, 37% were full professors, 30% were associate professors, and 24% were assistant professors. Remaining had the rank of instructors/lecturers/teaching assistants. Overwhelming majority, 92% of the respondents were full time appointees and 23% of them held some administrative positions, such as Chair, Dean and Director. About 49% have been teaching for more than 16 years, 40% between 6-15 years and only 11%, 5 years or less. 90% of the respondents had PhD or equivalent degree.

Schools’ Characteristics: This was a global survey, but 97.98% of the respondents’ schools were located in North America. We received 2 responses from Western Europe and 1 response each from Middle East, Asia and Pacific countries, China/Hong Kong/Taiwan and Central and South America. Of all these schools overwhelming majority, 84% were AACSB accredited. In terms of the size of the Universities/Colleges as measured by the numbers of students, 48% had more than 15,000 students, 35% between 5,000- 15,000 and the remaining 5,000 or less. In terms of the size of the business schools, 53% had 2,000 or fewer students, 31% between 2,000-4,000, and only 16% had more than 4,000 students. In terms of the size of finance departments as measured by the numbers of finance faculty employed, 59% had 10 or fewer faculty, 32% between 11-20 faculty, and 8% had 20 or more faculty.
Technologies Used: We have documented the frequency of usage of an array of 40 different technologies by the respondents.

Opinions of Finance Faculty: We have also documented the opinions of the finance faculty members regarding efforts at integrating technologies in the classrooms, effectiveness in enhancing students’ learning and incentive structure for integrating technology in the classroom.

Statistical Analysis: In addition to the summary statistics presented above, we also do a statistical analysis. We construct an Index for Informational Technology Usage and correlate that to the respondent’s and his/her school’s characteristics in a multiple regression model.

Conclusion

In this paper, we have documented the various levels of instructional technologies used by finance professors globally and their opinions regarding the effectiveness of integrating this technology in the classroom in enhancing student learning. Using a regression model, we also investigate the impact of finance faculty and his/her schools’ characteristics in the levels of instructional technology use.

REFERENCES


Bryant, S. M. and J. E. Hunton (2000). The use of technology in the delivery of instruction: Implications for accounting educators and education researchers,

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