

ACCOUNTING INFORMATION SYSTEMS: DOES THERE CONTINUE TO BE A LACK OF STANDARDIZATION IN TEACHING MEDIA?

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ABSTRACT

Many factors affect the way we teach accounting courses including new FASB pronouncements, industry need and changing technology. Limited research exists on specific practices of Accounting Information Systems (AIS) courses offered.

The purpose of this study is to identify colleges and universities that offer AIS courses in traditional and distance learning formats. The study will test 2 hypotheses: Ho1: There is a lack of standardization in teaching AIS courses; Ho2: More than one software package will be utilized when teaching AIS courses.

A sample of 200 colleges and universities with accounting programs was sent a questionnaire survey with follow up responses via Email. A pilot study was initially conducted in order to enhance validity and reliability of the study. Both hypotheses were proven and a very interesting finding could be noted in that of the respondents that did not offer an AIS course, 65% stated that they did not offer AIS courses because they could not find qualified faculty to teach these subjects.

There can be many different formats to offer AIS courses. In addition, automated or manual practice sets could be used to enhance student learning. AIS can be considered a new emerging discipline. The results of this study may assist faculty members structure new AIS courses or enhance existing ones to better meet the needs of their accounting students.

INTRODUCTION

Accounting courses can be affected by many factors including new FASB pronouncements, industry need and changing technology. Limited research exists on Accounting Information Systems (AIS) course media offered and even less research can be noted on specific practices of such AIS courses conducted in a distance-learning format.

Articles on research in distance learning (Cooper, 1999; Matthews, 1999; Sonner, 1999), on AIS courses (Davis & Leitch, 1988; Groomer & Murthy, 1996), and a few case studies (Geerts & Waddington, 2000; Kundey, 1991) on AIS courses can be found. Much more data could be accumulated on the teaching methods currently initiated by AIS faculty members, which could offer more options for teaching these courses.

The purpose of this study is to identify colleges and universities that offer accounting information systems courses (AIS). In addition, the study also attempted to identify the type of practice sets assigned, computerized projects, cases, simulations and other media offered in these courses.

LITERATURE REVIEW

Although much research exists on accounting education and AIS curriculum (Boyd, et al., 2000; Cohen, 1989; Groomer & Murthy, 1996; Kudney, 1991; Pei, 1988; Shaoul, 1989), not much research exists on what media can be used in AIS course offerings. One article noted the importance of technical communication in AIS courses. The authors suggested that integrating communication skills into a technical course such as AIS to enhance the students' understanding of AIS as well as improve the students' writing skills (Gelinis et al., 1997).

Other authors suggested the use of a database software when teaching AIS (Reuber, 1988). The students could be responsible for generating, testing, and the evaluating of database models relevant to AIS, auditing, and other accounting endeavors. Geerts & Waddington (2000) suggested the use of the Resource-Event-Agent (REA) model to structure a database in AIS courses. The authors noted that two AIS textbooks, Romney and Steinbart (2000) and Hollander et al. (2000) cover the REA model. Other AIS textbooks include the use of Access software. Perry & Schneider (2000) co-authored an AIS textbook using Access. Not only database software can be utilized in AIS courses but faculty can adopt other media in their classes as well.

AIS students can be directed to purchase integrated accounting packages. AIS faculty can incorporate integrated computerized cases into their course requirements such as Granite Bay Jet Ski, Inc. by Mansuietti & Weidkamp (1999). This computerized business simulation can teach students what a simple accounting information system might look like and give the students an opportunity to practice working with AIS software packages before graduating and beginning their careers.

There can be many techniques AIS faculty can choose to enhance their AIS courses. The purpose of this study was to note if a lack of standardization still exists as to techniques utilized in AIS classrooms, and if so, what media is currently being utilized in AIS courses at the present time. In addition the researcher also wished to know if the type of media chosen in the course would differ depending upon what program offered the AIS course. Also, the study would question whether one or more software packages could currently be noted in individual AIS classes.

METHODOLOGY AND DATA

A sample of 200 colleges and universities with accounting programs was sent a questionnaire survey with follow up responses via Email. Each Email memo included a survey instrument giving the respondents one week to return the survey. The sample of 200 was taken from Prentice Hall's Accounting Faculty Directories (Hasselback, 2000). The questionnaire was sent to department program directors, department chairs, or faculty members listed as being the contact individual for the business or accounting program.

A pilot study was initially conducted in order to enhance validity and reliability of the study. The pilot study outcome resulted in several changes to the survey tool such as expanding one of the questions to offer respondents an opportunity to describe what media they utilized in their classes. Even though limited respondents chose to offer details to this question in the pilot study, the format offered respondents to expand their answers if they wished to do so.

The survey tool included questions on the institution's classification, size of the institution, current graduate or undergraduate accounting information systems courses, media presently used in both traditional and distance learning AIS courses, number of students enrolled in AIS courses per year and if applicable, number of current AIS majors in the respondents' respective colleges or universities. The study resulted in one hundred and twenty-five completed questionnaires with one hundred eighteen usable responses.

RESULTS

The purpose of the study was to discover whether standardization exists in the teaching of AIS courses in colleges and universities. Survey questions included inquiries as to the media utilized in AIS courses, i.e., whether faculty members enhance their AIS classes with practice sets, simulations, computerized sets, cases or other endeavors.

The study included 2 hypotheses of which both were proven. Hypothesis 1 stated that there is a lack of standardization in teaching AIS courses. As noted in Table 1, the study results demonstrate that faculty members teaching AIS courses utilize diverse teaching methodologies and a lack of standardization still exists in teaching AIS courses (Davis & Leitch, 1988; Groomer & Murthy, 1996).

Media	Percentage
Access	17.8%
Papers/Presentation	15.3%
Excel, Internet/Research/Projects, & Peachtree	14.4%
Written Cases	12.7%
QuickBooks	9.3%
Simulations	8.5%
Great Plains	6.8%
Case	1.7%
Real World, Simply Accounting & Other	.8%
DacEasy, MAS/90, Lotus, One Write Plus, Oracle, People Soft, SPSS, Solomon	0%

Although 17.8% of the respondents utilized Access in their AIS classes, faculty continue to assign papers, presentations, research projects and other assignments. Faculty use other media in their AIS classes including Excel, Peachtree, and QuickBooks media at 14.4%, 12.7%, and 9.3% respectively in their classes as well. In addition, 8.5% of faculty members utilized AIS simulations and 6.8% of faculty members offered Great Plains software with 1.7% of faculty members teaching AIS classes with Case software.

The study results also indicated that the media chosen by faculty members teaching traditional AIS classes did not differ when teaching in a distance learning setting. It was interesting

to note that the survey respondents utilized the same media types whether teaching AIS courses in traditional or distance-learning classes. Distance learning researchers indicated that distance learning classes should be adapted rather than directly copied from traditional courses and that what media works in a traditional class, may not be successful in a distance-learning format (Au & Chong, 1993; Hogan, 1997; Webster & Hackley, 1997).

Hypothesis 2 which stated that more than one software package will be utilized when teaching AIS courses was proven. The study indicated that 19% of the faculty members surveyed utilized only one media and 31% of the faculty members surveyed offered two different media and 50% used three or more different media in their AIS classes.

As indicated in Table 2, Most of the survey respondents taught at colleges and universities above the junior or community college level with the largest percentage of institutions being the category of baccalaureate college designation.

Institution Category	Percentage
Doctoral/Research University	10%
Masters College and University	26%
Baccalaureate College	42%
Junior/Community College	22%

In addition, respondents of the study (Table 3) indicated that 60% of AIS courses were offered through business colleges or business departments. Accounting Departments offered 25% of the respondents' AIS courses with Economics and Computer Information Systems offering 13% and 2% of the college's AIS courses respectively.

Department	Percentage
Business	60%
Accounting	25%
Economics	13%
Computer Information Systems	2%
Other	0%

OTHER FINDINGS

The respondents noted a few different media choices when asked what media was used in their AIS courses. Some of these other media choices included: Word for flowcharting exercises, SAP, Quattro-Pro, Net Meeting, Blackboard, J.D. Edwards and (ERP).

The AIS course name most noted by respondents was Accounting Information Systems. The respondents listed other AIS courses as well including: Accounting Concepts with Application, Advanced Accounting Information Systems, Financial Accounting Systems, Financial Management Information Systems, Management Information Systems, Computerized Accounting Applications, Microcomputer Accounting and Advanced Microcomputer Accounting, Basic Peachtree, QuickBooks, Enterprise Process Analysis, and Application Solutions in the Connected Economy.

Forty-five percent of the respondents stated that their institutions did not offer AIS courses. Of these respondents not offering AIS classes, it was interesting to note that 65% stated that they did not offer AIS courses because they could not find qualified adjuncts or were not able to hire full-time faculty members to teach AIS.

SUMMARY AND CONCLUSION

There can be many different formats to offer AIS courses. AIS courses can be taught via distance learning or in a traditional setting or as a combination of both. In addition, automated or manual practice sets could be used to enhance student learning. There still exists a lack of standardization in AIS course media. It might be interesting to note if there is a correlation as to this wide variation of AIS teaching media and the lack of qualified AIS faculty available to teach these classes. In addition, a future study might be to compare what AIS software packages businesses would like their prospective employees to know and if those skills are the similar skills that students are learning in AIS classes today. Although, the results of this study may assist faculty members structure new AIS courses or enhance existing ones to better meet the needs of their accounting students, future studies might be able to aid faculty, students and employers who look to hire adequately skilled graduating students.

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