eLearning—
A Financial and Strategic Perspective

Institutions can consider different options in shaping a long-term strategy for achieving acceptable financial returns from e-learning

By **Stephen R. Ruth**

a report sponsored by the Alfred P. Sloan Foundation examined the importance of online education at more than 1,000 universities in the United States.[1] The results, published in November 2004, seemed to indicate that two major problems that had complicated distance learning's progress for almost a decade had been solved.

First, the study found that students and administrators believe that the quality of e-learning now matches that of traditional teaching methods. According to the report,

- Three-fourths of academic leaders at public colleges and universities believe that online learning quality equals or surpasses face-to-face instruction.
- The larger the school, the more positive the belief in the quality of online learning compared to face-to-face instruction.

A second major finding was that universities provide distance learning to almost two million users, with a rate of increase of about 25 percent per year.[2]

These results should be good news for colleges and universities. The report seemed to downplay the "no significant difference" criticism.[3] Distance learning detractors had argued that it was always possible to find a small, statistically significant local example where distance learning was very successful and then extrapolate the results to a much wider population, concluding that no significant difference existed between traditionally taught and technology-enhanced courses without studying the larger population for potential differences in results. The Sloan report implies that the users and providers of distance learning no longer need to concern themselves with this criticism.

Too Good to Be True?

Greater acceptance and use of e-learning today and fewer reservations about its quality—it seems too good to be true. Jack Wilson, president of the University of Massachusetts, has frequently described the exciting challenge of e-learning in terms of its untapped

million.[7] England's Open University, a venerable not-for-profit institution, has an annual budget of well over $200 million and is a major player in e-learning. A nine-figure annual revenue stream allows for high levels of student services, not to mention top-rated courseware with good learning modules, access to library facilities, carefully crafted exercises, and easy-to-use interfaces.

Comparing large-budget institutions like the University of Phoenix and the Open University with traditional universities suggests that the latter will encounter consistently decreasing returns on e-learning investment as an inevitable result of the strategic model employed in most postsecondary education. Three distinct challenges demand solutions if traditional universities are to successfully confront the economic realities of distance learning:

- First, many traditional universities are not willing to draw useful lessons from the more advantageous financial and IT models of for-profit or other nontraditional institutions.
- Second, only about a third of e-learning at U.S. graduate schools is accredited by professional bodies, and many programs have relatively high per-class student limits; some have no limit on per-class enrollment. Moreover, nearly all the high-volume programs are at third- and fourth-tier universities, not the nation's top institutions, affecting the quality of the programs.
- Third, the production of course content by full-time university professors is not guaranteed. Growing evidence indicates that many career-minded faculty are skeptical of investing much time or effort in developing online learning courses, believing the effort to be low in yield both financially and intellectually.

Leveraging Others' Experience

To describe the first challenge realistically, I selected the University of Phoenix (for-profit) and England's Open University (nonprofit) to compare with a composite of a large traditional university in the United States. Table 1 shows a

potential, while acknowledging significant failures such as Columbia's Fathom program. He feels that innovative approaches like UMassOnline, by aiming for larger audiences and returning profits directly to academic institutions, will gradually allow nonprofit e-learning to pay its way more successfully.[4] The stakes are high. Estimated 2005 revenues of for-profit higher education are $17.6 billion, representing a growth rate four times that of traditional colleges.[5] With current annual distance-learning revenues in the low to mid tens of millions,

even the examples of UMassOnline and Penn State's or University of Maryland's worldwide campuses appear too limited in enrollments and services to be cost-effective. The 2005 annual revenue projections for UMassOnline were $16 million, for example, compared to quarterly revenues in the $500-million range at the regionally accredited, for-profit University of Phoenix.[6] Strayer University, a mid-sized, regionally accredited for-profit institution, reported third-quarter 2005 profits exceeding $6 million on three-month revenues in excess of $47

Table 1

Comparison of E-Learning Program Characteristics

Characteristic	University of Phoenix	Open University	Composite of Typical Large U.S. University
Total enrollment/distance learning enrollment	230,000/115,000	220,000/170,000 (many classes offer varying DL options)	10,000/1,000
Number of full-scale DL degree programs	20 undergrad; 37 masters; 6 PhD	Over 200 degree options/ combinations	Typically, none or one
Full-time cadre for DL (professors and staff)	1,500 (for DL and traditional)	1,120 (for DL and traditional)	50
Part-time DL instructors	9,600	8,000	5–50
Cost per credit hour	$570	$70–$200	$200–$500 public; $500–$1,200 private
Student support infrastructure	Excellent (135 centers)	Excellent (352 regional/ study centers)	Fair (mostly local campus facilities)
Sophistication of courseware	Excellent	Excellent	Fair (varies by course and instructor)
Teaching model	Part-time instructor/many materials provided	Part-time tutors/ comprehensive materials provided	Full-time instructor/ individualized teaching materials
Typical per-course salary (3-credit course)	Adjunct $1,500–2,000	Adjunct $1,500–2,000	Full-time $10,000; adjunct $2,000
Program offerings	Undergrad through PhD plus certificates	Undergrad through PhD plus certificates	Undergrad and grad primarily plus certificates
Placement success of DL graduates	Good	Good	Good
Typical class size goal for DL graduate courses	12 (classes are 5 or 6 weeks in duration)	20	30+

comparison of selected characteristics of e-learning programs for the University of Phoenix, the Open University, and a typical large U.S. university as of fall 2004.[8] In aggregate, the University of Phoenix and the Open University offer services to nearly 300,000 online learners in formal university programs, ranging from pre-college to PhD. Neither institution uses the online model exclusively, however. At these two universities, enrollments in traditionally taught programs at hundreds of learning centers in the United States and England are also high, but decreasing each year as a percentage of total enrollments. Both programs have students in dozens of countries overseas, too. Similar to many other large distance programs, the University of Phoenix and the Open University cater to learners who have been in the workforce for awhile and are considerably older on average than the 18-to-21-year-old students at a traditional institution. The University of Phoenix seeks out students who are relatively settled in terms of age, maturity, and employment. Nearly all the university's students have full-time jobs, and the average student has been working for 13 years.

At one time critics would nod knowingly on observing statistics like these and assume that you get what you pay for. In other words, e-learning at traditional universities does not stint on the quality of the education process, but nontraditionals and for-profits cut corners. Anyone carefully reviewing the current results for many of the leading nontraditional institutions will find that quality and service meet or exceed that of their traditional peers, however, with significantly smaller class sizes, more sophisticated online resources, and excellent acceptance of online degrees by prospective employers.

As Table 1 indicates, the great advantage nontraditionals have in their deployment of distance learning is their financial and administrative model. The University of Phoenix has 9,000 part-time instructors and 1,500 full-time staff including teachers, managers, and support personnel. For the Open University, which offers a greater variety of online deployment options, the ratio is an equally notable 8,000 to 1,120. This means that a small percentage of those involved in course delivery expect or receive amenities like permanent office space, employee benefits plans, promotion and tenure, vacations, and the like. A cadre of senior faculty at both institutions assures the quality of content, trains the adjuncts, enforces standards, and so forth, but neither institution has anything like the tiered department-college-school hierarchy found in traditional universities in the United States and other developed nations.

Adjuncts versus Full-Time Faculty

A crucial issue in the nontraditional distance-learning model is the cost of adjunct versus full-time faculty resources. A typical three-credit course at the University of Phoenix or the Open University pays the adjunct instructor approximately $1,500–2,000. Traditional universities also employ this general salary band for part-time faculty. For full-time faculty, I'm assuming a tenure-track professor with an average class load of six courses a year and normal overhead expenses for office space, health care, retirement plan, IT network and infrastructure, some secretarial help, sabbaticals, and so forth. The full-time instructor earns $60,000, not including overhead. A salary disparity on a per-course basis of 500 to 600 percent occurs between full-time and adjunct faculty. If true overhead cost were considered, the disparity would be even greater.

The role of an adjunct at a traditional university is ambiguous and often controversial. It's un-university-like to have disproportionately high course loads in distance learning or classroom instruction where the professor is a part-time hire, not a member of the full-time faculty, yet the financial advantage is clear. As Carol Twigg noted:

Higher education has known for decades that substituting cheaper labor for more expensive labor reduces instructional costs. The use of graduate teaching assistants, adjunct and part-time faculty, and other instructional personnel has enabled institutions to keep their costs from rising beyond what they are now. The knock has always been that our dependency on part-time faculty reduces the quality of instruction, and anecdotal evidence seems to support that view. The academy, broadly, worries about institutions that rely too heavily on adjunct faculty for two reasons: (1) the academic program may fall into the hands and control of administrators who make decisions based on financial expediency rather than academic quality; and (2) quality assurance may be difficult to maintain, since the academy has neither the infrastructure nor the culture to support a close monitoring of ubiquitous and disenfranchised adjunct faculty.[9]

Use of adjunct faculty has also been a serious issue for accreditation with professional organizations like the Association for the Advancement of Collegiate Studies in Business (AACSB). About half of the 114 online masters of business administration (MBA) programs are accredited by the AACSB, yet they represent only 13 percent of the online MBA population; that is, about 87 percent of all online MBA candidates are in programs not accredited by the AACSB.[10]

Some significant changes are in the wind in other disciplines. For the 20 online graduate library sciences programs, all but two are accredited by the American Library Association (ALA).[11] A similar case exists for programs in nursing, where all but one of the 73 current e-learning graduate programs are accredited by the National League for Nursing Accrediting Commission (NLNAC) or the Commission on Collegiate Nursing Education (CCNE).[12] There is a downside to this: Online graduate

programs, professionally accredited or not, need to fill electronic classrooms to be financially viable, so many of them have very high limits on class size.

Why do some university administrators dismiss the nontraditional model? One complaint is that nontraditionals offer a relatively limited group of degree programs—the most popular ones, like business, education, health care management, engineering, and a few others. The traditional university might also put extra emphasis on locally popular online programs, of course, while limiting the use of technology in others. For example, a traditional university might offer a full business program completely online while limiting technology use in courses like chemistry, astronomy, or history. It's unlikely, however, that any university program established this way could approach the enrollment in the online business program offered by the University of Phoenix—more than 50,000 graduate and undergraduate students.

Another criticism holds that nontraditional e-learning programs are "degree mills" that allow almost anyone who wants an academic credential to enter. This particular complaint prompted a court case, since settled, accusing the University of Phoenix of questionable recruiting procedures.[13] Nonetheless, students obtain highly marketable degrees from many of these programs. In a recent survey, more than two-thirds of the respondents saw no difference between an online and a traditional degree in terms of academic quality, starting salary after graduation, and quality of job after graduation.[14]

Saving on Overhead

From my perspective, one of the least appreciated aspects of the nontraditional model is that very large enrollment revenues make it possible to offer extensive services and support in online courses. Enrollments of hundreds of thousands of online students involve different return-on-investment (ROI) rules from those of a few thousand or less—numbers typical even of large traditional universities. The latter can't spread IT and courseware overhead as

successfully as large online institutions and so face an inherent disadvantage: lower service levels for students and higher unit costs.

The UMassOnline system is notable for saving on unit overhead expense by pooling the collective capacities of many academic areas. As mentioned, however, its annual projected revenues of about $16 million dollars for 2005[15] lag far behind the University of Phoenix, whose annual revenues approach $2 billion for combined traditional and nontraditional instruction, or those of the Open University, the University of Maryland University College, or Strayer University, which fall into the $100-million-plus range. Other institutions, like Park University, St. Leo's University, and Central Texas College, show consistently rising numbers for online learning and currently are in the 20,000 enrollment range.[16] A significant proportion of these high-volume programs cater primarily to students seeking undergraduate and associate degrees online.

The advantage of sharing overhead also applies to factors such as availability of library resources, consistency of educational materials, class size, availability of online technical help, and so forth. For example, as shown in Table 1, the average size limit of a class at the University of Phoenix is about a dozen students and for the Open University's online program, about 20. The *U.S. News & World Report* rankings indicate that for many other universities the number is considerably higher. The largest online graduate engineering program, at Old Dominion University, has a class limit of 100, and two others in the top five, Columbia University (the Fu Foundation) and North Carolina State, have no upper limit on class size. (These numbers are discussed in more detail in the section "Quality" below.)

In summary, high-revenue nontraditional institutions offer a financial and service model that is inherently difficult for a traditional university to adopt without a fundamental change in strategic outlook. Putting aside some of the less important issues having to do with the logistics of course delivery, the greatest difference can be described

in two words: adjunct faculty. All of the large, successful nontraditional programs depend on instructors who expect no office space, benefits plans, sabbaticals, or other perquisites. Paying a qualified person $1,500 to $2,000 per course and charging about $500 per credit hour is a financial model that's hard to beat.

Faculty Concerns About Course Development

Who develops the course material for online learning? The professor has a unique role in a traditional university. She or he is the center of intellectual activity at the institution and thus the nexus of course development. Universities have a three-pronged approach to evaluating professors: research, teaching, and service, with research frequently accorded the greatest emphasis in tenure evaluations. The crucial question in the context of e-learning is whether full-time faculty are willing to prepare suitable material for use in online instruction.

Considerable literature over the past decade has concerned general feelings of faculty about online teaching. George Schell's 2004 study[17] found that full-time faculty try to avoid e-learning duties because of its perceived interference with promotion and tenure. The title of his study is quite descriptive: "Universities Marginalize Online Courses: Why Should Faculty Members Develop Online Courses If the Effort May Be Detrimental to Their Promotion or Tenure?"

In my own research, funded by a grant from the Andrew W. Mellon Foundation, I had the opportunity to interview some extremely proficient online course developers. George Mason University professor John Wallin, for example, offered a captivating online course in introductory astronomy that served several hundred students a year. Most students loved it and felt that Wallin's efforts significantly enhanced their learning experience. Careful testing by the university's Office of Institutional Analysis verified this. How much work was dedicated annually to prepare and maintain the course? Professor Wal-

lin estimated that it required between 500 and 1,000 person-hours, that is, Wallin-hours, to keep the course at the appropriate level of currency and usefulness. (Distance learning instructors often need technical skills, no matter how advanced the courseware system.) That amounts to between a quarter and half of a person-year.

Wallin received tenure during the period of his e-learning course development but is reluctant to attribute it to his success in online teaching. An accomplished scholar, he has many publications to his credit. "It was a wash," he said in a recent interview. "There was a favorable buzz about my course, but I lost a lot of time for research that was important to me."[18]

The reluctance of some full-time faculty to participate in e-learning can be traced to several causes. First, there is a perceived loss of research time because of the work involved in developing and teaching online classes. Lynne Pachnowski and Joseph Jurczyk found that even repeated delivery of the same online course requires extensive preparation time.[19] Professor Wallin's case hints at the time and effort required to deliver a high-quality, tailored course. Also, the effort needed to maintain the quality increases as the number of online students goes up, so the payoff for a course's popularity is additional work to make it capable of serving more customers.

Second, many faculty members feel that the financial reward structure for e-learning is not commensurate with the amount of work involved. Professor Catherine Shifter's study, and many like it before and since, showed that there are few, if any, financial inducements for participation in e-learning programs. She asked faculty to rank the positive and negative attributes of e-learning on a Likert scale, and they noted the reward system as among the top-ranked deterrents.[20] A report in the *Chronicle of Higher Education* noted that financial rewards for e-learning professors are decreasing as administrators come to perceive the technology as a routine element of academic duties.[21]

A third area of unease among full-time faculty is the quality of courses

they prepare. Lisa O'Quinn and Michael Corry found that course quality was the top-ranked concern among full-time professors, followed closely by release time and pay issues.[22] Preparing acceptable online materials involves far more work than reusing slides or taking a traditionally taught course and employing the same techniques and materials for online students. Many universities offer excellent resources to help train faculty in both the human factors and the software issues associated with distance education, but these classes require considerable extra time that could be used for other pursuits, like research.

Another troublesome issue involves the intellectual property (IP) rights for online courses. An argument can be made that each instructor "owns" the slides, TV lectures, CD-ROMs, special course techniques, and so forth. The legal issues associated with faculty IP concerns add additional overhead to the total per-course cost. In a recent article Linda Howe-Steiger and Brian Donohue described this dilemma and proposed methods for working out the ownership issue within the institution.[23] Since relatively few students use most of the courseware in question, it appears that rationalizing IP rights, while useful, adds to the cost of the e-learning deployment process and further reduces the yield per course at a traditional university.

Nontraditional schools are minimally concerned with the IP issue because many of their courses offer considerable teaching material to the professors beforehand to reduce the preparation time required. This, combined with outstanding technical resources, makes the development of learning materials less a controversy and more an opportunity to get a busy part-time teacher the tools needed to prepare a course much more easily. When the university supplies most of the course material, IP is not a controversial issue.

Quality

I have suggested that traditional universities will find it difficult to deliver a full-scale distance learning program at a competitive price without making changes in the financial model employed. If they do, what is the quality of the resulting program?

Each year, *U.S. News & World Report* publishes a list of e-learning graduate programs offered by U.S. universities, providing insights on their quality, services, and other attributes. The report includes many descriptive indicators such as number of students, cost per credit hour, year of origination, and so forth, along with quality measures like class size limits, accreditation status, and availability of technical help. Table 2 summarizes *U.S. News & World Report* data as of fall 2004 on graduate e-learning enrollment statistics by program and

accreditation.[24] As mentioned above, there are more accredited e-learning graduate programs now than in last year's report in 2004 and about a third of the students are enrolled in professionally accredited graduate programs, up from a year ago. Nearly all online programs in nursing and library science are accredited. Business courses are by far the most popular and have the most accredited institutions—but the lowest percentage of students in accredited graduate programs.

Where are the major online graduate programs taught? The *U.S. News & World Report* listings indicate that over a dozen institutions have enrollments of more than 1,000 students, the top ones being the University of Phoenix (49,940), Walden University (11,109), National University (7,237), University of Maryland University College (6,322), and Truro University International (3,885).

Most of the high-enrollment colleges listed are classified as lower-tier institutions by the *U.S. News & World Report*,[25] and barely one-fourth of the enrollments of this high-volume group represent professionally accredited programs.

Another interesting finding is the increase in fully accredited graduate programs (regional plus professional accreditation) from previous reports, especially in business, engineering, library science, and nursing. In business graduate programs, 57 of the 111 universities in the *U.S. News & World*

Table 2

Graduate E-Learning Enrollment

Program	Regional Accreditation	Regional and Professional Accreditation	Total Students	University of Phoenix	University of Phoenix Percent of U.S. Total
Business	54,394	7,275	61,669	29,945	48.56%
Education	27,725	28,295	56,020	14,987	26.75%
Engineering	4,707	5,699	10,406	N/A	N/A
Library Sciences	335	5,643	5,978	N/A	N/A
Nursing	26	9,887	9,913	4,011	40.46%
Public Health	5,350	1,150	6,500	997	15.34%
Total	**92,537**	**57,949**	**150,486**	**49,940**	**33.19%**

Report statistics have met professional accreditation requirements. Many of these newly accredited programs have relatively small enrollments, some less than a hundred students, so the financial viability of a 15-to-20-course MBA program, for example, isn't assured for the long term. Again, how do they do it? One indicator might be that only 3 of the 57 accredited MBA programs have class size limits of 20 students or less, with some having a maximum of 60 and 6 having no class size limit. Of the 18 professionally accredited library science programs, 14 have a class limit of more than 20, including 3 reporting no limit on class size.

Conclusions and Possible Solutions

As the popularity of online learning increases, a two-level system seems to be emerging. Many traditional universities use e-learning extensively but are reluctant to set up full-scale online programs. This is particularly true of the top-level academic institutions (tiers 1 and 2 in the *U.S. News & World Report* rankings), which do not appear on any of the high-volume e-learning lists. This group faces an unavoidable fixed cost that is difficult to amortize without extensive use of adjunct faculty or a commitment to higher student volumes. The other level, a group of for-profit and not-for-profit nontraditional institutions, offers full-scale online programs in popular disciplines like business, engineering, education, nursing, and library science. Most of these institutions are in the lower tier of the *U.S. News & World Report* rankings. Some of them load up the online classrooms to achieve higher revenues, and most use adjunct faculty extensively.

To achieve higher levels of quality and also a decent ROI, the University of Phoenix model seems worth considering. The University of Phoenix offers an extensive range of student services, high-quality instruction, both brick-and-mortar and online courses, and excellent job opportunities for graduates. Traditional universities have several options to achieve full utilization and possible profitability in the online

Many traditional universities use e-learning extensively but are reluctant to set up full-scale online programs; this is particularly true of the top-level academic institutions

learning segment of their operations. Five possibilities to consider are
- Investigate mergers and integration.
- Establish a no-nonsense, globally oriented virtual university.
- Limit bricks-and-mortar investment in favor of blended learning.
- Support the deliberate proliferation of distance-learning adjunct faculty.
- Accept that e-learning is costly but crucial.

Mergers and Integration

The major scale advantages of the University of Phoenix do not necessarily exclude competition from traditional universities. None are large enough by themselves to compete, but if several of the largest programs joined forces, the revenue/service model could change considerably. Suppose that the University of Massachusetts, Penn State, the University of Maryland, and the University of Florida agreed to a transparent (to the customer) merger of courses, revenues, service facilities, and so on, for e-learning? This would create a capacity approaching that of the University of Phoenix's online programs. No profit is involved for these four public institutions, a financially attractive differentiator, since the University of Phoenix has

returned about 30 percent in profits to stockholders each year.

Would this kind of collaboration work? Who knows? Each institution would have some wrenching decisions at all levels, and immense turf issues would need to be considered carefully. Considerable revenues could be obtained, far more than under the current system. Also, the remaining untapped customer base of potential qualified users of the postsecondary education system—tens of millions of adults—could be more easily served. Competition between for-profit and not-for-profit institutions would happen on a more level playing field.

No-Nonsense, Globally Oriented Virtual University

A far more drastic idea that could yield extraordinary benefits to student learners even in the short term is to establish a global virtual university. The concept is closely related to the four-university coalition just suggested, but it would involve many more institutions and students.

Currently, it's difficult for a student in one university to take an online course from another institution and get full credit. There are rules about budgeting, entrance requirements, allocation of student revenues, and other issues. The strategic vision here is a no-nonsense virtual university, where the procedures really have teeth—much tougher than the plans frequently proposed in state legislatures and other bodies. Many previous plans offer options but no specific directives. They fail because the various segments of the virtual academy are not willing to share revenues, academic prerogatives, syllabus development, established structures, and other traditional academic expectations. There would have to be limits, of course; perhaps only 25 percent of a student's credits could come from other e-learning institutions.

Potential savings could be enormous. If a million new students could be attracted to this system over time, the savings could be perhaps 10 percent of what it costs to fund all the universities in the United States. What would be the

offsets and the source of the savings? Ultimately, there would be fewer departmental enclaves and considerably fewer professors overall. If distance learning is ever to fulfill its promise, something of this magnitude would need to be considered very carefully. A recent article by futurists Murray Turoff and Starr Hiltz put it this way:

> Once more courses are available in digital formats as well as on campuses, geographic monopolies and barriers that have sustained thousands of different colleges and universities in the U.S. and around the world will weaken.[26]

Bricks-and-Mortar Versus Blended Learning

Because of the relatively difficult task of duplicating for-profit universities' cost model and the equally daunting challenge of enticing more full-time professors to become involved in e-learning, it seems that another answer might be for universities to think outside of the box in a big way. One possibility is a different approach to capital budgeting: a direct trade-off of bricks-and-mortar investments for virtual learning development. The effects of this could be much higher classroom occupancy rates and fewer new buildings needed.

The concept is simple. If some fraction of professors taught courses using a blended approach, where about half the teaching is done in class and the rest by using technology outside the classroom, large universities could double-book hundreds of classrooms per semester. Instead of constructing $20 million buildings, a university could achieve higher levels of productivity with existing space, including significant investment in virtual classrooms, substitutions of adjuncts for full-time faculty, partnerships with for-profit institutions (as appropriate), and other innovations.

Much of the burden here would fall on the faculty, since a large number would need to be recruited to participate. University administration would have to deal with the real challenge of trading capital construction dollars in some cases for investments in leveraging e-learning.

A large university could potentially save millions of dollars a year in costs of building new structures and costs associated with maintenance of those structures, and considerably more in reduced unit costs per course, even after paying faculty for participation.

Deliberate Proliferation of Adjunct Faculty

The major obstacle at traditional universities to offering distance learning is financial. Traditional delivery methods are inherently cheaper than technology-enhanced ones, and always will be under current university staffing norms. Perhaps the habit of using relatively few adjuncts for e-learning courses could be reversed and a new cohort of part-timers established. They would teach most of the e-learning offerings, primarily using materials approved and developed by the individual departments, just like the University of Phoenix and the Open University. Intellectual property issues would be drastically reduced.

Computing the savings is relatively easy, since there is at least a 400 percent differential between full-time and part-time salaries—more if overhead is considered. If a minimum of a few hundred courses could be managed this way each year at a large university, the annual savings would be in the millions of dollars after just a few years. The real advantage, however, would be the shift required at the level of departments, schools, and colleges within each university—they would control the content because they would prepare it. There is an important caveat associated with this idea: Because of the current second-class status of adjuncts at traditional universities, there would need to be a clear settlement on pay, benefits, and other disputed issues. The for-profit adjunct professor typically expects no benefits because teaching is a sideline. A traditional university would need to rationalize the differences between this type of adjunct and a contract employee who might serve for several years teaching a full load of courses. The latter employee would require a cluster of benefits and incur significant overhead, and the unit

salary cost of each class would be considerably higher, perhaps 300 percent higher than the part-time, no-benefits adjunct.

This idea might well be found unworkable, of course, given financial and political realities. Nonetheless, the concept could be the basis for investigating newer and more appropriate solutions, perhaps linked to the suggested no-nonsense virtual university and the serious trading of bricks-and-mortar construction for drastically upgraded e-learning environments.

Crucial but Costly

Finally, there is an easier solution, far less painful than any of the approaches already suggested: Accept the status quo as a valid approach to online learning programs at traditional universities.

I have claimed that e-learning is a financial loser in the long term except at extremely high revenue levels. This assumption ignores an obvious fact of life at any institution of higher education—e-learning is a necessity, a significant convenience, an indispensable service, and a way of life. So it's possible to continue what most universities do now: take their lumps at the budget table but resolve to offer e-learning where it fits the institution strategically. This is not necessarily a strategy of capitulation—some of the drastic measures described to achieve profits from e-learning programs might not justify the difficulties they could cause on a traditional campus. In such cases, accepting the necessity—and the unrecovered costs—of developing and offering online learning programs makes sense. Each institution will have to weigh the trade-offs and make e-learning decisions according to its own culture, finances, and goals. My suggestion is simply to look at the possibilities for changing the e-learning model to one potentially more profitable than the traditional, heavily subsidized model in place on many campuses today. *e*

Endnotes

1. E. Allen and J. Seaman, *Entering the Mainstream: The Quality and Extent of Online Education in the United States, 2003 and 2004* (Needham, Mass.: The Sloan Consortium, November 2004), p. 3, <http://www.sloan-c.org/resources/entering_mainstream.pdf> (accessed November 4, 2005).

2. Ibid.

3. T. L. Russell, *The No Significant Difference Phenomenon: A Comparative Research Annotated Bibliography on Technology for Distance Education* (Montgomery, Ala.: International Distance Education Certification Center, 1999).

4. J. M. Wilson, "Adventures in Education: The Maintenance Contract for Lifetime Education," University Continuing Education Association, March 30, 2005, slides 6 and 7, <http://www.jackmwilson.com/ArticlesTalks/UCEAMarch2005.ppt> (accessed November 4, 2005).

5. "Numbers," *Time*, December 5, 2005, p. 29; now in the magazine archive, <http://www.time.com/time/magazine/article/0,9171,1134786,00.html>.

6. EDGAR filing for Apollo Group, parent company of Apollo Education Group and the University of Phoenix Online, <http://yahoo.brand.edgar-online.com/fetchFilingFrameset.aspx?FilingID=3786130&Type=HTML> (accessed November 4, 2005).

7. Strayer Education, *Washington Post*, October 28, 2005, p. D04, <http://www.washingtonpost.com/wp-dyn/content/article/2005/10/27/AR2005102702226.html> (accessed November 14, 2005).

8. In Table 1 a major source of University of Phoenix data was the EDGAR filings, op cit. The University of Phoenix's extensive Web site (http://www.phoenix.edu) was useful for faculty data, although salary data came from K. Yung, "For the University of Phoenix, College Is a Big Business—and Getting Bigger," *Dallas Morning News*, February 28th, 2004. For the Open University major sources were *Facts and Figures 2003–2004*, <http://www.open.ac.uk/foi-docs/FF.xls> (accessed November 4, 2005), plus various online information sites and interviews with senior Open University administrators. Data on graduate school class limits was gained from EDGAR listings for the University of Phoenix and from *U.S. News & World Report*, E-Learning Guide, Online Graduate Degrees, <http://www.usnews.com/usnews/edu/elearning/gradoneline.htm> (accessed November 14, 2005), for traditional institutions. The typical salary matrix for adjunct professors at traditional universities was obtained from various Web sites, such as <http://www.gmu.edu/departments/provost/geninfo.htm>. Placement success data came from sources like "Online Learning," *Government Technology*, Vol. 18, Issue 9, September 2005, p. 11, <http://www.govtech.net/magazine/channel_story.php/ 96483> (accessed November 14, 2005).

9. C. A. Twigg, *Innovations in Online Learning: Moving Beyond No Significant Difference*, The Pew Learning and Technology Program Center for Academic Transformation at Rensselaer Polytechnic Institute, 2001, p. 23, <http://www.center.rpi.edu/PewSym/Mono4.pdf> (accessed November 4, 2005).

10. *U.S. News & World Report*, E-Learning Guide, Business Degrees Online, Accredited Programs, <http://www.usnews.com/usnews/edu/elearning/tables/mba_reg.htm> (accessed November 4, 2005).

11. *U.S. News & World Report*, E-Learning Guide, Library Science Degrees Online, Accredited Programs, <http://www.usnews.com/usnews/edu/elearning/tables/lib_reg.htm> (accessed November 4, 2005).

12. *U.S. News & World Report*, E-Learning Guide, Nursing Degrees Online, Accredited Programs, <http://www.usnews.com/usnews/edu/elearning/tables/nur_reg.htm> (accessed November 4, 2005). For information on engineering degrees, see <http://www.usnews.com/usnews/edu/elearning/tables/mba_reg.htm> (accessed November 4, 2005).

13. D. Gilbertson, "Student-Recruitment Tactics Blasted by Feds: Univ. of Phoenix Audit Leads to $9.8 Mil Fine," *The Arizona Republic*, Sept. 14, 2004.

14. "Online Learning," *Government Technology*, Vol. 18, Issue 9, September 2005, p. 11.

15. Wilson, op. cit.

16. The data were collected in summer and fall of 2005 in reference to the 2004–2005 academic year. Student enrollment numbers are rounded from the original *U.S. News & World Report*, E-Learning Guide, Largest Degree-Granting Online Programs, <http://www.usnews.com/usnews/edu/elearning/lists/size_lrg_list.htm> (accessed November 14, 2005).

17. G. P. Schell, "Universities Marginalize Online Courses: Why Should Faculty Members Develop Online Courses If the Effort May Be Detrimental to Their Promotion or Tenure?" *Communications of the ACM*, July 2004, pp. 53–56.

18. Interview with Dr. John Wallin, George Mason University, October 1, 2005.

19. L. M. Pachnowski and J. P. Jurczyk, "Perceptions of Faculty on the Effect of Distance Learning Technology on Faculty Preparation Time," *Online Journal of Distance Learning Administration*, Vol. VI, No. III, Fall 2003, <http://www.westga.edu/~distance/ojdla/fall63/pachnowski64.html> (accessed November 4, 2005).

20. C. C. Schifter, "Faculty Participation in Asynchronous Learning Networks: A Case Study of Motivating and Inhibiting Factors," *Journal of Asynchronous Learning Networks*, Vol. 4, Issue 1, June 2000, <http://www.sloan-c.org/publications/jaln/v4n1/pdf/v4n1_schifter.pdf> (accessed November 4, 2005).

21. D. Carnevale, "Professors Seek Compensation for Online Courses," *Chronicle of Higher Education*, August 13, 2004, <http://chronicle.com/free/v50/i49/49a02701.htm> (accessed November 4, 2005).

22. L. O'Quinn and M. Corry, "Factors That Deter Faculty from Participating in Distance Education," *Online Journal of Distance Learning Administration*, Vol. V, No. IV, Winter 2002, <http://www.westga.edu/~distance/ojdla/winter54/Quinn54.htm> (accessed November 4, 2005).

23. L. Howe-Steiger and B. C. Donohue, "Faculty and Administrators Collaborating for E-Learning Courseware," *EDUCAUSE Quarterly*, Vol. 28, No. 1, 2005, pp. 20–32, <http://www.educause.edu/apps/eq/eqm05/eqm0513.asp>.

24. Table 2 was developed from *U.S. News & World Report* data of August 29, 2005, by counting all graduate program enrollments across six disciplines and categorizing them as regionally accredited only or regionally and professionally accredited. The University of Phoenix is shown separately for information purposes, since it constitutes a major segment of the total enrollments (49,940 of 150,486). Only 38 percent of the aggregate enrollments are in professionally accredited programs (57,949 of 150,496).

25. These rankings by tiers from 1 to 4 are part of the *U.S. News & World Report* annual college report. The 2006 report can be found online at <http://www.usnews.com/usnews/edu/college/rankings/rankindex_brief.php> (accessed November 4, 2005).

26. S. R. Hiltz and M. Turoff, "The Evolution of Online Learning and the Revolution in Higher Education," *Communications of the ACM*, Vol. 49, No. 10, October 2005, p. 62.

Stephen R. Ruth (ruth@gmu.edu) is Professor of Public Policy and Technology Management and Director of the International Center for Applied Studies in Information Technology in the School of Public Policy at George Mason University in Fairfax, Virginia.