

All Aboard - Destination Unknown: A Sociological Discussion of Online Learning

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ABSTRACT

This paper is an attempt to describe the emergence and growing popularity of online distance education over the past 30 years through changing sociological lenses. Examining the re-casting of the electronic classroom through the euphoria of techno-positivism, the power-embedded analysis of Critical Theory of Technology (CTT), and the critique of postmodernism, the paper addresses the implications suggested by each theoretical interpretation. Using the metaphor of a high-speed train, we encourage administrators, instructors and technicians to stop and reflect on the destination, rather than simply marvel at the speeds at which we are traveling and the engine that powers our ride.

Keywords

Online classes, Distance education, Techno-utopianism, Critical theory of technology, Postmodernism

Introduction

Imagine trying to board a train that is already moving along the tracks. You manage to get on, but the directions to your seat are written in a foreign language. You recognize the letters, but the words seem unintelligible. The conductor is faceless yet clearly frustrated with your inability to sit and interact with your unseen fellow riders. Worse yet, you must get to your destination on time or you will not be able to disembark.

This scenario is neither a nightmare nor a horror movie plot; it is instead analogous to a first experience in an online class. Rest assured though that you are not alone in your discomfort. Both students and instructors struggle to negotiate online instruction, a still somewhat new mode of teaching and learning. Although assuming a far more removed stance, social theorists have also disparaged similar technological changes in modes of instruction. Their denunciations date back to Plato's condemnation of the privileging of writing over dialog in teaching – ironically while conducting his criticism in written form (Plato, 1961). Analyzing online education in terms of social theory is challenging because like Plato, theorists criticize technology but find themselves dependent on the very same tools, e-mail and computerized word-processing programs for example, that they criticize (Nobel, 1997).

Mindful of this inherent paradox between message and medium, in this article we attempt to examine online education, the most recent entwining of technology and education. We begin with the birth of the Internet - arguably January 1, 1983 when TCP/IP (Transmission Control Protocol/Internet Protocol) was established as the standard protocol for Internet transmissions (Cutshall, 2003). Access to the Internet enabled computers of all types to interact with one another, resulting in the rapid growth of the World Wide Web and the beginning of a new type of distance education, online courses. Defined as “any formal educational process that occurs with the teacher and the student separated by either time or distance” (Davey, 1999, pp. 44-45), distance learning in an online format combines synchronous and asynchronous interaction. This combination is then packaged and delivered to anyone with a computer, Internet access, and the often hidden prerequisite of basic technical skills. Embraced as “the educational pedagogy of the future” (O'Malley, 1999, p. 3), distance learning, enhanced by web based technology, has made great strides since first offered in the form of correspondence courses, and later as cable television courses and via interactive television. By 2000-2001 for example, 56 percent of all postsecondary institutions offered some version of online courses, up from 34 percent in 1997. This growth is particularly significant in the public sector, where 90 percent of all public, two-year and 89 percent of all public, four-year institutions offer courses from a distance (Wirt, Choy, Rooney, Provasnik, & Sen, 2004). Recent data reveals that secondary students also take advantage of this growth in course offerings. In the 2002-2003 school year, thirty-six percent of all public schools had students enrolled in distance education courses, with students in

fifty-nine percent of those schools enrolled in online courses. Of particular relevance to this paper, in forty-eight percent of those districts, post secondary institutions delivered the online courses. Online learning has become a run-away train, racing forward so quickly that it appears as a blur to the pedestrian standing by the tracks.

Our examination of this new technological context of learning and teaching is sociological in nature. In an attempt to understand the high-speed bullet train of changes technology has brought to education and the strategies employed for coping with these changes, we focus on the portrayal of online learning in both public and academic discourse. Our discussion of these modes of thought pivot around three widely divergent theoretical perspectives: techno-utopianism, an incontestable belief in technology as progress regardless of any difficulties that may arise (Lears, 2000), Critical Theory of Technology (CTT), a critique that equates digitizing data to the "legitimiz[ation] of knowledge that fits into that structure" (Spitz, 2000, p. 9), and postmodernism, an emergent theoretical perspective that focuses on the coupling of immediacy and isolation in the contemporary world (Neal, 1999). By tracing the discourse that defined the emergence, growth, and use of online learning over the past 20 years, we hope to make visible the gap that Agalianos (1996, p. 2) noted when writing, "The social processes and the political decisions involved in the production and 'consumption' of IT in education are largely ignored."

Hopeful Beginnings

From the beginning of education's courtship with technology, what has come to be known as techno-utopianism has flourished. Within this techno-utopian stance, technology in the classroom has long been proclaimed to "offer the greatest potential to right what's wrong with our public schools" (California Educational Task Force, cited in Oppenheimer, 1997, p. 53). In schools and campuses across the US, computer-assisted learning has been deemed capable of great accomplishments that include both the transformation of teaching and the improvement of students' academic and vocational performance (DeCastell, Bryson, & Jenson (2003). Like the general public, teachers have come to see computers as essential to improving student achievement. When Michigan's governor announced her intention to cut funding for a laptop project that provides computers to sixth grade students, for example, a middle school teacher insisted, "If the funding ends for this program, in three to four years, Bear Lake schools will take a 5-year leap backward in education" (Wendland, 2005, p. 12). Such strong convictions reflect an unquestioning acceptance of and growing dependence on technology that is manifested by teachers in a wide range of school settings.

At its most basic, techno-utopianism is based on the belief that technology will revolutionize society. Actively promoted by *Wired* magazine since the periodical's inception in 1993, techno-utopians view the Internet, the most recent example of digital technology, as a colorblind mechanism that fosters participation and involvement, while freeing individuals from governmental constraints. Techno-utopians promote online instruction as both an alternative to traditional class attendance and a mechanism for maximizing service to students at the lowest cost. District personnel cited the availability to offer "courses not otherwise available at the school, ...meeting the needs of specific groups of students and offering Advanced Placement or college-level classes" as reasons for having distance education courses in the district (Setzer, & Lewis, 2005, p. 14). In a 1998 advertising campaign, community colleges, in the form of the Community College Distance Learning Network, were able to target a new potential student base, the large immigrant populations in Chicago and Los Angeles, because of the development of more than 500 courses delivered via the Internet (Chronicle of Higher Education, 1998).

According to techno-utopian texts, students in online courses have been divided into seven discrete groups: 1) corporate learners pursuing education to maintain or upgrade work-related skills, 2) professional enhancement learners seeking to advance or shift careers, 3) degree-completion adult learners working to complete a degree at a later stage of their lives, 4) college experience learners preparing for life, 5) pre-college learners doing postsecondary work prior to the completion of high school, 6) remediation and test preparation learners preparing for an examination or enrollment in another program, and 7) recreational learners enrolled in classes for personal enjoyment (Oblinger, Barone, & Hawkins, 2001). Regardless of specific rationale and motivation, these learners are unable to attend traditional classes either because work or family situations restrict their participation or because they do not live in geographic proximity to a college campus. As a public relations article on Blackboard's website asserts: "When course content and activities are provided online, students no longer need to worry about accessing course materials. Students can complete assignments during their most productive times. Busy students can choose to download readings or take practice exams whenever it is more convenient, in the evening after kids are put to bed or at 4am during a bout of insomnia" (Blackboard, 2000, p. 3).

In addition to convenience, proponents of online education described this new virtual context as both more fair and less biased than traditional classrooms. As the context for discussion in college classrooms shifted to chat rooms and other modes of electronic networks, techno-utopians reported that "groups of students at different schools, even in different countries, work together on collaborative projects, comparing the results of environment studies or cross-cultural surveys and thereby learning not only the subject at hand but also other skills in social relationships just the kind of learning that the early critics of teaching machines were afraid computers would stifle" (Starr, 1996, p. 55).

Others highlighted the benefit of learners' disembodiment in a virtual learning environment. "At once, you may say, we have eradicated the pathology of the classroom: learners will no longer feel their very presence has generated an inscription on their bodies by others. Fat, thin, shy, squeaky-voiced, slow, boisterous, late, sleepy, hairy—the whole Seven Dwarfs roll call—will be irrelevant in the new virtual learning environment" (Beckett 1998, p. 6). Online distance learning has been described by Starr (1996, p. 56) as "race-neutral, location-neutral, age-neutral, income-neutral, disability-neutral and would be gender-neutral except for the clue of first names." Starr continues, "Student participation in the discussion is greater than in any of our face-to-face classes. Some kinds of personal warmth appear to be more freely exchanged in the absence of bodies."

The hopeful optimism surrounding online education has been so pervasive that both pundits and academics alike have predicted its role in the demise of the residential university. MIT mathematician Seymour Papert (1984 as cited in Cuban, 1996) claimed that computers would make schools obsolete. In a similar vein, management pundit Peter Drucker (Lenzner & Johnson, 1997, pp. 7 - 8) predicted that:

Thirty years from now the big university campuses will be relics. Universities won't survive. It's as large a change as when we first got the printed book ...totally uncontrollable expenditures, without any visible improvement in either the content or the quality of education mean that the system is rapidly becoming untenable. Higher education is in deep crisis....The college won't survive as a residential institution.

Conflicts Emerge

But as the marriage of education and technology moved beyond the honeymoon stage, tensions began to emerge in the relationship. By the late 1990s, suspicions surfaced that the techno-utopianism that had been embraced by educators and the general public alike was in fact a result of "technopositivism," a heavily marketed ideology that perpetuates a naïve faith in the promises of technology (Robertson, 2003b, p. 282). Critics claimed that teachers and schools were "easy targets" for assertive marketing campaigns that linked computer-assisted learning with issues of equity and access (Robertson, 2003a, p. 414). While techno-utopians proclaimed the cost effectiveness of electronic delivery, others saw universities struggling to upgrade instructional television systems, choosing between competing and costly course management software, and maintaining state of the art equipment in computer labs, libraries, and other points of access (Carmean & Haefner, 2003).

The reality of online distance education also brought with it concerns about students' actual access to technology, an increasingly apparent gap between requisite and actual skill levels, faculty members' complaints about increased workloads, and a growing sense of isolation on the part of both instructors and students. While public discourse continued to portray the Internet as available to all, able to transcend class distinctions, and free of bias, research findings began to surface critiquing the expense of Internet access. According to a study conducted by Vanderbilt University's *Project 2000*, access to the Internet was not randomly distributed, but correlated instead to income, education, and race (Novak & Hoffman, 1998). Conducted in January 1997 with a sample of nearly 6000 respondents, the study's authors concluded that "household income explains home computer ownership; increasing levels of income correspond to an increased likelihood of owning a home computer, regardless of race" (Novak & Hoffman, 1998, p. 13). A report released the following year by the Benton Foundation (Goslee, 1998) attributed this gap to a lack of infrastructure, rather than to choices made by poor families. Exposing a pattern of telephone and cable companies' prioritization of wealthier suburbs when wiring advanced systems, the report faulted the companies for neglecting to upgrade services in poor, inner-city neighborhoods. The report cited the mechanics of computer sales as problematic, claiming that a lack of financing options (i.e. credit cards, and checking accounts) severely limits the availability of Internet accounts to those living in poverty. In addition to infrastructure and hardware, access to online classes was also found to be dependent on the ability to afford a telephone, subscriber costs, and user fees.

Instructors also found that students lacked the requisite technical skills to participate in an online class and did not always develop these skills as they progressed through the semester (Belcheir & Cucek, 2002; O'Brien & Renner, 2002; van Schaik, Barker, & Beckstrand, 2003). To quote Ronald Walker, professor of African American Studies at the University of Maryland, "It isn't enough simply to have a personal computer – people need to integrate personal computers into their lives" (Floyd 1996, p. A20). Doubts began to surface concerning who actually benefited from online classes, students who would otherwise not have access to college classes, or already advantaged students for whom online learning added another layer of convenience. Distance education that required specialized software and Internet access may have been a boon for harassed professionals. However, it became increasingly apparent that for the unemployed student who needed these classes to get work, the requirements seemed to be yet another stumbling block (Gladieux & Swail, 1999).

Blacker (1994, p. 17) labeled these tentative anti-technology sentiments a "critical theory of technology" (CTT). Driven by Marxists and neo-Marxists, critical theory asserts that rather than being neutral, technology advantages and profits the privileged (Feenberg, 1991; Marcuse, 1964). From a critical theory perspective, the much lauded cost-effectiveness of online learning has failed to address the additional burdens on faculty members, who struggle with the expanded time commitment required to convert a class to an online format and to attend to students who demand the immediate attention of faculty members to solve their technology-related problems. College administrators have addressed the increase in workload by providing faculty stipends and stressing the need for faculty buy-in (Natale, 2002; Serwatka, 2002; Thor, 1999). But according to critical theorists, administrators have given little to no consideration to the displacement of teacher in an online environment that has "a preference for substituting 'delivery' for 'teaching'" (McWilliam & Taylor, 1998, p.29). Faculty members, in turn, have voiced skepticism about the de-peopling of electronic classrooms and the rendering redundant of their pedagogical skills. But in a climate in which market forces have already threatened their academic tenure, only a few have mounted any credible, cogent response to this pedagogical dislocation (Noble, 1998).

Online Education in a Postmodern World

The move from classroom-based to online education has also been viewed through a postmodern lens and positioned as an artifact of postmodern life. As Krishan Kumar (2001) observed: "The new society is now defined, and named, by its novel methods of acquiring, processing and distributing information... We do live in a world saturated with information and communication" (p. 97, 110). For post-modernists, wireless access has changed every aspect of our interaction. E-mail, instant messaging, online chat, and teleconferencing allow constant and immediate communication. At the same time, lives have also become more separate, and in turn, more isolated and private. Online classes reflect this dichotomy; students can access class at all hours of the day or night, yet they are increasingly isolated from their peers by an "electronic curtain" that constrains the development of a community of learning (Neal, 1999, p. 43).

Discourse among students in online chat rooms and virtual conference centers mirrors this separateness. Neal (1999) describes student's online postings as "sequential position statements," that simply refine their initial position rather than address those of their peers. According to Neal (1999), "It is too easy, in an electronic environment for students to escape the confrontations, challenges, and learning opportunities that are present in the classroom" (p. 43). While students may in fact choose this "self-imposed exile from communal conversation and action" when they register for online classes (Borgmann 1993, p. 2), university administrators have not fully grappled with the emotional distancing students and faculty experience while working within this disembodied context. In an unyielding campus climate of techno-utopianism, two mechanisms have become mainstays: counseling to steer students who voice a need for interaction away from online learning, and training to help both faculty develop online courses and students improve their technical skills. The presupposition here is two-fold. Students who favor distance learning "differ in their perceived learning needs from students who choose face to face formats" (Roblyer, 1999, p. 166). And that with support, anything can be taught and anyone can learn online.

At the same time, students' expectations of constant communication, instantaneous information, and immediate feedback have become painfully obvious to faculty members who teach in today's instant culture. Instructors find themselves barraged by students who assume they are tethered to the computer, poised day and night to respond to e-mail requests or comment on discussion postings. Unlike scheduled office hours, online availability, 24 hours seven days a week has become the norm in our postmodern world. Yet within a post-modern frame, these changes are neither all negative nor all positive. While online classes have the potential to transform the teacher student relationship to one of service on demand, technology has also afforded faculty

members increased flexibility. They no longer need to be physically present for office hours to answer student inquiries. As post-modernists proclaim, the collapsing of time and space, coupled with the disembodied nature of online instruction, has the potential to re-define the academy in ways we cannot yet imagine (Robertson, 2003b).

Conclusion

Drastically recast from an initial techno-utopianism to the power-centered analysis of CTT and the inherent contradictions of postmodernism, the cyber classroom is a manifestation of the pervasive changes engendered by the birth of the Internet. Managing and critiquing this pedagogical transformation is like painting a landscape from the window of le Train à Grande Vitesse (TGV). Feenberg (1999, p. 29) best describes the challenge when writing:

Fortunately, how we design our new technologies is still an open question; the answer will decide *which* benefits and *which* limitations we end up with... If we can resist simplistic appeals to managerial efficiency and focus our efforts on sustaining the dialogue that has always been at the heart of the educational experience, then technology holds great promise; if not, then we face a great threat.

Never immune to our own entrenchment in society, we recognize our techno-utopianism when we continue to hope that web-based technology holds great promise for learning and teaching.

In conclusion, we reflect back to the train metaphor used in the title of this paper. When we doubt our own abilities to paint a landscape that has become a blur outside the window of our high-speed train, we contemplate the possibility of getting off at the next stop and re-evaluating the train itself. Unfortunately however, we fear that “full speed ahead” is almost always the dictum of the day. We encourage administrators, technicians, and faculty alike to make the occasional forced stop and reflect on where they are going and why. They need to ask the questions: What is the purpose and who profits? We hope they disembark, and take time to consider the destination, not simply marvel at the engine that is powering this high-speed train called *Online Education*.

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