



**Chapter XI**

**The Role of Information  
Technology in Quality  
Education**

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*Discusses the rise of information technology functions in higher education and the related advent of quality standards for on-line education. The limited nature of existing guidelines is emphasized, particularly in the dimension of establishing authentic relationships, empowerment of faculty and students, and the inculcation of critical thinking. The Borkian vision of the future of education is summarized and contrasted with the limits if not failure of the legacies of past large-scale educational investments in programmed learning and in computer simulation. The drift toward mandated standards in on-line/distance education is discussed as well as the tension of this with empowerment concepts. Further contrast is drawn between the competing models of the university as "community of scholars" and as "marketplace of consumers." Cost-cutting motives for on-line course delivery are explored in some detail, raising issues about radical proposals to restructure university teaching functions. A hybrid model, involving both computer-mediated and face-to-face methods, is seen as the superior instructional strategy, but the cost of this model raises the danger that a two-tier educational system will emerge – a more expensive upper tier with sound traditional education supplemented with the benefits of electronic media, and a cheaper, inferior tier dispensing programmed training to meet objectives far narrower than the traditional goals of liberal education.*

Quality education is a universal goal. It is common to hear arguments that instructional technology will be the key to educational quality as we enter the new millennium (cf. Fiske and Hammond, 1997). Investment in educational technology is urged upon policy-makers as the path to educational quality (Mergendollar, 1996). In fact, enthusiasts for educational technology argue that quality has and will continue to increase rapidly, creating a "new

educational culture” (Connick, 1997). Whatever problems exist are seen as ones which can be handled through better administrative and technological planning — that is, technology believers perceive no intrinsic obstacles to total quality assurance using information technology in higher education (Roth and Sanders, 1996).

Other voices question educational technology as a panacea. Cardenas (1998), for instance, has written on the problems associated with technology in the college classroom in terms of issues such as poorly functioning equipment, over-promotion of technology-based learning to students, and lack of quality in courses delivered by technology. A recent article in the *Chronicle of Higher Education* reported on critics of educational technology who say students choosing on-line courses are not getting the education they pay for, and question whether universities should be providing such instruction (Guernsey, 1998). The American Federation of Teachers and other faculty organizations have also raised serious cautions about web-based education (Mingle and Gold, 1996) and have even gone on strike over it.

The unruly growth of on-line distance education is the basis of these concerns. One has only to look at popular books like, *The Best Distance Learning Graduate Schools: Earning Your Degree without Leaving Home* (Phillips and Yager, 1998). This work profiles 195 accredited institutions that offered graduate degrees via distance learning as of 1997-98. It acknowledges that “diploma mills” are a danger. Even accredited programs from recognized institutions of higher learning may have been thrown together as experiments or simply in quick response to administrative fiat. “Caveat emptor” is definitely a precept for student consumers of on-line education.

In response to growing criticism of the recent, rapid, unregulated growth of distance education, a number of recognized higher education organizations have formulated quality standards and guidelines. A prominent example is the document “Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs,” from the Western Cooperative for Educational Telecommunications; <http://www.wiche.edu/telecom/projects/balancing/principles.htm>; see Johnstone and Krauth, 1996; Zuniga and Krauth, 1996; WCET, 1997). These principles have been endorsed by a number of higher education governing and policymaking bodies in the western United States, as well as by the regional accrediting community. The core assumption of these guidelines is that, “The institution’s programs holding specialized accreditation meet the same requirements when offered electronically.” Since these guidelines are a widely-accepted definition of “quality” as applied to online education, they are quoted below:

- Each program of study results in learning outcomes appropriate to the rigor and breadth of the degree or certificate awarded.
- An electronically offered degree or certificate program is coherent and complete.
- The program provides for appropriate real-time or delayed interaction between faculty and students and among students.
- Qualified faculty provide appropriate oversight of the program electronically offered.
- The program is consistent with the institution’s role and mission.
- Review and approval processes ensure the appropriateness of the technology being used to meet the program’s objectives.
- The program provides faculty support services specifically related to teaching via an electronic system.
- The program provides training for faculty who teach via the use of technology.

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