



The Third Circle: On Education and Distance Learning

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## THE THIRD CIRCLE: on Education and Distance Learning

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**ABSTRACT:** *Has it been demonstrated that distance learning is as effective as face-to-face learning? This paper, proposing a "three circle" model of postsecondary education, argues that measurable competence, though a central component of education, is not in itself an adequate indicator of educational effectiveness. The model, supported by research into educational effects, is discussed in relation to the distinction between semantic memory and episodic memory, and in relation to the role of context in memory. Analysis of a widely-cited summary of 248 studies comparing distance learning and face-to-face learning concludes that these studies, which generally fail to go beyond measurable competence, and fail as well to support the newer interactive technologies commonly associated with distance learning, do not support any transfer of postsecondary education from the classroom to the screen. The limitations of distance learning are discussed in relation to their broader social implications.*

Is distance learning as effective as face-to-face learning? More than a little depends on how we answer that question.

There are some in the academic world who believe that the case for distance learning has already been made. Recently, for example, a faculty member, freshly returned from a distance-learning institute, posted a message on a technology Listserv at San Diego State University, directing colleagues' attention to a website listing 218 studies that show "no significant difference" in results between traditional teaching and mediated course delivery. This posting hopped almost immediately, as such postings are wont to do, to another campus Listserv, where a classics professor responded: "You can't convince me that a DL course (short of using personal holograms) will be the equivalent of PL (personal learning)." A professor in educational technology fired back a caustic response that began, "So much for open-mindedness." His point: the evidence is there for all who have eyes to see.

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Is it, though? Do we, in fact, have the evidence we need to move ahead on a large scale with the transfer of university education from the classroom to the screen? If we're to base decisions about the future of the university on these 218 studies (actually, 248 in the website's most recent edition: Russell 1997a) and on others like them, we need to be convinced of their validity—not just the individual validity of one study or another in relation to a particular set of limited goals, but the cumulative validity of all these studies in relation to the general inference that is being made from them: distance learning is as effective as face-to-face learning. Clearly we need to take a more careful look at the list in question. But first, in order to provide a framework within which such studies may be evaluated, I'd like to propose a model for what takes place in university education. When this has been done, we can return to the studies themselves.

### I.

Is academic performance—as demonstrated on tests of various kinds—in itself an adequate measure of postsecondary education? The assumption that it is has provided the foundation for a new breed of academic institutions, one of the most conspicuous of which is the emerging Western Governors University. Sponsored by eighteen participating states and a list of corporate “partners,” WGU is a market-oriented, “competency-based” university with no teaching faculty. Competencies are obtainable through resources listed in a “SmartCatalog/Advisor™,” where students can browse offerings, including Internet and satellite courses, as well as CD-ROMs, videotapes, and audiotapes, from a wide range of providers (these include various colleges, universities, and community colleges, along with commercial enterprises such as Novell and 3COM). When a student has paid the tuition and established his or her competencies, whether in basic skills, science, social science, humanities, applied science, or whatever, WGU will deliver the degree or credential.

It would be hard to imagine anything more efficient. Students pay the money, punch in the requisite competencies, and a degree comes out. Clearly Western Governors University regards itself as an idea whose time has come. Though skeptical academics might find “Western Gumball University” a more apt name for this operation, WGU is actually in the process of seeking regional accreditation.

Is WGU the wave of the future? Should it be? Is academic resistance to this kind of thing based on anything more substantial than a stuffy traditionalism and a fear of innovation? Are skeptics roughly equivalent to fish in the Paleozoic who don't want to leave the water?

Many of us who teach in universities feel that projects such as WGU rest on a simplistic and drastically inappropriate notion of education. But, at the same time, we recognize that they are impelled by powerful economic forces, against which our principled objections may seem flimsy and irrelevant—mere commencement-day rhetoric. Some of us, confronting the apparent inevitability of massive technological and economic restructuring, may even wonder if our skeptical instincts are to be trusted. Granted, the “virtual university” may seem a cold and cheerless substitute for the academic world we're so accustomed to, but if it's

convenient, if it's cost-effective, if it can, after all, deliver the goods...Two hundred and forty-eight studies show "no significant difference." Evidence is evidence.

But evidence of what? When one evaluates the claims that have been made for mediated learning, there are, I propose, three categories that need to be considered; they can be seen as three concentric circles of increasing size. The first is *measurable competence* (what we have come to call "competency," as in "writing competency test"); the second is *competence*; and the third is *education*.

Most courses in the university involve some measurable competence; in fact, this often provides, quite legitimately, the core of a course. But there is a wider kind of competence we usually aim at that is not so easily tested and quantified—more subtle and diffuse, harder to pin down. Teacher education provides an excellent example; you can test this and measure that, but you're hoping to instill a much broader competence than the assessment instruments are likely to reveal. A similar point could be made about a course in computer programming: two students might receive exactly the same grade, yet, of the two, one might possess a wider range of competence that includes less easily measurable skills.

Beyond competence, however, is a broader category still, the largest of the three circles: education. It is in no sense an alternative to the other two. On the contrary, it includes the smaller circles, but extends far beyond them. We need to proceed carefully, though, when we set out to characterize this larger circle and to determine what there is in it that goes beyond competence, measurable or otherwise. If our goal is to evaluate the claims of distance learning, fairly and convincingly, we need to consider them not in relation to some idealized rendition of what postsecondary education ought to be, but in relation to what actually takes place in colleges and universities. Therefore, it's essential to avoid, not only the sort of prescriptive approach to education that has flourished from Plato to the present day, but also any description whatsoever that is based more on intentions than effects. It won't do, in other words, to rely on "mission statements" and commencement addresses, or even on an examination of policies and curriculum. We need to turn to research on how students are actually affected by the time that they spend in colleges and universities.

Two very substantial studies of the effects of postsecondary education have appeared in the past decade. Astin's (1993) findings are based primarily on the author's own research. Pascarella and Terenzini (1991), though they draw heavily on their own research, provide a comprehensive review of the literature. Both studies, it should be noted, are concerned to establish net effects, effects that are not attributable to developmental factors or to other influences outside of the college experience.

Studies such as these can help us describe the outermost circle in the three-circle model if we approach them with this question: Beyond knowledge of subject matter, and beyond the quantitative and verbal skills and the higher level cognitive skills that are typically tested and measured in college, beyond even the less measurable kinds of competence that instructors often aim at, in what areas and to what degree do students tend to be affected by their postsecondary experience?

Let me emphasize that I have no intention of dismissing or marginalizing the role that competence plays in education. And certainly, it's important to note that Pascarella and Terenzini, for example, find significant gains in verbal skills, quantitative skills, and specific subject matter knowledge, as well as in general cognitive skills and capabilities (such as formal reasoning, critical thinking, and conceptual complexity). But their research doesn't stop here. Much of their work is devoted to investigating other areas, where they find a number of significant net effects, which they group under the headings of psychosocial changes, attitudes and values, and moral development.

Their conclusions in these areas can be summed up as follows: College-educated persons are likely to be less authoritarian and dogmatic, to have greater flexibility of thought and tolerance for ambiguity, and to have made some gains in psychosocial adjustment and in the sense of well-being. They are likely to show a preference for reflective and abstract thought and for problem-solving approaches that are logical, rational, and critical. They are likely to have greater interest in aesthetic, cultural, and intellectual subjects, and in public affairs and politics. They are likely to attach greater importance to education, to place more value on intrinsic occupational rewards, and to have more egalitarian views of gender roles. They are somewhat more likely to demonstrate a social conscience and humanitarian values and to support civil rights and liberties. Finally, they are more likely to engage in principled moral reasoning.

Obviously, conclusions such as these are limited to what the researchers have chosen to measure. That is, there may well be other effects, perhaps very important ones, that have yet to be investigated. But we're in a position at least to have a better sense of what the outermost circle in the model contains, particularly if we understand that what it represents is no mere aggregate of discrete characteristics, but rather a more integrated kind of development, "with change in any one area appearing to be part of a mutually reinforcing network or pattern of change in other areas" (Pascarella and Terenzini 1991:357).

## II.

What is particularly useful about many of the studies of college effects is that they not only reveal what the effects are, but also cast light on how they are achieved. Here one striking and consistent theme is the importance of a student's involvement in the campus community. It is not only faculty but a student's peers as well who contribute substantially to the body of integrated effects that we call education. Over and over, we find evidence that peer interaction is a centrally important part of the college experience—to the point that Astin, at the end of a chapter summarizing the effect of environmental factors on student outcomes, is led to conclude: "Perhaps the most compelling generalization from the myriad findings summarized in this chapter is the pervasive effect of the peer group on the individual student's development" (1993:363).

But student interaction with faculty also has a substantial role to play. One specific environmental variable that Astin studies is "Student Orientation of the Faculty," which is defined by a number of elements, including faculty interest in

students' problems, personal as well as academic; faculty sensitivity to issues of minorities; faculty accessibility outside of office hours; and the existence of abundant opportunities for student-faculty interaction. "Student Orientation of the Faculty," Astin finds, "produces more substantial direct effects on student outcomes than almost any other environmental variable." The overall pattern of effects suggests to Astin "that having a strongly Student-Oriented Faculty pays rich dividends in the affective and cognitive development of the undergraduate" (1993:342). Chickering and Gamson (1987) draw a parallel conclusion from teaching and learning research: "Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement."

Pascarella and Terenzini, whose over-800-page study is the most extensive review to date of the literature on college effects, emphasize, as Astin does, the important role that the campus community plays in the full range of educational outcomes:

A large part of the impact of college is determined by the extent and content of one's interactions with major agents of socialization on campus, namely, faculty members and student peers. The influence of interpersonal interaction with these groups is manifest in intellectual outcomes as well as in changes in attitudes, values, aspirations, and a number of psychosocial characteristics. (Pascarella and Terenzini 1991:620)

Quantitative studies such as these, though they establish the vital importance of campus interactions, may leave us with questions about just how it is that such interactions achieve their effects. These are questions that Pillemer, Picariello, Law, and Reichman (1996) address with their research on what they call the "educational episode." Their concern is with moments of student-faculty or student-student contact, inside or outside of class, that students remember long after the event and to which they frequently may attribute lasting effects. Most of the examples they provide in their article describe student contacts with a faculty member. In this connection, they remark:

On occasion, college professors intentionally or unintentionally step out of the impersonal professor mold and make a more intimate intellectual or affective connection with a student....These moments of personal connection can make a lasting impression. The student may be especially likely to emulate values, attitudes, or behaviors revealed at these times....Interacting with professors in more intimate or comfortable circumstances may stimulate intellectual growth and insight as well as social and emotional well-being. (1996:334-35)

One value of this kind of study is that it encourages us to move in from the abstract formulation "campus interaction" to a close-up on specific scenes as they are remembered. And, certainly, anyone who has been to a college or university will have accumulated countless memories of this kind. Some of these are likely to be explicitly meaningful, and even dramatic, the sort of thing Pillemer et al. most frequently elicited when they specifically asked people to recall "influential" college experiences. Others may be more everyday in nature, less overtly sig-

nificant, and yet these too may seem vividly to embody some of the essence of that period in our life. If we want a clearer picture of the way in which "third circle" effects in education are achieved, it may be that a closer look at educational episodes will help to provide it.

The episodes recounted in the Pillemer et al. study are, typically, placed by the respondent in their setting in time and space: "I still remember how lonely I felt when I walked into my dorm room...for the first time." "He asked me to stay and as we walked across the campus he said..." (1996:319). Pillemer et al. emphasize that these events "are commonly remembered in vivid detail" (1996:328). What is remembered, in other words, is not just content, not just, say, an observation that a professor or classmate happened to make, but a *scene*, in which context appears to play a necessary role

But what sort of role? Does this context help us to retain an event in memory? And, if so, is it to be seen as merely a backdrop for the action, a sort of container for the episode's content, or does it have significance in itself? Why is it, I ask myself, that, after so many years, I remember, not only the subject matter of a conversation I had with two French exchange students in my sophomore year, but also its setting: the library steps on a sunny spring day? And why is it that one of the memories that seem best to capture what my first year of graduate school was like is of standing in the parking lot on a chilly night chatting for an hour with a fellow student—though I scarcely knew him then or later, and can't seem to remember anything at all of what we were talking about? Context is not an issue that Pillemer et al. choose to focus on, but, given the role that it so commonly plays in memories of educational episodes, it raises intriguing questions, questions that go beyond the work that has been done either by the quantitative researchers into educational effects or by the study of educational episodes—questions that go beyond even the extensive research that has been done on context reinstatement as a way of facilitating memory (e.g., Davies and Thomson 1988). In particular—perhaps because, as a specialist in literature, I'm often very much occupied with the way setting functions in narrative—I find myself asking to what extent the particular contexts of college interactions might serve not only to strengthen their hold on memory but to embody some of their meaning. Certainly, the importance of a student's interactions with members of the campus community is well established. But I'd like to go beyond that to suggest a central role that context—the actual setting of these interactions—may play in bringing about "third circle" effects.

What will be helpful here is the distinction, commonly made in cognitive psychology, that separates *episodic memory*, which is the memory of specific events or episodes in one's life, from *semantic memory*, which is the basis of general, abstract knowledge—knowledge that is not tied to any particular context through which it was acquired. Episodic memory provides information about the spatiotemporal context of an event and also about the inner state of the person who experienced it. Semantic memory, on the other hand, typically has to go through a process of decontextualization, in which the specific contexts through which it was acquired drop away.

It's not difficult to apply these two categories to educational experience. An illustration of semantic memory would be the standard distinction that I learned to make, somewhere along the line, between denotation and connotation. I simply have no contextual associations related to acquiring it; I couldn't say whether I learned it in high school or in freshman comp, from a text or in class, or even whether I learned it explicitly at first or merely guessed at it from the way the terms were used. My episodic memories, on the other hand, are quite another matter. I vividly remember, for example, the particular day when I edged hesitantly into an English professor's office to ask him what I needed to do to start making A's on his tests. I don't recall advancing much past his doorway. He swiveled his chair around to face me and explained politely, but tersely, that it wasn't enough to supply what was asked for; I needed to supply *only* what was asked for. In other words—though I had to draw this conclusion myself after I made my escape from that doorway—it was time to start thinking about what I was going to write before I wrote it. (Needless to say, this was useful advice.) I can still remember where his desk was placed in the office; I remember his look of slight surprise; and I remember very vividly my state of mind and the circumstances that had led me to make this daring move.

Obviously, it would be unwise to set up any simplistic distinction that would assign semantic memory exclusively to competence, and reserve episodic memory only for the broader "outer circle" components of education. In fact, what I learned from that still-memorable office episode was essentially a matter of competence. And there may well, on occasion, be a context-rich "acquisition story" behind some straightforward item of factual knowledge. Still, it does seem likely that the kinds of development described previously in my summary of the research on college effects—developments in attitudes, values, interests, as well as in understanding, flexibility of thought, moral reasoning, and so on—are much more likely to rest on context-dependent memory than are most academic skills or subject matter knowledge, where the memory of specific episodic contexts is more likely merely to get in the way (see, e.g., Davies and Thomson 1988:343).

I know dates for a great many authors and works, and virtually none of these have an episodic basis. But I remember very well that my intense interest in the French poet Rimbaud was launched by one of my professors, Elizabeth Sewell, a very short, thin, somewhat hunchbacked Englishwoman with a lovely noble head like a piece of Roman sculpture, in a particular classroom on a particular series of occasions in the spring of a particular year. I retain an image of her in that night class—it was an odd room and ill lit—drawing a not-quite-complete circle on the board to illustrate the structure of Rimbaud's poem "*Le Bateau ivre*"; I remember at one point being invited with two other graduate students to her small apartment near the campus, where we had a beer and discussed Rimbaud and other matters; and I remember what she wrote on my seminar paper on "*Le Bateau ivre*." From time to time that semester she would mention unfamiliar names, and many of them retained, from then on, a sort of electrical charge. Just the other week, as a matter of fact, I had reason, finally, to look at a work of Michael Polanyi's, and that charge, that contextual aura that Sewell had given him was still there, in this book I had never seen before.



It's easy to see how campus community, a sense of place, and interaction with faculty and other students would be important in bringing about the broad range of what I'm suggesting are context-linked effects that go beyond academic skills and content knowledge. It's not merely that context in episodic memory can serve as a sort of "access key" or "heading" (Morton, Hammersley, and Bekerian 1985) to help us retrieve important content which has been linked to it but is essentially separable from it. Context can be far more than an index tab; it can itself carry meaning; it can embody complex and subtle cognitive-affective states that could scarcely be captured as well in any other way. The sound of someone's voice or of a busy cafeteria, the spatial quality of a small seminar room or an open quadrangle, clothing, furniture, light that's bright or dim, trees, grass, brick or stucco, styrofoam cups, coffee stains, feelings of anticipation or surprise—comprised of elements such as these, context has a way of soaking up, organizing and holding on to content that allows us to retain, to integrate, and to reference extraordinarily complex, multi-dimensional ensembles in a way that could not be achieved through semantic memory.

A complex philosophical stance can be inscribed in someone's habitual gesture; a campus locale may come to embody the aspirations one acquired in a particular year. There are, in other words, good reasons for us to assume that a rich and varied array of social and spatiotemporal contexts—personally significant and affectively charged—would provide the most fertile of grounds for education in the full sense of the term.

In my own case, I find that what is to be learned from a study of college effects and educational episodes, and from an investigation into the role that context plays, only reinforces a sense of what my own undergraduate experience was like: my sense that it amounted to a profound transformation brought about not merely by a particular set of courses but by the campus community as a whole, that social and geographical entity which—though, as it happened, I lived nowhere near the university—dominated my life in those days.

I look back, trying to cut through any nostalgic mist and see with as much clarity as possible. At first glance, it seems as though my peers were almost all of it, as though the university were merely a place provided so that we could come together to shape each other—in all those locales which in memory seem to constitute my undergraduate experience: the Daily Bruin office, and the print shop where we worked at night; the Cafeteria Annex where I spent more than a little of the time when I was supposed to be in class; the rooms, hallways, arcades of Royce Hall; friends' living room floors; cars, coffee shops, the beach...

But then, of course, I begin to remember faculty members as well. There was a brilliant anthropologist who left me scarcely any facts that I can identify, but, in their place, two things: a profound skepticism about racial categories and an indelible image of what it was to be an academic and an intellectual. There was a Czech conductor and scholar whom I followed through one opera course after another (though I was an English major who had once proclaimed he couldn't stand opera) and who, for me, simply *was* the international world of opera, right there in the classroom with us Monday, Wednesday, and Friday, a wonderful man who played, sang, analyzed, told stories, talked with us about Verdi, Wag-

ner, Mozart. There was an anxious, unstable French professor—dark—I seem to remember her biting her nails—who actually gave me a book of Cocteau's and who appeared to be living in some intense cultural world that I could only dimly make out, but wanted very badly to enter. There was a philosophy professor who, in his spare time, liked to play lightning chess with students in a lounge in Kerckhoff Hall and who gave a public lecture on "How Not To Talk about Art" that was possibly the beginning of my academic involvement with aesthetic philosophy (I remember I was down front in the lecture hall and way off to the side, wondering if I could ever learn to play chess well enough to have a chance of meeting him). And there was an English professor, whose teaching could scarcely have been more different from what mine has become, but whose voice I can hear even now, whose compact shape and short gray hair I can still see in the late morning light falling through the windows to the left of him, and who is to this day the model and foundation for my study of poetry. And I realize also, that, even as my peers and I were shaping each other, there was so much that these teachers were doing *through* us, as we absorbed them and disseminated to each other their teaching, their intellectual styles, and their mannerisms, in forms that were not always accurate, but were full of life.

More than anything, perhaps, at the university, I acquired some understanding and taste for what people like to call "the life of the mind"—a deceptive term, perhaps, for something that I felt to be so deeply rooted in physical community and place, and that, far from being bodiless, incorporated itself for me in images of faces, gestures, settings, voices; in qualities of light and kinds of weather.

### III.

Returning to that list of 248 studies comparing distance learning and face-to-face instruction—the list with which I began—we shouldn't be surprised to learn that it turns out to be concerned with straightforward academic performance. There's an occasional attempt to assess attitudes, but the focus of these studies is almost exclusively on measurable competence.

Someone might object at this point that my having set up a measurable competence/competence/education model is no more than a ploy that will enable us to dismiss, out of hand, any empirical study whatsoever that attempts to compare distance learning and face-to-face learning, since whatever is measurable is by definition relegated to the innermost of the three circles.

I am not suggesting, however, that the broader reach of education is inaccessible to empirical study—this kind of study is precisely what Astin (1993), and Pascarella and Terenzini (1991), and others have set out to do—only that it is not addressed when we merely measure competencies. The point is a crucial one: education, as represented in the three-circle model, and as described in a substantial body of careful research on the actual effects of colleges and universities, is a complex, integrated, holistic process that can be studied empirically, but that is not measurable by mere assessment of academic performance.

And for those advocates of the new mediated learning technologies who claim to have little patience with lofty notions of education and who stubbornly insist

that academic performance alone is “the name of the game,” that long list of comparative studies, when examined carefully, may prove to provide no support at all. In fact, as we’ll see, if one wanted to lower the boom on the new distance-learning technologies as a cost-effective means of delivering measurable competence, it would be hard to find a better argument for doing it than this list and others like it provide.

The list (Russell 1997a), which has been widely cited both in print and online, offers brief summaries of 248 “research reports, summaries, and papers” comparing traditional instruction methods with mediated methods and finding “no significant difference” in effectiveness. Items cover a period of almost 70 years, with nearly half of them dating from before 1970. There is, incidentally, a certain amount of duplication in the list, since well over two dozen items are reviews or summaries of already existing research. Scant information is provided about each item, but enough to make the following clear:

- Three studies demonstrate that radio teaching does just as well as traditional instructional methods.
- One shows that radio and TV do equally well.
- One demonstrates that teaching by telephone works just as well as face-to-face instructional methods.
- One shows the equal effectiveness of motion pictures; another shows that tape-recorded lectures work as well as live lectures.
- Ten show that correspondence courses do as well as traditional instruction.
- Over half of the studies demonstrate that TV, or in some instances, videotapes, are as effective as face-to-face instruction. These include studies at all levels: elementary, secondary, postsecondary.
- Though the brief summaries don’t always identify the precise nature of the medium being tested, it does appear that no more than a third of the studies actually focus on the more high-tech, interactive media, such as two-way TV and computer conferencing.

In some cases, Russell’s summary doesn’t make it clear exactly on what basis the comparison was made, but in the great majority of items by far, it is explicitly stated that the comparison was based on test scores, final grades, or unspecified “performance.” The list as a whole—assuming that the individual studies are, at least in most instances, valid—leads to a fairly obvious conclusion: if measurable competence is all we’re after, then not only don’t we need universities, we have no need whatsoever to invest in and maintain expensive learning technologies, since it’s perfectly clear that radio, telephone, and the postal service will do the job for us just as well, and at minimum cost. And, if for some reason, we do want to splurge on something a little fancier, the majority of these studies demonstrate that plain old one-way TV will fill the bill very nicely. In fact, there are a couple of studies suggesting that one-way TV may actually be more effective than two-way.

Russell, the compiler of the list, is far from unaware of its implications, and, in fact, he has taken what could be described as a conservative position within the distance-learning community. In a recent article written for the online *Educom*

*Review* (Russell 1997b), he insists: “the technology used to deliver instruction will not impact the learning for better or for worse.” Arguing that “the value of interactivity—especially synchronous interactivity—according to comparative research is, at best, suspect,” Russell suggests: “The best thing many of the newer technologies have going for them is the public’s favorable perception, based on media-driven hype, and the fact that the proponents enjoy a clear majority over the doubters.” Russell himself advocates a multi-technology approach, that would require us to “revisit many of the older technologies such as radio, television and videotapes to ascertain their viability for specific student populations.” And he asks: “Why do professional educators embrace high-cost technologies when low-cost technologies work as well?”

My purpose here, obviously, is not to argue that the university curriculum be delivered at minimum cost through radio and videotapes, and perhaps, a modest amount of interactive software, though the logic that bases itself solely on measurable competence would, strictly followed, appear to lead us in that direction. What I am suggesting is that we can’t have it both ways. If we want no more than measurable competence, it comes fairly cheap. But if we want education, we need to recognize its dependence upon a student’s interaction with and immersion in a live and located community of students and faculty, and we need to stop pretending that we can deliver the university experience on a screen. The new technologies may have important contributions to make in *support* of postsecondary teaching and research; they may even be very useful as a way of providing and upgrading certain basic skills, enabling class time to be used in a more productive way (what composition teacher wouldn’t be delighted to see students given access to some well-designed instructional software for punctuation?), but as a medium for education they don’t make the grade.

“But why not?” someone might ask. “Why *can’t* we deliver the university experience on a screen? With two-way video—either teleconferencing or desktop videoconferencing—won’t we be able to have it all: competence, community, interaction—the whole works?”

It’s worth pointing out, of course, that synchronous interactive video is far too costly to become the standard form of distance learning—costly not merely in technological terms but, more important, in the use it makes of human resources (since, like traditional teaching, it involves a teacher interacting with a limited group of students in real time). But cost is hardly the main problem here. Even if it were the standard, there are several reasons why teleconferencing or desktop videoconferencing simply could not begin to do what live learning can do.

The screen is a permanent, unchanging frame that tends to isolate and decontextualize the images it contains. And even within its frame it supplies a drastically reduced amount of information compared to what would be available in a live situation. I recently participated in a teleconference and was struck, once again, by how much more difficult it was to “read” the people on the screen than to “read” the people who were actually in the room with me. Basic information was communicated but many of the subtler cues were blurred or lost. Certainly, the complex and delicate group dynamics of a live class and the rich “orchestration” that such a learning group provides aren’t reproducible in screen-mediated

situations. When things are going as they should in a classroom, there is a live energy that feeds back into itself, reverberates, and creates continually shifting patterns of mood and meaning.

Most important of all, the screen presents us with what is essentially an ontological barrier—and an entirely unbreachable one. No matter what its power to inform or to entertain or to arouse emotion, the screen can never offer us anything more than a virtual image. That is, we perceive what it portrays as ontologically on a different level. And this, in turn, means that it engages us in a different way. An hour spent on the screen—searching the Net or watching a documentary or exchanging on-line messages with a friend—may be an hour well spent; whereas it's possible that a particular hour spent in the non-virtual world around us might be poorly spent. But when we turn from the one to the other, something in us comes back into play—something that makes what we experience immediate (that is, un-mediated) and gives it the potential to affect us in the deepest and broadest possible way, to affect us in ways that can be amazingly subtle and complex. There is a level of engagement and belief that the real world elicits that gives it access to deep-seated motivational sources. This non-virtual world around us *matters*—matters so much, in fact, that it is not always a comfortable place to be (which, of course, is one reason why people so frequently take refuge in the screen). Nor should education be all that comfortable. The screen protects us far too much.

(It's interesting to note, incidentally, that text seems to survive the transition to screen somewhat better than does a person with whom we're videoconferencing. Text is text; it has less to lose—though even with text, the ephemeral, disposable, fully controllable nature of screen imagery tends to give it less importance and power than it might have on a printed page.)

But let us note that teleconferencing, sadly inadequate as it is as a replacement for the classroom, is the very top of the line when it comes to distance learning. Or, to come at it in another way, teleconferencing and desk-top videoconferencing are the face that distance learning presents when we approach it looking for "quality." When we approach it looking for cost effectiveness, for "imaginative solutions" to the problem of how to educate many more students with much less money, we see an entirely different face, as revealed, for example, in a recent Coopers & Lybrand white paper which claims that "a mere 25 courses," packaged as instructional software, "would serve an estimated 80 percent of total undergraduate enrollment in core undergraduate courses." The paper estimates that software for these 25 courses would serve 50% of the total community college enrollment and 35% of the total enrollment in four-year institutions. "Distributed learning," the paper concludes, "involves only a small number of professors, but has the potential to reach a huge market of students" (Coopers & Lybrand 1997). One has to admit that the salary savings (not to mention the market) would be enormous if one biology professor, for example, supported by a team of educational technologists, special-effects designers, marketing experts, and other support personnel, could teach every Biology 101 course not only in the U.S. but in many other countries as well.<sup>1</sup>

There are, in other words, two opposed messages coming out of the world of distance learning. One promises ample opportunities for "live" student-faculty

interaction; the other promises a standardized mass-market product at bargain prices. It's interesting to note, in this connection, that K-12 educators have been encountering a similar double message; Yeaman (1997:52) observes: "The rhetoric of school reform through technology tends to be self-contradictory, with arguments for more individual contact between teachers and children running against arguments for more efficiency due to decreasing the need for teachers."

To repeat: we can safely assume that real-time interactive two-way video is not what the average postsecondary student is likely to be getting if distance learning makes serious inroads on postsecondary education. It's far too costly, particularly considering that it doesn't appear to be significantly more effective in delivering measurable competence. Threlkeld and Brzoska (1994), citing a number of researchers who find little benefit and even some disadvantages in what they call "live" (meaning "synchronous") interactive distance learning, conclude: "There is little empirical evidence to support the current drive for live and interactive instruction..." All the more likely, then, that what most postsecondary students will be encountering, should distance learning become widespread, will be something far more cost-effective and merchandisable: a measurable-competence-oriented product, pre-packaged and with limited opportunities for e-mail interaction with an instructor or, perhaps more likely, a TA or technician. (The Coopers & Lybrand white paper envisages a 24-hour help-desk to serve students around the world: an eight-hour shift for the U.S., an eight-hour shift for Europe, and so on.) This nonsynchronous, mass-market kind of product will be—is already being—promoted as offering students greater "convenience and autonomy."

But even if the looming corporate presence abruptly receded, even if universities and colleges and community colleges were all, by some miracle, willing and able to spring for two-way video across the board, what an unappealing substitute for education that would be. To imagine my time at UCLA happening in that way—de-located and contextually impoverished—my opera professor on a screen, my literature, anthropology, philosophy professors on a screen, my long afternoons in the Cafeteria Annex played out as an on-line chat group, my days and nights year after year spent staring into a screen—is a depressing, a deeply depressing, thought indeed. Suppose they had been able to put Jan Popper in a multi-million-dollar ed-tech megaproduction with film clips of the world's great opera stars, computer animation, and hyperlinks in abundance. It would have just been another glitzy show. The real Jan Popper, working patiently with nothing more than real space and time, live classroom community, and a piano, changed my life. So, minus the piano, did my Intro to Psych professor; so did my linguistics professor, my Renaissance literature professor, my Proust professor, my English poetry professor. That's what good teachers do. It happens all the time.

#### IV.

If you take the new developments in educational and communications technology, lift them up on a millennial wave of technological enthusiasm, integrate them into the competency-based/outcomes movement in education which has persisted in one form or another since the 1970s or earlier, and put them in the ser-

vice of corporate interests, which are moving toward a de facto takeover of higher education, you come up with a rough approximation of what appears to be happening in a great many colleges and universities at the turn of the century.

Distance-learning technologies provide, for the first time in history, a way to make education into a highly profitable industry. Faculty members have been discovered to represent an extraordinary pool of unrealized capital, a virgin forest waiting to be harvested. Professors, offered the opportunity to redefine themselves not merely as "content providers" but as entrepreneurs, find themselves tempted to abandon any struggle to preserve education in favor of a struggle to make sure that some of the new "revenue stream" will be diverted in their direction. And even if securely tenured faculty are able to withstand such temptations, the legions of fully qualified but marginalized part-time faculty or unemployed PhDs are less likely to do so.

In an atmosphere of technological enthusiasm, skeptics are dismissed as nostalgic traditionalists, if not as out-and-out luddites. And if those crucially important environmental factors that researchers on college effects have identified— involvement in a campus community, interaction with peers and faculty—stand in the way of this new distance-learning industry, the competence-based approach provides a rationale for simply writing them out of the concept of education. This is all the more easily done because the competence-based notion itself has contracted; a broader understanding of outcomes assessment is giving way to the demand for more and more standardized testing at every level, from early childhood on (see Astin 1993:428-29 on the limitations of standardized tests as indicators of student development in college; for an account of the destructive effects of a week of standardized testing in a second-grade classroom, see Anderson 1998).

Once again, my intention is not to minimize the importance of competence; the problem lies neither in teaching competence nor in assessing it; the problem is in allowing competence and its measurement to assume a reductive power. White and Gunstone (1992) are among those who have looked at how assessment can gradually alter our perception of what it is we think we're assessing.

An instance is the way in which the notion of intelligence is shaped by the tests used to determine IQ. As the concept itself is narrowed by the tests, so the narrow tests appear to be more valid measures of the concept. The longer this goes on, the more comfortable the fit between the concept and the test. What we must appreciate is that the price of that comfort may be a loss of the original richness of meaning of the concept. (White and Gunstone 1992:178)

This very process has been coming into play in relation to the concept of education itself. What is not testable tends to become marginalized, and then irrelevant; our notion of education loses its original "richness of meaning" as it shrinks to fit the prevailing means of assessment. What is it then that is lost as education contracts toward measured competence? Recall the kinds of effects that Pascarella and Terenzini (1991) reveal: in orientation toward public affairs, and toward intellectual, cultural, and aesthetic subjects; in flexibility of thought and outlook, and

tolerance for ambiguity; in humanitarian values; in moral reasoning; in a reduced tendency to be dogmatic and authoritarian; in a preference for rational problem-solving approaches; and so on. A narrowing of education is, in other words, a narrowing of minds—stunting in its effect on the individual and potentially dangerous in its effect on society.

The process that White and Gunstone describe is, however, only part of the story, because education is being reduced not merely to measurable competence, but more specifically to competence in economically productive job skills. Cold war fears eased only, apparently, to give way to what was an already growing anxiety about the global “brain race” (Kearns and Doyle 1988). Now, disciplines that don’t appear to meet the criterion of economic productivity, scramble to find ways to plug themselves in (classics courses, for example, are defended as teaching valuable “critical thinking” skills).

Perhaps the worst thing that can be said about the stripping away of education’s outer circle is that it corresponds to a reduction in our understanding of what it is to be human. Education is one of the principal ways in which we construct our own image. Through education we represent ourselves. What does it mean then to move from the student as a member of a socially complex, multi-dimensional, geographically anchored campus community, where the curriculum is defined by culture, history, and the broad range of human inquiry, to the student as disembodied, de-located, solitary face peering into a screen in pursuit of a narrow range of commodified testable skills dictated by the needs of an ever-changing market? And how ironic that this reduction is being presented to us in the guise of liberation.

For the rhetoric of liberation is very much in the air. “Bliss was it in that dawn to be alive...” But I’m not sure that a triumph of the virtual university would allow us to continue Wordsworth’s thought: “But to be young was very heaven!” It’s true that the new educational and communications media are said to have the potential of liberating students from centralized academic hierarchies, so that they can actively create their own education in the de-centered, hyperlinked world of cyberspace. But, in fact, these students are being “liberated” only to fall more completely under the sway of corporate needs and interests which have rapidly been taking over the Internet (Moore 1997), and which are redefining education in their own terms, now as corporate-academic “partnerships” proliferate, and as even public universities are “marketizing” themselves (for careful documentation of this last point, see Slaughter and Leslie 1997).

When students, in isolation, receive decontextualized instruction geared solely to the demands of the market, when the most enriching, broadening, and life-enhancing elements—the most transformational elements—have been stripped away from education, it’s difficult to see how it is that these students have been liberated. And it’s especially difficult to credit claims that distance learning “democratizes” postsecondary education. I have argued elsewhere (Farber 1997) that distance learning is likely not only to retain but to exaggerate hierarchies. Should it prevail, we can expect to see all the benefits of community, interaction, and a rich sense of place—*along* with the best technology—being provided to future leaders at a few elite institutions, with these third-circle elements dwindle-



dling rapidly as we descend toward the screen-bound masses at the bottom, consuming the academic equivalent of fast-food.

There is a great deal that can be said against universities—and I have had occasion over the years to say more than my share of it. Applying their formidable intellectual power to the understanding of every other social institution, they often persist in a willful mindlessness where their own institution and its practices are concerned. They exhibit an entirely unjustified faith in the validity and effectiveness of the grading system. They give pitifully insufficient attention to teaching, even now when an emphasis on teaching happens to be fashionable. They continue to maintain an oppressive and mystifying caste system, which is insulting and intimidating to students, which demeans part-time and temporary faculty, which draws instructors in general into stuffy role-playing, and which surrounds presidents and chancellors—at best, no more than faculty members who have assumed a particular set of administrative responsibilities—with an aura of imperial power that, more often than not, turns reasonably competent individuals into fatuous blunderers.

But there is nothing in sight to take their place. Nothing comes close. Even today, as the corporate raiders close in, when you walk onto the campus of a large state university like mine, you find yourself in a place that's by and large—however imperfectly—under a different set of rules: intellectual openness; rigorous, reflective, critical thought; scientific inquiry; historical awareness; an orientation toward public affairs; pursuit of the arts; a celebration of culture; and, above all, one overriding criterion: not utility or profit or popularity or orthodoxy, but truth. A problematic term, to say the least, but, as with the university, there is nothing to take its place.

Most of the students in my university work; a substantial number of them work 30 to 40 hours a week. Many of the students who walk onto my campus are the first in their families to attend a university. I teach students whose parents are professors or doctors or lawyers, but also students who've grown up among migrant workers, students who grew up in street gangs, students who were born on farms in Laos or the Philippines or Guatemala, students who are starting college, or returning, in their 50s, 60s, 70s—to begin a new career or merely to expand their horizons. For most of these people, whatever their expectations may have been when they arrived, the university has become what it was for me when I was a student: a learning community where you develop affectively as well as cognitively; in attitudes, values, and aspirations as well as in knowledge and abilities; in ways that you may have anticipated, but also in ways that you have not. This campus we share has become, for them, a means of transformation.

There is nothing in sight to take the place of the university and there is nothing in sight to take the place of the classroom. I would like to suggest that what we need is not to transfer education from the classroom to the screen, but to learn to make better use of the classroom. In fact, I would say that learning to make better use of the classroom, learning to exploit the advantages of real time, real space, and real community, may be the most important direction higher education can take at this point. In an age when people in the U.S. are already averaging four

hours a day merely watching television, when work, recreation, and communication are all moving ever more rapidly onto the screen, when, in other words, life is becoming increasingly a mediated affair, the campus and the classroom may represent a technology whose time has come.

## NOTES

1. When we compare teleconferencing, on the one hand, and mass-market instructional software, on the other, we can't help recognizing that there are varying degrees of "distance" in distance learning, depending on the particular technology involved and, perhaps, also on how it is employed. Interesting attempts have been made to provide a theoretical basis for measuring "distance" in any mediated instructional situation—or, indeed, in any instructional situation at all. For "transactional distance" theory see Moore (1983); Saba and Shearer (1994). For "social presence," see Short, Williams, and Christie (1976). An application of "social presence" theory to computer-mediated conferencing has been made by Gunawardena and Zittle (1997).

## REFERENCES

- Anderson, Susan R. 1998. "The Trouble with Testing." *Young Children: The Journal of the National Association for the Education of Young Children* 53(4):25-29.
- Astin, Alexander, W. 1993. *What Matters in College? Four Critical Years Revisited*. San Francisco, CA: Jossey-Bass.
- Chickering, Arthur W., and Zelda F. Gamson. 1987. "Seven Principles for Good Practice in Undergraduate Education." *American Association of Higher Education Bulletin* 39(7):3-7.
- Coopers & Lybrand. 1997. "The Transformation of Higher Education in the Digital Age." Report based on the Learning Partnership Roundtable, Aspen Institute, Maryland, July 1997.
- Davies, Graham, and Donald Thomson. 1988. eds. *Memory in Context: Context in Memory*. Chichester, UK: John Wiley.
- Farber, Jerry. 1997. "The Student and the Screen." *Brave New Work World* [On-line serial]. URL <http://www.newwork.com>
- Gunawardena, Charlotte N., and Frank J. Zittle. 1997. "Social Presence as a Predictor of Satisfaction within a Computer-mediated Conferencing Environment." *The American Journal of Distance Education* 11(3):8-26.
- Kearns, David T., and Dennis P. Doyle. 1988. *Winning the Brain Race: A Bold Plan to Make Our Schools Competitive*. San Francisco, CA: ICS Press.
- Moore, Michael G. 1983. "The Individual Adult Learner." Pp. 153-68 in *Adult Learning and Education*, edited by Malcolm Tight. London: Croom Helm.
- Moore, Michael G. 1997. "Lessons from History." Editorial. *The American Journal of Distance Education* 11(1):1-5.
- Morton, John, Richard Hammersly, and D.A. Bekerian. 1985. "Headed Records: A Model of Memory and its Failures." *Cognition* 20:1-36.
- Pascarella, Ernest T., and Patrick Terenzini. 1991. *How College Affects Students*. San Francisco, CA: Jossey-Bass.
- Pillemer, David B., Martha L. Picariello, Anneliesa Beebe Law, and Jill S. Reichman. 1996. "Memories of College: The Importance of Specific Educational Episodes." Pp. 318-

- 337 in *Remembering Our Past: Studies in Autobiographical Memory*, edited by David Rubin. Cambridge: Cambridge University Press.
- Russell, Thomas L. 1997a. The "No Significant Difference" Phenomenon. [WWW document]. URL <http://teleeducation.nb.ca/phenom/nsd.doc>
- \_\_\_\_\_. 1997b. "Technology Wars: Winners and Losers." *Educom Review* 32(2): n. pag. [Online serial]. URL <http://www.educom.edu/web/pubs/review/reviewArticles/32244.html>
- Saba, Farhad, and Rick L. Shearer. 1994. "Verifying Key Theoretical Concepts in a Dynamic Model of Distance Education." *The American Journal of Distance Education* 8(1):36-59.
- Short, John, Ederyn Williams, and Bruce Christie. 1976. *The Social Psychology of Telecommunications*. London: John Wiley.
- Slaughter, Sheila, and Larry L. Leslie. 1997. *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore, MD: Johns Hopkins University Press.
- Threlkeld, Robert, and Karen Brzoska. 1994. "Research in Distance Education." Pp. 41-66 in *Distance Education: Strategies and Tools*, edited by Barry Willis. Englewood Cliffs, NJ: Educational Technology Publications.
- White, Richard, and Richard Gunstone. 1992. *Probing Understanding*. London: The Falmer Press.
- Yeaman, Andrew R.J. 1997. "The Discourse on Technology." Pp. 46-60 in *Educational Media and Technology Yearbook*, vol. 22, edited by Robert Maribe Branch and Barbara M. Minor, with Donald P. Ely. Englewood, CO: Libraries Unlimited.