**SUPPLY AND DEMAND**

Almost every state in the country seems to be engaged in some kind of virtual university consortial effort. In some cases, the consortium involves only public institutions, especially those that are part of a state system. In others, the effort includes both public and private institutions. Despite the flurry of activity and the flood of press releases, is anyone making real progress on the virtual university front?

If you asked most people, especially those in the public policy arena, why these initiatives have been started (and funded), the answer is surely to expand access to postsecondary education and increase the educational attainment of the state’s citizens. The rationale for establishing these consortia is not, of course, education for education’s sake; rather it stems from the role education can play in contributing to statewide economic development. Indeed, most of the mission statements of these consortia include goals like meeting the needs of employers, upgrading workforce skills, expanding professional development and increasing global competitiveness.

Therefore it would seem that progress should be measured by how well the virtual university initiative is expanding access to postsecondary education and meeting the economic development goals of the state.

At first glance, things appear to be going swimmingly. Here is a sample of reports taken from various press releases and Web sites:

* Spring 2001 enrollment in the Virtual University (VU) has nearly doubled from this time last year. As of the fall 2001 term, the VU offers 34 college credit programs with 246 courses, representing 28 colleges and universities. To date 6,100 of the state’s citizens have enrolled over five semesters.

* The Learning Network (LN) started with 8 courses 1995 - 1996. There were 34 courses offered in 1996 -1997, 180 offered in 1997 -1998, 460 courses offered in 1998 -1999, 1000 courses offered in 1999 - 2000, and more than 1500 courses in 2000 - 2001. This growth in the course portfolio is representative of the plans to expand the LN within the state university system.

* The explosive growth in Internet-based courses has fueled an impressive gain in distance education since the Virtual Campus (VC) went online a year ago. There were 26,214 students enrolled in distance learning offerings through the VC during spring 2000, up from 14,846 in the fall 1999 term. The electronic course catalog now lists 45 certificate and degree programs and more than 1,800 courses, up from 800 a year ago.

Those leading the efforts are happy to take the credit. “We are delighted to report the strong interest by both students and institutions in using the Virtual Campus to expand access to higher education,” said one director “The growth we have seen is a testament to the need for distance learning programs and the strong support by the state.”

But wait. In each case one might ask, how many of the reported students are new students who were previously unable to access the state’s higher education resources? In fact, the vast majority of those enrolled are students at individual institutions within the consortia who have shifted a portion of their studies from the classroom to the net.

These numbers generally reflect the explosive growth in online learning that is going on throughout the country. According to a report by International Data Corporation, in 2002 approximately 85 percent of two- and four-year colleges will offer distance education courses, up from 62 percent in 1998. For the same time period, student enrollments are projected to increase from just over 500,000 to well over two million students.

It is questionable how far these consortial efforts, as currently constructed, can go toward meeting their key goal of economic development. Their primary activity is to operate a “portal”—a Web site that lists participating institutions, degree programs and courses offered online or at a distance. Since none of the consortia is degree-granting and none offers its own courses, each functions as a referral service. In some cases, they present consumer information about how to be an effective distance learner, and a few provide statewide faculty development services.
DEMONS, FREE LUNCHES AND VIRTUAL UNIVERSITIES

Towards the end of the 19th century, the brilliant Scots physicist, James Clerk Maxwell, was instrumental in providing a mathematical foundation for thermodynamics. Among the many complex concepts he dealt with was entropy—"left to itself, an isolated system tends toward a state of maximum disorder." He devised one of those marvelous thought experiments that has since become part of the lexicon of modern conversation.

He envisioned a container of gas at some constant temperature and pressure which was filled with molecules moving with various speeds. His thought experiment was to imagine that there was a divider in the container and a trap door in the divider. He imagined an intelligence which he called a "demon", capable of seeing the molecules, judging their speed, and by judicious opening and closing of the trap door, segregating the fast molecules on one side, the slower on the other. The consequence would be that one side of the container became warmer while the other side cooler.

Now, if such a demon were to exist, the Second Law of Thermodynamics—entropy—would be overturned and the latent energy of a system could be captured. Succeeding generations of physicists wrestled with and eventually demonstrated just why such a demon would need information—not a part of the "isolated system"—to perform his task.

As a society we seem wont to find demons that are "free"—our own versions of the economist's free lunch or the physicist's perpetual motion machine. The latest appears to be the widespread misconception that we can create a virtual university that can be "free" simply by leveraging existing education resources. The idea, of course, has appeal because no one really wants to spend more money on education and what could be more desirable than capturing the latent efficiencies in our existing educational system in which we have already made such a major investment.

The simple fact is that it costs money to do anything new, even if a key part of the new initiative's strategy is to draw on existing resources or to be self-supporting in the long run. When institutions are operating near capacity, as is essentially the current situation in higher education, and capacity is basically a measure of...
personnel resources, there are few non-personnel budget items that can be tapped for reallocation to create a pool of venture capital. Almost the entire operating cost of an educational program is reflected in the faculty employed to teach in it and the staff to support it.

It is all too easy to fall into the fallacy that the marginal cost of adding another student is “free.” The reasoning goes, “we have already paid for the faculty and staff and another student more or less isn’t going to change that.” The same reasoning seems to prevail with the way many people think about a virtual university. As existing institutions are already offering online courses, we will simply have them “contribute” those courses to the catalog of the virtual university.

In the first instance we are required to ignore that each student is typically subsidized by state or endowment funds and almost never pays the full cost of the education services. We have long since realized that we can’t make up in volume what we lose for each student registration. In the case of the virtual university, we must also beg the question as to whether the course and program choices of an institution bear any resemblance to the unmet demand for programs for students who wish to study at a distance.

Experience clearly shows that adding an additional student is not “free,” nor are the marketing, administration or services of a virtual university. Virtual universities, whether for-profit (like the University of Phoenix Online), non-profit (like the Western Governors University) or statewide (like the Kentucky Virtual University), have required millions of dollars in start-up costs. Shifting any “burden” (administrative services or course presentation) to existing institutions simply shifts costs.

Clearly, the construct of the virtual university (at least those that do not provide the courses themselves) adds overhead. While that overhead may be quite appropriate in terms of a state or region’s economic development intentions, it nonetheless adds overhead by requiring additional personal services. Those personal services will either be added at the level of the virtual university organization or the level of the institutions which are contributing services and courses, or both. Absent some significantly changed economics in the cost to deliver instruction, we are simply adding cost.

As Pogo once observed, "It is difficult to remember that you came to drain the swamp when you are up to your armpits in alligators." The only way out of this self-perpetuating reliance on personal services is the infusion of new monies into the system. This is not to say that the institutions of higher education cannot operate more cost effectively, only to say that to do so requires funding for research and development. While research and development funds are a fundamental facet of any business enterprise, they have not historically been a component of college and university budgets.

Some have suggested that this might be an appropriate use for endowment funds but, unfortunately, not all institutions have endowments which will yield any significant venture capital. Those that do are generally using endowment funds to further subsidize the price of tuition through scholarships, endowed chairs, etc., not to attack the costs engendered by reliance on personal services.

What is clear is that any organization in the midst of transition from one paradigm to another (say residential to online instruction) will experience higher costs as it is required to continue doing most all that it had done under the old paradigm while attempting to create new offering under the new paradigm. This transition will never be accomplished absent seed money, whether generated internally from some sort of research and development funds or externally from some form of venture capital. This is the case for a single institution of higher education and it is even more the case when it comes to creating virtual universities.

There are no free lunches and there aren't any free virtual universities.

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UPCOMING LEADERSHIP FORUM EVENTS

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February 25, 2002, Dallas, Texas

Co-sponsored by the Executive Forum in Information Technology at Virginia Tech

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