Fluency In Technology (FITness) Application to the Introductory Accounting Course: Student Utilization of EDGAR Database

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WHAT IS FITNESS?

Concern for true computer literacy lead the National Academy of Sciences to develop a Committee on Information Technology Literacy (CITL). As developed by the CITL, FITness involves the following three interrelated types of knowledge which should interact to reinforce each other, leading to a deeper understanding in information technology and its uses:

Intellectual capabilities. The intellectual capabilities of FITness refer to one's ability to apply information technology in complex and sustained situations and to understand the consequences of doing so. These capabilities transcend particular hardware or software applications.

Fundamental concepts. Concepts refer to the foundations on which information technology is built. This is the "book learning" part of fluency, although it is highly doubtful that a decent understanding of the fundamentals can be achieved strictly through the use of textbooks.

Contemporary skills. These skills refer to the ability to use particular (and contemporary hardware) or software resources to accomplish information processing tasks. Skills embody the intent of the phrase "knowing how to use a computer" as that phrase in colloquially understood.

The CITL recommendations for the application of FITness to the college curriculum involve a project-based approach to teaching FITness in an active learning environment whereby students discover solutions to problems in a laboratory-like setting.

FITNESS APPLICATION TO THE INTRODUCTORY ACCOUNTING COURSE

In an attempt to incorporate the FITness skill set advocated by CITL into the Introductory Accounting course, the authors designed a FITness module incorporating database analysis. In the spring semester of 2003 approximately sixty students in the Introductory Accounting course participated in twenty student projects. At the end of the term when students had completed most of their study of basic accounting, student groups of three (although in some cases a group might number four) were required to analyze a public

company's balance sheet, income statement, statement of cash flow and related footnotes and then make recommendations to their "Board of Directors" (the class) as to whether the Board should take an action based on their in-depth analysis.

The essence of our FITness project was to search out and provide to the students access to the best research materials and databases available for their particular projects. Each student project started with the Securities and Exchange Commission's (SEC) electronic financial database commonly known as EDGAR. This government database provided the students with the links in real time to the financial information their respective companies had filed with the SEC. EDGAR organized the information according to the Standard Industrial Classification (SIC code) which then permitted the students to evaluate their company relative to the financial information for their company's particular industry. The idea was to obtain sufficient information to enable the user of the information to look backwards at the company's historical performance, look sideways at the company's relative performance and then extrapolate into the future by manipulating the data to see what would happen under "what if" scenarios.

Each team of three to four students was required to submit a detailed ten to twenty page written report analyzing their company and the company's industry. Then they had to draw conclusions based on their data by making a concluding recommendation as to whether they would buy, sell or continue to hold the company's stock.

Once these written reports were submitted, students then had to orally present their findings to their instructor and their class using PowerPoint software. The instructors graded the presentations and the other students in the class provided written feedback to each presenter in an online Excel spreadsheet. This format provided the instructors with an independent evaluation (ie, second opinion) of the student presenters. In addition to written comments, the student audience indicated a numerical score for each student presenter and the overall grade for each team project. These numerical scores were then tabulated and displayed on the course homepage. Most of these student evaluations were linked online so each presenter so linked could see the numerical and written evaluations of their contemporaries. In several cases this was a painful experience for the presenter!

CONCLUSION

Overall, we believe the use of EDGAR was a very successful component in the student projects. This government database gave the students exposure to a very detailed financial database they probably had not experienced before in their undergraduate education. Once in the database, it provided direction to all Securities and Exchange Commission information on their company and enabled students to make comparisons with other companies which they would not otherwise have been able to do.

[ETS1]We have in the past used end-of-semester student projects as a way to encourage students to tie together the course materials and hopefully gain confidence in their ability to analyze financial information. Relative to prior years when students did not use EDGAR, this year's student projects seemed to be done at a higher level[ETS2], ie,

student graphs, charts and detailed analyses were more comprehensive and informative, on average, than similar student assignments from prior years. Some of that might be attributable to using a new textbook this semester, but it is our opinion that EDGAR provided a resource to the students which enhanced their database searching and analytical skills. The general impression was that the student projects were truly outstanding. In one semester students had gone from knowing next to nothing about accounting to making a presentation on a public company that would be fitting for just about any board of directors charged with making decisions based on the financial information contained in the reports[ETS3].[jdt4]