Chapter XIII

Information Systems Education for the 21st Century:
Aligning Curriculum Content and Delivery with the Professional Workplace

Glenn Lowry
United Arab Emirates University, UAE

Rodney Turner
Victoria University, Australia

Abstract

*In this chapter, we consider how information systems educators might revise curriculum content and adopt student-centered/active learning pedagogical approaches to achieve a better fit between the workplace and the university 'studyplace'. In considering **What to Study**, numerous research findings suggest a repertoire of 'soft' skills that are seen as essential to success for new IS professionals. The research findings discussed in this chapter present evidence that traditional business subjects such as Marketing, Economics, or Finance do not equate to the 'other' or soft business skills that employers of IS graduates are seeking in new hires. Soft skills are cultivated elements of professionalism that derive from example, reflection, imitation, and refinement of attitudes, personal capabilities, work habits, and interpersonal skills. Soft skills are*

seldom taught in dedicated subjects in tertiary information systems curricula. Somehow, the soft areas such as teamwork, communication skills, ability to accept direction, and others are expected to be picked up *along the way through an unspecified, osmotic process. Turning to* **How to Study***, a critical and contentious issue is determining the appropriate learning environment to best help new graduates develop soft skills and higher order thinking. Course delivery paradigms may be characterized as traditional, passive 'teacher-centered learning' and active 'student-centered learning'. We argue that student-centered/active learning approaches may be more effective in helping students to cultivate and refine soft skills than those currently in use. 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, to meet the educational needs of students.*

Note: The term information systems will be used to mean management information systems, business information systems, and informatics throughout this chapter.

Introduction

Information systems professionals contribute to the achievement of business and organizational goals through the use of information technology. The information systems profession is team-oriented and project-based.

Students are first and foremost concerned with future employability. Employers, on the other hand, often indicate that they want new graduates who can be immediately productive in their environment.

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

In the sections that follow, we will consider how information systems educators might modify curriculum content and pedagogical approach to achieve a better fit between the workplace and the university 'studyplace'.

Education for Yesterday's Workplace: Why We Must Rethink Curriculum Content and Delivery Methods

The authors began their careers in the 1960s, before the development of the IS profession. As young academics, our students typically studied computing in science faculties, often in mathematics and computer systems engineering departments. Curriculum content consisted of a mixture of mathematics, such as discreet mathematics and

Related Content

Virtual Reality in Education

Nicoletta Salaand Massimo Sala (2005). *Technology Literacy Applications in Learning Environments (pp. 358-367).*

www.irma-international.org/chapter/virtual-reality-education/30226

We Learn in the Form of Stories: How Digital Storytelling Supports Critical Digital Literacy for Pre-Service Teachers

Lynne Masel Waltersand Sam von Gillern (2018). *International Journal of Digital Literacy and Digital Competence (pp. 12-26).*

www.irma-international.org/article/we-learn-in-the-form-of-stories/218161

Guidelines for Successful Public Internet Access Points (PIAPs) Implementation

Ali Arifoglu, Gülgün Afacanand Erkan Er (2013). *Digital Literacy: Concepts, Methodologies, Tools, and Applications (pp. 502-521).*

www.irma-international.org/chapter/guidelines-successful-public-internet-access/68467

Use and Perception of Wikipedia among Medical Students in a Nigerian University

Esharenana E. Adomiand Samuel Emeka Adigwe (2014). *International Journal of Digital Literacy and Digital Competence (pp. 1-11).*

www.irma-international.org/article/use-and-perception-of-wikipedia-among-medical-students-in-a-nigerian-university/115894

Gender Digital Divide and National ICT Policies in Africa

Violet E. Ikolo (2013). *Digital Literacy: Concepts, Methodologies, Tools, and Applications (pp. 812-832).*

www.irma-international.org/chapter/gender-digital-divide-national-ict/68483