Phase I: The Virtual University

The TicToc Conversations began on Tuesday, October 8, 1996, with a message, posted by discussion facilitator Ken McAllister, that raised issues gleaned from a newspaper article on Duke University's virtual MBA program. These issues, as well as those formulated from several responses to the article by members of UIC's English Department students, faculty, and staff, shaped the first phase of discussion on the virtual university. The conversations that follow problematize the formation of virtual universities by dealing with questions that fall into six categories:

***SALARIES**: how will instructors be compensated for online teaching?*

***VIRTUAL CLASS DEFINITIONS**: what constitutes a virtual classroom and what will it involve?*

***QUALITY**: in what ways will the advent of online teaching affect the quality of learning that occurs?*

***NEWS MISINFORMATION**: how is public perception of virtual education shaped by the media?*

***DISTANCE LEARNING**: what problems are introduced in the shift from a physical classroom to non-physical classroom?*

***A MANIFESTO**: what goals can be articulated for the successful implementation of virtual learning environments?*

Date: Friday, 1 November 1996
From: Ken McAllister
Subject: Getting started

It seems fitting that I sit down to write this introductory note to the TicToc Conversation on the day that, for the first time in Chicago newspaper history, a virtual university made the front page. The article actually describes a number of virtual academic programs, but it focuses in particular on Duke University's online MBA program, which grants a fully-accredited MBA degree to anyone who can fulfill all of the electronic requirements—and pay the $79,500 tuition. This story clearly startled a good number of Chicagoans; between

8:30 am and 2:30 p.m., this article was brought to my attention by two faculty members, one teaching assistant, two support-staffers, and a former student. Interestingly, the responses from these four university contingents differed substantially.

Both faculty members expressed concern over pedagogical and administrative issues, wondering how anyone could learn anything very well strictly by electronic means and also how class observations could be conducted for a class that never meets face-to-face.

The TA wondered about the virtual university's impact on the job market and salaries; her recent discovery that the adjunct faculty salary for teaching online courses at the University of Chicago is $965.00 per quarter made her wonder if the Ph.D. she's working toward and all her computer experience will be worth anything when she finally finishes her dissertation.

The support-staffers wondered how much real paper exchanged hands in this "virtual university," skeptically suggesting that notorious academic problems like incompletes, duplication and distribution permissions, and course evaluations must certainly generate a considerable amount of paperwork behind Duke's virtual scenes.

The student, a working-class young man studying to be a high school math teacher, wondered if Duke extended financial aid to enrollees in the virtual MBA program, and also thought it strange that the program is so expensive even though its overhead must be quite small.

While all of the people with whom I spoke today about the concept of the virtual university know about UIC's developing virtual English Department—eworks—none of them knew that the University of Illinois has already begun implementing UI-Online, a distance-education, research, and administration program that is far more broad in scope than Duke's MBA program. Similarly, these people didn't realize that members of our department have already developed courses which, had they been approved, would have been taught entirely in cyberspace. In other words, many people, even those within academia itself, don't realize how near the virtual university is to them, both professionally and administratively.

Allow me to begin the conversation then, simply by reiterating some of the questions that were posed to me:

- •Can one learn anything well in a virtual environment?
- •Is it important that neither teachers nor students can "see" each other in electronic classes?
- •What impact will virtual universities have on the job market and on faculty salaries?

In three subsequent messages, I will initiate conversational threads that focus on each of these questions. If you're moved to reply to one

of these threads, please do!
   Ken

Salaries

The first discussion thread of the TicToc Conversations took up the issue of salary. It began with a reference to a letter printed in the <u>Chicago Tribune</u> in which an instructor tells of having been grossly underpaid for teaching on-line courses and expresses a fear that such practices will become a standard for all teachers in cyberspace. This concern is echoed by Don Marshall, (11/6) who observes that these kinds of teachers may soon be even worse off if electronic courses become detached from institutions of higher learning. Marshall predicts that instructors of electronic courses who are no longer affiliated with a physical campus will be at greater risk of being denied fair and competitive wages, retirement benefits, job security, course input, and legal protection. Other participants pursue this issue by responding to what Bob Goldstein (11/6) calls the "out-sourcing of the teacher-function," that is to say, the threat of commercial enterprise instigating its own on-line course offering in competition with that of standard universities. Such a possibility, several point out, will only become a serious threat if in fact on-line courses prove to be lucrative; and even then, it is argued, the credibility of established universities over that of a corporate substitute will, in all likelihood, keep experienced teachers and cash-toting students loyal to the present system.

As this discussion develops, other points are presented regarding the more immediate issue of teacher compensation. Gene Ruoff (11/6) proposes that an entrepreneurial approach be adopted within the academy that would reward on-line teachers by offering them a substantial percentage of the tuition monies that their courses generate. Others seem less certain of this model as an all-inclusive solution and appear to suggest, alternatively, that the best way for on-line teachers to receive fair compensation is through unionization and collective bargaining.

Ken McAllister: I'm Ken McAllister, a Ph.D. candidate in the L.L.R. (Language, Literacy, and Rhetoric) program at UIC. I'm married to Rachel Srubas, who is both a student (working on an M.Div.) and a teacher of English. We have two cats—Julian and Loraine—and our car is known to our friends as the "Bone Truck" because it sports a number of sun-bleached animal bones that we've found on our many hiking trips through New Mexico deserts. I play the alto sax, the alto and soprano recorder, and I've tried

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Date: Friday, 1 November 1996
From: Ken McAllister
Subject: Discussion prompt

Two days ago, Don Marshall pointed out to me a letter that had been printed in the October

to learn the banjo about a dozen times, but have never had the time to work out three-finger picking. (There's also a rumor that I was once a rodeo clown.)

As for my professional work, I've been involved with computers for about 15 years. I cut my teeth on CP/M and OS/9. I've worked as a professional programmer and computer consultant with a specialty in database design. Although some of my work has been done in C and C++, I've been coding more recently in the ObjectPAL. A couple of years ago I was a co-designer of a handheld navigational device that implemented aspects of multimedia design (using Director), remote database storage and retrieval using packet radio, and GPS (global positioning satellites) technology. Like everyone else on the planet, I've recently become interested in JAVA programming, but I have more pressing needs to learn PERL.

My dissertation reflects my technological interests and concentrates on the rhetoric of popular computing, and on how an understanding of this rhetoric can help us interpret the influences of computing in culture. Chapters will draw on sources from the fields of graphic, software, and industrial design, and will discuss topics such as the ideology of hardware, operating system, and software development, metonymy in computer advertisements, internet rhetoric, and of course electronic pedagogy. I've presented a number of papers at national conferences on subjects such as the decay of subversive attitudes within the computer virus-writing sub-culture, the radical nature of technology in the plays of Wole Soyinka, the function of hypertext links as syllogisms, and the similarities and dissimilarities of the acceptance of TV as an educational tool as compared to computers. I've published a few small articles on the rhetoric and history of technology, and I have more projects waiting in the wings. But right now, the dissertation commands much of my attention.

And if none of this lands me a job, I

25 issue of the *The Chronicle of Higher Education* that was run with the headline: "Poor Pay for On-Line Educators." The author of the letter indicates that he was aid $965.00 for teaching an online course for the U. of Chicago's New School for Social Research, and he puts this figure in a professional salary context by observing that "At my rate of compensation, I'd have to teach 30 courses a year just to get up to the level of a beginning full-time position" (B9). In academic settings that are increasingly driven by profit-motives and budget restrictions, this letter raises a number of related questions concerning how teachers at all levels will be compensated for their work. Here are a few:

•What impact will virtual universities have on the job market and on faculty salaries?

•Is a new Ph.D. with experience in teaching, say, renaissance literature in an electronic environment (as well as in a traditional classroom) a more promising job candidate than one without any electronic teaching experience?

•We have seen in the past couple of decades a shift in many universities toward a heavy reliance on graduate students to teach introductory-level composition, literature, and creative writing courses. This shift is generally believed to be the result of economic pressures: graduate students are cheaper labor than tenure-track faculty. Is it conceivable that the move toward virtual universities is the next

step in what might be called the down-sizing of the educational system?

   •What characteristics—in terms of mission and policy—might we expect to see in an educational institution that compensates its online teachers fairly?

   Relevant Online Addresses: http://franklin.scale.uiuc.edu/vpaa/-online/virtual_learning.html and http://sunsite.unc.edu/horizon-/issuechalleng/Froeschle.html

   Ken

Date: Friday, 1 November 1996
From: Joe Amato
Subject: Class consciousness and wage disparity

Joe Amato: i'm beginning to think that nothing i do should be programmatic... so if it turns out that what i do is programmatic, i trust it'll be less so as a result of not having started out that way... i have a background in engineering, about which i'll depart from (my) biographical custom & go on a bit... the first year-and-a-half, i was responsible for nearly all facilities maintenance (what used to be called "buildings & grounds"), & i supervised corresponding construction projects—asphalt, painting, rail siding, doors, telephones, offices, hvac, landscaping & so forth... very mundane work, from an engineer's perspective, with the benefit being you could actually "see" (or literally sense) improvement... i worked with numerous construction trade unions—which can be very testicular discourse communities (& very corrupt, to boot)... my second, third & fourth years i moved gradually into process design... this was in a brewery (miller brewing co. in fulton, ny, north of syracuse, where i grew up) which at the time was the third or fourth largest brewery in the world in terms of production (approx. 10 million barrels annually)... in retrospect, this site served, primarily, as my engineering (and bureaucratic) coming-of-age...

   i left miller brewing co. to join bristol-myers co. (in syracuse) in a similar, though now senior, capacity... & spent

first, thanx to ken for alerting us to that chicago trib article...

   w/o wishing to wax contentious or to throw a stumbling block in the way of this discussion, i'd like to observe that we probably need to establish some parameters before we can talk paycheck and the like... i've never found us academics to be too good at talking paycheck (sorry!)—save perhaps for a relatively small group of unreconstructed marxists whose sights are usually set anyplace but on academe per se... and i can readily see a discussion of wage devolving to a discussion of virtual wage...

   i'd rather pose the question crudely: will the advent of virtual courses and such like increase, decrease, or simply have no effect on class consciousness?... positive correlations abound between the emergence of this digital era and the marketplace woes of postsecondary ed (which cary nelson has described as being with us lo these past 25 years)...

   and as a way of concretizing

nearly three years there redesigning & supervising reconstruction of various pharmaceutical process systems, aging systems which at one time produced nearly half of the penicillin used world-wide... again, my work had primarily to do with controlling processes (flow, temperature, level, mixing, etc.), but generally incl. responsibility for altering large chunks of related hardware, such as piping, insulation, storage tanks & valves... hence, though my formal education was in mechanical engineering, most of my time in industry was spent with chemical engineers, in factories, doing process-related design, taking off & putting on my hard hat...

fast forward: here i am teaching technical & professional communications, along with composition, literature & creative writing, at illinois institute of technology (with my tictoc colleague dave coogan)... iit is another predominantly male institution, both in terms of faculty & students... for me, this constitutes a bizarre echo from the past... this is my seventh year of teaching tech. & prof. writing courses (two years visiting down at urbana-champaign, the year prior adjuncting in central ny), & i've pretty much had to throw away the books to do it in a fashion that comes even close to my sense of what such writing is really all about... my pedagogy is student-centered, dialogic, online-oriented, liberatory to the extent i'm able, concerned directly with race gender class etc. issues... & my writing is—well, much of my writing is a bit difficult to place in the existing categories of academic discourse... suffice to say that i'm not easily seduced by technical arcana—-the nuances of html, or java, or any programming language—-primarily b/c i find that i need to concentrate these days on alphabetic arcana...

said question, i'd like to be certain that we observe at the outset the probable vast range of salary/material differences represented by tictoc participants... undergrads, grads, profs—even these educational distinctions and places of work don't do justice to our individualized access to material means . . .

further, we have some public basis for considering just how disparate the educational context per se can be... i note in the 18 october issue of *the chronicle* the listing of "best paid employees at 479 private colleges"... and i note the six highest salaries at my institution (iit) to range from a low of $146,630 (plus $10,230 benefits) for our dean to a high of $195,780 (plus $17,280) for our president.... both of which are well in excess of the highest paid tenured humanities prof—around $40,000 (plus maybe $8,000 in benefits)... which is itself below the average assistant prof. salary on our campus (from an earlier chronicle piece) of approx. $43,000...

compare this with the salary range of the highest paid institution, cornell (based on my quick scan)... a low of $129,000 for the president (plus an amazing $165,269 in benefits—must be a parachute, no?) to a high of (get this) $1,729,709 for the chair of cardiothoracic surgery (plus $46,371 in benefits!)... in fact, med. school profs. and admins. seem to be absurdly high all the way 'round...

can any of you make these numbers speak to your own life and work situations?.... or better, how on earth to do this?... maybe *this* activity, in *these* spaces, constitutes one possibility of online technologies insofar as class and wage go.... i.e., the possibility of sharing and informing across institutional and geopolitical boundaries...

until we're willing to broach these sorts of disparities—or unless we are—then i don't hold out much hope that virtual technologies will somehow—automatically?—raise our wages... in all likelihood, if we can't talk paycheck, then our wages will continue to reflect such disparities, and may even get lower!... institutional wealth is another matter (sorta)—mean, if you gots the bread, then you gots the machines—and another still (sorta) is the question of collective bargaining (unless of course we can instigate that around here—and there's a report in the same chronicle about the columbia u. afl-cio/faculty conference)...

anyway, just fer starters
best,
Joe

Date: Wednesday, 6 November 1996
From: Donald G. Marshall

Don Marshall: I am Professor and Head of English at UIC (since 1990). I taught at UCLA (1969-75) and at the University of Iowa (1975-90) after receiving my doctorate at Yale (1971). With Joel Weinsheimer, I revised the English translation of Hans-Georg Gadamer's *Truth and Method*. I compiled *Contemporary Critical Theory: A Selective Bibliography*. I have published numerous articles, particularly on critical theory and its history. I have served on the Board of the Illinois Humanities Council since 1994. My experience with computing is pretty much limited to word processing and e-mail, with an occasional spreadsheet thrown in. But my interest in the impact of the media of transmission on culture (oralicy/literacy/print) leads naturally to an interest in the emergent electronic media. A lover of books, libraries, and face-to-face discussion, I admit to a bias in favor of keeping electronic technology in the role of a useful but humble servant of a scholarship that will remain book-centered for the foreseeable future. But I expect to learn more about the potentialities of technol-

Subject: Contract teachers

A small correction—the New School for Social Research is an independent private institution in New York City not connected with the University of Chicago.

I'm told that some "on-line" programs are hiring faculty from other institutions to offer on-line courses and paying them at "continuing education" rate— not far off from the New School level. This adds another problem: an instructor might be teaching several on-line courses for different institutions and could in fact have no home institution of his/her own. This would be the last word in a "floating professoriate." Such a person would presumably have no benefits, no retirement, no job security. From another point of view, such a person would have no say in faculty governance. At the moment, faculty have a determining voice in what courses are offered, the award of

credit and degrees, the requirements for programs, the selection and tenuring of instructional staff; and they have a very strong role in the selection of administrators (the role gets stronger as the position gets closer to the facult—i.e., strongest for department chairs/heads, then deans, and so on, weakest at the level of Chancellors or Presidents). I find this prospect horrifying. Think also of working conditions. It's conceivable that a faculty member could devise an on-line course. I think this is unlikely, because such a course, if well done, would probably require a team, in fact probably a large team. Suppose they set up the course, copyright or patent it, and then offer it on-line for a tuition fee (through an institution or as an independent consortium). They might then hire "instructors" to see to the individualized component of the course—grading quizzes or on-line papers, etc. We'd end up with graduate students or PhDs serving as the lowliest kind of course assistants in a course that was absolutely pre-fabricated. For this they would certainly be paid very little—treated as a "grader." Meanwhile, the course devisers might reap a substantial royalty or percent of the take. This is exactly what happens with most encyclopedias or reference works, where the publisher does quite well and the writers are basically hack writers and very ill paid.

Frankly, I think this issue is critically important. It is simply an accident that on-line courses are now based in real institutions. The logic of the technology points to courses without ANY real base. And the conditions of employment for people who are "contract workers" at the mercy of an amorphous entity they can't even locate physically are not likely to be good. Consider the question of legal rights and grievances. Suppose you were the instructor for an on-line course and didn't get paid. Who would you sue? In what jurisdiction? Under what law? With what lawyer representing you?

I'm sorry to be so fixated on the downside. But it seems to me prudence suggests that we ought to be thinking seriously about these matters.

Regards,
Don

Date: Wednesday, 6 November 1996
From: Bob Goldstein
Subject: Outsourcing the teacher function

>Frankly, I think this issue is critically important. It is simply an
>accident that on-line courses are now based in real institutions.
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base. >And the conditions of employment for [...]

Point very well taken. If there is money to be made in higher ed v-

Bob Goldstein: I'm Bob Goldstein, and I head the Network Services Group at the ADN. I'm the webmaster, and my group is involved with instructional technology, on-line docuementation, and so forth. ("and so forth" includes databases and high-end scientific programming. Almost by definition, my group does whatever it is that the other ADN groups don't.)

I accepted Jim's invitation to join this project because I am quite interested in the changes in education that this technology will bring, like it or not. In that sense, we are comrades-in-arms. But in a deeper sense, I am probably an outsider to this group. Except for high school, I've never taken an English course. Nor one in computers, for that matter.

My background is in physics and bio-physics. I know what happens in physics classes and departments, and I am reasonably certain it is somewhat different in English. (If it weren't different, you would actually be the physics department!) So I hope you'll accept with grace some of my naive questions. At best, they'll help you re-examine your fundamental assumptions, in the way good off-beat questions can. At worst, you'll be bored by my asking questions with obvious courses, Microsoft U and Nintendo State may become formidable competition. And if there isn't money to be made, how are the real universities going to make up the deficit?

The downsides Don mentioned are quite real, and neither the universities nor the professors (not the same!) will win this one with defensive tactics. They will have to establish, in the public mind, that a curriculum is more than a collection of courses, and that a course is more than a video game with a grad student grader. It must actually be the case that someone with a degree from an actual university (v-classes or not) is worth more on the business market than someone who has picked up the material from some (sometimes excellent) microsoft programs.

This, of course, raises the question of the current connection between teaching and scholarly research. But that deserves another subject line. :-)

Bob

Date: Wednesday, 6 November 1996
From: Gene W. Ruoff
Subject: The institutional credibility of the university system

Funny you should ask! As I have been thinking about U of I initiatives along this line, I have worked from two assumptions: that what would differentiate our courses from others would be that ours compose part of a real curriculum of a real university, and that they would be taught by the same faculty who give them in classrooms. The only advantages we have are institutional credibility and accreditation, both of which would seem to preclude out-sourcing the teacher-function (I love that) to a third-world country. What follows is a rudimentary structural analysis from those premises:

UI Online: Reflections on Incentives and Ownership

The following analysis is based on a number of assumptions, any of which may be questioned:

Gene Ruoff: This is probably more self-analysis than I can bear. How does a boy from Kentucky who frequents both the dim corridors and bright ballrooms of British Romanticism end up being the guy in the Office of Academic Affairs tagged with "coodinating" the campus information technology effort? Don't I believe that "Things are too much with us"?

I don't know. My sole claim to technological mastery rests in having been cashiered from MIT after my sophomore year. I caught on at Centre College in Danville, Kentucky, and used up a number of potential career paths before graduating as an English major (minors in physics, philosophy, and economics) who was headed to law school at Duke.

Then came a Woodrow Wilson fellowship for graduate study, and Duke being agreeable to my taking an M.A. at Wisconsin before entering, off I went to Madison in 1961. Who could leave Madison in the 60s for Durham? Who even imagined Stanley Fish would end up on the law school faculty there?

I joined the UIC (then Circle) faculty in 1966 and got into computing through word processing in the early 80s. I learned quickly how I didn't want to do things (Waterloo Script printing through a document printer across campus), discovered CPM and WordStar, and became a passionate early advocate for PCs, singing the praises of Morrow and KayPro. I stayed off the university system until the early 90s, contenting myself with taking potshots from Senate committees at its lack of productivity tools (ever heard of spreadsheets, guys?).

In the early 90s we had a crisis of confidence in computing at UIC, and I was put on a task force to rethink our priorities, after which I was asked to become an Associate Vice Chancellor with this as a big part of my dossier. After chairing a gloriously successful search for a new

• that we should not confuse support and incentives: support entails the provision of an adequate infrastructure of networks, machines, training, and assistance to meet the goals of UI-Online; incentives are inducements to take part in the project
• that the project is in competition for marginal faculty time, not for a share of the time that is customarily devoted to teaching, research, and service
• that departments and colleges will see the project as a potential threat to their ability to meet their existing objectives (so that release of a faculty member to prepare an online course will not begreeted warmly by a department that is having trouble mounting on campus courses for its majors)
• that the primary cost of mounting online courses will fall upon the instructor as provider of intellectual content and teacher; admittedly, these will be opportunity costs, but they too are real
• that the university's marginal costs for the extension of the campus learning environment to potential off-campus students will be relatively modest
• that the first faculty question (outside a small group of zealots who may wish to climb the mountain just because it is there) will be what is in it for them

There seem to be potentially two

director of academic computing, I helped to orchestrate a $4.5 million information technology initiative that has completed the campus backbone, removed line and installation charges for networking, and put a thousand new Pentiums and Power Macs on faculty desks. I've also been able to do some advocacy work for student labs and classroom technology, and helped godfather some major improvements for our computerized writing lab, SCAILAB, that is somewhere at the center of TIC-TOC.

As punishment for my sins I seem to be pushed now toward coordinating enterprise-wide administrative data systems, about which I don't know beans either. But I still love toys, and I can always read Jane Austen to cleanse my

basic models for UI-Online: an institutional model and an entrepreneurial model:

• under the institutional model, the program would be part of U of I base operations, and faculty rewards and incentives would come from within the existing structure

• under the entrepreneurial model, the program would exist outside base operations (rather like continuing education) and incentives would be provided through additional pay

Advantages of the Institutional Model

- integration with existing faculty expectations
- teaching would be on-load

Disadvantages of the Institutional Model

- UI-Online would be in competition for reward dollars with other activities (research), classroom teaching, public service
- rewards would be subject to departmental and college cultures (check current attitudes on extension teaching, textbook publication, etc.)
- no real way to acknowledge that the primary cost of content developmen—a genuine opportunity cost—is borne by the faculty member
- under current state economic conditions and priorities, we cannot presume the ability of the university to deliver meaningful rewards for any faculty behavior

Advantages of the Entrepreneurial Model

- direct reward for performance
- proportionality of reward to performance
- analogous to existing entrepreneurial faculty functions (textbook writing, extension teaching, summer teaching, medical service plan, administrative overpay, consulting)
- recognizes faculty opportunity costs
- potential for much higher rewards

Disadvantages of the Entrepreneurial Model

• potential conflict with other institutional objectives

Proposal: The teacher of a UI-Online course should receive a reasonable percentage (50%?) of the gross tuition revenue for the course. The remainder may be divided on the model of ICR revenues in a manner to be negotiated among legitimate stakeholders.

Ownership: Ownership of intellectual content should remain where it always has resided, with the individual faculty member.

Gene

Date: Thursday, 7 November 1996
From: Donald G. Marshall
Subject: Ensuring fair compensation

I appreciate Gene's providing a positive outline on the issue to frame thinking about it. My comments were mostly in the mode of worry, and I think you can't oppose something with nothing. Hence, we need to reach a view of what we want, not just what we're afraid might happen. I'd still like the issue of benefits and retirement addressed. Call this the question not of salary but of compensation. How can standards of compensation be assured? Will it require federal legislation? pressure from the AAUP? unionization? Can one institution's faculty force that institution to establish reasonable compensation policies, even if they price that institution's on-line products out of the market? Is this Gresham—bad policies will drive out good? Gene puts it in a nutshell: either this is a way of making money, in which case commercial enterprises are likely to take it over; or it a way of losing money, in which cases commercial enterprises will leave it to universities, but universities will need to find subsidies and that will come inevitably at the cost of something else (even a supplement for on-line instruction from the legislature will be given in lieu of funding for something else). Best,

Don

Virtual Class Definitions

The following conversation about virtual classes begins with a request from Bob Goldstein for clarification on what exactly makes a class "virtual." Put succinctly, Bob asks how much and what kind of technology has to be incorporated into a learning environment for it to be called a virtual class. Jim Sosnoski (11/1) offers the simple sug-

gestion that a virtual class is one in which learning occurs even though a teacher is not physically present with the student(s). From here the participants move on to interrogate the underlying motives associated with current models of virtual pedagogy. Joe Amato (11/6) criticizes one virtual classroom whose implementation reflects little forethought as to the effects of its own technology on the learning dynamic. Thomas Philion (11/8) expresses a similar concern, arguing that a virtual classroom should not be established simply because it can be, but because such an environment is deemed to address an identifiable weakness within the present system. Here again, the participants seem to agree that the pedagogical use of technology is less important than knowing why we teach and what we hope to accomplish in our pedagogical endeavors. Like all good conversations, this one continues to evolve. Its initial emphasis on the "what" and "why" of virtual classrooms gives way to a discussion about the inherently political aspect of technology. Such a thread leads to the general conclusion that technology's role in the classroom will not be contingent upon what it will or won't allow us to do, but what we ourselves are both willing and allowed to do with it.

Jim Sosnoski: I was born in Dickson City, PA on June 18, 1938. I went to Scranton Preparatory School, then to Loyola U in Chicago (BA & MA), and finally to Penn State U (Ph.D.). My dissertation was on Kenneth Burke whose sense of humor and uncategorizableness attracted me. In 1967 I accepted a position at Miami University in Ohio. I met Patricia Harkin there and my re-education began. She now teaches at Purdue, but while at MU, she, Leroy Searle (U of Washington, Seattle), and I co-founded the Society for Critical Exchange, which I directed from 1982 to 1988 and whose journal (*Critical Exchange*) I edited. In 1983, I co-organized (with Steve Nimis and David Shumway) the GRIP project, a national Group for Research into the Institutionalization and Professionalization of Literary Study, directing it until 1985 when David took over. Some of the results of my work during this period are published in *Token Professionals and Master Critics: A Critique of Orthodoxy in Literary Study* and in *Modern Skeletons in Postmodern Closets: A Cultural Studies Alternative.* Since about 1990, I've turned my attention to electronic environments. In 1995 I accepted an appointment at the University of Illinois-Chicago and during

Date: Friday, 1 November 1996
From: James Sosnsoki
Subject: What is a virtual class?

Bob, on November 1, 1996 you wrote:

>What is a virtual class?
>Is it a "normal" class done
>over desktop video
>conferencing? Is it another
>real-time conference, such
>as a MOO? Is it
>asynchronous, such as
>email? (And if so, is it as a
>group, or one-one-one
>with the instructor?) Or is
>itinteractive self-study, via
>either CDROM or net-
>work? So—what are the
>implicit assumptions in the
>current discussions?

the cold winter of my first year found solace in the warm conversations that led to the formation of the eworks and TicToc projects in which I am now busily engaged.

One of my sons, Gregor, is a print maker and lives in Chicago. My other son, Jonathan—a life-long Philies fan—is a sportscaster for a cable company in Clearwater, Florida where his favorite team trains. Though I am very technologically oriented, I love film, mystery

I think it is ALL of the above. A VIRTUAL phenomenon is one "being such in force or effect though not actually such" (Websters). So any teaching that can have teaching force or effects when the teacher is NOT actually present would seem to qualify as a virtual class. Thanks for bringing up the question of assumptions. We will need to develop working terms in this conversation simply because the meaning of many of the key term—such as virtua—are used in widely differing senes.

Jim

Date: Wednesday, 6 November 1996
From: Bob Goldstein
Subject: The economis of technology

Hi, Jim. Yes, I thought it should be all of them, too, and even perhaps a mixture in a single class. I kinda had the feeling people were assuming a v-class was video desktop conferences, but wasn't sure. My real point is that both economics and technology, possibly more than quality of education, will drive what happens. And the economics of interactive self-study, with the huge investment in preparation amortized over the huge "class size" it can reach, is very different from video conferencing.

Bob

Date: Wednesday, 6 November 1996
From: Joe Amato
Subject: Multimedia systems in the classroom

well if as jim sez instructors' absence = virtual classroom (and i think it does), then of course distance ed constitutes a virtual technology . . . so perhaps it's worthwhile to consider different examples of such technologies? . . .

just the other day got wind of a new 'interprofessional project' on my campus that goes something like this: you take the standard video-based distance ed. apparatus (hereafter, on my campus, our decades-old iit system, which includes two-way voice boxes for remote q & a) and you supplement it with archiving of video images . . . video output is fed to a computer, and students at remote loca-

tions (as well as the instructor) essentially are given the option of 'saving' a particular frame of the video as it follows the instructor writing from blackboard segment to blackboard segment (the students have two monitors—the video display and a computer monitor, though this could eventually be combined into one) . . .

yes—the instructor's writing on the blackboard, with instructor in the frame, constitutes an archived image . . .

the rationale here, so i'm told, is that this permits students, on a needs basis, to check their notes of the lecture after class by logging in to the web site that stores such images . . .

now: from what i've been able to deduce, there has been very little discussion of the extent to which this technology will itself feed back into the instructional context . . . b/c the tendency here could very well be to further prepackage lectures (there is some indication that at least one dept. may go in this direction, with the ostensible purpose being a streamlining of presentation across different instructors) . . .

it's fair to observe that this constitutes an extremely panoptical effect, even more so than the simple video image recording, b/c at any given instant (the 'snapshot' interval minimum is every 30 seconds), an instructor must consider not only that she is being watched (and possibly taped), but that a still image is being produced that will be archived on the web . . . that is, instructor pedagogy is thereby documented in a different medium (with password access, currently, for classroom participants) . . . as to copyright and such like, i think it's being copyrighted at the moment simply "iit" . . .

i might mention that iit is generally utilized to reach students in the suburbs who don't want to make the haul into the city (where our main campus is located) . . . that is, the logistics are similar to other distance ed. plans, but the underlying motives have to do not with students in remote locations exactly, but with suburban-urban convenience (traffic congestion) as well as comfort (there are many folks who simply don't want to be on the main campus at night) . . .

anyway . . . needless to say i find this highly problematic, and lamentable to the extent that there doesn't seem to have been any real instructional design input or, for that matter, any discussion of teaching/learning in light of what we know now about student-centered classroom practices . . . anybody have any thoughts on same? . . . or examples from their own
institutions? . . .

Joe

Date: Thursday, 7 November 1996
From: William Covino
Subject: Why electronic environments?

Let me offer another take on V-class, one that disrupts the task-oriented focus of the discussions so far, but is at least tangential to issues of salary, and central to the question of how we re-define teacher and student. Arthur Kroker and Michael Weinstein, in *Data Trash: The Theory of the Virtual Class*, define the virtual class in socio-political terms, as a group "compulsively fixated on digital technology as a source of salvation from the reality of a lonely culture and radical social disconnection from everyday life, and determined to exclude from public debate any perspective that is not a cheerleader for the coming-to-be of the fully realized technological society. The virtual class is populated by would-be astronauts who never got the chance to go to the moon, and they do not easily accept criticism of this new Apollo project of the body telematic" (4-5).

Should this definition be considered along with the others, to the extent that it stresses the disappearance of people-as-bodies; suggests the virtual classroom as a site for transcendence of social life; implicitly associates the virtual classroom with elitism and the disenfranchisement of the unwired; recognizes that its own argument is readily dismissed because technotopia is alread—like the body snatchers—here; and suggests that low pay for on-line classes may obtain because they do not require the labor of the body?

I think that Kroker and Weinstein are strategically rabid, and don't have much constructive to offer. At the same time, they are insisting upon our alertness to the desires that may be prompting our enthusiasm and engagement with electronic environments, and prompting

> **William Covino:** Since my grad school days (Ph.D. University of Southern California, 1981), I've been most interested in the parameters of rhetorical invention. This interest led me to revise the canonical tradition in favor of invention (*The Art of Wondering*), advance a pedagogy that features the generation of multiple perspectives (*Forms of Wondering*), and most recently, investigate connections between rhetorical invention and magic (*Magic, Rhetoric, and Literacy*). The magic-rhetoric connection has led me to begin thinking about technology as a magic rhetoric and investigate the ways in which technological cultures and literacies participate in the traditional motives of the *magus*: efficiency, expansion, and transcendence (my work on this appears in *Rhetoric Review* 14.2).
>
> In connection with the TicToc project, I am mainly interested in the ways in which electronic environments "charm" us: what magical motives they exploit, to what end, with what gains and losses. I'm Professor and Associate Head in the Department of English at the University of Illinois at Chicago, where I teach histories and theories of rhetoric in the Language, Literacy, and Rhetoric graduate emphasis. Before becoming an increasingly curmudgeonly academic, I had a top-40 band in Southern California (I played keyboard, sang everything from "Proud Mary" to "My Way" to "The Bride Cuts the Cake"—this was the 70s, pre-Macarena—and bantered with the crowd at wedding receptions, bar mitzvahs, and bowling banquets).

us to ask what we are transforming/materializing ourselves into.
  Bill

Date: Thursday, 7 November 1996
From: Joe Amato
Subject: Prioritizing teaching and learning

  i think the kroker/weinstein perspective bill introduces is, if caustic, helpful, as is the historical process of knowledge extrusion from higher organizational positions to create lower organizational positions of the sort shoshana zuboff describe in *in the age of the smart machine* (a book that broached so many of these issues, what now seems so long ago) . . . zuboff gives us a workplace rationale for understanding how the capacity to rationalize tasks, which is increasingly afforded through the automating/informating capacities of the computer, generally creates (less or more) inform-ed tiers of workers (in our case, professors become, literally, lecturers) whose primary role could simply consist of more functional, panoptically monitored duties (think of those archived instructors' images i referred to in another post) . . . or, we could use the information provided to enrich our understanding of our institutional(extra-curricular) structures, and find ways to get students to particpate more fully in the creation and articulation of such structures . . .
  i'd still like us to keep in focus this question of teaching and learning, what we each think we're doing in the classroom (virtual and otherwise), as we ruminate over finances and the like . . .
  Joe

Date: Friday, 8 November 1996
From: Thomas Philion
Subject: Technology in service of pedagogy

  Joe—I think your invitation to re-focus on teaching and learning enables me to contribute to this conversation, and perhaps also to respond to some of the various comments that have already been made.
  I, too, have been thinking that some contextualization of v-teaching might help us to explain what we mean by that term and to deal with anticipated problems.

> **Tom Philion:** Hello everyone. Before I write my autobio, I just want to say that I'm looking forward to our electronic conversation. I spend a fair amount of my time these days thinking about the on-line teaching that I do, and so I'm curious to hear about other experiences and to receive feedback on my own teaching. I hope that our conversations will be stimulating and help me to improve and re-think my stance as a literacy educator.

I grew up in a small town in upstate New York and went on from there to attend Fordham University and the University of Michigan, where I obtained my MA in English and my Ph.D. a few years later in English and Education. In the years between my MA and my Ph.D., I taught reading in a parochial middle school in the South Bronx on 179th St. and Valentine Ave. My dissertation explores the various problems that I encountered as I attempted to help a veteran inner city school teacher improve her teaching, and the various responses that I had to those problems (one of which was obtaining a Macintosh computer for use in motivating and developing student writing). Like most dissertations, mine is uneven and incomplete; however, the lessons that I learned in undertaking my research project and in trying to write about the problems that I experienced have served me well in my present capacity as a professor of secondary English education here in the English Department at UIC.

Currently, I teach a methods course for students interested in high school and middle school teaching, an undergraduate course on young adult literature, and a graduate seminar on English education. This semester I am researching my teaching in the secondary methods course with the intention of writing a monograph about my p e d a g o g i c a l approach and about the role that computers and other technologies play in it. My publications up to this point explore such top-

From my perspective, v-teaching ought to emerge from teacherly reflection upon difficult or problematic classroom conditions. For instance, I know that some of my colleagues in Math education at UIC have begun to use long distance learning (of the video sort described earlier here) in some of their graduate courses to make connections between students and teachers in different parts of the state of Illinois. As I understand it, they have moved in this direction so that their students might obtain insights into the sorts of issues that prospective teachers face in rural parts of the state; through tele-conferencing (I think this is the right term), students and teachers gain insight into the nature of their professional duties and responsibilties. In other words, one's perspective is enriched through interaction with others grappling with seemingly very different contexts and concerns (as in this listserv here). When I reflect upon my own teaching, I find that I am not interested in creating a v-classroom (at this point) in terms of the methods course in secondary English education that I teach here at UIC. I *am* interested in integrating computers into my teaching, in making computers a part of my pedagogy; however, because my students will not be immersed in computer classrooms in their future contexts of teaching, and because I believe that the teaching they will engage in in high school situations is person-centered (that is, more sensitive to students than to subject matter), I do not wish to get too abstracted from, as Bill suggests, "the body" of teaching. In other words, at the present time, I can't think of a "problem" that virtual teaching would solve for me in the context of this particular class (again, just to clarify, my focus is

more on integrating technology into this course; for example, I know that my students benefit from hearing and interacting with experienced teachers in the field; if a tele-conference will enable this sort of interaction, and I can stash this video on the Internet for future reference, then I will do it in a second—but I cannot conceive at this point making my methods course an entirely "virtual" class).

By way of contrast, another course I have taught (though not presently) is a seminar for student teachers in disparate high schools in the Chicago area. In the context of this course, I have thought much more about virtual teaching. Presently, students who participate in this seminar do so on Wednesday afternoons, for about 2 1/2 hours; they travel to UIC sometimes from as far as 45-50 miles away. Even for those teaching close to UIC, they often have to leave school early. Plus, they are really tired at this time. I think you can see how I am setting this up. One problem is time; another is distance; a third is motivation (who wants to reflect after a long day of teaching, and negotiating traffic?). Might we re-conceive this course such that students "converse" about their teaching experiences on-line? Might we tele-conference? Creating a situation where this seminar is, in the main, "virtual" seems to me a more viable option here.

Anyway, I must return to other responsibilities (i.e., the kids are awake now). But perhaps this reflection provides some balance to the quote that Bill shared with us? I'm less sure about how all this relates to the issue of faculty compensation. My naive and too innocent suggestion is that just as teachers ought to be open to new ways of teaching in light of technological advances, so too administrators ought to be open to new ways of financing and justifying financial support for new educational endeavors. Clearly, we teachers will need to advocate strongly to administrators and the public at large the importance of just and fair compensation—compensation that recognizes and values the complexity of and different rationale for the new pedagogies we are creating.

Tom

Date: Monday, 11 November 1996
From: Bob Goldstein
Subject: Response to Philion

> >In other words, at the present time, I can't think of a "problem"
> that >virtual teaching would solve for me in the context of this par-
> ticular >class . . .

I agree with Tom, if the problem is "How do I do a better job teaching *these* students?". But from a university point of view, the problem might become, "How do we teach twice as many students with no increase in teacher salary (to be very blunt) and teacher time, except

for some prep time that can be amortized over many classes?". Would virtual teaching help then? Would it hurt quality?

I noticed Randy Bass said:

>I have recently begun to adopt a rule of thumb about technology in >education: the payoff is richest where the context is poorest.

Is this saying that the technology payoff is richest where past cost-cutting has been most vigorous? Can technology put back what 1000-student lectures have taken away? (Like enriching white bread?)

Bob

Burks Oakley II: I am a Professor in the Department of Electrical and Computer Engineering and the Associate Director of the Sloan Center for Asynchronous Learning Environments at the University of Illinois at Urbana-Champaign (UIUC). I am currently also a Faculty Fellow in the Office of the Vice President for Academic Affairs, where I am promoting innovative applications of learning technologies on the three campuses of the University of Illinois. From 1992 until 1995, I served as the Assistant Head of the ECE Department. I received my B.S. degree from Northwestern University and my M.S. and Ph.D. degrees from the University of Michigan. In 1991, I was named "one of the most distinguished Ph.D. recipients over the past 50 years" by the University of Michigan. I have received numerous awards for my teaching and for my use of technology in education, including the Luckman Distinguished Undergraduate Teaching Award from UIUC in 1993, the Outstanding Professor Award from the American Society for Engineering Education (ASEE) IL/IN Division in 1993, the Educom Medal in 1996, and the IEEE Educational Activities Board Major Educational Innovation Award in 1996. I am the chair of the ASEE ECE Division and a senior member of the IEEE.

Date: Tuesday, 12 November 1996
From: Burks Oakley
Subject: Synchronous learning networks

>In other words, at the present >time, I can't think of a "prob->lem" that virtual teaching >would solve for me in the con>text of this particular class

>I agree with Tom, if the prob->lem is "How do I do a better >job teaching THESE students?" >But from a university point of >view, the problem might >become, "How do we teach >twice as many students with >no increase in teacher salary >(to be very blunt) and teacher >time, except for some prep >time that can be amortized >over many classes?" Would >virtual teaching help then? >Would it hurt quality?

Greetings! If you want to know some of the benefits of "asynchronous learning networks" (ALN), I suggest you look at the evaluation of the Sloan Center at UIUC. This evaluation is on the web, and can be accessed from the Sloan Center's home page: http://w3.-scale.uiuc.edu/scale/.

A description of my own experiences teaching the introductory circuit analysis course (ECE 270) at UIUC is at: http://w3.-scale.uiuc.edu/scale/results-/ece270/index.html (the entire material for ECE 270 just appeared in a special issue of the IEEE Transactions on Education - with all the supplemental material on a CD-ROM).

Finally, all of my recent presentations about ALN are available as PowerPoint files at:

http://w3.scale.uiuc.edu/scale-/OakleyPresentations.html

Best regards,

   Burks

David Coogan: What is a bio graphy? (writing oneself)

I wonder how many of us stare down the monitor with this task—"write a biography of yourself"—wondering what to say, as I do now—wondering how personal writing relates to academic writing?

The truth is, I think quite a bit about electronics and the future of literacy instruction. You might say I'm obsessed with the topic. So I guess that's personal, a part of me. I am interested in TIC TOC because I am always interested in hearing from similarly obsessive people who are using hypertext, email, Daedalus, MOOS, and so on, to imagine new ways to write in the Academy. I am not so much interested in what these technologies, as agents(?), can do, though I admit, that is a fascinating distraction :-) I am most interested in what we can do with these technologies to change literacy from a functional skill to something more along the lines of critical inquiry. I would like to believe, in other words, that college "writing" could be something else besides research papers and lab reports, that we might use electronics to imagine disciplines of composing that are *not* tied to print-based ways of knowing and credentializing.

I approach these issues in a number of ways: as a writing teacher, a writing program director, a writing tutor, a poet, and a great believer in writing-as-a-way-of-

Date: Thursday, 14 November 1996
From: David Coogan
Subject: Reassessing teaching

What I always love about these conversations is how quickly we move from technology, per se, in the strictest sense, to our engagement with technology. Or rather: we use the occasion, as we should, to talk about our fears, our hopes, and our confusion about education, in general. If, as that voice from the chorus points out, we can sustain that kind of dialogue THROUGH the technology questions, then I'd say we're doing the right thing.

For instance:

• Is it possible to INCREASE the distance between students and teachers with technology? To make learning ugly and boring. Of course. But as Randy pointed out, it is quite easy to do that without technology.

• Is it possible to exploit faculty with "cost-effective" virtual classes? Right again. But it is just as easy to exploit faculty now: just as easy to attack tenure, increase class size, down-size

learning. I have written about email in the writing tutorial in *Writing Lab Newsletter* and *Computers and Composition*, and I'm currently at work on a book to be published by Ablex, based on my dissertation, that extends what I tried to summarize in that preceding paragraph! I live on the North side of Chicago with my wife, Joan, a librarian at Northwestern University. I drink lots of coffee, enjoy baking bread (yes, I'll make

departments, de-register majors and graduate programs, and a whole host of other things.

• Is it possible to break boundaries between universities—to create bridges, as well, to public schools thru technology? (The University of Michigan's program with inner-city Detroit schools comes to mind). Yes, yes, yes.

Such connections are possible. But such connections have already been forged without technology.

Technology doesn't create better pedagogy, cost-effective solutions, or a blurring of the boundaries. But we can articulate a rationale for these changes thru technology. The issue, finally, is not what technology can or cannot do. The issue is political: who is willing to articulate what we *should* do; who has formed the right alliances to achieve his or her objectives; who understands and can deal with most institutions' deep reluctance to take risks; who is prepared to encounter new problems and find new ways to value "English" or "teaching" or "writing" in online environments?

These are the questions that keep me intrigued with "technology." I don't know, however, if that interest says more about education than it does about technology. I'm not sure sometimes if it matters.

Dave

Date: Friday, 15 November 1996
From: Joe Amato
Subject: Response to Coogan

i would offer a friendly amendment to dave coogan's insightful post about technology & teaching:

simply that it's already with us [note the use of 1st person plural] . . . i mean to say that it's not like we have a choice about technology that's as simple as choosing chocolate over vanilla ice cream . . . technological practice is already here, it's all around us, it's in us, and the technological choices we make, while on the one hand politically motivated by our (social and individual) desires and the like, are already part of the politics of technology . . . which is to say that technology is never neutral (one might be a bit clever and say it's 'arbitrary & motivated') . . . i would argue that there's never a "technology as such" that exists independently from what we're already doing with technology, what technology is already doing with us . . . so "new technologies" (and here i'll leave aside the question of what's new) may in fact augur new methods and means and the like, but these are

likely to be as much a function of what we've already been doing as what we're willing to do . . . i mean, if one is not willing to take risks with the old, one probably won't enthusiastically embrace the new . . .

   not that there's anything inherently wrong with the old, mind you . . . all of this has a bearing on social structures, and there are some social structures that we might do well to hang on to . . .

   so as dave suggests, it's not simply what the technology can or might help us do (or not do), but what we're willing to do with it, and what we think we should oughtta do . . .
   Joe

Date: Friday, 15 November 1996
From: David Coogan
Subject: Possibilities for a new pedagogy

   There is, in many ways, a great paradox about technological inter-ventions into university culture. My experience—or might I say "con-tact"—with the paradox came about at SUNY-Albany, where I did my graduate work; where I developed my practice of e-mail tutoring.

   What I wanted to do was invest tutorial interaction (one-to-one con-ferencing in the writing center) with more writing. What I found, however, was that this textualization of the tutorial not only changed conferencing dynamics, especially in the asynchronous mode, but opened up new opportunities for me and my students to change the value of college writing.   By giving students—writers, really—the chance to write more about their ideas, to explore divergent plans, difference, and the undercurrents of rationality that get squashed out of most formal prose, I found that SOME writers began saying things, thinking things, that they might not have said or thought face-to-face. This finding parallels the findings of those who work with CMC in the writing classroom.

   The paradox, however, was that for many students, e-mail did not change their perceptions of either writing or tutorial interaction. In fact, I got quite a few students sending me papers to be "corrected", anonymously—just as I did when I worked in the regular writing cen-ter.

   The point is, while I was busy prophesizing to myself and others, about a revolution in conferencing—George Pataki got elected, adjunct funding was cut, and I hear now that there is talk about unit-ing all SUNY campuses with a single plan for gen ed requirements. Funding for EOP and bridge programs, serving mostly minority stu-dents, was simultaneously cut, and there were protests at the Governor's mansion, etc., etc., etc. It got ugly.

   The paradox that I live with, since I continue to work with students

online at IIT, is this: though it is possible to change the nature of teaching with technology, change is not guaranteed. I am thus weary of techno-enthusiasm, including my own some times, because it allows us to mistake the pure possibility of virtual environments with material constraints.

David

Quality

In this conversational thread, participants attempt to identify the kinds of costs and benefits associated with the transition from the physical classroom to the virtual classroom. Ken McAllister (11/1) initiates the discussion by inviting the group to examine, among other issues, the merits of distance education and the kinds of skills associated with virtual learning environments. The main theme that emerges in the ensuing dialogue calls for a reassessment of the kinds of assumptions, practices, and goals on which current "live" classrooms are based. Joe Amato (11/9) indicates that the shift from a local context to a distant context presents us with an opportunity not only to ask ourselves how technology can improve the way we structure learning, but better yet, to ask ourselves whether or not those structures themselves truly reflect the kinds of goals we should have in mind as teachers and administrators. Bill Covino (11/13) and Greg Ulmer (11/12) engage in this very type of inquiry by calling into question our fixed assumptions regarding the value of classroom attendance, the value of the 50-minute class period, and the value of other policies and attitudes inextricably connected to the nature of the non-virtual campus. Greg later indicates (11/13) that virtual technologies can free us from the strictures of conventional practice and physical logistics by introducing such advantages as asynchronous dialogue. Other participants are less sure of the benefits of distance education. Randy Bass (11/9) explains how quality in the classroom in terms of productive interactions between the teacher and the student is not a guarantee of either the live or virtual model. Likewise, Thomas Philion (11/13) reminds us that there are many obstacles to teaching that simply cannot be remedied through the use of electronics. The limitations of the virtual classroom are finally made most explicit by John Huntington (11/26) who argues that the social aspect of face-to-face learning is an absolutely fundamental component of "good" education, fundamental in that it teaches the student lessons that cannot be learned in isolation: how to personally respond to, incorporate, and reflect back that which is learned.

Date: Friday, 1 November 1996
From: Ken McAllister
Subject: Discussions prompt

Among the most commonly voiced concerns about the virtual university is that it will prove to be merely an expensive experiment proving what many people already take for granted: classes conducted corporeally are better than those conducted virtually. Rather than rehash a vague and typically devisive argument about whether or not this assumption is true, perhaps TicToc participants might consider these more specific questions:

- At the October meeting of the UI-Online planning group, Burks Oakley, Sylvia Manning, and others began to brainstorm a plan to extend electronically the resources of the Illinois university system to those who cannot conveniently reach one of the actual campuses. In the introductory notes to that meeting, the U. of I.'s long history of leadership in distance education is summarized (radio, TV, video tape, early computer networks), and there is the suggestion that distance education in all forms is always a worthwhile enterprise.   What personal experience or information can you provide to the TicToc participants that such an assumption may or may not always be true?
- If you consider yourself skeptical of the idea of the virtual university, what would it take to persuade you to become its advocate?
- There is no question that learning to function as a student, teacher, administrator, staff person, or scholar in a virtual university will necessitate the loss and gain of new skills. What specific skills—technical, academic, interpersonal—might be involved in this shift from a physical to a virtual university?
- If we judge the quality of an education by the quality of an institution's resources (staff, faculty, facilities), what qualitative changes in education might emerge as universities experiment with sharing their resources electronically?

Relevant Online References:
http://franklin.scale.uiuc.edu/vpaa/online/virtual_learning.html
http://w3.scale.uiuc.edu/vpaa/OctMeeting/
   Ken

Date: Friday, 1 November 1996
From: Ken McAllister
Subject: Assessing online teaching

In a recent UI-Online planning meeting, Bill Covino facilitated a brainstorming session on electronic pedagogy and curricula. A number of the issues raised there involved matters of assessment. For example:

- Is it important that neither teachers nor students can *see* each other in electronic classes?
- How do teachers of electronic classes know if the people completing online exams and turning in online papers are the same people who registered for the course? In other words, what's to stop me from hiring someone to get my Duke MBA for me?
- Are the existing evaluative criteria that were developed for teachers in traditional courses equally applicable to online instructors? Consider specifically criteria for tenure reviews, teaching awards, etc.
- To what extent is it reasonable to assume that a virtual institution's reputation is as respectable as its traditional counterpart? Put another way, is a virtual UIUC engineering degree just as respectable as a UIUC engineering degree earned on the Urbana campus?
- In what ways may the unusually high preparation time for an online course be justified?
- Is it fair to assess virtual universities and traditional universities in the same way?

Relevant Online References:
http://w3.scale.uiuc.edu/vpaa/OctMeeting/Reports/covino.html
http://w3.scale.uiuc.edu/vpaa/OctMeeting/
Ken

Date: Wednesday, 6 November 1996
From: Cynthia Haynes
Subject: Distance learning, skepticism, and institutional control

I would like to address this thread by taking sections of Ken's series of questions related to QUALITY one by one . . .

> >At the October meeting of the UI-Online planning group, Burks
> >Oakley, Sylvia Manning, and others began to brainstorm a plan to
> >extend electronically the resources of the Illinois university system
> >to those who cannot conveniently reach one of the actual cam-
> >puses. In the introductory notes to that meeting, the U. of I.'s long
> >history of leadership in distance education is summarized (radio,
> >TV, video tape, early computer networks), and there is the sugges-
> >tion that distance education in all forms is always a worthwhile
> >enterprise. What personal experience or information can you pro-

>vide to the TicToc participants that such an assumption may or
>may not always be true?

Distance Education may always be a worthwhile enterprise, even when certain projects produce lukewarm participation or outright confusion and failure. I say this because it seems to me that an institution's investment in pursuing various options for education means that it must follow trends, but more than that, it must examine these trends within the contexts of its own mission, infrastructure, and student population. To examine and pursue, it seems, is certainly warranted. So, this is perhaps a qualifier to the phrase, "always a worthwhile enterprise."

Cynthia Haynes: Greetings,

I am currently Director of Rhetoric and Writing and an Assistant Professor in the School of Arts and Humanities at the University of Texas at Dallas where I teach graduate courses in Rhetoric and Composition, Writing and Ethics, Textuality and Technology, and undergraduate courses in advanced composition and core humanities topics. I train and supervise the TAs who teach our first-year Rhetoric course, and increasingly find myself in the position of being my own system operator as I maintain the networked computer classroom in which these Rhetoric courses are taught. I am also co-administrator with Jan Rune Holmevik (of Bergen, Norway) of Lingua MOO, a text-based virtual learning environment we created in January of 1995. Jan and I are putting the finishing touches to a collection of articles we are editing on educational MOOs for University of Michigan Press. The book is titled *High Wired: Negotiating the Tight/Trope of Educational MOOs*. For a look at the history of Lingua MOO and how we use it for teaching and research, you might want to read our web article in *Kairos* under the CoverWeb on teaching with MOOs (http://english.ttu.edu/kairos/1.2/index.html). I am also co-editor with Victor Vitanza of the soon-to-be released electronic version of *Pre/Text* journal of

>If you consider yourself skeptical of the idea of the virtual university, >what would it take to persuade you to become its advocate?

It would take persistence and energy. I don't happen to be a skeptic, but I respect skepticism and the underlying resistance that drives the energy I see going into the above-mentioned efforts to "examine and pursue." Without the skeptics, we would flounder, perhaps, on our own enthusiasm. A case in point... a graduate student in my Rhetoric and Ethics class came to me with a project she wanted to do that involved Lingua MOO (the MOO I administer with Jan Rune Holmevik). This project was for another graduate class (on Fitzgerald) in which she organized an online symposium at the MOO on the musicality in Fitzgerald's language in comparison with the fiction of Toni Morrison. The professor's first reaction was total rejection. He told her if she wanted to do that it would be on her own time, unrelated to their class, not to be conducted during classtime, and

rhetorical theory. We're calling it *Pre/Text: Electra(Lite)*.

Last year Jan and I also began a series of meetings at Lingua MOO called C-FEST aimed at discussing issues related to conference presentation formats, delivery, and pondering the impact of electronic pedagogy and research on our fields. We will be holding a Special Interest Group (SIG) under the C-FEST banner at the next CCCC in Phoenix called "The Audience Delivers Hypertext," in which the hypertext web developed and maintained by Matthew Levy at UT-Arlington will be explored at random by audience participants at the SIG in an attempt to deploy variations on the ideas of rhetorical "delivery" and "author/reader" relationship.

Previous to my position at UT-Dallas, I spent eleven years at UT-Arlington obtaining a Master's and Ph.D. in Humanities with concentrations in Rhetoric, Composition, and Critical Theory. In the last four of those years, I

further, not to have his name or UTD's name associated with the event. Wow. Not to be dissuaded, she "examined and pursued" the possibilities... invited Fitzgerald's scholars, Morrison herself, and other interested participants. It's happening next week. When she informed him last night about the progress of her efforts, he was overwhelmed, effusive, and wanted immediately to be in on it...to be instructed about how to log on to the MOO, etc. It took her energy and persistence to persuade him.

>There is no question that
>learning to function as a
>student, teacher, administra-
>tor, staff person, or scholar in a
virtual university will necessi-
tate >the loss and gain of new skills. What specific skills—technical, >academic, interpersonal—might be involved in this shift from a >physical to a virtual university?

I think technical skills are certainly crucial, and perhaps more significant for the graduate students going into the market, but the academic and interpersonal skills are profoundly significant. The possibility of expanding your own academic community exponentially, beyond your immediate colleagues and even the colleagues in your research area, is perhaps one of the most astounding benefits, and one that is totally undervalued by those who have not experienced this (and those who don't see that as necessary, perhaps even threatening). Interpersonal skills is a much more intangible issue, but seems to elicit some of the more outspoken resistence to "virtual" interactions...from the oft-beaten mantra of turning into machines talking to machines...to the more sinister implications that somehow interactions with people on the other end of a screen are frivolous, unproductive, and inhuman. I think such shifts from physicality to virtuality require much more finessing of the questions at stake in the resistence than we currently see. The technophobic, and technodiffident, accounts of the shifts described have enjoyed much more media coverage than other accounts, especially in the popular media. Those of us who preach to the choir need to take our shows on the road, so to speak :)

>If we judge the quality of an education by the quality of an
>institution's resources (staff, faculty, facilities), what qualitative
>changes in education might emerge as universities experiment
>with sharing their resources electronically?

Sharing resources is sharing knowledge. We already know the benefits of such an exchange. I think the most qualitative change that will emerge has more to do with who MEDIATES the acquisition of knowledge. As Seymour Papert explains, once students have technological access to knowledge "the possibility of freely exploring [and creating] worlds of knowledge calls into question the very idea of an administered curriculum" (my emphasis). Add that to the driving force behind (some) distance learning efforts, what Stuart Moulthrop calls "information capitalism," and the waters get even muddier. In short, I see more problems with this disjuncture between what institutions want to provide and what they are willing to change in terms of extremely old traditions, and the sort of gate-keeping that goes on between the publishing cartels and scholarly structures of promotion and tenure. Did I leave out education of students in all of this? Yes. That is what occupies the expansive "space" between this disjunction.
 Cynthia

Randy Bass: I don't know who said it in their bio, but the phrase "I never met a deadline I couldn't miss" rang through my head for weeks. I wanted to chime in with my bio quickly, prior to the conclusion of the project.

Briefly:

When I speak to groups about technology in higher education, I occasionally begin this way: "Hi, I'm Randy and I'm untenured." I've come to realize that admitting that is the first step to recovery.

I teach English and American studies at Georgetown University in Washington, DC. I also direct the American Studies Crossroads Project (http://www.georgetown.edu/crossroads/). The Crossroads Project will be holding, courtesy of the CYCLES project, the Crossroads Conversations, overlapping and then lasting beyond the Tictoc project. If anyone is interested in the call for investigators connected with that, you can check out the link from the Crossroads homepage, or go to the page researchagenda.html at the Crossroads address.

Other than that, my life is extremely simple and well-ordered. Like Ben Franklin, each day I rise early and do all my email from 5:30am to 6:00am. At 6:00 I take 15 minutes of vigorous exercise and then 15 minutes of isometric. From 6:30 to 7:30, I will either read a very long novel for sheer pleasure or continue work on some of the handcrafted furniture that I make for myself and

Date: Saturday, 9 November 1996
From: Randy Bass
Subject: Student-teacher interactions

 I wanted to make a couple of observations about this question, "Can anyone learn anything well in a virtual environment," that might help us continue refining

friends. At 7:30 I eat breakfast, then walk the leisurely 11 miles from my home in Alexandria, down 395, across the Key Bridge and into Georgetown. I arrive at work around 10 very refreshed. From 10:00-11:00 I take a cup of coffee with colleagues in the departmental salon, debating literary theories or arguing about the moral center of the current drama at the Folger.

From 11:00-1:00 I teach. From 1:00-3:00, I am often occupied in conversation with students from the 11:00-1:00 class, who cannot get the implications of what we're studying out of their head until they've talked it through. From 3:00-5:00 I retire to my office where I will stay current on all the journals relevant in my field. I realized a few years ago that this was a simple task. I decided that I would limit the journals I found relevant to myself to 22, as this was the number of days a month I was on campus. I find that by reading an entire issue from 3:00-5:00 each day, I am able to stay completely on top of all the latest developments and be quite conversational each morning in the salon sessions with colleagues.

At 5:00 I make the long walk home to my wonderful wife Gail, and my fabulous 2 year old son, Eli, whose principle charm these past couple of days has been

some terminology.

I have recently begun to adopt a rule of thumb about technology in education: the payoff is richest where the context is poorest. So, for example, introducing a course-based listserv in a classroom context with a high student faculty ratio will probably have a direct positive impact under almost any circumstances. A course-based listserv where student faculty ratios are low can also have a positive impact (enhancement) but requires, I would argue a higher level of integration. Similarly, if you look at the courses on a large institutions campus that are successfully using new technologies of one kind or another (CAI, web-mounted materials, networked discipline based applications, communication forums) a very large percentage of those course are introductory courses: intro to stats, intro to micro, chem 101, composition and basic writing. Why? because these are the course where the poorest instruction context exists (i.e. least amount of institutional resources are applied there). How many senior capstone courses are experimenting with new technologies? How many upper division electives or majors seminars? I just visited a school yesterday with 50 sections of composition taught in networked classrooms, and 2 out of 100 courses in the "literature" and "cultural studies" areas using technology as an important part of the course.

This doesn't mean that the potential isn't there, of course, or that excellent examples of this exist. I'm just saying that it takes a far higher level of integration to demonstrate a positive impact in those kinds of courses and in those kinds of environments.

So, this bears I think on the conversation about virtual learning. One of the questions I think we have to ask is "What is a virtual classroom replacing?" Is a virtual class replacing the non-access of that class for a particular population? Is it replacing a 100 person lecture course where students rarely spoke or interacted? Or is the course replacing some more intensive or interactive experience.

At this same school I was at yesterday, I saw a web based video lecture library for a whole range of classes offered on campus. A student in a course can go to the web library, and select a lecture that was missed and sit and watch it on the screen, on video. I looked at two examples: one was Chemistry where the teaching was engaging and constantly using props and so forth. I saw an accounting lecture, where the instructor sat and spoke straight into camera for 20 minutes before showing her first visual. The librarian told me that the accounting lectures were all pretty much like that, and the history course lectures were worse. There were a number of alarming things about this setup which I won't go into, but one of them is that the tapes were merely studio versions of what these instructors do "live" week in and week out, year in and year out.

So, are these lectures in video, watched at this large commuting student population's convenience worse than the "real thing"? or better? If 99% of the student experience in these classes is to listen to non-interactive lectures then is that a fairly poor instructional context to begin with, so that being able to listen to very dull tapes at your own speed, to download portions or back up and listen again at your own rate, seems like an enhancement.

My point is not to defend various distance learning contexts or be less creeped out by the possibilities than anyone else, but merely to suggest that there can be a lot of distance between students and faculty in live and physical situations. Comparisons ought not to be made (or solely to be made) on the virtual/physical (or virtual/local) fault line, but other criteria, such as "interactivity": that is, to what extent does an educational context foster teacher-student interaction, community-based interaction and learning (student-student), and learner/material interaction? Virtual technologies can make any of those categories more or less effective, just as those categories can vary widely in live and local contexts.

Randy

Date: Saturday, 9 November 1996
From: Joe Amato
Subject: Rethinking learning

randy, i like it when you write (among other things)

>Virtual technologies can make any of those categories more or less
>effective, just as those categories can vary widely in live and local
>contexts.

one of the questions i think we need to risk pos(t)ing here is, to what extent *are* virtual technologies making those categories more or less

effective? . . . further, how can we use virtual (as other) technologies to make the categories more effective, and/or to revise/rethink the categories? . . .

as you suggest, looking at the course itself—its student/faculty ratio, content, level of difficulty, curricular place etc.—speaks to the use of virtual technologies . . . but what complicates this, for me, is that such considerations might be the basis for sidestepping, again, a discussion of what learning ought to be, simply b/c of what it has become . . . i mean, perhaps we won't be able, hereabouts, to get into this latter—but my experience has been that it's often difficult to broach such matters ftf, in the midst of one's dept . . .

in short: where *is* a discussion to take place about what we think we should be doing in the classroom, with or without virtual technologies? . . . does the advent of new such technologies somehow speak directly to this question of educational aims?—is there something inherently democratizing about the so-called virtual world? . . . or is there something inherently authoritarian about same? . . . are such technologies simply 'neutral,' a function of how we use them? . . . or is it more appropriate to ask how they play to specific postsecondary realities currently being experienced around the nation, even as we consider a host of local deformations? . . .
 Joe

Date: Monday, 11 November 1996
From: Vainis Aleksa
Subject: Salary and quality

 let me play the chorus for our g(r)eek tragedy.
 Rah-Rah: If this "computer" discussion is forcing us to turn to the question of "what ARE we supposed to be doing in the classroom?"— then computers have justified their existence.

Vainis Aleksa: Hello Toctitians!

I join you from the ranks of part time lecturers who top off their dissertation with not one job, but several! It's sort of an "E.R." version of academics, where we zip around the metropolis, filling last minute positions, retaining a professional demeanor at the cost of an exhausted personal life. I'm just glad not much money is involved. Just think of how far we would fall behind in grading if we could go out to eat once in a while!

For me then, part of what is tic-toc-ing is the sense that my computer privileges are dependent on institutions that hire me by the semester, and will drop me like a hot potato whenever.

The computers themselves, meanwhile, keep me and my students busy. We use interchange for small group peer editing, newsgroups to post bibliographies, and listservs to carry on or prepare for face to face discussion. What has changed my teaching most, however, is plain old, no frills, e-mail. At first glance, the setup suggested nothing out of the ordinary. Students would post their drafts to me, and I would post my responses to them. However, as students and I got the hang of the idea, we began to realize that we had quick and easy access to each other and that turnaround time for a response was short. In my experience, this set of circumstances encouraged students to take on more complex challenges in their essays—the eggs weren't all in one basket; they could risk writing in new ways, knowing that going back on track, if needed, would be just one posting away.

The e-mail landscape has given me more and more leeway to respond to students as individuals. Because I am there when their drafts begin heading away from the assignment in a better direction, I can encourage them not to reign themselves in. And because I am also there when they hit their stride, I can say, forget the due date, skip the next assignment, and turn this into a ten-pager.

This ain't, of course, heaven. Not everyone has a computer. It is, as writing proliferates, more work for both students and myself. And there are ever present personalities who make the computer their word weapon of choice. Nevertheless, it's hard to imagine anything in the near future that will be a bigger impetus to change our notions of what a classroom is, and what it is that

Boo-Hiss: What's all this surprise about computers opening the pandora's box to exploitation? Isn't this just an extension of what part-timers and temporaries in the humanities have been facing for a while? If people administrating departments would stop throwing their hands in the air every time the topic of part-timers comes up, we would already be equipped to nip this seemingly new problem in the bud.

Rah-Rah: Amato, amato, he's our person, if he can't do it, nobody can . . . Your point is well taken—compared to the "$1,729,709 for the chair of cardiothoracic surgery (plus $46,371 in benefits!) . . . " we (t.a.'s, untenureds, and tenureds alike) are all in the same boat. We CAN'T talk paycheck—but we better learn.

Whatever the dangers of the "computer" creating a complacent and solipsistic world for its rising class, there is still the chance that it can serve the more wakeful side of our minds . . .

Vainis

Date: Tuesday, 12 November 1996
From: Joe Amato
Subject: *The University in Ruins*— a brief review

not really responding to anybody here, just trying to locate this rather pedantic urge in me at the moment under an appropriate subject line . . . and "quality," close as it is to words such as "excellence," is it . . .

i wanted to call ticktockers' attentions to the following book: *the university in ruins* by bill readings oxford up: 1996. readings (a canadian) died in a plane crash in 1994 before his book was published . . . it's one of the most fascinating—and accurate—analyses of the contemporary (north american) university i've come across . . . briefly, readings describes the transformation of the university from a cultural institution to an institution that participates in the emerging transnational corporate structure, largely under the rubric (and rhetoric) of "excellence" in education . . . his is not a marxist analysis, though it's

informed by a keen understanding of marxist critique—he carefully disengages from the customary use of terms like "ideology" and the like . . . his gist (and i do the book no justice in attempting a quick summary) is that the idea of culture was intimately tied to that of the nation-state, and that in the demise of the latter it is futile to criticize the university for not being sufficiently cultural (the critique from the right), just as it is futile to expect cultural studies and multicultural impulses to yield sufficiently radical transformation (the platform of the left) when in fact these latter are being rapidly incorporated into the system . . . where he goes as a result i won't attempt to summarize—and i'm not suggesting the book is not without its problems, though it's provocative as hell (and historically documented throughout) . . . in any case readings' concluding chapters deal explicitly with teaching and community, with the actual university as a site—a site in ruins—within which to begin considering the question of what it means to be together (in the course of which proposal he explores some of the overlooked possibilities of sixties liberatory rhetoric etc.) . . .

i would think that readings gives us one way—an important way, as i see it—to situate our own discussion of virtual educational agenda . . .

apologies for the biblio
best,
Joe

John Huntington: I have been teaching in the English department at UIC for twenty years now with a variety of specialities ranging from pulp science fiction to literary theory to Elizabethan poetry. In the late 1960s I wrote a dissertation at Berkeley on the early poetry of George Chapman (the first English translator of Homer), but in my first job at Rutgers I began teaching SF and got sidetracked. My first book was on H. G. Wells, and my second, *Rationalizing Genius*, is on pulp SF of the 1930s, 40s, and 50s. Over the past decade I have been much influenced by the cultural sociology of Pierre Bourdieu, and I am now at work on a book on a social interpretation of the poetry of the 1590s, with an emphasis on Chapman, but also touching on Spenser, Marlowe, Shakespeare, Jonson, and some more minor writers.

I come to the TICTOC conversation having little experience with the electronic medium beyond elementary word-processing and e-mail. I follow the talk about it with some input from SF, but it remains more or less a literary idea for me, not a practice. I am not sure what to expect, but I look forward to learning.

Date: Tuesday, 12 November 1996
From: John Huntington
Subject: Socialization in face-to-face learning environments
I am not part of the choir, so I miss the assumptions that lie behind the decision not to discuss whether students learn better in a real or a virtual environment. It seems to me that unless we can clarify this issue all the others are irrelevant. I also understand that unless we can focus the discussion carefully the conversation will just be bull.

Therefore, let me concentrate on one specific issue: "the suggestion

that distance education in all forms is always a worthwhile enterprise." As devil's advocate I would suggest that insofar as distance education gives students an illusion of parity with local education it defrauds students. Before everything else, education is a socialization. The reason we have teachers at all (rather than just libraries and books) is that what is being learned is more than facts or even approaches, but styles of body and voice. The deficit autodidacts famously labor under is precisely that they have everything but that all-important sense of style that allows someone to carry learning in such a way that others regard it with respect. As Bourdieu argues, centrally in *Reproduction* and in passing in many other books, the educational institution itself is already very limited in how far it can compensate for the inherited power of class styles that are learned from even more basic institutions such as the family. My fear is that the virtual classroom will rob education of even that small power of correction and change, that in the admirable gesture of opening "quality education" to everyone with access to the web we will in fact be mystifying the nature of learning and hiding to a further degree the way class-inflected styles operate.

Since as Bourdieu argues disciplines differ in their social meaning, what I am worried about will be a much more serious problem in humanist studies than in the natural sciences. It will also be a more serious problem at the high-school and college level than at the graduate level where the basic socialization is, we hope, more or less complete. Also, it may be that the web itself will establish styles that will themselves have power and will play against the kind of class competence Bourdieu discusses. Even this is a dialectical situation however: a new style may achieve a kind of social success in a special social space, but that very space will be socially defined and limited.

In the *New York Times* of Monday, November 11, 1996, there is an interesting article on how e-mail operates socially at Dartmouth, a very high-tech institution. At one level Dartmouth represents the privilege that Bill Covino worries about. But at another we see in the electronic cave a delusion of interaction that may be both more subtle and more misleading than we realize.

Greg Ulmer: Hello timers. I finally began to understand the meaning of the *constructed subject* when I composed a mystory called *Derrida at the Little Bighorn*. The personal Mount Rushmore I found carved in my being carried the likenesses of Walt Ulmer, Gary Cooper, General Custer, and Jacques Derrida. The method taught me to look to the ficelles (Henry James + Lacan useage), which produced LaVonne Watters Ulmer, Marlene Dietrich, Chief Gall, and King Sunny Ade. I am now attempting to think my way into this alternative subject via Method acting. In *Heuretics: The Logic of Invention* mystoriography is developed into chorography (?). These neologisms name the methodology I have been working on for some time to

John
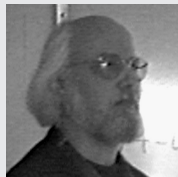
support the transition of the academy (teaching, research, service) from literacy into electracy. The opening of the networked writing environment in the IBM computer lab at the U of Florida in the fall of 1994 has given me and the graduate students I work with a chance to test and develop this grammatological approach to our work in an online setting. The NWE includes 5 classrooms with 30 Unix workstations each, running email, a MOO (MOOville), Netscape, and more in a fully integrated environment. I teach both freshman and graduate courses in the NWE (you may browse the work done in these classes via my URL noted below). I am looking forward to participating in tictoc because I am now becoming involved in the move toward distance ed that has suddenly become a big thing in Florida (and everywhere else it seems). At the request of our new provost, I started an online project called Electronic Learning Forum (see the intro at http://www.elf.ufl.edu/), whose short-term goal is to bring to bear some critical thinking on current policy making in Florida (without much optimism about having much effect), and a longer-range goal to introduce the grammatological approach in particular, and poststructural postmodern theory in general, into the DE/DL conversation. I am part of a grant-writing project developing a BA degree in English whose first 2 years will be at a community college and the next 2 years be delivered entirely by distance. All my statements will need some justification, but I thought I should let you know where I am coming from (grew

Hi Joe and all. Thanks for the recommendation and summary of Readings' book. That kind of grounding in a reference can be very useful. Just one comment for the moment, regarding the point that culture is bound to the nation state. A similar, but perhaps even more pointed link for seeing what is at stake in a project such as this one is Benedict Anderson's well-known *Imagined Communities* which shows the dependency of the nation state on literacy (national languages created by high literature, and symbolic capital spread via journalism). If we start assessing the implications of a change in the technology of language and memory in this more holistic way, we begin to see what is at stake, and why te changes might be resisted. My own thinking about the situation is influenced by the history of writing (grammatology) which suggests that the changes in media are paradigm changes: to figure out how to use the new tools to deliver education or represent knowledge (pedagogy) we need to think holistically, not just how the institution of schooling changes, but how civilization changes. Why stop there? how change changes . . . :)

best,
Greg

Hello John. You are right to ask about the comparison of virtual versus f2f learning. However, your concerns only addressed one side of the worry—how DE might differ from the positive side of campus learning. There is the other side too. U of Florida has 40,000 students, with the same size faculty it had roughly when there were "only" 24,000. Class size in intro courses and filter requirements are limited only by the size of the auditorium available. Our discussion needs to be honest, all right. We need to examine the quality, the reality, of campus learning. How many of our campus practices are dictated by learning, and how many by administrative convenience and other factors of material existence? the conventions of the 50 min. class, 3 or 4 times per week? The quiz, the exam? the research paper? Part of the challenge of DE is to design it so that it is better than the conventional class. My assumption is that what we are talking about is not two different pedagogies (one for the campus, one for distance), but one pedagogy that integrates computing media into learning, wherever one is housed. best

Greg

Date: Wednesday, 13 November 1996
From: William Covino
Subject: Re-evaluating attendance policies

In light of recent contributions by John Huntington, Greg Ulmer, Joe Amato and others, we are perhaps at the beginning of considering the lexicon of "keywords" that has become associated with the current-traditional classroom, and the values that such words maintain.

I am thinking now of words like "attendance" and "effort." As one of those who likes it when students show up, I've been wondering lately about what I think their "presence" says about them. I/we have tended to associate class attendance with commitment, maturity, interest, respect, community. For instance, I am currently teaching a course with large numbers of upper-division students majoring in Teacher Education in English, a number of whom have established poor attendance records. I hear myself thinking, "If they can't manage to show up for class regularly, how can they ever be teachers?"

The dynamics of the V-class must necessarily drive us to re-think, or perhaps re-affirm, the assumptions that attend this question I ask myself. We tend to associate matters such as an "attendance policy" with the way the real world works. Does the real world of work continue to work this way? Whether or not it does, should we begin to define the ways in which hard work, commitment, and accomplishment can be dissociated from making an appearance? But at the same time, might we keep in mind that while the work world may be

relaxing its attendance requirement, and allowing for the company to be "housed" in networked home offices rather than in the same building (to what extent this is really happening, I don't know), those who are allowed to work from home tend to be in the executive class, while others must show up or get fired. And of course in certain professions, medicine for example, showing up on time and well-prepared is a life-and-death matter.

In sum, then, how should we (or should we) redefine the keyword attendance, as both an academic and socio-cultural indicator?

Bill

Joe Tabbi: I began my academic career studying engineering physics at Cornell University (BS, 1983) and worked for a time at a company in downtown Boston that designed automatic test equipment for electronic and laser-optical machinery. The institutional life of scientists and engineers held little interest for me, but I enjoyed the ideas, and I discovered that courses in quantum theory combined well with the literary "theory" that was then raging in the English department. (This was the early eighties, when engineering students could afford to take advanced courses in the liberal arts, and before cultural studies of science had made so many physicists defensive about maintaining disciplinary limits.) After a teacher in a class on Romantic poetry digressed and mentioned the work of Thomas Pynchon, I added a major in English so that I could write a senior essay on *Gravity's Rainbow*. Around that time, the Society for Literature and Science was forming, which gave me the idea that I might go on to write a dissertation in the field, with a concentration on technology in postmodern American fiction. Through most of grad school (University of Toronto, 1984-1988), and during an extended period of post-doctoral semi-employment (Toronto; San Francisco; New York City; Milwaukee; Manhattan, Kansas; Hamburg, Germany), I tried to work out the conceptual links between the disciplines by reading experimental fiction, philosophy of science, and critical theory, in equal doses. Now I am less interested in becoming a literary scientist than in learning to work with a medium. There is exactly one sentence devoted to electronic textuality in the epilogue to my book, *Postmodern Sublime: Technology and American Writing from Mailer to Cyberpunk*. I say that hypertext is a subject I'd better not pursue in a printed text. I go into the subject a bit further, from a pedagogical angle, in an essay titled "Reading Writing Hypertext," which is forthcoming in *Internet Culture*, and I've just completed another essay, "Hypertext

Date: Wednesday, 13 November 1996
From: Joseph Tabbi
Subject: Thinking critically about the technological medium

Hi everybody,

The exchange between John Huntington and Greg Ulmer raises the issue of whether teaching might actually be improved by the introduction of electronic media. I submit that, before any improvements can be realized, teachers will have to pay more attention to the medium as such, and inculcate a self-consciousness in students about the aesthetic and institutional assumptions that underlie the use of e-media. So long as the medium remains transparent—a mere channel for transmitting "information" from point to point, students will never experience anything comparable to what goes on in traditional classrooms. The emphasis on education as an

Hotel Lautreamont," which tries to enact the hypertext aesthetic it's about. For the past year and a half, since coming to UIC, I've edited the electronic book review at the alternative-x web site (www.altx.com\ebr), and I've been actively listening in on the discussions exchange of information strips the teaching/learning encounter of its social dimensions, as John points out; the same emphasis also works to make users forgetful of the medium—whether electronic or otherwise—through which they are getting their information.

Right now, when the technologies are developing and there's still no single standard for interchange networks, net browsers, and so on, users tend to think about the medium only when something goes wrong: when a system crashes or when a message composed using one program can't be decoded by someone using a different program. But there's little reflection on the medium as such (at least not in most literature departments; art schools and graphic arts programs are often better about this). I haven't worked all that much with electronic media (apart from email talklists) in my classes, but when I do, I want to ask students to reflect on what it is that changes when their work circulates electronically, through many different media rather than the various print media. Because I teach contemporary literature, my starting point has been to look at ways that writers—the most interesting ones, in my view—have already developed sophisticated self-conscious experiments with their own medium: print. Pedagogically, it would be a good thing if, as Greg says, the new media initiate a reconsideration of the old media of traditional classrooms—the quiz, papers, exams, etc. What I hope to get from these discussions are ways of defining such activities (which I think can be done better online). More generally, I look forward to getting ideas for conducting a mixture of online and conventional classes so that (short of requiring that all students become programmers), people in the arts and humanities may become more active in deciding how the new media are implemented and used.

Joe

Date: Wednesday, 13 November 1996
From: Greg Ulmer
Subject: Virtual learning environments

Hi Bill. About attendance: I also require students attend my paper classes (and penalize them for excessive unexcused absences). This issue is a nicely grounded simple example of rethinking practice holistically. For example, I have 2 sons in high school. I read recent-

ly that given the average adolescent's body clock, the worst time to try to educate teens is in the morning hours. My kids are up at 6am and doing chem labs, calculus etc by 7:30am. Why? it has to do with the bus schedule. Only so many buses, so they have to do triple duty: first the high schools, then the middle schools, then the elementary schools. Starting times are all staggered. The larger issue is: arrangements for managing people across the institutions of home, work, education. Everything is interconnected: an ecology. One of the supposed virtues of Internet technologies is the potential flexibility. Asynchronous exchange. We need to think about how to get from here to there institutionally as well as technologically

best
Greg

Date: Wednesday, 13 November 1996
From: Joe Amato
Subject: The social aspect of campus learning

greg, this is it though (and sorry for excerpting you, i always find this a bit annoying myself!):

> >arrangements for managing people across the institutions of home,
> >work, education. Everything is interconnected: an ecology.

i want to intervene in your use of the term "managing"... i may be able to get to "ecology" too, but briefly...

i mentioned in a prior post shoshona zuboff's *in the age of the smart machine* (1988)—which along with everything else is one of the earliest examples i know of examining online community—one chapter is a study of one such community in the early 80s, how it began as an experiment in transposed professional (conversational, oral), culture and ended as an exercise in top-down surveillance and control a la foucault...

now to belabor the point a bit, assuming not everybody is familiar with zuboff's book: zuboff gives us a way of understanding how contemporary information technologies may be better understood in terms of their informating as opposed to their automating technologies... she explains (in historical detail) how the customary managerial skills associated with acting-with (note the bodily-presence implication here) are literally textualized in electronic environs . . . and that this has all sorts of ramifications for the contemporary workplace, not least of which is that

"the informated organization is a learning institution, and one of its principal purposes is the expansion of knowledge—not knowledge for its own sake (as in academic pursuit), but knowledge that comes

to reside at the core of what it means to be productive"...

by aligning the (new) informating workplace with the "learning institution," zuboff (perhaps unwittingly) encourages us to consider the reverse—an alignment of the educational institution with the workplace . . . the only distinction she offers us is that the pursuit of knowledge in academic institutions is presumably "for its own sake" . . . hence zuboff's conception of the academic institution, to the extent that she offers us one in her book, would seem to be predicated on a somewhat idealistic conception of the university as a place that is divorced from the sorts of material objectives ("products") that provide the impetus for corporate work . . . at the same time, her use of terms like "teaching" and "training" and "education" remains somewhat uninformed by the controversies surrounding such terms that has been ongoing for years now in educational circles per se (though at one point she references, for example, basil bernstein's work on 'elaborated' and 'restricted' codes and so forth) . . . zuboff suggests, in any case, that an informed organization differs from an automated one, that in fact it is more appropriate and productive to view the "information panopticon" from the perspective of informating rather than automating . . .

now, i would argue that one major gradient in the contemporary rhetoric of higher education is that of student-as-consumer, even as it remains unclear what it is students are being asked to consume . . . whether students in college are consuming/purchasing—while producing—a new version of themselves . . . and if this is the case, whether students are then to be conceived as both consumer/producer of product and product consumed, producer . . .

yet the question i want to pose in light of zuboff is whether this rhetoric of consumerism is itself predicated on an automated view of information—hierarchical production of a new student body, with teachers-managers-administrators to supervise the transfer of knowledge; or whether it is better predicated on an informating view—dialogue-based inquiry that results in a new knowledge of this body (recall the textualization of process), with teachers-co-learners-collaborators together with student-learners to form a self-managed learning community . . . to some extent, this is a function of the institution in question . . . anyway, if, as zuboff asserts, "learning is the new form of labor," this suggests that the student body—those who are traditionally the learners—as well as the faculty body may represent a new workforce, a new set of laborers . . . and if the university as a social entity is becoming little more than another transnational corporation (readings' view), this suggests a somewhat product-based mission . . . we might further consider, then, what sort of disciplinary bodies (students, teachers) an automated view will give us (vocational, entrepreneurial?), as opposed to what sort of disciplinary knowledge (possessed by students, teachers) an informated view will give us

(corporate, team-based?) . . .

and perhaps more importantly: whether there is, in any case, a way to rethink the social function of the university such that it is not saturated with corresponding disciplinary, panoptical measures . . . b/c zuboff gives us no way out of the information panopticon . . . the best alternative she offers—the informating one—is one in which everybody is observer as well as observed . . . and i would argue that this represents a self-policing mechanism, in line with the general drift of disciplinarity that foucault describes in *discipline and punish* . . .

in short [cough], greg: isn't the question of management (which would surely, these days, be construed in terms of its associated science) simply and profoundly already one step in the elaboration of a gesellschaft? . . . isn't this exactly what the public relations push is these days—in the words of one of the field's founders, edward bernays, to 'engineer consent'? . . . and isn't this the once and future problem with technology—that it renders such rationalized workings transparent? (and even through an ostensibly natural construction, such as ecology?) . . .

sorry to riff on you so, but it seemed worth the effort . . .

all best,

Joe

Date: Wednesday, 13 November 1996
From: Marjorie Luesebrink
Subject: The commodification of distance education

Quality folks—

I was prompted to enter this discussion under the "Quality" banner by Cynthia Haynes' message of a few days ago. In the intervening time, the contributions by John Huntington, Greg Ulmer, Joe Amato, Joe Tabbi and others have extended the discussion in important ways. To step back a bit and consider how the institutions might endeavor to change, I would like to offer our experience at the California Community College level. I am the Curric. Chair at IVC in Irvine, California.   We are in the process of updating our "Mediated Instruction" criteria to conform to the guidelines we have received from the State Chancellor's Office. That Office has taken the position that all distance courses will be in a "trial" mode until the year 2000. As a consequence, every institution is required to file a report for each instance of a "distance learning" course. This report consists of answering a list of questions (yes! questions!) about the courses. I thought I'd share them with the group as they indicate both a level of concern and a habit of thinking about how education is commodified.

Purpose: What was the intent in offering the course by distance

education? How was learning enhanced by the use of technology?

Marjorie Luesebrink: The 1880 census for Los Angeles, California, lists the household of George Coverley. It consisted of George, his wife, Pretinella Walker Coverley, and their two children, Mary and John. Also in the household were Harvey Walker, Pretinella's father, and Matilda Coverley, John's mother. Within three years, George and Matilda would be dead, Pretinella would be married for a second time, and Harvey Walker would be in the mountains with young John, prospecting for gold. 116 years later, I, Marjorie Coverley Luesebrink live in Newport Beach, California. I have two grown sons in the state. We are now six generations. The history of the Coverleys spans the booms and busts of the California dream—gold, land, movies, airplanes, land again, and now, perhaps, the promise of electronic technologies that have the risky quality of the longest of long shots. Certainly that is one attraction for a hypertext fiction writer. I am currently at work on a hypermedia novel, *Califia* (I write under the pen name of M.D. Coverley). [You can see a small section (without much of the "media") at http://artnetweb.com/blast5/anacap/earth_1.html.] The novel draws on the myths and history of Los Angeles to create a quest-saga, a sort of inverted imperial romance of the area and some of its more persistent seekers.

My interest in computers and teaching has also influenced my work as a writing teacher at Irvine Valley College. I began the first CompuEnglish Program there in 1982 and have continued to pursue ways to improve learning through technology. In 1995, I participated in an NEH Seminar in Electronic Technologies, where I met Joe Tabbi, who introduced me to the TICTOC Project. This looks to be a valuable and interesting means of understanding the way our disciplines will evolve in the next century. And

Student Access: What is the evidence, if any, that the new methodology increased the number of students served, or extended services to new populations? What student services were provided to support student success for distance education? In what ways were the goals of the district's Student Equity Plan furthered? What is the evidence, if any, that special community needs were met by the courses using new methodologies?

Faculty: How were faculty selected to teach each distance education section and what relevant professional development activities and support services were provided to them? What was their perception of the experience, as expressed by instructors and student services professionals [sic]? Which new approaches were judged effective? Ineffective?

Quality: How did student satisfaction compare with that in courses offered in a traditional mode? In what ways was student achievement improved? Did students with prior independent study experience do better in distance education than those without prior experience? What type and quantity of student-faculty interaction occurred in each course? What types of instructional support and services were provided? How appropirate and effective was the courseware for each course? Was equipment satisfactory for each course? Which technological mix was used most effectively? What dif-

ferences, if any, were there in the level of student achievement in transferable verses nontransferable distance education courses?

{you will note here the essentially student-centered bias of community college and Calif. in general. Many of the quality questions raised by our listserv do not materialize. Another observation—the filing of such a report may seem to be a discouragement in its own right.}

There are a couple of other sections on costs, how ADA (daily attendance) is kept, recommendations, and so forth, but the above is a hefty prescription for response. We are being told that our funding rests on complete answers to these questions. Of course, I am looking to the TICTOC discussion for insights as to how to even provide answers. In addition, I have prepared a 5-page report for our faculty and administrators on "Considerations for Distributed Learning Policy"—if you are interested in having a copy, you can e-mail me and I will post it along (one section of it attempts to classify the various forms of Distributed Learning Modes that we might attempt). It might seem that the way in which the institution involves itself in quality issues might be of some importance—

gracias to all the contributors on this subject,
Marjorie

Date: Wednesday, 13 November 1996
From: Thomas Philion
Subject: Response to Covino

I think we can dig even deeper here in terms of considering the various constraints upon our students' attendance and therefore their learning. At UIC, I always have students who miss classes because of health, family, and/or work-related considerations. Just a few weeks ago, one of my more diligent undergraduates missed about two weeks of class, his wife in the hospital with Krone's disease, his daycare schedule thrown into haywire. Today, I received a note from a seemingly less diligent undergraduate explaining that she had been sick last week and only today made it to the health care center (this same student works something like 25 hours a week and carries 4 classes). Last week, one of my teacher ed students called to ask me for permission to attend the last football game of the year at the high school where he is practice teaching; he wanted to attend this game because several of his students are players and he promised them that he would attend one of their games (his absence here suggesting not his flippancy with regard to my class but his commitment to his high school students). My point is, I'm not sure we need to re-think the notion of attendance; attendance—in mind and time, if not in body—is surely important to learning. However, I do think that we need to

inquire as to the reasons our students fail to attend (to their words and work, as well as to their actual classroom meetings). Will virtual learning strategies help the student who is working 30-40 hours a week to attend better to her classes and her learning? Will virtual learning strategies help the teacher education student who is immersed in the culture of secondary education to attend to his other classes? Can technology help people to deal with the social, medical, and economic crises that impede learning and education? I suspect not, or at least not as much as we think. Learning is always constrained by factors beyond our control; while technology can help us to develop creative responses to many problems that we face in the classroom, it obviously will not provide solutions to every problem. Consequently, I believe that as we explore the implications of new technologies and the complex theoretical insights that they enable, we also ought to attend to our students, to the hard-to-understand environments/dynamics of their learning, to the complex relationship between these environments/dynamics and our own teaching.

Tom

Date: Thursday, 14 November 1996
From: Greg Ulmer
Subject: Response to Amato

Hi Joe

I admire your ability to express yourself in this medium, Joe! Please tell me you were working from notes when you posted your riff regarding Zuboff, informatting, and all! It was a great post, indicating we are going to have to some THINKING. some speculating. Just a couple of associations for now: managing, management. The image I had in my mind when I used that term was Disney World. I have mixed feelings about making this point, since my wages are paid by sales taxes on tourists visiting the Orlando area by the millions. POOR SAPS (oops, sorry, ignore that). The most amazing colossal achievement of Disney World if you have never been there (and *this is worth the trip in itself*, don't get me wrong) is the lines, the way the place is designed to move people. Whoever the designer was must have studied drama at one time, the 3 part or 3 act play: You enter the line near the point where the crowd disappears into what seems to be the final entrance to the ride, event turns out this is an illusion). The line seems short. Problem: you are led a mile in the opposite direction. The line snakes back however just when you are losing hope; you near the entrance mouth; but only to snake away again. Finally you approach the door: JOY, JOY (an hour or so has passed); but the door gives way to a tunnel, and about a third of your journey is ahead of you.

Now the ride event exhibit itself lasts approximately 65 SECONDS and is SO INANE that you get bored during the last 36 seconds. You are actually HAPPY to be out of there. Leaving the place what keeps you from appealing to those at the back of the line, counseling them to FLEE? Freud explained this in his account of why people repeat shaggy dog stories. Also, the most horrible thing, is if you are with young children (no more than elementary school) they say: CAN WE GO AGAIN???

Ok, I'm so worked up now I cant go on. More later

best

Greg

Date: Thursday, 21 November 1996
From: Ann Feldman
Subject: Students and the formation of community

Hello, all!

As I've listened to the discussion thus far, I've found myself asking more questions about teaching and learning across the university rather than attending to the values of the virtual environment. I especially appreciated Randy Bass's take on the situation: "there can be a lot of distance between students and faculty in live and physical situations."

In either case, virtual or physical, I want to ask what kinds of practices are students and teachers engaged in and to what end. I agree with John Huntington (following Bourdieu) that schooling is "a socialization," one's

Ann Feldman: Hello TicToc-ers:

I'm really pleased to be participating in this group. I entered this field in 1979 as Ann Matsuhashi (more on that later) when I completed a dissertation in which I observed the writing process in real time and began my job in the graduate specialization here at UIC. I also directed the Writing Center for the first ten years, and now I direct the composition program.

My early theoretical work culminated in an edited volume published by Ablex, *Writing in Real Time: Modeling Production Processes*. Since that time I have pursued a strong interest in teaching and learning. It seems critical to consider questions about access to academic literacy on our urban campus, which has grown to a 60% population of students of color. I just published a textbook (*Writing and Learning in the Disciplines*) that aims to draw students into the academic community while inviting them to bring their experiences with them. Students are encouraged to find personal connections between their experiences and the reality presented by the academic works. Here, at UIC, students need both rigorous instruction in academic practices and a way to connect to the material. Along these lines, graduate students and I have written additional materials to provide tools for archival research, ethnographic interviews, and understanding survey data. Students now can take some sections of our required writing classes called "Exploring Chicago" in which they connect academic research to issues in their own neighborhoods.

I'm a relative newcomer to electronic pedagogy, but learning fast. I've set up listservs for my last few classes, and the composition program has an address for students and staff to write in to us. I've seen a Moo, but that's about it. There's no better way to learn than to throw yourself into the conversation and the practice, so that's just what I did. During the past month I have written two grants (with

Cordelia Maloney, Jim Sosnoski, and Jim Fletcher) to begin a distance learning program through on-line video writing conferences.

Now to get back to the Matsuhashi thing. Some of you know that that was my name for about thirteen years during a grand multicultural excursion and now, even though I'm Feldman, I have two scions named Philip and Amy Matsuhashi (13 and 11). They take Judo and fight with each other constantly (seems like). They love to surf the net to do their school reports, download movie clips, and find out what's happening. They also love to come to work with me and "hang out" with the graduate students and staff who are wonderfully solicitous of them. There's one more member of our little tribe — our puppy, Mazel Tov Cocktail, who is learning to catch a frisbee and chase girl dogs (even across Ridge Avenue!). I should also tell

identity is transformed. We need to think carefully about how this transformation occurs. I've watched this process occur in first-year composition classes and in training the teaching assistants who teach in those classes. Students need to be able to recognize the intellectual, meaning-making conversation going on throughout university life, participate in it, and critique it. For instance, in the first semester course, Paula Mathieu, Jennifer Cohen and others in a teaching collective have asked students to engage in a critique of the flow of information on university web pages and to write themselves into site. I've designed a second semester course in which students connect historical and anthropological material on families to their own experiences or to explorations of their neighborhoods. Students ought to have a stronger sense of participation through such work. My staff and I continually ask ourselves what activities/work/practices will provide students with the appropriate tools for this endeavor.

Unfortunately, teaching (and not only distance teaching) too often is viewed as transmission of information not as increasing participation in a community. Joe Tabbi's request that we "pay more attention to the medium 'as such,' and inculcate a self-consciousness in students about the aesthetic and institutional assumptions that underlie the use of e-media," applies to current teaching practices as well. On the whole, I'm finding that electronic supplements to classroom work offer outstanding opportunities for students to "show up" as Bill Covino puts it so aptly.

Listservs have added another rich strand to the class's conversation. Our teaching assistants are beginning (just beginning) to design web pages specifically on the topic of the class's research that can ease the distance between them and the library for conducting research. We're focusing on critique of web sources, hoping to add some measure of distance for students to be critical, we hope! I do wonder how fully virtual environments might work in a variety of disciplines and for a variety of types of pedagogy. According to Ken McAllister we'll be moving on to talk about e-works and then specific on-line courses. In the meantime I'm going to be examining a hefty list of url's that illustrate how some of this might work. Happy Thanksgiving, all.

Ann

Date: Tuesday, 26 November 1996
From: John Huntington
Subject: Socialization in pedagogy

   Jim Sosnoski (11/5/96) in his early definition of the virtual classroom stipulated it as a situation in which the teacher is not present. As I read the discussion of QUALITY, it seems to me the discussion needs to distinguish more carefully than we have between such virtual classes, what I understand as "distance learning" in which the only connection between teacher and student is electronic, and mixed situations, what Greg Ulmer (11/12/96) describes as a "pedagogy that integrates computing media into learning, wherever it is housed," or what Ann Feldman describes as a virtual supplement to a "real" class. I should make it clear that I am enthusiastic about experimenting with electronic supplements to my own real (I'll drop the quotation marks around this term) classes. My questions about socialization were addressed mainly to the purely virtual situation. In response to Greg's raising the issue of the problems conventional classrooms—especially the large lecture class, but to some extent all "real" classes—pose for "quality," I want to meditate further of the way a real class educates.
   I agree with Greg that there are very great problems with the lecture situation, some of which distance learning seems to correct or at least diminish. On the other hand, even the giant lecture has important qualities that will be lost in on-line pedagogy or such imitations of the physical as teleconferencing or video-tapes (see the last part of Randy Bass's discussion in SALARIES 11/9/96). The words and projections of the teacher are only one part of the experience. There is the relation among the students; on the margins of the lecture the way the teacher relates to the students and the assistants in the course; the way where the students choose to sit reflects their attitudes towards the class and towards learning itself. A student in a live lecture chooses publicly how to pay attention (e.g., posture, note-taking, bringing the book or not) and what to pay attention to. Whether to attend at all involves a significant choice, forced (e.g., a job or sick child might take priority) or unforced (e.g,. a student is bored with class or finds a conversation over coffee more engaging at the moment and chooses to cut), and the other students will often be aware of these choices. The very density of bodies in the classroom will affect the intellectual tone. I could go on, but my point is clear: educationally, an intellectual argument is always socially contoured by the way it is received by the class.
   The virtual classroom can to some extent be defined by the absence

of this social contour: all the disruptive and distracting misbehaviors of the lecture (such as late-arrivals, absenteeism, whispering, reading other material during lecture) are screened out so that the purely intellectual content can be isolated and contemplated in itself. The physical and temporal convenience of the virtual class represents an artificial isolation of the intellectual content from the space of social (which here includes economic) contingency. We would all agree that these are virtues, yet the simple book has most of these same virtues, and we don't think of it alone as sufficient for education. To return to my original point, it is the social situation that marks the teacher-student relation and distinguishes it from pure information exchange and learning. It is differences in these social situations more than in quality of faculty or simply size of classes that finally marks the difference between "good" and "mediocre" education. My question is how an education stripped of this dimension will function socially. My fear is that the student who has mastered distance learning, despite the skill with keyboard and monitor, will be less well equipped to succeed socially than will the student who has weathered the crowded (or in some cases the over-enrolled but sparsely attended) lectures of the large state university.

Let me pose this another way: if we were to grant the superiority of distance learning, why should any student attend college? Why not just rent the "great teacher" tapes and take some certifying exams? Even if we add a list-serve to the videos, would such a student get what we mean by "an education"? (See the conversation in SALARY about institution- based versus entrepreneurial on-line education.)

I suspect that only on the day when we live entirely online in an updated version of E. M. Forster's 1909 story, "The Machine Stops," will virtual education be clearly more socially adaptive than what we now term real education.

John

News Misinformation

This brief thread focuses on the way in which virtual universities, departments, and courses are depicted in the media. The main concern expressed by the participants is that media reporters, especially those connected with periodicals that cover academia (Chronicle of Higher Education, Lingua Franca, Educom Review, etc.), produce stories so egregiously biased that their take on technology is either overly enthusiastic or overly dismissive. That such a critique of media coverage is by no means new is indicated by the main points presented in the course of this discussion. The first of these points, introduced by both Jim Sosnoski (11/20) and Ken McAllister (11/20), is simply

that media coverage of electronic pedagogy tends to be sensational and biased toward the corporate interests that own the particular reporting medium at hand. A second point the group considers is the fact that the media plays an important role in influencing public perceptions of computers as educational tools. Several participants question the ramifications of news stories that depict students as being "forced" to engage in technological learning. One final point, which is not explicitly addressed in this conversation, but which is implied in several corollary discussions and is certainly relevant here, is the call for students and instructors to exercise their critical faculties on computer-related journalism just as much as they might on journalism concerned with issues involving more apparent potential for mis-/disinformation.

Date: Wednesday, 20 November 1996
From: James Sosnoski
Subject: Resistence to "forced" technology

The "information Technology" section of the Nov 8th issue of *The Chronicle* contains an article on the use of technology at Western Kentucky University. On the second page, a large side bar features the following uncontextualized quote:

> It aggravates me. We spend hours and hours working on assignments. I can find the information myself in the library just as easily. (A22)

Reading the article one discovers that the remark was made by a first year graduate student in biology who cannot access the Internet easily at home and has to "drive up here at nighttime to do it." In the succeeding paragraph where her remark appears, she is categorized as an example of students who object to being forced to use computer technology but who, "after a little time," are "using it."

I mention this to call to your attention the way in which *The Chronicle* treated the "aggravation" of persons who feel they are being "forced" to use technology. Such aggravation seems to me quite common, especially in instances where persons feel obliged or are instructed to use technology in their work. What is noteworthy, however, though not surprising, is that there is no analysis of the conditions of the aggravation. Lesley N. Preston, the first year graduate student in biology who made the remark, complained about the lopsided ratio between the time it took her to do a task without computers and the time it took her to do the task with computers. Presumably, (though we are never told) she could *not* complete the task without finding the information on the Net despite the fact that it

was available in the library. Presumably, were she to find it in a library book, it would not count as the fulfilment of her assignment. We are not informed about the circumstances of her aggravation. Is the information she seeks *only* available on the Net or could it have been just as easily found in a book? Again, we don't know. What gets underscored is her aggravation. Note, however, that Lesley's time ratio differential evidently includes driving to the university at night to use the technology there because the technology she has at home is inadequate. Is the problem in this case a socio-economic one rather than a technological one? Is this *Chronicle* article giving us mis-information—being inaccurate or inadvertently leaving out significant information. Or, is it in some way giving us dis-information, that is, alleged facts to mislead us into thinking in one direction rather than another? Or, is the author biased in some way and we should infer that the missing information and the emphases reflect Goldie Blumenstyk's attitude?

Is the un-contextualized highlighting of "aggravation" an implicit appeal to persons who do not wish to be forced into using technology? If so, are readers of this article being encouraged to assume that administrators are forcing students to use technology? And further, that this is to be understood as a problem with technology? What if we posed the implicit question directly: to what extent is a teacher who requires students to use technology *forcing them* to do something that has nothing to do with learning a subject matter?

Chronicle reporting is probably no better or worse than *Chicago Tribune* reporting. Yet, this is not especially comforting to someone like myself who believes that the media nowadays is more likely to manipulate its readership in order to maintain its profit margins than it is to tell its readers what they don't want to hear.

Jim

Date: Wednesday, 20 November 1996
From: Donald Marshall
Subject: Response to Sosnoski

In the article Sosnoski cites, the student complained about being required to get information from the Net and as a consequence having to drive to the university a long distance at night to get to a computer that could give access to the Net when the information was readily available in the library. It puzzles me that the reporter didn't ask how long it took the student to drive to the university to get to the library. Perhaps the student is more nimble than I, but it usually takes me at least some time once I'm in the library to find the information I'm after. That assumes the book I need is on the shelf.

I don't say this as an advocate of technology over libraries. Each has

its uses. Some find one more congenial than the other. But it's hard to deny that the recognized difficulty of access to research libraries was one of the motivations for developing the technology in the first place.
   Don

Date: Wednesday, 20 November 1996
From: Ken McAllister
Subject: Electracy as a maligned medium

   Along with Jim, I've also been thinking about the press's portrayal of virtual universities, virtual departments, and electronic pedagogy in general. Not surprisingly, *The Chronicle of Higher Education* tends toward a less-than-enthusiastic perspective in these matters. In the November 1 issue, for instance, Gertrude Himmelfarb's "Point of View" ran with the headline: "A Neo-Luddite Reflects on the Internet."
   This piece can be useful to us as we work toward an honest under-standing of how computing and academia should work together because it presents in a nutshell the most common (I might even say cliche) concerns about the issue we've all agreed to address. Himmelfarb's piece has been posted on the TicToc web site under "V.U.s in the News," if anyone would like to read the full essay, but below are her main points:

   • Computers in education are occasionally useful for research, but usually they are "frivolities, diversions, [and] often meretri-cious...."
   • Like its predecessor the TV, the computer—especially the multi-media computer—diminishes one's attention span, and therefore reduces one's ability to do good scholarship, which takes a great deal of patience and care.
   • The authority of sources found on the internet is highly question-able.
   • Reading electronic texts is a naturally less-careful process than reading printed texts because the computer encourages constant movement, particularly as conveyed by the overbearing presence of scroll bars.
   • Computers encourage retrieval and recombination, but not understanding.

   As a "Point of View" piece, the essay is unabashedly biased; it wouldn't be fair to judge the *The Chronicle* to be against electronic pedagogy based on Himmelfarb's commentary. But considering the essay that Jim cites, and several other essays over the past year, one of

jjs

Frankly, technology will never replace the humanities as we know and love them

the *Chronicle's* editorial positions does become clear: computer technology is the most likely medium in which the academy will be able to survive in an increasingly profit-driven culture. In four other *Chronicle* essays at hand (also soon to be on the web site), computers and computer networks are depicted as the mechanism that can Taylor-ize education, allowing teachers and administrators to do more with less.

Jim asks "to what extent is a teacher who requires students to use technology *forcing them* to do something that has nothing to do with learning a subject matter?" I would ask three related questions that I derive from my observations of v.u.s in the news:

1. To what extent are teachers being forced to use technology in their classes as a result of what appears to be a new efficiency movement within academia?
2. To what extent is the press responsible for propogandizing the value of corporate efficiency in academia?
3. To what extent are the enthusiasts and electronically-oriented pedagogues among us responsible for encouraging—intentionally or unintentionally—our own institutions' downsizing?

The November issue of *Lingua Franca* carries an interesting article by Reid Cushman that describes the Education Network of Maine, a sophisticated distance education program on the East Coast. At the end of his piece, Cushman contrasts the cinder-block headquarters of the ENM with the campus of Colby College, where "beneath a canopy of maple leaves and sharp blue sky, students wander lazily across broad green fields, among the postcard-perfect buildings" (63). Cushman concludes with this provocative comparison between the two schools:

Certainly a microcomputer and modem in the den could never be as nice as all this [Colby College]. But perhaps they don't need to be. Shopping at Wal-Mart isn't always a very exalting experience either, particularly compared to the intimate, personal service of the neighborhood hardware store. The siren song of "prices falling down" (as the giant retailer's commercials put it) has enticed a lot of people into new shopping patterns nonetheless. Wal-Mart, and distance education, may not be all things to all people. But then, neither was the corner store—or the liberal arts college. (63)

In working out ways to incorporate computing into our classes, are we also implicitly working to encourage the transformation of the academy into a knowledge factory and warehouse?

Ken

Date: Friday, 22 November 1996

From: John Huntington
Subject: Response to Sosnoski

There are other readings of the *Chronicle of Higher Education* essay that Jim analyses. The aggravated student is a single anecdote at the end of a long essay almost falling over itself in praise of an ingenious administrator who developed a computer presence on "credit." One suspects that the pull-quote and the anecdote that generated it are there for "balance." The provocative pull-quote may pull in Luddites looking for evidence, but what they find is unabashed praise of the new technology with a single, undetailed whiner off on the side.

One has to read the Chronicle with much scepticism. It often goes out of its way to see controversy, and its understanding of the controversies it finds is often superficial. One reads it to find where the issues are, not to understand them.

John

Date: Friday, 22 November 1996
From: James J. Sosnoski
Subject: Response to Huntington

John:
On November 22 you wrote:

>There are other readings of the *Chronicle of Higher Education* essay >that Jim analyses. The aggravated student is a single anecdote at the >end of a long essay almost falling over itself in praise of an ingenious >administrator who developed a computer presence on "credit." One >suspects that the pull-quote and the anecdote that generated it are >there for "balance." The provocative pull-quote may pull in Luddites >looking for evidence, but what they find is unabashed praise of the >new technology with a single, undetailed whiner off on the side.

Obviously, I did not construe the first part of the *Chronicle* essay as "almost falling over itself in praise of an ingenious administrator." I didn't notice much "praise." I did note remarks such as "The solution . . . was to do what millions of consumers do—buy on credit" (A21) and
". . . Dr. Anderson acknowledged that the university 'may be pushing it a bit' in buying the bulk of the computers on a five-year schedule" (A22). When I read the last remark, I resonded—"ouch." Buying a pro-duct that has less than a three-year life span on a five year credit schedule did not seem like sound financing.

We'll scan the article and we'll post it for everyone to read as soon as possible.

Jim

Key Issues in Distance Learning

In the following discussion on distance education, participants address three principal concerns associated with the framework of the virtual learning environment. The first concern is introduced by Joe Amato (12/15) who takes up the problem of whether or not the non-physical classroom is able to foster a sense of "social contour," that is to say, whether or not it is able to successfully facilitate the kind of student socialization that education seems contingent upon. Amato's argument that the mechanical strokes of a keyboard do in fact materialize into a sense of self /community-consciousness is later echoed by Eric Crump (1/14) who explains the way in which some electronic media, such as the MUD, are far and away more "paticipatory" than the traditional lecture, and hence produce an heightened awareness among students of their own collective presence. Both participants agree that the extent to which social interaction becomes a part of the virtual classroom depends on the kind of medium engaged in. The second concern addressed by the group involves the issue of access. Paula Mathieu (12/17) argues that the cost of technology sets students of a lower socio-economic standing at a distinct disadvantage against other students of the virtual setting. She worries about the unfair penalties exacted on these students in terms of increased frustration and lost time and wonders whether our shift toward technology might not eventually alienate and/or exclude economically depressed students from the classroom. The third topic of concern discussed by the group involves the issue of quality control and how

My distance ed course on Shakespeare was just terrific! I learned a tremendous amount about the newest tequeniqjes for video streaming.

best to organize and manage the role of computer resources within the university. Tom Bestul's proposal (12/20) that such administrative details be managed at the departmental level is met with a mixed sense of concurrence and skepticism. As Mick Doherty points out (12/20), most department's appear to want this autonomy, but almost none has taken concrete steps to assert it. In a similar manner, Joe Tabbi (12/30) laments the current trend of departments to leave matters of technology up to the self-motivated individual rather than engaging in a concrete decision-making process that might articulate a collective vision for the use and implementation of resources.

Date: Sunday, 15 December 1996
From: Joe Amato
Subject: The social contours of distance education

   as i recall, john huntington's post was about how the virtual classroom (defined broadly) displaces the "social contours" of the flesh & blood experience—the various comings and goings, the sighs and whispers, the metabolism of live bodies sharing lived space . . . true enough . . . yet a related, broadly posed question would be, What sort of social contour is afforded by the virtual classroom? . . .

   i would argue, along the lines of what my friend kali tal posted me some time ago, that the virtual world provides for different valences of anonymity and intimacy, distance and proximity . . . this is a sort of interactive-affective way of putting things—tickling these keys here, in my spare bedroom in hyde park, in chicago, with the wind occasionally howling through the window [wink], i feel in fact that my comings and goings, to a greater or lesser degree, are noticed, attended to . . . that somebody is looking, listening . . . looking and listening—recognizing "me" as a composite of various pixel elements—is part of the social contour of the virtual world (a form of pattern recognition, to gloss kate hayles' work on same) . . . oddly enough, in looking and listening so, perhaps we are that much more likely, as we interact, to relish the thought of actually dealing with flesh & blood communities—not out of further alienation, but out of enhanced awareness (and this is something a recent piece by michael joyce has made me think long and hard about) . . .

   that anybody is looking at or listening to this post could be an illusion, yes . . . but i'm often met by blank stares in person, so nothing new on this count . . .

   at the same time, there's no question that what i'm writing (what i'm discovering, what i'm in the process of feeling in my context, and what you're in the process perhaps of resisting!) is being reduced, recorded, digitized for an unknown posterity . . . as with any writing, i'm becoming a text that documents, that serves as a record . . . that

such a text can be easily or instantly archived and accessed from a remote location is, again, something different . . . this is a less inter-active way of putting things, a more administrative insight (apologies to you admins out there, but—) . . .

now when i think of distance learning, i generally think of a plain ole closed-circuit tv system . . . the cruder versions of such systems textualize at the expense of those customary social contours over which john justifiably frets, providing little in the way of live feedback (perhaps an occasional disembodied voice) . . . though the tradition-al lecture format may constitute a largely passive experience for all concerned, esp. in these days of ubiquitous tv images, watching an instructor on tv and taking notes can be even more passive, both wrt the instructor's and the students' bodies and perceptions . . . the words are ostensibly transmitted and received, and notes are taken ('passive construction') . . . there's very little dialogue, very little in the way of gesture that doesn't reduce immediately to entertainment, and this, as i see it, is owing less to the realities of distance and more to the real-ities of this form of

mediation . . .

am i getting through? . . .

if the push is to go with distance learning of the traditional variety (tv cameras and the like), i would argue that, at the very least, this would mean coupling video with online exchange to achieve a con-structively mediated classroom . . . now, online lists for classes are a LOT of work (as many of you are no doubt aware) . . . personally, i would not be interested in teaching such a course—i don't feel that the sort of teaching i do, or am interested in doing, would broadcast well . . . broadcasting is in my view clearly inferior (not from an administrative, but from an interactive viewpoint) to coupling inter vivos exchange with online exchange . . . in fact, i would be more interested in teaching a course online than in broadcasting AND using online technologies . . . that video conferencing will likely become far more popular will, of course, alter broadcasting itself . . .

i'm trying to draw distinctions here . . . distance learning was designed for remote locations . . . in practice, it can become merely remote control, aka bad performance . . . even if you believe, like sey-mour papert, that a self-learning model is more attuned to the times in which we find ourselves, the educational-institutional resonance with such a model will occur only if we allow students (and ourselves) some interactive distances through which to mediate, dialogically and otherwise . . . which may be just another way of saying that we need other types of mediation . . . anyway, whatever we decide to do, i'd say that the means of teaching should be made a legible part of the learning process for all concerned . . .

Joe

Date: Sunday, 15 December 1996
From: Greg Ulmer
Subject: Reconciling distance education with literacy-based modes of teaching

What happens when we translate or transfer our curriculum into a new technology (when we move education from literacy to electracy)? McLuhan: the old medium becomes the content of the new medium. What happened when the Greeks wrote down Homer? What happened when the Catholics printed the Bible?

So if we assume the literal transfer of our degree program into interactive tech (I assume Internet computing will be the site of real advances in DE) will produce changes, is it possible to plan for those changes and direct the consequences? For example, what aspects of our present curriculum and pedagogy are essential, and which aspects are relative to the nature of literacy? Shouldn't one of our first steps be to inventory and make explicit the experience of our major?

At U of Florida the major is 10 courses. Let's say a typical course requires 6-8 books, mixed among critical, theoretical, and creative modes. The students read thus 60-80 books minimum. Assignments? say 2 15-page papers, 2 essay exams, 2 quizzes? That totals out to about 300 pages of writing: about the length of a book manuscript. Of course the writing is not unified or synthesized in the bookish way (that is not done until the PhD). Speaking? in-class reports, Q&A dialogue in class, a couple of visits to an office per course: in short, a basic ability to ask and answer questions.

This survey is a mere sketch: the point is, what does all this add up to? How could it be done better with the new technology? How would the roles of teaching

Paula Mathieu: I can sum up my academic life as follows: I was badly miscounseled as an undergraduate, and I'm still trying to recover. A well-intentioned guidance counselor convinced me not to pursue English but a degree in business. I have a B.S. in business administration from U of I Urbana and worked a few years as a financial writer. Through this experience I have become interested in rhetorical theory and how corporate culture and language shapes our contemporary American experience. My master's thesis explored how corporations create "needs" through language, using Starbucks coffee as a case study. I am now a doctoral student at UIC in language, literacy, and rhetoric, pursuing a concentration in women's studies. I live in terror that my business background will be what lands me a job.

My interest in computers relates primarily to issues of pedagogy. I am an assistant director of the composition program here at UIC, where this semester we coordinate more than 90 instructors teaching more than 3000 students. I, like David Coogan, am interested in talking about how teaching technology can become a critical and not just a functional skill. I am worried about the economic and political issues related to computer use, such as access for all students, the impact of corporations on teaching, and so on. Regarding instructors, I am interested in developing training strategies that not only teach staff to use technology, but to know how to teach well with it. I am involved in eworks, designing the web pages for the UIC cultural studies collective, of which I am a member.

My "personal" life has been tough this year, having lost my mother after a difficult illness. I am lucky to have an amazingly supportive husband, Jeff Purdue, who is a librarian in the Chicago public schools and so much more than that. We're temporarily uprooted, living at my mother's house in the suburbs until it's sold. I like train trips and Indian vegetarian cooking.
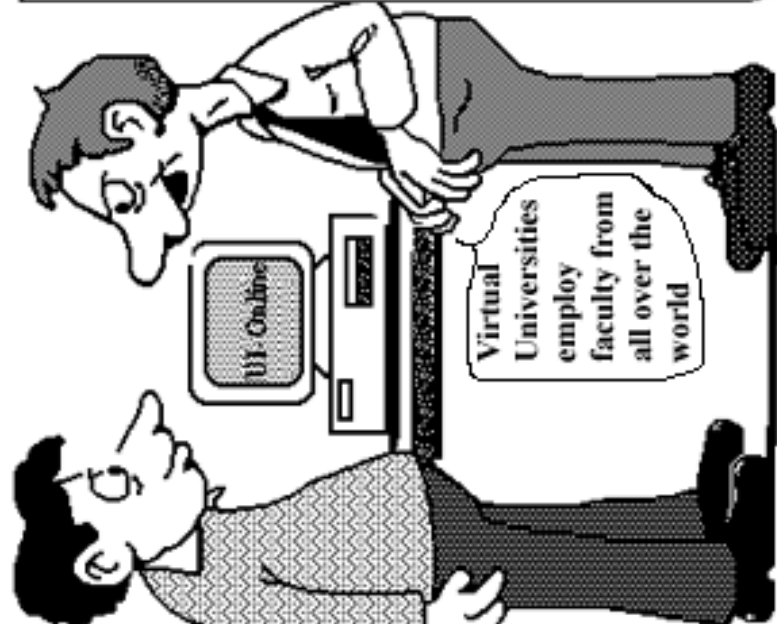
and learning change via the new tech? Assuming that other degrees are being put online as well, what kinds of relationships across knowledge might be possible? Is specialization important, or only a feature of literacy?

Sum: to think about going electronic requires also that we make explicit our bookish ways.

best
Greg

Date: Tuesday, 17 December 1996
From: Paula Mathieu
Subject: Socio-economic status and the issue of access

Another set of issues that I feel are key—in addition to the ones mentioned by Greg Ulmer and Joe Amato—is how does this emerging technology affect who has access to learning and who can succeed in it. UIC is presently marching toward a state it is calling "a paperless university," while at the same time public access computer labs and computer classrooms are sorely lacking. Right now, students who have computers at home, especially ones with modems they know how to use, have real advantages over students who must wait in line for terminals that are often not working well or are virus-laden and who may have to wait up to four hours for a document to print.

As an assistant director of the Composition Program and as a composition instructor, I worry if new teaching initiatives—including my own—adequately take into account the differing "hassle factors" students must face when asked to work in electronic settings, depending primarily on their socioeconomic status. How difficult or easy the transfer into electronic media is depends not only on whether a person owns a computer, but also on experience and familiarity with technology, which have strong economic correlations. Race and gender can also affect how easily one sees oneself as a subject of all this technology: the face of the WWW, at least at this point, seems to be predominantly corporate (i.e. controlled largely by males and by whites).

Going forward—if UIC or other institutions move toward "paperlessness," will this also spell a concurrent move toward requiring students to own computers as a condition for admission and/or will a computer become a tacked-on materials charge on the tuition bill? If so, such a move could drastically and detrimentally change the make up of the student body at UIC, which now includes a large number of people paying their own ways, many of whom are immigrants or children of immigrants, working mothers, and/or are employed full-time in addition to their course load in order to pay the bills. So at this institution, along with many others like it, a trend toward more and

better technology, may bring about a concurrent trend (or disguise/justify the rise of an independent trend) toward recruiting financially and educationally more privileged students. Such a change would mean a complete deviance from this university's stated mission, which is to serve students "for whom a university education is not a long-standing family tradition and who must surmount economic, social, and educational barriers to achieve academic success" (*UIC Mission Statement*).

By raising these concerns I am not saying that using technology in teaching inherently accompanies an elitist trend in education. What I'm saying is that as long as access to technology and information in this country is tied to access to capital, the possibility for shutting out those without adequate finances needs to be guarded against. In my own teaching I include an sizable computer component, including writing and designing entries for a web page. In doing so, this past semester I gave over large portions of class time to work in a computer lab, so that students without private computer access could work as well as students with machines at home. Even with this adjustment, however, problems persisted for the students who were "have-nots": lack of time, practice and computer savvy led to unreadable disks, unsaved documents, and lots of unfinished and repeated work. It's these sorts of penalties for not knowing that I seek to avoid and hope these conversations can offer strategies for. Also, I feel that an institution that embarks on a technological teaching endeavor has an obligation to come up with specific and well-funded strategies for inclusion, which go beyond superficial 'Gingrichian' gimmicks to give homeless people an Internet connection.

Paula

Date: Tuesday, 17 December 1996
From: Joe Amato
Subject: Response to Mathieu

great post, paula! . . . really brilliant exposition of how "access" issues are comprised of race, gender, class issues as well . . . it sounds like your experience is very close to mine wrt how the institutional push to secure new technologies can squeeze certain groups out of the educational system . . .

to combine your insights with greg's concerns re our 'bookish' natures: there are race, gender, class issues having to do with print literacies too (i use the term "literacy" here rather casually), and many times such issues are obscured simply b/c print technologies benefit from having support systems already in place . . . the emergence of new technologies and literacies foregrounds where we're lacking when it comes to respective support, so as your post implies, it's

important to see these emerging realities in light of the sorts of tacit (if not hidden) assumptions that have for so long guided and sustained print technologies . . .
   best,
   Joe

Date: Tuesday, 17 December 1996
From: John Huntington
Subject: Response to Mathieu

   A question for Paula: at the end of the course you taught was the gap that you describe any different? In slightly different terms, did your course perhaps slightly (an important word: education is slight) change what would have been an almost total social exclusion without it?
   John

Date: Wednesday, 18 December 1996
From: Bob Goldstein
Subject: Response to Mathieu

>Right now, students who have computers at home, especially ones
>with modems they know how to use, have real advantages over
>students who must wait in line for terminals that are often not
>working well or are virus-laden and who may have to wait up to
four >hours for a document to print.

   Paula, your concerns are well-taken. As one who is partly involved in actually finding solutions, I'd like to make a few comments, at least about the situation at UIC.
   Firstly, rebooting a pc in an ADN public lab completely removes any viruses, because the boot image comes from a read-only remote server.
   Secondly, we have made enormous progress in upgrading the quality of the labs over the last several years, as well as increasing the number of seats. Last year, the VC for Academic Affairs committed to doubling the number of seats in public pc labs over 3 years. This is not ketchup-as-vegetable; you can be sure these funds would otherwise be used for faculty salaries, financial aid, or any number of worthwhile activities. Interestingly, the current bottleneck to increasing public pc seats is finding adequate space, not adequate funds. My point is that our concerns are, in fact, shared by people who spend money, even if the decisions can't always go fast enough or far enough.

Thirdly, I have heard complaints of long printing lines due to some professors scanning in handwritten notes and publishing them on the web as large gif images. When the students print them, well, let's just say the wrong technology was used. I doubt if this caused the majority of print problems, but in this era of cheap, fast, personal computers, performance of a given technology can still matter.

I agree there isn't enough access, and what access there is isn't equal. In keeping with the theme of KEY ISSUES, I'd like to see discussed here:

1. How much access is adequate? (This will depend very much on what technologies are used - video conferencing vs. email, handwritten notes in gif form vs. html, and so on. Are compromises in technology worthwhile to reach a larger audience?)

2. How much access and experience can we reasonably expect? (Clearly the number of home pcs/modems is increasing, not decreasing, although not equally among all groups.)

Bob

Date: Wednesday, 18 December 1996
From: Gene Ruoff
Subject: Technology, inventory, and funding

On December 18 Bob Goldstein wrote:

> >Paula, your concerns are well-taken. As one who is partly involved >in actually finding solutions, I'd like to make a few comments, at >least about the situation at UIC.

Let me add a few words to what Bob has said about the situation for student computing here at UIC. About three years ago at this time the Computer Center put in its first student lab with current-generation equipment. Until then we had suffered through an environment of 286s and worse, with the great majority of the machines for student use actually terminals running mainframe sessions. Today we have over 300 usable (and very heavily used) machines (none over 3 years old), with recurring funding to double this inventory over three years and replace machines routinely every four years.

The funding for this effort has come from several sources:

• internal reallocation at the computer center, which has meant scaling back on services some users wanted very much
• campus-level reallocation, which has meant taking dollars from other activities, real as well as potential

- painful cost savings through better management of information and communication resources
- some modest new state funding for technology to campus.

We have done this without taxing student-users, as many campuses have done. Bob's point is well taken. There just aren't any free lunches, and barring an unlikely outbreak of political sanity in the state on the importance of technology in higher education, our likeliest source for funds to improve student access to computing will remain money we are already spending on something else.

Anyone who wants to see where we are heading with student computing should check out the new lab in Room 340 Chicago Circle Center, which has 69 Pentium 166Mhz PCs with 32MB RAM and CD ROMs running DOS and Windows, feeding a HP5si postscript printer. Getting this prime space for our students was a student effort, spearheaded by last year's Student Trustee Roy Mathew, which received the full cooperation of the Circle Center board and management.

We are trying.

Gene

Date: Thursday, 19 December 1996

From: Paula Mathieu
Subject: Response to Huntington

Tom Bestul: Greetings,

I've been a professor of English at UIC since 1993, after a long stretch (1968-93) at the University of Nebraska in Lincoln. My specialty is medieval literature; my most recent book (on medieval narratives of the Passion of Christ) will be out in a month or two. I was bitten by the technology bug after I saw my first Macintosh in 1984, and at that time became what might be best described as a recovering technoskeptic. My interests in computing have tended more toward research than pedagogy. At Nebraska in the mid 80s I helped establish and then was in charge of a humanities research computing center designed for faculty and graduate students. In 1990 I established (and still run) an electronic discussion group on Chaucer that now has some 600 mem-

To Bob and Gene—thanks for the update on the UIC computer access issue. Bob's question— how much access is adequate— is an important one to consider. I hope that folks with more experience in this area can offer their views. I believe U. of Michigan has a roughly 10-1 student to computer ratio; that sounds good to me!

>A question for Paula: at the end of the course you taught was the gap >that you describe any different? In slightly different terms, did your >course perhaps slightly (an important word: education is slight) >change what would have

bers. I also was one of the organizers of a conference at the University of Toronto on computer-based Chaucer studies and edited the proceedings. I was relatively active in the Association for Computing in the Humanities, and at Nebraska, through committee work and minor administrative posts, I picked up a lot of experience about the administrative politics of technology-based instruction. I'm especially interested in TicToc because I see that the new technology has the potential for making actually true one of the traditional maxims of the academy— the inseparability of teaching and research. On a personal note, I am an ex-marathoner, although still a runner, an ex-bread baker, and a Frank Lloyd Wright

been an almost total social exclusion
>without it?   -John Huntington

To answer your question, John, I read through my students' evaluations of the course, ones they did for me in which I asked them to focus on the class' use of technology as well as the departmental evaluations.   Briefly, this is what they said:

It seems the course did have some positive effect on all students by making them feel more able to make use of the university technology: most activated their email accounts and used the Internet for the first time in our class; all had their first experience with building a web page. Several shared the sentiment that the course helped them overcome fears of technology and are now using email etc outside of the class. Still, I don't think this process went as smoothly for some students as others. I'd like to share one student's response. She begins by saying that now she feels confident to check her email and use netscape. But then she adds the following:

"The only problem I have is that I have limited access to computers here on campus and I don't have a computer at home. This is not only a problem for me but for my teachers as well. You see they can't email me and be sure I'll get the message in time for our next class or in time at all. It is also a problem for me when I am on campus and have to use a computer, because there is always a line and the computers tend to freeze a lot too. As a student without proper training I find it very frustrating and hard to understand all computers and their programs. What I mean is that the little things you did teach us won't necessarily help us with all our problems with the computers we work with. Then when you are in the computer labs, you ask the lab advisor for assistance and they fix it for you instead of taking the time to explain things like you did. I give you a lot of credit for enriching our minds with the computer introduction and with technology, but I believe that an English class should be spent working on English-related subjects."

So I do feel all students became more "socialized" to computers in my class, but I still feel the gap between the haves and the have-nots was apparent. In other words, although everyone completed web entries for the end of the course, the cost of doing that entry varied, depending on whether or not students were able to pick up on the "tricks" I showed them (like saving essays as text-only and using cut

and paste instead of retyping) and if they had private access to computers.
  Paula

Date: Friday, 20 December 1996
From: Thomas Bestul
Subject: Issues of administrative control

I'm responding to the call for comments about key issues from administrative types. I'm the Director of Graduate Studies in English at UIC. I'll try to keep this brief and base my comments on experience with similar projects, mainly at the University of Nebraska-Lincoln. For me the key issues are:

1. Quality control. That means, in my book, faculty control and review at every step of the way, especially, but not exclusively, in all matters of curriculum and the awarding of credit, using regularly constituted committees at department, college, and university level, as well as appropriate outside peer review mechanisms. The structures that assure quality now should be used and by no means bypassed.

2. Administrative control. Should remain local, at the department level, as much as possible. Decisions about workload, salaries, promotions originate in the department. Both pragmatically and philosophically, I don't think projects like this are likely to succeed if they are structured top-down. Superboards and higher administrators can do the cheerleading, show the way, make resources available, but then they should be prepared to move to the sidelines and let faculty who are actually working with students take the lead. This gets harder of course when the effort spans several campuses or institutions—but it is a principal that cannot be ceded. (Most good administrators know this).

Mick Doherty: When an autobiography is but a list of URLs, you start to think Cliff Stoll might have had a point. But here I am anyway:
  Mick Doherty: Department of Language, Literature and Communication Rensselaer Polytechnic Institute http://www.rpi.-edu/doherm/
  Editor: *Kairos: A Journal For Teachers of Writing in Webbed Environments* http://english.ttu.edu/kairos/
  Managing Editor: (1994-95) *Computer-Mediated Communication Magazine* http://www.december.com/cmc/mag/
  Teacher: Pedagogy Designed and taught Writing to the World-Wide Web http://www.rpi.edu/dept/llc/webclass/web / http://www.rpi.edu/dept/llc/webclass/summer96/
  Technical and Professional Communication http://www.rpi.edu/dept/-llc/techpro/doherty/ Also have taught

every level of writing class from junior high through graduate seminar, science fiction, cyberpunk, and virtual reality fiction.

Works in Progress: Book Chapters "FYComp Phreaks Out: A Hypertextual Foray into Teaching Writing" http://www.rpi.edu/~doherm/cyberpunk/ "Donut Shoppes and Tea Rooms: Getting in the MOO for Hypertext" URL forthcoming

Dissertation: to examine tenure, promotion and technology in the humanities in current American academic. Exam reading areas: Hypertext theory, communications technologies, rhetorical invention. http://www.rpi.edu/~doherm/dissertation/

Looking forward to working with y'all. Moving from Troy, NY to Fort Worth, TX some time in the next year for some RL f2f interaction with my soon-to-be wife. But either place, I'll be online all the damn time ...

3.   Equality of access. We have had much eloquent commentary on this already. I think it's fundamental especially for the kind of institution UIC is. We need to avoid the mistake of generalizing into a universal, and making decisions accordingly, a largely white, middle class vision of an 18-22 year-old student in a comfortable suburban home surfing the web from a $3000 multimedia computer. That doesn't mean that we should avoid new technology because of inequality of access. New technology has always been expensive. Printed books were a luxury item for a long, long time. We need to continue to use the resources of the university to level the playing field (to coin a phrase).

(As an aside, I want to applaud the efforts at UIC to increase computer access. When I came here in 1993 I thought we were in the dark ages—and that was in comparison not to Johns Hopkins or Stanford, but the University of Nebraska, an underfunded, open-admissions, land-grant university in a fiscally conservative state. The strides that have been made in the past three years have been enormous.)

4. The long view and the quick response. My last issue is to urge the importance of taking a long view and not basing decisions on too short an historical time frame. Corporations do this all the time, driven as they are to show results quarter by quarter. Universities have not—this is where our ponderous administrative structure and innately conservative culture can be an advantage instead of the disadvantage it is often held to be.

5. The university's resiliency. Finally, I'm optimistic about the survival of the university as an institution, changed, of course, but still the same in its fundamentals. The university was a great invention of the middle ages that exists now pretty much in the same format as in the twelfth century (deans, degrees, students taught in classrooms by faculty organized by discipline who set a curriculum). Historically, it has shown great resiliency in adapting itself to new historical circum-

stances (e.g., the land-grant ideal). John Huntington has made this point in a more sophisticated way, but I think that humans being social animals, they will want to be around other people (in the flesh, that is) and to be part of communities where learning takes place. That's been a successful format for the transmission and production of knowledge in the West and I don't see it as being superseded.

Tom

Date: Friday, 20 December 1996
From: Mick Doherty
Subject: Response to Bestul

On December 20, Thomas Bestul wrote:

> >2. Administrative control.
> >Should remain local, at the
> >department level, as much
> >as possible.   Decisions
> >about workload, salaries,
> >promotions originate   in
> the >department.

Agreed . . . I know this is the reality. But that leaves me with a question. I believe I posted to this list a copy of my call for samples of department-level statements on tenure, promotion and technology (as NCTE subcommittee chair on TP&T, I'm responsible for drafting an organizational statement this year, and that topic is also the focus of my dissertation research). I have heard from one department that has such a statement; one that is drafting a book of "case studies" for referral; and from about 25 people saying "we don't got nothin', what you got?"

My question, then . . . what purpose does a statement such as the NCTE Statement on Tenure, Promotion and Technology (or the MLA cousin document) play at the departmental level? What issues should it address? Who is, and how should I-we address the audience for said statement?

Thanks in advance for your input, either on this list or to me personally.

Mick

Date: Monday, 30 December 1996
From: Joe Tabbi
Subject: Departmental decision-making regarding the use of technology

I've been away for a few weeks and I'm just now catching up on the various issues raised before and during the break. I look forward to following through on each of these topics, but I'd like to address one issue raised by Tom Bestul—that of departmental autonomy in the use of electronic media.

I agree that control of the technology ought to remain in the departments—at least as long as the university system continues to differentiate academic work according to the departmental structure. I also think it's important that departments have a sense of what they want to do with the technologies they are being asked to work with (and which, more often than not, they have no choice but to work with). The trouble is, for those of us working in Humanities departments, technology is an appointment that comes from somewhere else, funded by "internal reallocations at the computer center" and other campus programs, as Gene Ruoff acknowledges—programs with their own agendas and their own system of values. The technology arrives in the form of office computers for fulltime faculty and work stations for a percentage of students. Most of these computers are then promptly used as word processors and electronic mailboxes. Those faculty and students who hope to do more with the medium, are pretty much left to themselves (except for limited access to student consultants). Technical problems do get worked out. But the task of systematically thinking through the possibilities of the new technologies takes place, not in the department itself, but in committees for forming "guidelines," in the occasional maverick course, and in talklists such as this one, organized through the initiative of particular individuals. There's a do-it-yourself ethic at work here that tends to replace departmental autonomy with individual autonomy. The upside to the d.i.y. project is that work can proceed semi-informally, and information can be shared among those who actively seek it. Established internal and external peer reviews can be used to access the quality of work done by individual faculty members. But the problem remains that such work and such informally shared information has very little chance of influencing the direction of the department as a whole.

I'd like to ask the list members, from this and other institutions, what administrative mechanisms are in place, and what measures need to be in place, to encourage the coherence of a Humanities department's electronic policies and the non-trivial use of its technologies. Surely Tom is right that we should not look for a top-down structure, either between administrations and departments or within departments. I know of departments that hire tenure-track faculty trained specifically in the area of electronic textuality, whose job it is partly to act as a liaison between humanities and technical departments. I have also heard of courses under way in electronic textuality, which might be inserted in the curriculum not as an elective but as part of the

Eric Crump: Last, as usual. Might be the defining irony of my professional life I try so hard and so often to be first that I end up almost always pulling up the rear, too scattered and random to dream of punctuality. Never met a deadline I couldn't miss. Ask Cynthia.

So I'll start with that apology (won't be the last, I fear, though I'll try to keep up better), and then I'll describe myself in terms of my envies:

- of Ken's&Jan's programming ability (I'm a geek wannabe)
- of Greg's EFL program (I'm trying to help make up something like that w/o institutional mandate & support, though I suppose that lack may be its own sort of blessing, too)
- of Joe for saying "i'm beginning to think that nothing i do should be programmatic." Before I could (rats!)
- of Ann for saying "There's no better way to learn than to throw yourself into the conversation and the practice." Before I could (so I'll just shut up [soon] and throw self...)

Mick said: "When an autobiography is but a list of URLs, you start to think Cliff Stoll might have had a point." Nah! No need to concede points to Stoll (ick!). Cliff has some problems with change, linguistic or otherwise. The URL is just a new-ish semantic unit, no? So I'll see your list and raise you a paragraph:

I'm involved in a bunch of online projects/conversations as an instigator when I can manage it, and as an incompetent coordinator when I can't. My favorite at the moment is **a href="http://www.missouri.edu/~rhetnet/">RhetNet**, an online journal for rhetoric and writing that may be less of a journal, really, and more of an archive with Protean aspirations. It's fun because we neglected to establish policies and procedures from the start, leaving the door open for all sorts of interesting accidents to happen. A new bit, which I've been stewing about for some

major. (Such courses would have the incidental benefit of requiring faculty, as well as students, to become literate in the electronic medium.) I don't think that such courses or such hires should be primarily technical in orientation (a purely technical course—in HTML or Photoshop, for example—could probably be handled more effectively by a private corporation, or picked up from the manuals). Rather, a course in electronic textuality might be specifically devoted to exploring those aspects of the technology that hold possibilities for literary work (in the case of the English department). In other words, I guess I'm asking whether, if the Humanities are to remain autonomous in the electronic university, we need to institutionalize courses and departmental hires that are capable of implementing the very issues that are under discussion on this list.
Joe

Date: Tuesday, 14 January 1997
From: Eric Crump
Subject: The social component of virtual learning environments

On November 26, John Huntington wrote:

>educationally, an intellectual argument is always socially contoured >by the way it is received by the class. The virtual classroom can to >some extent be defined by the absence of this social contour: all the >disruptive and distract-

time but only now getting around to act-
ing on, is
**a
href="http://www.missouri.edu/~rhet-
net/interversity/">Interversity**, an
ad hoc version of UFL's EFL, maybe, as a
venue for considering how education
may be transforming (or transformed) by
distance and de-institutionalizing. One
modest example of an 'interversal' learn-
ing environment is a project I've worked
on longer than others,
**a
href="http://www.missouri.edu/~wler-
i c / w r i t e r y . h t m l " > T h e O n l i n e
Writery**, an attempt to create some-
thing along the lines of Ray Oldenburg's
"third places" with only wires & soft-
ware. I'm planning to teach an **<a
href="http://www.missouri.edu/~wler-
ic/e20/">online writing course** this
winter and am helping develop another
online   journal,   the   **<a**

ing misbehaviors . . . are
screened out so that >the pure-
ly intellectual content can be
isolated and contemplated in
>itself.

Glad you brought this up, John.
Quite often when the subject of
distance education comes up,
you can hear/see the fear in
teacher's voices, the fear that
'interactive' video and multime-
dia network tools will effectively
put human teachers out to pas-
ture. Moreover, we're afraid that
our replacements will be only
shoddy versions (from our per-
spectives) of our worst selves,
doling out information rather
than creating rich learning envi-
ronments.

Which is to say that f2f learning
situations (aka 'classrooms') have
not generally made the most of
the social contours they play
host to.

Therein lies an unlooked-for danger in our tradition as content
providers. If we primarily purvey intellectual content (aka 'professing
our disciplines'), and if machines can be made to do the job cheaper
(if not better), then the danger to our profession is very real—and per-
haps self-inflicted.

Suddenly, we're more aware than ever of the social contours at
work in the classroom.

And that may be the greatest impact the Internet has on education.
Not only does it provide potentially more powerful learning environ-
ments than conventional classrooms, but it may force classrooms and
conceptions of teaching to change (at last!)—radically and (not
unproblematically) for the better.

So I guess what I'm saying may seem like a quibble with your point
above, but it's a quibble of some significance, I think, since the impli-
cations for our decisions in shaping learning environments online
come down, so often, to distinctions like these: social contours can
be (rather than are) screened out in virtual environments.

Everything pretty much depends, I guess, on the kind of decisions
made by whoever has the most institutionally bestowed authority
(teacher and/or administrator, usually), which tool and what kind of

use is allowed or encouraged.

For instance, I've used MUDs in what I would call campus-based distance courses. After the first quarter of the semester I declared that participation was still mandatory but attendance—of the physical sort—was optional. We had good enough access to the net that it seemed arbitrary and even a bit silly to demand that everyone pile into that boxy, boring room at the same time.

First semester I did that the result was kind of predictable (though I didn't predict it—didn't have a clue as to how it would turn out). Of the students who took me at my word and pretty much stopped coming to the classroom, about half faded away, dropped out without doing the paperwork. For all practical purposes, failed. About half, given that unusual degree of freedom/responsibility, thrived, energized by the release from the shackles of the classroom.

Academically, there was no extraordinary gain. Those who failed seemed to me to be students who would have struggled in a conventional setting. Those who thrived would have thrived. What I noticed, though, was a definite unveiling of the social interchange that is usually repressed in conventional classrooms. There was a sense of community present.

>The physical and temporal
>convenience of the virtual
>class represents an artificial
>isolation of the intellectual
>content from the space of
>social (which here includes
>economic) contingency.
>We would all agree that
>these are virtues . . .

Maybe.

I don't assume there was a greater social element or sense of community than is associated with other classes. Students who share classroom space often get together outside class to study, commiserate, party, flirt, chat, whatever. The difference—what made the class a great success—was that the social element of the group was able to come into the foreground, to share space with the academic work.

To a great extent I credit the technology, the MUD, for that because that's where the social element of the community emerged and flourished. First day of class I got everybody out of their seats, encouraged them to mingle. They stood in a line, politely silent. Nervous. Stiff. For the first two weeks we immersed ourselves in network tools. Email, newsgroups, web browsing, a bit of web authoring. They were compliant, interested, uninspired.

Got them on the MUD & they transmogrified before my eyes from nice students into real people. Heh heh. We had fun. They goofed

around. Still learned stuff, but there was a constant current of inane banter weaving through the discussion. And when I popped in at odd hours I always found 2 or 3 folks from that class on the MUD.

> >it is the social situation that marks the teacher-student relation and
> >distinguishes it from pure information exchange and learning

Quite right. And that's what creates the magic in a MUD. It's not that the tool itself does anything extraordinary, but it's difference from the classroom that makes things happen. Because it allows realtime conversation and user-created spaces, it is more distinctly social than a classroom. Or maybe just more distinctly participatory. The social structure of any classroom is constrained by the institutionally inscribed hierarchy of authority. That teacher-student relationship you value is indeed at the heart of what makes classrooms learning environments as opposed to information kiosks. But the institutional baggage of the classroom (attendance policies, schedules, deadlines, assignments, grades, etc.—the stuff that to a great extent defines the classroom and defies education) are not native to the MUD environment.

My students recognized immediately that, even though they were still sitting in the classroom with a teacher and a bunch of other students, when they set foot in ZooMOO, they were in a different place, with different possibilities and limitations. They acted accordingly.

The result, I think, is that the social element not only isn't stripped away or filtered out, it's enabled in a rich and complex way—to the benefit of the learning experience of students and teachers.

> >My question is how an education stripped of this dimension will
> >function socially. My fear is that the student who has mastered
> >distance learning, despite the skill with keyboard and monitor, will
> >be less well equipped to succeed socially than will the student
> who >has weathered the crowded (or in some cases the over-
> enrolled but >sparsely attended) lectures of the large state university.

Fear is warranted, I fear.

Distance education is not a monolithic thing. And while there are many educators embracing tools like MUDs, exploring the productive and collegial relationships they might enable, there are more (and more visible to the media) efforts to package and automate information in the name of education.

In the Jan/Feb issue of *Educom Review* is an interview with Roy Romer, the leading figure in the development of the Western Governors University. There are some possibly good things happening there. Romer describes educational content that's tailored to the needs of individuals. A scenario he uses sounds like a computer-dri-

ven educational smorgasbord. Nothing wrong with that, in itself. Real choice is largely absent from current educational institutions.

But where I get a little nervous is about what happens after the learner presents his or her needs & interests. Romer says:

> The computer then would scan what's available from 13 westenr states, and would deliver in a really quality way the educational experience you need. That's the first pillar of our plan, a kind of brokering of courseware from various sources, without creating new faculty.

What does he mean by "a really quality way"? That could mean some very interesting and highly social interaction with teachers and other students. It could just as easily mean a few video tapes arrive in the mail with all the content ya need right there for only $39.95! or somesuch.

> >Let me pose this another way: if we were to grant the superiority of >distance learning, why should any student attend college? Why not >just rent the "great teacher" tapes and take some certifying exams?

Interesting. And Romer, btw, puts much stress on "competency verification" (aka testing and credentialling). He hems&haws a bit, but suggests that GWU might even be willing to provide just that, testing and credentialing services. In that case, someone who learns something elsewhere and could pass GWU's tests could receive GWU credentials.

It just now occurs to me that that might be a fairly natural direction for institutional education to go. To my mind, that's already where the greatest emphasis is placed. Universities are, in some very essential ways, NOT designed to facilitate learning. Some researchers suggest that they are mechanisms for collecting the young who are likely to succeed, verifying their likeliness to succeed, then turning 'em loose to do their succeeding. The claim that universities help students learn may set up unreasonable expectations!

So maybe it's time to follow GWU's lead and stop that charade. Most learning already happens outside the classroom. Learning will survive—maybe even thrive—without the university meddling with it.

The question in the subject line, "Can one learn anything well in a virtual environment?" well, I've babbled a good bit along the way, but I'm meandering toward an answer: Yes. Better, perhaps, than in a f2f environment. Not automatically, nor unproblematically, but the opportunities are rich and varied, indeed.

I frequently claim, with no hyperbole intended, that I've learned more while immersed in the net than I have in any classroom, anywhere, ever.

guess it'll be back to the rodeo circuit for "Little Mac."

Eric

A Manifesto

As a means of bringing closure and continuity to the conversations of Phase I: The Virtual University, Ken McAllister drafts and submits the following group manifesto. The demands of his declaration coincide with the major issues raised by the group in the preceding body of discussion, namely, the issues of quality, opportunity, and accountability that attend the establishment of the virtual university. In reflecting this emphasis, the manifesto articulates the demands that must be met in order for the virtual learning environment to materialize as a completely viable alternative to traditional modes of education.

A "MANIFESTO" FOR TEACHING IN CYBERSPACE THROUGH ON-LINE COURSES (The TicToc Manifesto)

- **WE DEMAND** that the adoption of computer technology for our classes not result in our necessary forfeiting of such pedagogical and social values as providing equal access to our class materials and resources (17 Dec 1996);
- **WE DEMAND** that the implementation of computer technology in our courses must demonstrably improve our chances of meeting our pedagogical goals (15 Dec 1996);
- **WE DEMAND** that teaching in electronic environments always involve a self-critical component for all those involved in the project (teachers, students, staff, administrators) so that pedagogical and labor practices may be kept at the forefront of our consciousness, and so that inevitable problems such cultural hegemony may be exposed, discussed, and minimized (15 Dec 1996, 17 Dec 1996 (JA), 17 Dec 1996 (JH), & 19 Dec 1996);
- **WE DEMAND** that teachers in particular become and remain aware of how the combined activities of socializing and learning differ in physical and electronic environments. (14 Jan 1997);
- **WE DEMAND** that access issues be investigated by and decided upon by groups comprised of people with diverse perspectives on education and technology, so that questions such as "How much access is adequate," "Are compromises in technology worthwhile to reach a larger audience," and "How much access and experience can we reasonably expect at a given institution," can be evaluated fairly (18 Dec 1996);

- **WE DEMAND** that courses with a computer component be established permanently within all institutions of higher learning in order to ensure that experimentation and advancement in the use and understanding of computer technology in education is an ongoing project. (30 Dec 1996);
- **WE DEMAND** that hiring and promotion procedures be established permanently within all institutions of higher learning that guarantee faculty, staff, and administrators that their experimentation and advancement in the use and understanding of computer technology in education will be officially recognized as valuable service (30 Dec 1996);
- **WE DEMAND** that the quality of electronic courses be ensured by evaluation by diversely opinionated, faculty-comprised committees and that administrative decisions (salary, promotion, workload) be made at the departmental level, rather than the college or university level (20 Dec 1996);
- **WE DEMAND** that all institutions of higher learning adopt, at the appropriate level and in the relevant departments, official positions on declarations that are produced by field-wide organizations such as the National Council of Teachers of English and the Modern Language Association (20 Dec 1996).

With this preliminary manifesto in place, I would like us to move into a discussion of the more local and specific concerns of building and maintaining a virtual department.

Ken

that have established the e-works collaboration here. I look forward to continuing these discussions and to hearing from others about work that's been going on in electronic environments.

we are supposed to do there.

i suppose, programmatically speaking, this is (more than) enough of a bio for the present...

palate.

stories, cooking, and occasionally I draw cartoons.

ics as portfolio pedagogy, collaborative learning, oppositional narrative, and critical pedagogy.

some if Jim has another party that I'm in town for), and I'm anxious to start talking pedagogy.

to raise both hands up into the air and say "Why?"

I don't know where he got that. Nor do I know, given the orderliness of my life, why it took me so long to post by bio.

you that I'm a vegetarian, so when we meet in real time and space, I'll bring the lentils!

and passenger train enthusiast..