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EDITORIAL

Most articles about distance education are either program descriptions or reports of research on effectiveness, attitudes, learner characteristics, etc. Occasional articles address theory-building or policy issues. In this month's issue of DEOSNEWS, Stephen Ehrmann of the Annenberg/CPB Project takes a different approach by analyzing what he sees as a disturbing reality within education in general and distance education in particular: the fact that students can receive what is classified as a "good" education without ever really questioning or understanding either their previous ideas or the new concepts they are being taught. Ehrmann presents two possible scenarios and asks distance educators to carefully consider the consequences to the field and to society of choosing one of two courses of action: the bad option of maintaining the status quo or the good option of reexamining our curricula and our ways of teaching.

THE BAD OPTION AND THE GOOD OPTION

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New technologies are leading us toward an old trap, but there may still be time to avoid it.

What's leading us toward the trap is the urgent need to solve a Triple Challenge: how to improve certain unsatisfactory educational outcomes, extend access to an older and more diverse set of learners, and control spiraling costs. Controlling costs is all the tougher because of the urgency of coping with those first two challenges.

In order to meet that Triple Challenge, colleges and universities need better educational strategies, new ways of organizing teaching and learning. If they stand pat, they know something will suffer: quality, enrollment, a balanced budget, or all three. Thus many institutions are trying to enroll and retain more adult learners who must study at home or at work; in some states the need to extend access is reaching crisis proportions. Educators are also working to help each learner tap more powerful resources-- libraries, experts, laboratories--from around the planet, rather than restricting those learners only to those resources that

institutions can buy and keep on-campus. As you might imagine, computers, video and telecommunication are often essential to their plans in each of these areas.

That's encouraging. But a few educators and their benefactors see technology itself as a savior: buy the hardware and save the college! Most of us realize that it's not that simple. We know that what matters is how we use the technology.

But I think the problem is even trickier than that. New technology could get us into even worse trouble than we're now in. That's because of a largely hidden problem that has dogged higher education for a very long time, a problem that could be made even worse by new forms of technology-based distance learning. It's a problem that technophiles cannot fix, at least not by themselves.

What is this bad option for our future? You can see it clearly in "A Private Universe," an award-winning video program about education. As the tape begins, the bell is tolling in Harvard Yard for the Class of 1987. Twenty-three randomly selected seniors, faculty and alumni are asked one of two questions, "Why is it warmer in summer than in winter?" or "Why does the moon seem to have a different shape each night?" Only two answer their question correctly, yet they have been taught these ideas repeatedly while still in school. For some, the material was also covered in their Harvard educations. Their teachers "covered" it, but the students never learned it. Why not?

The scene then shifts to a good high school nearby. Ninth graders, it turns out, believe many of the same things as graduating Harvard seniors. We see the kids being interviewed before they are taught this material. Their beliefs about summers and seasons are often mistaken and sometimes rather surprising. Then we watch as they are taught this material. The teaching looks pretty good, but the instructor never tries to understand what each student already believes about these phenomena, despite asking canned questions and getting their canned answers. She probably assumes that once students hear the truth, their prior beliefs (if they have any) will be irrelevant.

Afterward the students are interviewed again. At first their answers sound as though they understood the ideas. They'd probably get an "A" on the test. But as the interviewer follows up, it is obvious that their original beliefs are still there, virtually untouched. In some cases students have actually been further confused by the teaching because they had used their hidden preconceptions to (mis)interpret what the teacher was saying. The students were never forced to become conscious of their prior beliefs, let alone to test them against new ideas. The result is what an artist might call "pentimento": a layer of "learning" is painted over pre-existing belief, but, after a time, the original beliefs about the content reemerges, mostly untouched.

"A Private Universe" is one of many studies showing that students often get As without truly understanding the material or being able to apply it. These are good teachers, dedicated to their students' learning, skilled at teaching as they themselves were taught. But they (and their students) are being fooled. The students look like they understand and think they understand. They even score well on tests. But faculty may realize that they have to reteach the

material. Cursing the failures of their predecessors, they teach it again, in the same way it was first taught. It's a form of teaching by broadcast, even though students are in the same room. That's because the information flow is almost entirely from the faculty member outward to the students; very little fresh information flows from the students to the faculty member (or to each other). This kind of broadcast instruction may happen several times before ultimate graduation. And (surprise!) after that graduation it turns out that the graduate still does not understand.

Let's accept the charge that this kind of broadcast teaching can be inefficient, even ineffectual, because instructors currently don't discover what each of their students already thinks. The video has shown this happening when the instructor and students are in the same room. What happens when instructors try to teach students they can't even see? Teaching over video and computer networks presents this challenge.

Those networks will force us to choose between the Bad Option and the Good Option.

Bad Option: We will have chosen this option if we teach over computer and video networks just as we have in traditional classrooms: unquestioningly. Some administrators even appear to encourage this ("You'll love this new technology; you can just teach the way you always have!"). If instructors do merely broadcast their instruction into the dark, outcomes are likely to deteriorate still further. If today's best graduates are symbolized by those Harvard graduates, what will the average graduate of tomorrow be like?

Good Option: We will have chosen the Good Option if most faculty members begin to reexamine their teaching and their courses:

- * These faculty members would ask more probing questions in class (whether the students are in the same room or a hundred miles away).

- * They would devise assignments that help students confront their beliefs and test their skills. These new questions and assignments could help both faculty and students understand the deep structure of ideas, not just their surface features.

- * Electronic mail and computer conferencing would give students safer and more thoughtful means of discourse, whether students are on campus or studying at home; students reveal more than they do when facing the faculty member behind the lectern.

- * Students would get more and better feedback than ever before from their peers and from distant experts, as well as from the instructor. More dependent on other students, they would begin to bond and to take more responsibility for their own learning. A healthier academic community could develop, even among people who rarely see each other.

And by the time they graduate more seniors might have understood why it's warmer in the summer.

I favor the Good Option.

Am I optimistic about achieving it? Yes, but I am an extremely optimistic person. The upgrading of courses (and faculty skills) is going to cost long hours and big bucks. Unfortunately, I see little sign that many of our colleagues in higher education realize the need, let alone that they are willing to pay that price.

When I say "our colleagues" I don't just mean faculty who teach courses at a distance (only about 5-10% of all faculty do, even at most institutions using technology to extend access.) That's too small a base to reorganize our syllabi and curricula. What learners off-campus will get is what learners on-campus get, by and large.

But I don't see much dialogue among the various little groups interested in reform. Instead of thinking together to select some priorities about which they all agree, they each are turned inward, looking only at their own agendas--computers, critical thinking, internationalizing the curriculum, writing across the curriculum, TQM and CQI, updating calculus, college-school partnerships, classroom research, education for diversity. None of these movements has much money. Nonetheless, these various reformers rarely share what resources they do have. In fact, they don't even talk to each other much, even when they work for the same institution. Nowhere is the gulf deeper than between reformers who care about technology and those who don't. Part of the problem is that distance teaching was, until recently, constrained mainly to broadcasting, so those on campus interested in projects, collaboration, and the like may assume that those involved with distance learning are an alien species.

The good news is that these different movements now do share many of the same goals, including helping faculty members learn to assess how their own students think. Almost all of them believe that some learning should be done collaboratively. They almost all want to engage students and academic resources that would not be found on the traditional campus. In those shared hopes lies some hope for all learners.

The bad news is that, while we're failing to think together, some decision makers want to use the Information Superhighway to "beam" cheap education to everyone's tele-computers. They think "distance education" is a great idea. A master teacher will lecture ten thousand learners! Economies of scale! Given the great unmet needs for education and the shortage of funds, these are attractive hopes but also perilous. Done badly, this sort of beamed education can separate learners completely from faculty and from each other. These unfortunate learners could remain locked in the grip of their prior conceptions. Meanwhile they (and policy makers) can be happily convinced that they are getting a "Harvard" education.

That would be the tragedy of the Bad Option, chosen merely because too many policy makers and learners don't know the difference and because too many educators and educational institutions won't pay the price of reexamining their teaching.

Our reformers, including technophiles and technophobes, must get their shared act together. If they do, we could have more successful learning communities and more vibrant institutions. As Benjamin Franklin once asked, will we hang together, or

separately? Bad Option or Good Option?

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