Chapter XIII

Education for a Technology-Based Profession: Softening the Information Systems Curriculum

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ABSTRACT

This chapter reports some further findings of an ongoing investigation into conceptual, academic, and “soft” skills that IS/IT practitioners regard as important in new graduates. There has long been agreement that the IS curriculum should be comprised of some combination of technical subjects and nontechnical business subjects, and that graduates also need “soft” business skills. There is far less agreement about what the mix between these should be and how best to prepare students in some areas, notably in the development of “soft” business skills. The research findings reported here present some evidence that traditional “business subjects” such as marketing, economics, or finance do not equate to the business skills that employers of IS graduates are seeking in new hires. The chapter concludes with a discussion of IS curriculum reform issues and strategies for reducing confusion, overcoming tradition and inertia, finding resources, and neutralizing vested interests.
INTRODUCTION

How can information systems educators achieve a better fit between the workplace and the university "studyplace"? Discerning and reconciling the aspirations of university students preparing for careers in business information systems with the skills, competencies, personal characteristics, and qualities desired by employers is, at best, the art of finding an acceptable, if not optimal, balance between them.

Students are most concerned with future employability. They classically desire to develop a sufficient base of knowledge and a skills repertoire to secure their first professional position following graduation, to survive in that position, and to feel that their education will also prepare them for advancement in the medium term of five or more years.

Employers, on the other hand, often indicate that they want new graduates who can be immediately productive in their environment, who are teachable, loyal team players who work to deadlines, who possess the ability to make an intelligible presentation, who can write understandable business letters, memoranda, and reports.

Are the aspirations of students and employers fundamentally incompatible? How can IS educators help to find a workable and satisfying balance?

Professional Preparation and Curriculum Design

It is a truism that the preparation of IS professionals must encompass a significant portion of a body of technical skills laid down by various professional bodies (Cheney, Hale, & Kasper, 1990; Gorgone & Gray, 1999; Underwood, 1997). It is also often held that employers desire more well-rounded graduates who possess well-developed business skills in addition to a sound technical repertoire (Trauth, Farwell, & Lee, 1993; Van Slyke, Kittner, & Cheney, 1997).

A persistent research finding that employers want graduates who possess better business skills is often interpreted by academics who typically operate in a business or commerce faculty to mean that more traditional, formal business subjects such as accounting, economics, business finance, and marketing should be taught alongside traditional hard skill subjects, such as systems analysis/design and programming in particular languages. Somehow, the other “soft” areas, such as teamwork, communication skills, ability to accept direction, and others, are “picked up” along the way through an unspecified, osmotic process.

Studies conducted in other practice-oriented business disciplines such as accounting (Stewart, 1997) have indicated that students may not fully appreciate the importance of nontechnical skills sought by prospective employers.

Several writers, including Ang (1992), Ang and Jiwhahasuchin (1998), and Young and Keen (1997) noted the long-term shift from programming and other technical subjects to business analysis and people-oriented skills in IS curricula and in employer requirements expressed in recruiting advertisements over the past two decades. Ashley and Padgett (1997) reported results of a 1996 study of the evaluation of the IS curriculum by IS graduates. The study covered business and nonbusiness courses along with traditional IS courses and compared results with a similar study in 1990 (Beise et al., 1991).

Some of the results appear to go against conventional wisdom. In the nonbusiness area, foreign languages rated quite poorly in both periods. In their business courses, Introduction to Information Systems and Business Communication rated highly, but core business subjects such as Economics, Business Law, Statistics, Quantitative Methods, and even Accounting rated below the average. Predictably, from the IS courses such as Systems
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