Chapter VI

Technology Competency and Associated Challenges

Bill Gates stated in a speech, “In all areas of the curriculum, teachers must teach an information-based inquiry process to meet the demands of the Information Age. This is the challenge for the world’s most important profession. Meeting this challenge will be impossible unless educators are willing to join the revolution and embrace the new technology tools available.” .... Every educator looks at the integration of technology—and its challenges—from a different perspective. Technology coordinators view the problems of insufficient hardware, software, and training as major obstacles. Teachers consider the lack of time to develop technology-based lesson a concern. Administrators identify teachers’ lack of experience using technology in instruction as yet another challenge. Teachers and administrators, however, can and are beginning to overcome these barriers with effective leadership, proper training, planning, and a commitment to enhancing teaching and learning using technologies. (Shelly, Cashman, Gunter, & Gunter, 2004, pp. 6.10-6.11)
Implementing the use of Web-based technologies in teaching and learning requires fundamental changes in many areas of an institution. Areas that incorporate a range of challenges involving faculty reluctant to take the plunge into incorporating technology in teaching and research endeavors, as well as how various institutions regard and reward scholarly work involving technology (Lamboy & Bucker, 2003).

Faculty members’ knowledge and skills in using technology are very important; however, it may be that poor experiences with technology create skepticism and mistrust in technology. This chapter discusses methods for launching timid faculty into the digital age by exploring examples such as mentorship and institutional support programs that educate and introduce paradigm shifts linked to the rapid technological changes in today’s academia. Based on the notion that any successful technological integration into the curriculum and instruction is not possible if the faculty members are reluctant to participate, this chapter discusses the following:

- Faculty Reluctance with Technology Integration
- A Case Study Involving Higher Education
- Educating Hesitant Faculty

**Faculty Reluctance with Technology Integration**

**The Problems Defined**

Faculty reluctance, it appears, is often related to actual fear of technology, in addition to the research that suggests that the promotion and tenure review process often does not consider technical contributions as scholarship. Technical pockets of reluctance can be enabled by institutional attitudes, workload allocations, the time required to develop technical initiatives, and the promotion and tenure review climates. The responsibility for change rests with the entire set of stakeholders (those developing and implementing institutional missions and policies) and classrooms where ultimately no hiding place from technology will remain, and students who will no longer tolerate a technological mismatch.
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