

**Achieving Quality in E-learning:
A Conceptual Framework**

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Introduction and Background

A number of researchers have observed that the introduction of organizational innovations passes through several stages. In one conceptualization (Moore, 2000) there is early experimentation by a handful of practitioners, the so-called “early adopters.” If the innovation is demonstrated to be positive, a second wave of implementation at a larger number of institutions will take place. The final stage is widespread acceptance throughout the full range of organizations within which the innovation is applicable. Christensen (2000) and Kuhn (1996) suggest other paradigms, but essentially a similar pattern emerges, much like ripples traveling outward from their point of origin. This brief presentation on the innovation of e-learning will examine quality paradigms for each phase of its development in higher education. The context is the USA. It will be helpful to think of the following time frames corresponding to each of the three stages: Stage I, 1990-1994; Stage II 1995-1999; and Stage III, 2000-2005.

Stage I The Development of a New Approach to Distance Learning

Every wave of technological innovation, from the use of radio, television, and most recently web linked computers has been greeted with great enthusiasm, often unrealistic, leading to disappointment as actual performance falls short of what has been promised. Yet, it is often overlooked that despite the gap between expectation and performance, each innovation in distance education, from the advent of independent study in the 19th century to the present has made an important contribution to adult continuing education,

promoting access, opportunity, and economic self-improvement thereby spreading democratic ideals.

Although we can predict little beyond a continuation of what we know currently, the introduction of e-learning has, in our lifetime, reshaped the world of continuing education in far-reaching and dramatic ways. Suffice it to say that in 2003 over 80% of all US public universities offer at least one fully online or “blended” or “bimodal” course (combining online and face-to-face instruction) and two-thirds of academic leaders believe that online education is crucial to their long-term strategic plans. (<http://sloan-c.org/resources/report.asp>>, retrieved 20 September 2005).

For early adopters, the key issue is determining whether or not the new technology is a change with value- an innovation, or just a fad. Unlike a transitory novelty, innovations contribute in clearly discernible ways to the benefit of their users. In the early 1990's a handful of universities began experimenting with internet linked computers for distance education. The experimenters were based in two vastly different institutional settings. One group was located in public universities with a long tradition of distance and independent study. E-learning was just one in a long evolutionary tradition going back to professors on horseback visiting remote sites in order to lecture. The second cluster was composed of proprietary colleges and universities. These schools were profit-making businesses. US higher education accrediting agencies do not discriminate on the basis of institutional funding, so these schools, when accredited, have met the same criteria as their public and not-for-profit peers.

In both circumstances, e-learning enabled schools to expand their pool of applicants and enrollees. The attractiveness of an asynchronous, computer based “classroom” appealed immediately to those adult students already burdened by work and family. For anyone who has been a night school student, pursuing a degree on a part-time basis, the new option was heaven sent.

Public universities and proprietary schools, it bears stating, worked in tandem with computer technologists, manufacturers, and corporate education providers, all of whom were simultaneously coping with the equivalent issues of learning at a distance via computer.

Quality, as it was framed at this seminal stage, can be reduced to two basic questions: “Does it work?” and in the for-profit sector, “Does it either save or make money?” In both cases, the answers were resoundingly positive. Enough so, to warrant further investment and testing.

Stage II Applications Multiply in Higher Education

While many mainstream universities watched from the sidelines, the virtues of e-learning were becoming palpable. This coincided with a startling expansion in all information technology related businesses, now referred to as the dot.com bubble. The higher education press focused its attention on the dynamic proprietary sector, especially the University of Phoenix. It was impossible to attend a conference or pick up a journal without reading about the threat to higher education posed by this new type of competitor. One issue of *Educause Review* (March/April 2000) summarized, none too subtly, the mood of the era with a cover picture of a phoenix rising from the ashes of traditional, brick and mortar higher education.

In the years 1995-1999, there were enough successful examples of virtual education for replication by universities that had been hesitant to begin their own programs. Also, the cost of acquiring the requisite technology was becoming more reasonable, sharply reducing this particular obstacle. The dynamics of demystification, low cost, and the looming threat of the University of Phoenix provided the right ingredients for an explosion of learning about e-learning.

A period of intensive conferencing and research dissemination yielded a superb milieu for just-in-time learning and the emergence of a new category of continuing education professional- the electronic distance learning specialist. Most of these positions appeared in schools lacking any prior experience in distance education. These professionals created bureaus, offices, and departments dedicated to the development, deployment, and evaluation of online courses. Within schools already having extensive independent study offerings, e-learning might constitute a parallel but separate administrative structure.

Quality came to the forefront as a pivotal issue, especially in the skirmishes for and against online learning. The range of criticisms catalogued mainstream higher education's standard complaints about distance education. These could be summarized as follows:

- 1) Online teaching could not be of the same high caliber compared with the traditional classroom or lecture hall where faculty could monitor the body language and facial expressions of their students as feedback for how well the material was being understood.
- 2) The opportunities for cheating, such as the use of "ringers," would be rampant unless students were under the watchful eyes of their mentors.
- 3) Difficult material could not be taught at a distance. Would you want your surgeon to have attended a virtual medical school?
- 4) Administrators would be in a position to illegally obtain faculty intellectual property –lecture notes, the lectures themselves- and decide that they could decrease instructional staff. Administrators could also spy on faculty, an electronic omnipresent Big Brother.
- 5) Intrinsic to the collegiate experience is being on campus, rubbing elbows with other students and out-of-class meetings with faculty during office hours or at lunch. Virtual Frisbee on the internet is a poor substitute for playing on the academic quad.

In short, elearning represented a broad gauge assault on the traditions and fabric of American higher education.

Advocates of electronic distance education countered:

- 1) Online faculty received copious written feedback from their students. Instructors teaching the identical course in electronic and traditional classroom formats reported equivalent, if not superior, educational outcomes. The claim that faculty teaching face-to-face received meaningful behavioral clues from their students, was unsupported testimony, and hard to take on face value, especially in large classes.
- 2) Online faculty had more evidence on which to evaluate consistency in student performance. Also, new electronic services, such as Turn it In and Google Scholar, made it far easier to discover instances of plagiarism.
- 3) While surgeons did not attend virtual medical schools, the health and medical professions were among the first to use electronic media for continuing education, electronic databases, and just-in-time sharing of expertise at a distance.
- 4) As faculty became better informed about elearning it was understood that conventional teaching and the reliance on extensive lecture notes were no longer appropriate and were not at risk of being appropriated. Moreover, academic administrators did not deviate from their commitment to academic freedom and their belief in the sanctity of the classroom, even if electronic.
- 5) Many more traditional aged students were compelled to work in order to afford rising tuition bills. In increasing numbers they demanded evening and online courses in order to maintain steady progress toward graduation.

Probably most significant of all, tenured faculty members could successfully resist entreaties to teach online, leaving the bulk of virtual instruction to untenured lecturers and adjuncts.

Stage III Widespread Acceptance

In this manner opposition to elearning diminished. The combined weight of student demand, the growing number of institutions offering e-courses, and the demonstration of acceptable quality tipped the scales in favor of the new technology. Of equal, if not greater, consequence was the fact that public universities were relying more and more on enrollment as both a direct source of revenue, or as part of state and local funding formulas. Additionally, these virtual students could be added without taxing existing facilities.

Private institutions, especially those in the proprietary sector, saw a way to generate revenue without the need for investment in real estate, libraries, and most radically, full-time tenured faculty. They could, with clever and persistent marketing, instantly transform themselves overnight from local to national institutions, reaching into every corner of the country for adult students eager to earn college degrees. Popular software platforms such as Blackboard and WebCT emerged so that students and instructors could easily navigate the world of online learning, making it possible to learn or teach at almost every institution offering electronic courses.

In this third stage of maturity almost anything was educationally possible, from the Associates to the Doctors degree including continuing professional education. Universities could address the needs of both full-time and part-time students; and meet the aspirations of men and women across the economic spectrum. With the exception of some elite institutions, there was overwhelming acceptance of e-learning.

Most interestingly, notions of quality shifted again. To many observers e-learning had demonstrated acceptable standards of rigor to join the edifice of American higher education. To some it would always be a necessary evil, like the Summer Session, Night School or Independent Study; a source of revenue, a form of mass education, but not the real thing. But this academic assessment meant little to distance education advocates, especially part-time students whose options have always been limited. The judgment had

been rendered. Quality was “good enough.” Virtual students were electronically “here” to stay.

Conclusions

Over a brief, fifteen year, period online distance education was widely popularized across the higher education spectrum. Overcoming initial skepticism, advocates persistently demonstrated acceptable levels of quality to quell all but the most severe critics. Moreover, growing student demand, the competitive pressures of new online education providers, and shifts in higher education funding were additional incentives to embrace the new venue. In short, the quality paradigm shifted from “How good is it?” to “Is it good enough?” Barring any unforeseen scandals the popularity of online learning should persist. As technology evolves it can be safely predicted that e-learning ten years from now will be different from what we are familiar with today. With any luck it will enhance educational access and opportunity, leading to a more equitable society.

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