



Werry, C. (2002). The rhetoric of commercial online education. *Workplace*, 9, 34-44.

CHRIS WERRY

The Rhetoric of Commercial Online Education

Introduction

A few weeks after the September 11 attacks on the World Trade Center and the Pentagon, the online journal *Edge* invited prominent scientists, philosophers, artists, and journalists to write a response to the incident.¹ One of the respondents, Roger Schank, discussed the terrorist attack in relation to U.S. policy on online education. (Schank is a noted cognitive scientist, and chair of the online-learning company Cognitive Arts.) In a piece entitled “Educating Arabs, Educating Ourselves,” Schank argued that the root cause of the tragedy was lack of education—education of the American public, and especially, the education of Arab youth. Schank proposed that a solution to the dense web of problems, conflicts, and political issues surrounding the September 11 attack could be found in online education. Creating and exporting online education to regions of the world blighted by “poverty and ignorance” would lessen the chance of a similar attack in the future. Schank writes:

If we created high quality on-line courses, for example, if Harvard and Yale and other universities took seriously their role as world educators, then perhaps what they built could be exported to the rest of the world. If it were not done on a for profit basis, but were offered for very little money, then people in poor countries might qualify for better jobs and might be able to reason more adroitly about the complex issues they face. Instead we leave their education to mullahs or their angry fathers in law. While we, as a nation export television, movies and blue jeans, we do not export quality education.

While Schank's comments are a rather stunning example of political naiveté, technological determinism, and the banking model of education taken to new extremes, they are nonetheless consistent with the way in which online education has been talked about by many of its supporters in the U.S. over the last decade. For example, John Chambers, CEO of Cisco Systems, has said that online education will enable workers to “take more control of their jobs, while the dispossessed of the world will be able to make strides to improve their economic position” (McCright, 1999). CEOs, university administrators, publishers, and Nobel laureates routinely predict that online education will revolutionize learning, empower students and faculty, democratize knowledge production, and transform society. Schank's remarks provide a particularly vivid example of the narrow, technocratic character of many models of online education, and of the reductive way in which teaching, knowledge, and the university are often thought about.

The Growth of Online Education

“The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error.” —John Chambers, CEO of Cisco Systems (cited in Friedman 1999, A2)

Online education and distance learning have grown rapidly in the past decade. In 1999 one in three U.S. colleges offered some sort of accredited degree on line, and approximately one million students took online classes.² Private investment in online education went from \$11 million in 1993, to just under a billion dollars in 1999 (Education Quarterly Investment Report, 2000). Wall Street analysts, accountancy firms, Internet entrepreneurs, and university administrators routinely tout the commercial potential of online education, and a variety of groups, both academic and corporate, have developed models. According to a 1999 Merrill Lynch report called "The Book of Knowledge: Investing in the Growing Education and Training Industry," the digitizing of education has made the university ripe for the kind of rationalization that took place in the health industry in the 1990's. The report prompted some Wall Street analysts to predict a future of "EMOs," or "Educational Maintenance Organizations."

According to Alessandra Bianchi (2000), traditional universities now find themselves "part of a new competitive marketplace with other online learning providers like UNext (part of the Knowledge Universe), Kaplan College, University of Phoenix Online, Jones International University, and over 400 new companies entering the online learning marketplace." Many universities have responded to the specter of increased competition by launching online courses and virtual universities of their own, by forming coalitions with other universities, or by forming partnerships with corporations. Todd Woody (1999) writes that elite universities and professional schools have been scrambling to "leverage their brands," and to organize their own systems of online education:

Fearing that they will be left behind, Ivy League administrators are becoming deal makers, and buzz phrases like "leveraging brands" and "tapping intellectual capital" echo from the Stanford Quad to Harvard Square. Now that this gold mine of intellectual property can be packaged and sold online, universities are determined to share in the profits. "The idea that all of this content—we used to call it teaching and learning—can be turned into content with an economic value is extraordinary," says Geoffrey Cox, a Stanford University vice provost. "Frankly, if anyone is going to get the economic value of that, it will be the university." (Woody, 1999)

Over the last three years, Ivy League schools have, in fact, developed some of the most aggressive and sophisticated examples of commercial online education. This rush to develop online education by different organizations has led to a proliferation of models.³

Futurists like Nicholas Negroponte, corporations such as Microsoft and Cisco, and academic organizations such as Educause (the group that promotes distance education in the U.S.) argue that online education will play a revolutionary role in higher education, that this will lead to the increased corporatization of the university, and that this is generally a good thing. They argue that the digitizing of the university will bring about a leaner, flatter, more flexible and efficient institution, one that will more closely resemble the structure of the modern corporation. This argument is often accompanied by claims about the impending collapse of the traditional university.

University administrators have tended to welcome online education and distance learning. Online education is often seen as a way to increase student admissions, keep up with technological advancements, and manage costs. For example, Martin Irvine (2001), Associate Vice President for Technology Strategy at Georgetown University, compares the costs of traditional education with those of online education, and discusses how "expensive overhead" such as human resources, security and police, counseling and career services, facilities and management, and health care and utilities, can be "unbundled" from the educational product with online education:

The Internet and marketplace demand are the driving forces in unbundling the needed learning experience from the campus-based and high-cost college product. Elearning thus

represents a "disruptive innovation," in Clayton Christensen's term, because it breaks apart the bundled higher education product into the components desired by a market segment that needs less and at a lower price.

While "visionaries" like Irvine embrace such changes, many administrators are less sanguine about them, and express a degree of anxiety about how to manage the challenges that online education poses. Often they harbor reservations about jumping on the e-learning bandwagon, but worry that if they don't act quickly their university will be left behind—their students and their resources snapped up by corporate/academic competitors, and their star performers cherry-picked. Thomas Hayden (2000) notes that Michael Crow, the vice provost of Columbia University, has stated that Columbia's foray into online education was motivated in part by concerns about competition with rival education companies:

Columbia is anxious not to be edged out by some of the other for-profit "knowledge sites," such as About.com and Hungry Minds. "If they capture this space," says Crow, "they'll begin to cherry-pick our best faculty." (p. 52)

The executive director of the Instructional Telecommunications Council argues that "a lot of colleges are rushing to put courses together, and they're very afraid of the competition from other states. That's what is really driving it in a lot of cases: fear." (Cited in Young, 2001.)

Given the dominant interests driving the development of online education, many teachers have come to associate it with a particular set of professional and political concerns: the corporatization and commercialization of higher education; the casualization of working conditions; loss of control over the product of academic labor, and fears that university administrators are becoming vendor-agents and corporate managers rather than scholar-administrators. Many of these concerns were foregrounded in Fall 1999, when roughly five hundred American universities began outsourcing web, email, courseware and administrative services to "education portal" companies such as Campus Pipeline. In some instances this meant online courses would be taught via systems produced by outsourcing companies, and email would be sent via the companies' systems, which were to be advertising-supported. I first became aware of the situation from the New York Times article, "Welcome to College. Now Meet Our Sponsor." I forwarded the article to the newsgroup H-rhetor, a discussion list for teachers of rhetoric and composition. Several people who were at universities where the outsourcing was going on posted comments about their experiences. Their posts made it clear that they found several aspects of the process troubling:

- 1) As a faculty member at [deleted] university I can tell you there are two reactions to this article: so what, and WHAT?!!! Most of the "so what" responses come from administrators, who think this is a great way to reduce costs. The "WHAT?!" responses are coming from faculty, who were not consulted about this. Not a big surprise, there. The commercialization and out-sourcing of campuses has been going on for quite some time, as we're all aware. But this crosses a line, for me. Now if I send messages out to my class, those messages come through an interface of advertisements or "sponsorships." I'm not sure what long term impact this will have, but I do know that it bothers me. Dr. [deleted]'s office hours are brought to you today by Amazon.com.
- 2) When our university began to outsource web-based courses intellectual property was a big issue. In our case, anything placed on the company's web site belonged to the university. In response, many people did not put anything on the web site that they had developed themselves or planned to use in research or a textbook. Instead, they would send this material to students via e-mail. As teachers, if we don't own the material that we produce for our courses, what do we own as professionals?

Scholars writing about online education and the virtual university have echoed the concerns expressed by these two teachers. Tim Luke has written a number of critiques of the trend toward what he calls “thin, for-profit, and/or skill competency versions of virtual universities being designed by corporate consultants and some state planners.” (Luke 2000, p. 155) David Noble (1998a, 1998b) has argued that as teaching materials and knowledge production go online, the ability of the corporatized university to automate, commodify, reproduce, and claim ownership rights over academic work expands. He warns that online education may lead to “digital diploma mills,” electronic sweatshops in which teachers lose control over the products of their labor. In order to contest the models of online instruction critiqued by writers such as Luke and Noble, it is important to carefully examine the rhetoric of commercial online education. This involves analyzing how teachers, students, knowledge, academic resources, and community are represented; how key terms are defined and struggled over by different groups, and how persuasive language is used to convince various constituencies of the benefits of particular visions of online education and of the university.

The Rhetoric of Online Education

One area of the rhetoric of online education worth investigating involves the ways in which commercial developers of online education talk to different audiences—how they tailor their message when talking to teachers, students, administrators, and investors. As Clark (2000) notes, when organizations such as Campus Pipeline⁴ produce written materials intended for their investors, they stress how the portal locks in the most valuable demographic in the country—college students. They stress its “must use functionality”—how it is integrated into student life, from registering for classes, and emailing professors, to accessing course information. They focus on the relationships they are forging between students, advertisers, marketers, and vendors, and on how they plan to become portals with the kind of influence possessed by AOL or Yahoo.

In material written for university administrators, what is typically stressed is the savings that will be made, and the increases in efficiency and flexibility. The information packets sent to administrators by companies such as eCollege, Real Education, Jenzabar, and Campus Pipeline often talk of education in terms of a “conduit” model that stresses the efficient transport of educational units (even Campus Pipeline's name suggests a conduit), and of education conceived in terms of delivery.

However, when courseware vendors or education portals discuss online education in materials intended for faculty, a very different tone is registered, one in which “community” tends to be a central motif. For example, issues of *The Chronicle of Higher Education* are crammed with advertising from online education companies. A common theme in these advertisements is the notion that the vendor's software system will enhance “community life” in universities, make academic community resources easier to use, and connect academics with the wider communities outside their gates. Thus Campus Pipeline's advertising slogan is: “a community dedicated to meeting individual needs. A business streamlined for maximum efficiency. And a campus that never closes.” Campus Pipeline announces in its mission statement: “We will revolutionize education by connecting the collegiate community, enhancing the way higher education builds relationships with its students, faculty, staff and alumni.” In much of the material Campus Pipeline has produced for teachers, the term “community” appears to function as a way of reassuring educators that courseware vendors are sensitive to the social and communicative aspects of teaching. “Community” becomes a way of managing some of the tensions inherent in systems that tend to reify educational practices. The discourse of community appears strategically drawn on to reassure educators—to quiet their fear of automation and displacement, and to show that the company understands that education entails issues of culture, communication, and socialization.

Many proponents of commercial online education stress the need to move from a traditional Fordist, mass production based model of education, to a more flexible, Post-Fordist, “mass customization” model. This

is sometimes allied with the language of constructivist, learner-centered approaches to education—language that stresses the importance of student-centered approaches in which knowledge is constructed within a community of learners. For example, Irvine (2001) talks of how universities are moving from “an academic model with a legacy system tied to industrial and agrarian economies to a learner-centered Internet economy model.” However, sometimes this focus on “student-centered” education seems merely a way of camouflaging shortcomings in models of online education. Some all-Internet courses offer no face-to-face interaction, and there is significant dissociation between different levels of the educational enterprise—between managers, advisors, system designers, content providers, technical assistants, and teachers. The courses are designed to be modular and scalable, so that teaching assistants and adjuncts can be slotted into courses as required. (Irvine proposes that future models of online education will center on “reusable learning objects in customized modules with assessments for specific outcomes.”) In such contexts students must, of necessity, show a great deal of initiative. They are at the “center” of the system in the sense that they must take charge of their education in a way that traditional students aren't required to. However, it isn't clear that this necessarily empowers students, provides for a better educational experience, or is really in line with constructivist pedagogy.

An impoverished notion of “student-centered” education is often part of the argument that the technology will somehow democratize education and make student-centered learning happen by itself. Thus Andrew Rosenfield, chairman and CEO of UNext.com, 5 has stated: “lectures are dead. They are not a good way to learn. People want to learn what they need to know, not what professors want them to know. You can only do that on the Internet” (Cited in Huffstutter and Fields, 2000, p. 1). The technological-determinist argument that the Internet has the miraculous ability to democratize and empower its users is familiar enough. However, Rosenfield appears to extend this argument to say that the Internet will also democratize education and empower students. Rosenfield often invokes student-centered, constructivist goals in his writings, yet the courses offered so far by Unext appear to approach such goals in a rather superficial way.

Many concepts, themes, and categories derived from theories of electronic commerce have been influential in discussions of online education. This is hardly surprising given that many companies involved in electronic commerce have moved into the area of online education. Some of the most commonly used concepts and categories are discussed below.

“Disintermediation”

Disintermediation is often talked about in relation to online learning. It is proposed that the digitization of education will enable teachers and students to interact in ways that are less encumbered by the traditional bureaucratic structures of the university. This is an interesting claim, given how the new technological interfaces involved seem hardly to reduce the need for “mediation.” And when one looks closely at enterprises like Unext or Jones International, instead of disintermediation, one finds complex forms of “remediation.” In fact many new layers of mediation appear to be involved, since in order to make teaching as modular, scalable, and automated as possible, traditional faculty roles get differentiated and parceled out to networks of advisors, content providers, teachers, technicians, and administrators. A number of E-commerce texts have argued that claims about the Internet's role in disaggregation and disintermediation are greatly exaggerated. 6 Ester Dyson has argued that claims about the disintermediation brought about by the Internet are often misguided. She writes:

Contrary to the notion that the Net will be a disintermediated world, much of the payment that ostensibly goes for content will go to the middlemen and trusted intermediaries who add value—everything from guarantees of authenticity to software support, selection, filtering, interpretation, and analysis. (Cited in Addison, 2000, p. 17)

Thus it would seem quite likely that many corporate models of online education will not involve disintermediation so much as they will involve different kinds of mediation, by different groups of people, perhaps residing to a greater extent outside the university.⁷

“Internet Democratization”

Electronic commerce texts often talk about the democratizing effects of the Internet. Discussions of online education often make corresponding arguments. Irvine (2001) writes that the emerging system of online education, which he calls the “Internet Elearning Model,” produces a “shift in authority and agency to the learner.” He writes that the “demand driven economy of the Internet, which communicates the needs of customers and suppliers more rapidly than ever before,” is paralleled by the “learner-centered paradigm of elearning, in which the learner-customer has far more authority, control, choice, and agency in personal learning and knowledge production.”

Similarly, Schank writes: “The Virtual University will replace an inherently passive venue (the classroom) by an inherently interactive medium (the computer) One on one education will replace mass education. Students will be able to shop all over the world for the best courses. They will be able to learn when they are ready to learn.” Yet the notions of democracy and agency advanced in such arguments are often very limited, and are closely tied to a consumption model of education. Furthermore, the argument that the digitization of education will democratize learning is often at odds with the idea that in order to move quickly in the Internet-age, deliberative democracy within the university itself must be lessened. For example, Taylor (2000) writes:

The defining characteristic of network culture is speed; only the quick survive. The current organization and decision making structure of colleges and universities cannot respond quickly enough. In many cases deliberative processes will have to be streamlined and decision-making responsibility delegated to individuals with the necessary expertise. (p. 45)

It would thus seem that increased “consumer/student choice” and flexibility must come at the cost of a decrease in deliberative democracy for teachers and researchers.

“Frictionless Education”

There is much talk of the new, more “frictionless” education market, where students anywhere are able to engage in classes that suit them. It is often claimed that the digitization of education will one day enable everyone to take classes by Harvard professors. And while increased accessibility is certainly a possibility, the trouble with this way of thinking about education is that it reduces education to delivery, and underestimates how other aspects of E-commerce run counter to this. A number of Ivy League schools have in fact made it clear that they are pursuing a policy of price differentiation, and so won't mass market their courses precisely because they don't want to damage their “brand.” Huffstutter and Fields (2000) cite the example of Duke's Fuqua online business school, which offers a virtual MBA that costs \$90,000. The Dean of the online business school has stated: “We could offer 60,000, 100,000 MBAs, but we want to be an incredibly desired product that far more people want than can get” (p. 1). The way around this problem, according to Irvine, is to “segment the total market served and bring differentiated products to the marketplace of learners.” The construction of such patterns of economic and social differentiation seems to run somewhat counter to the “frictionless” ideal in which the highest quality education can be reproduced and made available to anyone anywhere. Furthermore, the very concept of frictionless education takes for granted that education can be successfully automated, and that quality instruction is possible without significant investments in interaction and communication between teachers and students.

“Disaggregation,” or the Unbundling of the Educational Experience

Educational Entrepreneurs often argue that just as the Internet has fostered decentralization and disaggregation in a variety of traditional markets, a similar process will take place in the education market. Irvine writes that:

The Internet is allowing entrepreneurial companies and innovative colleges to unbundle learning and credentialing services from the whole campus-based industry with its high cost of research and residential services and to deliver these services to a growing marketplace. The elearning revolution has only just begun to capture the promise of the democratization of knowledge made possible with Internet technologies.

Irvine proposes that the “core” services and products provided by the university will be disaggregated from the peripheral ones, that a variety of differentiated services and products will emerge in order to cater to different market segments, and that this process of unbundling will enable highly flexible forms of mass customization. The viability of this paradigm is dependent on the extent to which education can be divided up into modular, scalable units, which remains an open question.

Conclusion

To those committed to the project of democratizing education, and to producing what one might loosely call an oppositional public sphere, the models of online education discussed above are hardly encouraging. However, the dot.com collapse of 2001 and the recent failure of several high profile commercial “E-learning” ventures⁸ has slowed the speed with which online instruction is being developed. As Noble (2001) states, arguments about the “technological inevitability” of online education no longer seem as plausible as they did a few years ago. The notion that there is no alternative, and no time or place for democratic deliberation and critical analysis, is increasingly unpersuasive. Furthermore, the rhetorical construction of faculty resistance as either technophobia or narrow professional self-interest has become harder to sustain, particularly as faculty become more knowledgeable about online education, as organizations representing teachers craft policies that outline how members will work with systems of online education, and as emerging research on the pedagogic value of models of online instruction become public.⁹ The current slowing in the funding and ideological momentum behind commercial models of university instruction provides an opportunity for critics and analysts of online education. Noble (1998a, 1998b, 1998c, 2001), Luke (2000), and Nelson (1999) have provided important tools for the critique of dominant constructions of online education, and have proposed some useful strategies of resistance. (These include demanding faculty control over intellectual property, strengthening tenure, and advancing the struggle for faculty unionization.) I'd like to conclude by briefly outlining several other tactics that critics of online education could explore.

In some contexts it may be useful for teachers to propose alternative systems of online instruction, as well as critiques of dominant models. This could involve articulating systems designed to be open, participatory, and democratic; and systems that respond to a variety of social interests, include a strong public service commitment, and safeguard the working conditions of teachers. To further such goals, teachers might consider creating an “open source” movement for on-line academic resources, and taking inspiration from groups like the Free Software Foundation, building something like a “Free Courseware Foundation,” which gives teachers greater control of their resources, and better enables them to share materials with other teachers and with the public. Teachers might also draw on the resources of critical pedagogy to foster what Travers (2001) calls “technoliterate skeptics.” This might entail resituating courses that deal with online information as part of an expanded project of critical practice in which students are seen not just as technical problem solvers, but also as critics who actively intervene in situations in which issues of value, power, and social organization are negotiated. Such classes could look

at how competing discourses and competing information architectures represent the possibilities for organizing online space, activity, access, assembly, public use, control, and ownership. Last, an important ongoing project is to critically examine the rhetoric of online education, to analyze the figures, narratives and rhetorical strategies used to talk about it.¹⁰ This project could include constructing a set of criteria for talking about online education.

Online education is being currently used in a variety of different ways, and a wide range of models are competing for acceptance. However, within this range there are some broad criteria that can be used to evaluate it. These include the extent to which control over the construction, organization, and delivery of online courses is “top down” or “bottom up”; the degree to which the course materials are “mixed” or “all-internet”; and whether they offer “education in a box” or are part of a more holistic approach. Many commercial models of online education are designed to be modular, scalable, reproducible, amenable to automation, consistent with the goals of cost cutting, and with a “work for hire” concept of intellectual property (teachers are hired to produce work that then becomes the property of the hiring agency). Alternative models of online education tend more often to involve adapting new technologies to particular learning communities and sets of pedagogic goals, to constitute an extension of existing practices, and to involve faculty/public ownership. There are of course a range of other possibilities, and many other criteria that can be drawn on to evaluate online education. It is important that this be carried out while different models, technological standards, and ways of talking about online education are still relatively open and available to contestation.

REFERENCES

- Addison, Joanna. (2000). *Outsourcing Education, Managing Knowledge, and Strengthening Academic Communities*. In Werry & Mowbray *Online Communities: Commerce Community Action, and the Virtual University* (175-194). Prentice Hall.
- Bianchi, Alessandra. (July 01, 2000). *E is for E-school: Dot-com start-ups go to the head of the class. Inc.*
- Carr, Sarah. (2001). *Union Publishes Guide Citing High Cost of Distance Education*. *The Chronicle of Higher Education*, April 23, 2001. MACROBUTTON HtmlResAnchor <http://chronicle.com/free/2001/04/2001042301u.htm>
- Chambers, John. (1999). *Next, It's E-ducation*. The op-ed column, *New York Times*, November 17, 1999.
- Clark, Norman. (2000). *Education, Communication, and Consumption: Piping in the Academic Community*. In Werry & Mowbray *Online Communities: Commerce Community Action, and the Virtual University* (129-152). Prentice Hall.
- Downes, Larry, & Mui, Chunka. (1998). *Unleashing The Killer App: Digital Strategies for Market Dominance*. Harvard Business School Press.
- The Education Quarterly Investment Report (February 2000). Eduventures.com. MACROBUTTON HtmlResAnchor http://www.eduventures.com/research/industry_research_resources/EQIR.cfm.
- Friedman, Thomas. (November 17, 1999). *Next, It's E-ducation*. *New York Times*, A29.

- Hayden, Thomas. (February 28, 2000) *New Profits for Professors*. *Newsweek*, page 52.
- Huffstutter, P J, & Fields, Robin. (March 3, 2000). *A Virtual Revolution in Teaching*. *Los Angeles Times*.
- Irvine, Martin (2001). *Net Knowledge: The Coming Revolution in Higher Education*. *Gnovis*, 1(1).
MACROBUTTON HtmlResAnchor http://gnovis.georgetown.edu/business/irvine_html.
- LeBlanc, Paul. (1993). *Writing Teachers, Writing Software: Creating Our Place in the Electronic Age*. NCTE, Illinois.
- Luke, Tim. (2000). *Building a Virtual University: Working Realities from the Virginia Tech Cyberschool*. In Werry & Mowbray *Online Communities: Commerce Community Action, and the Virtual University* (153-174). Prentice Hall.
- Mccright, John S. (17 November 1999) Comdex 1999: Chambers - Education is next e-commerce. PC Week. MACROBUTTON HtmlResAnchor <http://www.zdnet.co.uk/news/1999/45/ns-1153html>.
- Moe, Michael T., Bailey, Kathleen., & Lau, Rhoda. (1999). *The Book of Knowledge: Investing in the Growing Education and Training Industry*. Merrill Lynch & Company.
- Nelson, Cary. (1999) *Academic Keywords: A Devil's Dictionary for Higher Education*. Routledge.
- Noble, D. F. (1998a). *Digital Diploma Mills: The Automation of Higher Education*. *First Monday*, 3(1).
http://www.firstmonday.dk/issues/issue3_1/noble/index.html.
- Noble, D. F. (1998b). *Digital Diploma Mills, Part II: The Coming Battle Over Online Instruction*. MACROBUTTON HtmlResAnchor <http://communication.ucsd.edu/dl/ddmhtml>.
- Noble, D. F. (1998c). *Digital Diploma Mills, Part III: The Bloom Is Off the Rose*. MACROBUTTON HtmlResAnchor <http://www.vpaa.uillinois.edu/tid/resources/noble.html>.
- Noble, D. F. (2001). *Digital Diploma Mills, Part V: Fool's Gold*.
<http://communication.ucsd.edu/dl/ddmhtml>.
- Schank, Roger. (2001). *Educating Ourselves, Educating Arabs*. *Edge*, volume 9 October 16, 2001.
<http://www.edge.org/documents/archive/edge9html>.
- Taylor, Marc C. (July/August 2000). *Useful Devils*. *Educause Review*.
- Travers, Ann (2001). *Public Technologies*. *Radical Pedagogy*: 3, 2.
http://radicalpedagogy.icaap.org/content/issue3_2/travers.html.
- Werry, Christopher. (2000a). *Imagined Electronic Community: Representations of Online Community in Business Texts*. In Werry & Mowbray *Online Communities: Commerce Community Action, and the Virtual University* (3-32). Prentice Hall.
- Werry, Christopher, & Mowbray, Miranda. (2000b) *Online Communities: Commerce Community Action, and the Virtual University*. Prentice Hall.

Woody, Todd. (October 22, 1999). *Ivy Online*. *The Standard*.
<http://www.thestandard.com/articles/display/0,1449,7122,0html>.

Wyatt, Edward. (November 4, 1999). *Investors See Room for Profit In the Demand for Education*. *New York Times*, page A1.

Young, Jeffrey. Web Site Tracks Statewide Virtual University Projects. *The Chronicle of Higher Education*, June 13, 2001.

NOTES:

1. *Edge*, volume 91, October 16, 2000 The issue is available online at:
<http://www.edge.org/documents/archive/edge9html>.

2. These figures are from Huffstutter and Fields (2000), and Bianchi (2000).

3. A full description of the many different models of online education is given in Werry, 2000a.

4. Campus Pipeline is a “college portal,” an outsourcer that manages the web, email, courseware and administrative services of universities.

5. Unext is a for profit consortia of top-tier universities that includes Columbia, Stanford, the University of Chicago, Carnegie Mellon University, and the London School of Economics and Political Science. Unext aims to be the “gold standard” in online MBAs.

6. For example, Downes and Mui (1998) write that 'in many sectors intermediaries have proven to be remarkably robust. Long chains are being taken apart, but they are also being put back together in new configurations.' (p. 152).

7. There is a different sense in which “disintermediation” may occur. Luke notes that one of the problems faced by teachers at the Virginia Tech Cyberschool was burnout, caused in large part by their having to take on a much greater range of technological and administrative burdens. The emergence of the teacher-administrator-technician may constitute a kind of disintermediation; however it does not seem like a very favorable one.

8. A number of companies have gone bankrupt. For example, Pensare, a high-profile e-learning company that specialized in online business courses, went out of business recently. Virtual Temple, a for-profit subsidiary of Temple University was shut down in 2000. Fathom, Columbia University's for-profit online venture, has struggled to attract both students and outside investors, forcing the university to spend \$10-million to keep the project afloat. Universitas 21, perhaps the most ambitious online education venture, has also run into difficulties. Universitas 21, which describes itself as the world's “premiere E-university,” is a consortium of top universities from around the world that have partnered to form a global online university. However, the project has been fraught with difficulties and defections.

9. Studies of the educational benefits of various online education projects have produced findings that could most charitably be described as mixed. Perhaps the most consistent finding is that online education tends to cost more than traditional education. The NEA has issued a study asserting that online instruction is almost always more expensive than traditional, in-person instruction (Carr, 2001).

10. A critical history of how online education has been talked about would be a useful resource. David Noble's work on the history of correspondence schools is exemplary in this regard (Noble 1998c). Noble demonstrates that when correspondence courses first emerged, the predictions made about their revolutionary, democratizing, transformative effects bear an uncanny resemblance to claims made today about online education.

Chris Werry is assistant professor of Rhetoric & Writing Studies at San Diego State University. His most recent research examines the narratives, metaphors and rhetorical strategies used to talk about on-line education, community, and electronic commerce. He is co-editor (with Miranda Mowbray) of *Online Communities: Commerce, Community Action & the Virtual University* (Prentice Hall 2000).