THE FUTURES PROJECT

The New Competitive Arena: Market Forces Invade the Academy

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For the first time in any of our memories, higher education is undergoing a transformation powerful enough to change the basic way universities and colleges operate. Driven by new and compelling forces, the American system of higher education is becoming more intensely competitive. Neither the university and college leaders who run the institutions, nor the governmental leaders who set the system's policies, are ready for the changes ahead.

Higher education in the United States has always viewed itself as competitive, particularly when compared to systems elsewhere in the world.² In reality, however, the competition has been muted, mitigated by tradition and governmental regulation. State governments have basically operated state-by-state cartels. Each institution is assigned its role, and regulations govern the funding, operation and scope of each. Now the system is shifting steadily toward greater competition and more dependence on market forces, less dependence on regulation. Most significant, a powerful set of new forces is adding to the already growing competition, changing it from benign to aggressive. This is creating both opportunities and dangers for the institutions and for society.³

The task for policy makers is intellectually and politically challenging—how to develop new policies that build on these new pressures and create an effective and thoughtful marketoriented system of higher education. For this to take place, a serious debate about the advantages and disadvantages of various policy approaches is urgently needed. Political and academic leaders need to put aside their reluctance to engage in discussion of fundamental issues and open debate about possible options for structuring higher education lest, one day, they awake to find that the restructuring has progressed on its own and created a system that is awkward at best, or dangerous at worst. Institutional leaders must as well address their own institutional planning. To thrive, and perhaps even to survive, every institution will need a strategy that helps it to focus on what it does best and helps it to improve its performance.

We will first take a look at the forces pushing higher education toward greater competition; then at the implica-

tions of the resulting changes; and finally attempt to identify the risks if institutions and policy makers are slow to respond.

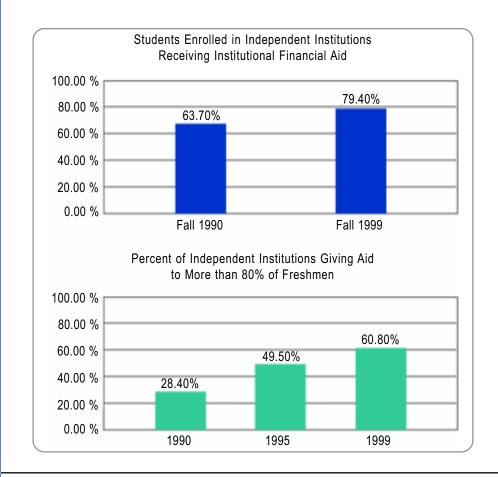
A New Intensity in the Traditional Competition

There has always been competition among institutionsfor students, for research dollars, in fundraising, in sports, and particularly in prestige. Recently, the competition in these traditional forms has been growing in intensity.⁴

■ The use of student aid to attract better students is escalating. Several states, led by Georgia with its HOPE Scholarships, have begun offering merit-based aid. Some states are now offering merit-based reductions in out-of-state tuition as well.⁵ Independent institutions are using their own funds for merit scholarships. The result has been a sharp rise in the share of students that receive institutional financial aid (at independent institutions this now reaches 80 percent).⁶

Private Institutions Offer More Aid to More Students

The National Association of College and University Business Officers reports that 79.4 percent of students enrolled in independent institutions in Fall 1999 received institutional financial aid, growing from 63.7 percent in Fall 1990; the percentage of independent institutions giving aid to more than 80 percent of their freshmen grew from 28.4 percent in 1990 to 49.5 percent in 1995 to 60.8 percent by 1999.7



The most recent examples are Yale's announcement that it will make student aid available to foreign students on the same basis as domestic students⁸ (a move that breaks with a widely shared custom), and Princeton's announcement that it will replace student loans with grants.⁹

- Programs for older, working students have exploded. Sister Joel Read, the President of Alverno College, reports that when they started a weekend college in Milwaukee 24 years ago, they were alone. Today, Alverno competes with 27 such programs seeking to serve adult learners in Milwaukee.¹¹
- The number of applicants for federally funded research grants, always a competitive arena, has grown substantially and researchers find more competitors applying to each program and proposal success rates falling.
- Even inter-collegiate athletics is more intense, as several new reports have documented, with the intensity of recruiting increasing and coaches' salaries reaching (by academic standards) the stratosphere.¹²

What is causing this change? It is not a lack of students. More are applying than ever as new demographic pressures encourage more and more diverse students to attend higher education.¹³ Nor is it a lack of research dollars, for total grant funding has grown smartly. But while the number of students is growing, the competition and the search for new revenue sources¹⁴ are increasing faster.

The push toward greater competition comes, among other things, from the emergence of more demanding and sophisticated students. As institutions increasingly treat their students as consumers, students respond by acting more like consumers, bargaining over student aid packages, or attending multiple institutions to meet their specific needs. The ratings systems (*U.S. News and World Report*, etc.) exacerbate the competition for better students by causing a push for more and better applicants so they can turn down a greater percentage. This allows a move up in the rankings (much as college football coaches push for blowouts to improve their

Randall Smith, a freshman at Princeton from Anchorage, said about the financial aid announcement, "I am planning to go on to graduate school, so it will be nice not having a large debt from my undergraduate years starting out...I'll have some from the loans that I took out from this year, but besides that, I will be saving about \$12,000."10

Michele Tolela Myers, president of Sarah Lawrence College, recently wrote an indictment of the new culture of competition. She described it as:

We "bid for student talent," as the new language would put it, because we know that "star value" in the student body affects the "brand value" of the university's name: its prestige, its rankings, its desirability, and ultimately its wealth and its ability to provide more "value per dollar" to its "customers." 16

national computer rankings and their chances for a bowl bid).

Gordon Winston has described this new climate as an "arms race" where institutions engage in a frenetic and neverending search for better students, better faculty, winning athletic teams, more research funding, prestige, and, above all, revenue, fueled by the belief that ever-increasing revenue is necessary to keep up with the Joneses.¹⁷

New Forces Intensify the Competition

What makes this trend so explosive is that it is reinforced by new forces of change. One element is a rapidly escalating number of new competitors.¹⁸ This includes for-profit degree granting universities and colleges. There are today over 650 such institutions.¹⁹ There has been, as well, an explosion of virtual or online-courses available from traditional non-profit institutions, from for-profit institutions, from institutions that are entirely virtual, and from consortia of existing institutions. Altogether, there are estimated to be several thousand American institutions providing virtual courses enrolling well over a million students.20 Digital technology is transforming teaching and learning in all settings including traditional classrooms, creating new opportunities for those institutions alert enough to strive for recognition as leaders in the art of teaching and learning. And finally, there is an emerging trend toward the globalization of higher education. There are already a number of institutions well on the way toward truly global operations-the British Open University, Monash University of Australia, NYU, the University of Maryland, the University of Phoenix, or Temple University, to name only some of the contenders.

These new providers—virtual institutions, virtual arms of traditional institutions, for-profit universities and colleges, consortia—expand the universe of post-secondary institutions from which students can choose from the traditional 3600 to over 5000.²¹ And beyond this array there are even more choices—certificate programs run by the information technology companies²²; corporate universities (which now number over 2000)²³; newly aggressive community colleges partnering with collaborators to provide online courses so as

The Rise of Virtual Consortia: Some Examples

(Please see Endnote 21 for a more detailed chart on consortia.)

Consortium Name
African Virtual University
http://www.avu.org

American Distance Education Consortium http://www.adec.edu

Cardean University http://www.cardean.edu

Colorado Community College Online http://www.ccconline.org

Contact South http://www.contactsouth.org

EuroPace http://www.europace.be

Fathom http://www.fathom.com

Great Plains Interactive Distance Education Alliance http://www.okstate.edu/hes/gpdc/

National Technological University http://www.ntu.edu

Pennsylvania Virtual Community College http://www.pavcc.org

Scottish Knowledge http://www.scottish-knowledge.co.uk/ home.cfm

Southern Regional Electronic Campus http://www.srec.sreb.org

SUNY Learning Network http://sln.suny.edu

Universitas 21 http://www.universitas.edu.au

Western Governors University http://www.wgu.edu/

to allow their students access to four year baccalaureate degrees; museums, publishers and even government agencies offering courses.²⁴ The sum of these challenges is a fundamentally changed climate of competition. Every student now has multiple and differing choices. Every college and university faces new competitors.²⁵

	Enrollment Growth in Distance Education C (for all institutions) ²⁸	Courses
1994-95	Total enrollment	753,640
1997-98	Total enrollment in college-level, credit-granting distance education courses	1,343,580
1997-98	Total enrollment	1,632,350

Another cause of the more intense competition is the blurring of the difference between for-profit and non-profit institutions. A significant change in public perception has taken place as some of the best known for-profit institutions have established themselves inside traditional academic areas, particularly bachelor's and master's degree programs, formerly reserved for traditional non-profit universities and colleges.²⁹ The best known of these, but hardly the only one is the University of Phoenix. By determined efforts to evaluate learner outcomes and faculty effectiveness at teaching, the best of these for-profit institutions have worked at positioning themselves as quality leaders rather than institutions of questionable reputation.

The traditional sense that non-profit universities alone represent quality is further eroded by the fact that many of the best known non-profit universities, both public and private, have established for-profit subsidiaries or joined with for-profit firms in joint educational enterprises—NYU, Columbia, Duke, Temple, Stanford, Chicago, Nebraska, and Maryland are examples.³⁰ The academic community is taking on other aspects of the commercial world as well, such as outsourcing, or high executive salaries. These may make the institutions more efficient, but they may also erode the independent aura of the university and college.

Enrollment Growth in Virtual Education

While Western Governors University's low enrollments have often been cited as evidence that virtual education is of limited interest to students. Colorado Community College Online's enrollments grew from just over 100 students in the Spring of 1998 to 1270 by the Fall of 1999. The Southern Regional Electronic Campus reached enrollments in 1999 of more than 20,000 students, and online enrollments at the University of Maryland University College jumped from nearly 21,000 in 1998-1999 to almost 44.000 in 1999-2000.26 The International Data Corporation expects the number of "Web Learners" to grow to 2.2 million by 2002, and the U.S. Department of Education reported total enrollment in all distance education courses to have reached 1.6 million in 1997-98.27

University	For-Profit Arm	URL
Babson College	Babson Interactive, Inc.	http://www.babsoninteractive.com/
Columbia University	Fathom	http://www.fathom.com
Cornell University	eCornell	http://www.ecornell.com/
Duke University Fuqua School of Business	Duke Corporate Education, Inc.	http://www.dukece.com/
New York University	NYUonline	http://www.nyuonline.com/
Temple University	Virtual Temple	http://www.temple.edu/
UCLA	Global Film School, Inc.	http://www.globalfilmschool.com/
University of Maryland	UMUC OnLine.com, Inc.	http://www.umuc.edu/gen/virtuniv.html
University of Nebraska	Class.com	http://www.class.com

This new array of opportunities is much easier for the student to access because all are listed on the Internet. A student interested in choosing an undergraduate college, enrolling for an MBA, or selecting an introductory math course can easily peruse a wide variety of options—a range of institutions or a selection of virtual, traditional or mixed courses—and find something that matches his or her current needs. A student enrolled in a university who finds a given course is of poor quality—or even just inconvenient—can find a substitute nearby or online. High school students increasingly show up at the college door having already taken a number of virtual college-level courses. (Utah rewards this with a scholarship in order to cut the overload of students trying to enter the state universities.) As competition grows, each registrar or admissions office is under pressure to accept these credits lest the applicant choose a competitor institution that will.

The result of all of these changes, taken together, is a market place for higher education that allows more choices among a wider array of alternatives; a growing interest in convenience and effectiveness (i.e., learner outcomes); and a readiness to attend multiple institutions on the way to a degree. It is the beginning of a shift in the nature of prestige —from a view favoring the old, established traditional institutions to a new view of higher education that is yet to become

fully clear.

The Impact of Technology

New technologies, principally the computer and the Internet, presage an era in which prevailing approaches to pedagogy will be transformed, measuring learning outcomes will become more feasible and more common, and interactive software will become central to both virtual and traditional classes. The result will likely be a new form of competition. No institution, no matter how great its prestige in the traditional mode, will be able to escape the need to compete effectively through the skilled use of technology to enhance learning.³¹

What makes technology so important an influence in the growing competition is its capacity to increase both student learning and student interest in learning. Technology can engage students in active learning with realistic, practical problems that connect learning and real life. Technology offers the student the opportunity to return, at the student's own convenience, to material previously covered.³²

Technology also offers the faculty important advantages. When students use software, the Internet, or both, faculty can, for the first time, see the different forms of learning that individual students bring to the task. This allows skilled faculty to have a greater impact on learning. Faculty roles are changing as they are forced to shift from the role of information provider to that of learning facilitator or tutor.³³

In choosing where to enroll, students are, increasingly, demanding evidence of the institution's capacity and skill in employing technology. Digital technology also equips students with a level of information that was previously unavailable. Institutional websites tell prospective students much more than brochures ever did.³⁴ Once enrolled in a given university, a student can compare the approach taken in one course with other courses at the university, as well as with courses at other institutions. Such transparency can only help create a greater level of competition and increase the demand for skilled uses of technology.

The use of digital technology can, as several studies have shown, reduce the costs of teaching and learning even as it improves learning. Technology also offers, for the first time, a capacity for new providers of higher education to undertake, on an efficient basis, selected parts of what the traditional university provides—to unbundle, in other words, university services.35 In the past, if an institution wanted its students to interact with the faculty or to interact with each other, the efficient mode—in fact the only mode—was use of a campus, student union, etc. Today, technology allows an effective and efficient alternative, attractive to some students, without the extensive capital investment needed to build even a commuter campus. Technology also creates an additional pressure that changes the shape of the new competition. The high investment cost of the new computer mediated courseware pushes the institutions that make these investments to seek larger markets—i.e., to compete with additional traditional colleges and universities in new markets, both here and abroad.36

A Fundamental Change in the Nature of Competition

A new dimension to competition is emerging as a result of these changes. There is a new competition, a competition of pedagogy, with each institution trying to demonstrate its capacity to help students learn.³⁷ Technology is key in this. Sixty years ago, Joseph Schumpeter argued that technology created the opportunity for a fundamental shift in the nature of competition, threatening the lives of existing organizations.³⁸ Four years ago, Clayton Christensen updated this observation with his description of "disruptive technologies."³⁹ These disruptive technologies, in their first iteration, have different benefits and often lower costs, but often still need refinement to become competitive. As the technology continues to improve, revolutionary changes follow. This is exactly the pattern by which the technology for improving learning is unfolding in higher education. While its use is growing rapidly, it is, in its present form, primitive compared to the obvious potential. Each month sees new applications that are better, more exciting for the student, less costly, more reliable, and easier to use.

The traditional battle for prestige has been largely a

UMUC Online.com, Inc. Vies for Market Share

"The development of this company will enable us to break the traditional 'thought-mold' for the way educational providers compete in a commercial setting," said [Dr. Gerald A.Heeger, University of Maryland University College President]. "Colleges and universities that want to participate in this competitive online market must think and act differently in order to succeed. We are doing just that."

battle of inputs—of endowment, of well-known faculty, of selectivity of students, of an attractive campus, of reputation. Since little or no information is available about how much students are learning, parents, policymakers and the academy itself are forced to make assumptions about quality—assumptions that usually lead to equating expectations as to learning with institutional prestige. Now this is changing. There is a growing pressure, principally from policy makers, to measure learning. Some of the new providers are already doing this well. There is, as well, a growing effort to create new forms of learning outcomes measurements. Technology is an increasing help in such measurements.

The sum of the new challenges described above is a fundamentally changed climate.⁴² Every student now has multiple and differing choices. Competition is moving beyond the old factors that defined prestige. Price has become important. For many working students, convenience is key.⁴³ The quality of course work is becoming more of an issue (including how much real contact there is with faculty).⁴⁴ There is growing attention to how interesting courses are to students. All of this will force a change away from dull and boring lectures.

Surely, some of the new entrepreneurial efforts will fail. But, just as surely, as the competition intensifies, the weak points of existing institutions will become glaringly evident.⁴⁵ If, for example, introductory math courses are large, taught in an abstract lecture form by a teaching assistant; or if freshman science courses have laboratories with hundreds of students; or if faculty contact is far more limited than implied in the college brochure; then the institution will be increasingly at risk. Rhetoric will no longer be a sufficient cover. Students who, up to this point, have had little capacity to weigh the institution's performance against other competitors, and who have simply gone along with the institution's flaws because there seemed to be no other choice, will now be equipped to compare and choose realistic options. Some whole institutions, particularly those unwilling to plan for the future, to address their shortcomings and to change, will run into trouble and may even fail.

The academic landscape is also likely to become more

Danielle Sessa wrote about the new approach to planning of for-profit higher education institutions: "The nation's for-profit higher-education companies have been around for years, and they are nothing like a typical football-obsessed college. Students who enroll in these institutions care about one thing: classes. They are in their mid-30's. They don't want frat parties. They want better jobs. These schools read the want ads closely, and they respond by offering courses in subjects such as finance, management, nursing and information technology."41

complex. The result of the new competition is likely to be an array of institutions that mix many of these approaches—virtual and face-to-face instruction, for-profit and non-profit, consortia and individual institutions, etc. along with a great deal of technology—each institution seeking to create a specific niche. The experience of the last half century, when institutions competed largely with their "own kind" and where each could count on a reasonably predictable cadre of applicants, is breaking down.

The Impact of the New Competition

There has been considerable speculation on which institutions are most vulnerable with attention focused particularly on the less distinguished state colleges and the unselective private colleges. 46 Many of the state colleges suffer from the tendency to try and be all things to all people expanding the number of majors, adding graduate and professional programs, building dormitories—often becoming pale copies of the state research universities.⁴⁷ However, when one looks carefully, there are examples within each of these categories of aggressive and focused institutions doing remarkably well. While surely the best known and the best endowed institutions enter this period of enhanced competition with significant advantages, the real danger is to those institutions without a strategy, without a focus, without a willingness to change and to improve. How high this number will prove to be is uncertain, but one thing is clear—every institution will be affected.48

In addition to institutions, some programs, or even courses, will be threatened as well. For example, many universities have fallen into the habit of using large lectures for introductory courses. While these serve as cash generators that subsidize issues of interest to the faculty such as smaller upper division courses or greater faculty time for scholarship, they are disliked by students and less likely to achieve effective learning outcomes. For-profit firms are already targeting these courses with more attractive offerings—i.e., lower cost and more interaction. The university then faces a choice of either outsourcing or revamping its introductory courses so as to be competitive.

Reflecting on the competition in the Philadelphia region, reporter James O'Neill wrote:

Small private colleges, a gateway to higher education and professional success for thousands of Americans over the decades, are under increasing financial duress.

Despite the booming economy of the last decade, some small colleges have recorded significant budget deficits.

Despite steady demand for higher education, many have suffered enrollment declines.

And while a few elite schools rode Wall Street's bull to billion-dollar endowments, most small colleges were left in the dust.

In the Philadelphia region, long known for the rich variety of its colleges, many schools are struggling to reinvent themselves with new courses, new dormitories and new technology, spending heavily in a high-stakes bid to survive.

For some, the situation is precarious.

"Many schools are only three bad enrollment years away from bankruptcy," said Laurence W. Mazzeno, president of Alvernia College in Reading.⁴⁹

What creates the opportunity for the new providers to compete with established institutions is the long advance of academic arteriosclerosis. Gradually but steadily, costs have increased; the rewards for faculty have shifted from teaching to publication; the steady addition of programs important to someone has led to a dispersion of resources and loss of focus; and governance has become cumbersome to the point of immobility. The result is that the rhetoric of the campus is better than the reality.

One danger is that the new providers (either for-profit or online or both) have begun to cherry-pick the "profitable" parts of the enterprise—the moneymaking majors (e.g., business or education) or the large introductory courses. Universities have used these as revenue sources to cross-subsidize high cost majors or courses, faculty scholarship, or community service. If the university loses the capacity to cross subsidize, who will provide the resources for these activities?

None of this is to say that traditional campus-based universities and colleges are about to disappear. The traditional model has great advantages, which is why it has survived for over a thousand years. Most undergraduate students of the traditional age who can will still choose to attend a traditional campus. At research universities, cutting edge questions will still be pursued with zeal. However, competition is forcing a hard re-examination as to the purpose and effectiveness of every activity—from how well and often faculty interact with students, to whether expenditures on student life actually create a learning community, to the issue of costs and the wise use of resources. Slowly—but surely—the nature of even the most traditional institutions will change.

The Implications for Policy

A difficult set of choices lies ahead for policy makers, choices that will determine whether the new competitive pressures bring new energy, purpose, and productivity to higher education or whether they instead bring a loss of valued attributes. Most policy makers have yet to realize that market forces in higher education need their attention. But a

growing number of issues demand careful analysis and action. Policy can affect whether:

- There is greater diversity among institutions or simply sameness (e.g., whether all of the airlines try to leave LaGuardia at 5:30 p.m.).
- Universities and colleges expand and improve their service to the least advantaged or focus on those easier to educate and better able to pay.
- Universities and colleges focus on the effective socialization of the student to society, including the development of civic skills, or focus only on work force skills.
- Colleges and universities become entrepreneurial or retreat into a defensive, bureaucratic mode.
- Effective methods of measuring quality, particularly as it affects learner outcomes, become widespread.
- A smaller number of large, worldwide institutions or a wide array of independently governed institutions come to dominate the higher education landscape.
- There is constructive but not destructive pressure to improve costs.

What practical steps can policy makers take? They can:

- Require a better flow of information and a greater degree of transparency so that students—and others, including administrators, faculty, and policy makers can make better choices.
- Consider alternative policy structures such as the transformation of institutions into charter universities and colleges, reducing the bureaucracy and encouraging responsiveness to public needs.
- Provide incentives for the wise use of technology to enhance teaching and learning, expand access, and improve efficiency.
- Require the measurement of learner outcomes.

- Design financial-aid packages that balance the desire to reward student merit with the needs of students from low-income and less-advantaged backgrounds, as is being tried in California.
- Set up funding mechanisms that encourage institutions to be entrepreneurial, define their niches, and differentiate their missions.

The Implications for Institutional Strategy

As university and college leaders have become more aware of the array of new providers and of the power of the shift toward market forces, there is a rapidly growing interest in how to prepare for the bumpy road ahead. Colleges and universities need to prepare for change. The changes will not be as sweeping as the zealots proclaim nor as limited as the skeptics believe, nor will only one mode of institutional organization prevail. The likely result will be a mixed system —traditional classrooms, virtual classes and mixtures; forprofit and non-profit institutions and non-profit institutions with for-profit subsidiaries; global institutions and local. This does not mean that the institutions will look and act much like they do now. Competition will seek out institutional weaknesses—those activities where current performance is poor. The failure to address poor performance will lead to danger. While swelling undergraduate enrollments will temporarily help the cause of those wishing to avoid change, the pressure of these new competitive forces will continue to grow, and gradually the resistance to change will abate.

How should colleges and universities react?

- Every institution will need a strategy in order to compete. Given the rate of change going on in society, that strategy will need to be dynamic, not a one-time effort. The strategy will need to define the activities that will provide competitive advantage and to focus resources on those activities rather than trying to be all things to all people.⁵⁰
- Real advantage will come from being different, creating a strategic position that serves the real needs of students. There is a problem inherent in the rational planning for improvement of costs, quality, etc. Today,

few universities and colleges are doing this sort of planning and focusing on costs and the quality of learning. In the short run, therefore, institutions that do create a process for improvement will do well. But as more and more are forced to undertake such planning, there will be gains in efficiency and effectiveness, but no particular competitive advantage. As Michael Porter's work suggests, institutions will then be forced to develop strategies that provide both improvement and a clear competitive advantage.⁵¹ Given the history of higher education, there will be a tendency for institutions to straddle, to be all things to all people, rather than to focus. Consequently, great advantages will accrue to those colleges and universities with the wisdom, courage and capacity to create a special place for themselves.

■ Leadership will be key in the new competitive environment. Institutions will need leaders capable not only of creating an institutional vision and an institutional strategy, but capable of drawing faculty, the administration, the board, alumni and students into the process so that they understand, are energized by and support the strategy. As Ronald Heifetz argues, "Leadership means influencing the community to face its problems." ⁵²

The Risks if Academic Leaders and Policy Makers are Slow to Understand

Whether policy makers and academic leaders are capable of addressing these issues in the months and years ahead or not, higher education will continue its inexorable evolution toward market forces. The continuing rapid expansion and simultaneous continuing improvement in online or virtual courses insures a growing level of competition. New alternatives to traditional college or university enrollment appear—such as corporate universities or information technology certificates. Institutional leaders often argue that these new competitors affect primarily older, working students. What is often overlooked is that older, working students are now, in fact, the majority of students enrolled in our traditional institutions.

But even beyond this, the new competitive approaches are steadily encroaching on the traditional institutions in

many areas. More and more of the brightest high school students are engaged in online courses during their senior year, sometimes even their junior year, arriving at the college admissions office with courses for which they are demanding credit. For-profit institutions are gradually making inroads into the "market" for introductory courses. Every month some new competitive encroachment becomes visible.

Without careful analysis, discussion, and debate, higher education will drift into an environment that is unconsidered and to some degree unexpected. A likely projection is that there will be a growing competition for the "best" students—those who can pay and are smart and therefore easy to educate. The tendency will be to ignore the less able and the less affluent. This tendency is already evident in both institutional student aid and state and federal policy.

Given an absence of careful planning, traditional universities and colleges are also likely to move, a small step at a time, in a direction that brings them closer to the activities and philosophies of the for-profit institutions. In part, this is already happening as the traditional nonprofit universities and colleges, either public or private, spin off for-profit subsidiaries or sign agreements with for-profit concerns. In part, the change is happening as institutions become more "for revenue," even if not "for-profit," in their search for ever greater resources. The danger of this gradual but important transformation is that the traditional institutions will lose the independence of mind and action that is so essential for the functioning of a free society.⁵³

There is also a danger that, without analysis and debate, there will be a continuing focus on the less useful measures of institutional performance, such as prestige, rather than on learning outcomes. It will be a great loss if, as a more competitive environment emerges, imaginative, high value added but less wealthy institutions are damaged or eliminated while some better known, better endowed institutions with more pedestrian learning environments gain ground because of their prestige.

There is a good chance that, under any conditions, there will be a gradual growth of large scale institutions—either

large, worldwide operations of a single institution or linked, smaller institutions with uniform practices such as shared courses or common assessment—a sector much like franchised fast-food restaurants. Because courseware and other forms of new software for learning are so expensive, their development will encourage such large-scale operations. There is a danger as well that their development will move an important part of the academic process, the preparation of course content, out of the traditional academic departments and into for-profit concerns. Of course, books and other learning materials are already produced commercially. Software, however, requires a much higher investment, meaning there will be fewer options available, and it will have more impact on the learning process.

While the dangers noted above are both real and of great consequence, the opportunities inherent in the new environment are equally great. There lies ahead the opportunity to create much more effective modes of learning, suitable for all students, not just some students. There is the opportunity for learning to become much more engaging and exciting. There is the opportunity for costs to be lowered, access to be increased. Not only are the risks well worth the gain, but we have no choice. Change is coming whether we are prepared or not.

All of this is simply to say that there are great advantages in opening serious discussions in which academic leaders and policy makers sit down together. Over the years, academic leaders have assiduously avoided meaningful discussions with policy-makers about real issues of the structure of higher education fearing interference in the life of the academy. Policy makers have been equally reluctant, fearing that such discussions will turn into one more round of special pleading for added resources. This is a good time to break down the reluctance and begin thinking in terms of the future of higher education.

End Notes -

- David Collis, <u>When Industries Change Revisited: New Scenarios for Higher Education</u> (New Haven: Yale University, September 1999) 2.
- ² The Economist compared the competitiveness of American universities to others in the world in this statement:

The unique advantages of America's universities go beyond the hybrid vigour of a system in which state and private institutions have all been allowed to seek out their competitive advantage. Much of the system's success derives from the readiness of American academics to let market forces work. In contrast to most countries, where pay is centrally negotiated, competing American campuses strive to outbid one another for talent.... How ready are academics in continental Europe and Japan to accept such a free-for-all? ("The Core and the Cloud," Economist 4 Oct. 1997: S20).

- ³ A danger inherent in greater competition is a pressure toward winners and losers among the institutions of higher education. This has, in fact, been the result in New Zealand, both among institutions of higher education and at the school level, after stronger market forces were introduced a decade ago. New Zealand began releasing state control and cutting funding to higher education in 1988. The unfortunate result was skyrocketing tuition fees; the strong institutions of higher education have become stronger but a number of the weaker institutions may be forced to close and are facing bankruptcy. There has been a 20 percent decrease in higher education enrollments from the country's poorer districts. At the school level, decentralization and competition have led to considerable segregation. In 2000, the government began seeking ways of reasserting its control over the sector. See Edward B. Fiske and Helen F. Ladd, "A Level Playing Field? What We Can Learn from the New Zealand School Reform," American Educator (Fall 2000): 28; and John Webster, President/CEO of UNITEC of Auckland, New Zealand, personal conversation with Frank Newman, Paris, France, 11 Sept. 2000; and New Zealand Ministry of Education, "Tertiary Education in New Zealand: Policy Directions for the 21st Century," White Paper Nov. 1998, Oct. 2000 http://www.minedu.govt.nz/Tertiary/Review/wp/ chap>; and New Zealand's Vice-Chancellor's Commission, "The Priorities: Funding, Student Financial Support, Differentiation and Research," NZVCC Newsletter February 2000, Oct. 2000 http://www.nzvcc.ac.nz/pubs/newsletter55/text.
- ⁴ While there has always been competition among institutions for students, for research grants, in fundraising, in sports, and in

prestige, and while American institutions have traditionally engaged in greater competition than is the case in most other countries, a form of competition is emerging that is new to higher education—more vibrant, more rapid, less forgiving, more likely to bring significant change. *The Economist* describes universities in this new climate as, "not just as a creator of knowledge, a trainer of young minds and a transmitter of culture, but also as a major agent of economic growth: the knowledge factory, as it were, at the center of the knowledge economy" ("Inside the Knowledge Factory," Economist 4 Oct. 1997: S3).

- ⁵ Craig Savoye, "State colleges start border wars over tuition," Christian Science Monitor 27 Dec.2000: 2-3.
- National Association of College and University Business Officers, "Positioning for Competition," by Lucie Lapovsky and Loren Loomis Hubbell, In "Proceedings from the NACUBO Forum on Tuition Discounting" 27 April 2000, 20 Aug. 2000 www.nacubo.org/website/members/issues/bulletins/ Discounting.pdf>. See also Edward B. Fiske, "Financial Aid Free-For-All As Students and Colleges Seek Deals," New York Times 12 Nov. 2000, Education Life: 34, 36.
- National Association of College and University Business Officers, "Positioning for Competition," by Lucie Lapovsky and Loren Loomis Hubbell, In "Proceedings from the NACUBO Forum on Tuition Discounting" 27 April 2000, 20 Aug. 2000 www.nacubo.org/website/members/issues/bulletins/ Discounting.pdf>.
- ⁸ Karen W. Arenson, "Yale Expands Aid Plan to Help Foreign Students," New York Times 15 Nov. 2000: B5.
- ⁹ Karen W. Arenson, "Princeton to Replace Loans With Student Scholarships," New York Times 28 Jan. 2001.

Following Princeton's announcement, Harvard announced it would increase the size of financial aid packages by \$2,000 a student (Scott Carlson, "Harvard Increases Size of Financial-Aid Packages by \$2,000 a Student," <u>Chronicle of Higher Education</u> 22 Feb. 2001, 2 April 2001 <www.chronicle.com>). See also Andrew Brownstein, "Upping the Ante for Student Aid," <u>Chronicle of Higher Education</u> 16 Feb. 2001: A47-49.

It is worth noting that this competition is taking place at all types of institutions, and it certainly is not limited to the Ivy League.

A Trend Toward Negative Tuition?

Winston and Zimmerman assert that a new price structure may emerge, with higher prices charged by poorer schools (who spend less on their students) and lower prices charged by institutions that are wealthier. Academic quality may come to have an inverse relationship with price: "There is an increasing trend for high cost schools at the top to offer low or negligible tuition for top students, while schools with less spending per student will demand more money from students. The pattern of actual price/ cost ratios rise with falling subsidies will be massively exaggerated by price competition... in the top 20 private schools, students on average will be paid \$12, 740 to buy a \$38,336 education. At the 90th percentile, a student will pay the school \$1,718 for a \$17, 615 education. The median school will receive \$2.296 from its students for an education that costs \$11,046 to produce, and in the bottom twenty schools, students will pay \$6.580 for an \$8.794 education" (Gordon C. Winston and David J. Zimmerman, "Where Is Aggressive Price Competition Taking Higher Education?" Change May-June 2000: 10-18).

For a counterpoint to this view, followed by Winston and Zimmerman's response to the counterpoint, see Myra H. Strober, "More on Price Competition," <u>Change</u> November-December 2000: 6-7. Strober argues that negative tuition at the undergraduate level is unlikely to happen.

For a discussion of the aid package wars in Pennsylvania, see James M. O'Neill, "An Exacting Education in Economic Realities," <u>Philadelphia Inquirer</u> 28 Jan. 2001-2 Feb. 2001, 6-part series.

Much of this competition is between schools that have aggressively sought to enlarge their endowments in recent years through capital campaigns and investments. See John L. Pulley, "How Billion Dollar Endowments May Change 2 Institutions," <u>Chronicle of Higher Education</u> 23 Feb. 2001: A34-36.

- ¹⁰ Karen W. Arenson, "Princeton to Replace Loans With Student Scholarships," New York Times 28 Jan. 2001.
- Sister Joel Read, President of Alverno College, personal conversation with Frank Newman, Pew Forum Retreat, San Diego, CA, 7 Jan. 2001.

For an interesting overview of how this competition for adult students and corporate contracts is playing out in the state of Pennsylvania, see James M. O'Neill, "An Exacting Education in Economic Realities," <u>Philadelphia Inquirer</u> 28 Jan. 2001-2 Feb. 2001, 6-part series.

- James L. Duderstadt, Intercollegiate Athletics and the American University: A University President's Perspective (Ann Arbor: University of Michigan Press, 2000); William G. Bowen and James L. Shulman, The Game of Life (Princeton University Press, 2001). See also Welch Suggs, "Can Anyone Do Anything About College Sports?" Chronicle of Higher Education 23 Feb. 2001: A50-52.
- 13 Carnevale and Fry estimate that by the year 2015, undergraduate enrollments will have grown by 2.6 million, reaching a total of approximately 16 million students. Minority students will make up 80 percent of that growth, with overall minority enrollment rising to 37.2 percent. An astounding 31 percent of the growth will be attributable to students age 35 and older. This growth will accentuate the already clear trend toward more but increasingly different students, such as minorities and older students, who are less comfortable with the traditional academic approach. See Anthony P. Carnevale and Richard A. Fry, Crossing the Great Divide: Can We Achieve Equity When Generation Y Goes to College? Prepared for the Educational Testing Service Leadership 2000 Series (Princeton, New Jersey: 2000).

Students are also following new patterns of attendance. Many, for example, attend more than one institution at the same time, or take a virtual course while enrolled at a traditional campus. More

and more freshmen enter having already taken college-level courses online. See U.S. Department of Education, National Center for Education Statistics, <u>Transfer Behavior Among Beginning Post Secondary Students</u>: 1989-1994, NCES 97-266 (Washington, DC: U.S. Government Printing Office, 1997) 3, <www.nces.ed.gov>.

¹⁴ Many institutions have pursued aggressive fundraising and endowment-growth strategies in recent years. See John L. Pulley, "How Billion Dollar Endowments May Change 2 Institutions," Chronicle of Higher Education 23 Feb. 2001: A34-36.

Patent revenues are an increasing source of income for universities. According to a survey done in 1999 by the Association of University Technology Managers, "at least 417 new products were introduced from 98 institutions this year." These academic discoveries which were licensed to industry generated \$40.9 billion of economic activity and supported 270,900 jobs. Association of University Technology Managers, <u>AUTM Licensing Survey: FY 1999</u>, ed. Lori Pressman (2000): 1, 8 March 2001 <www.autm.net>.

15 Building on the popularity of pioneer *U.S. News & World Report's* posting of leading undergraduate programs in colleges and universities, more magazines have come up with their own lists. *Money Magazine's* "Best College Buys Now" ranks schools based on value, Businessweek annually rates MBA and executive MBA programs, and *U.S. News & World Report* now publishes ratings for both U.S. graduate and undergraduate programs. General newsmagazines such as *Newsweek* and *Time* have also begun to produce their own semi-annual rankings that combine rankings and news pieces on college life and financial aid with a phone-book like directory of university contact information.

Michael McPherson gives his perspective on how "rankings exert subtly distorting influences" in "The Enduring Folly of the College Rankings Game," Association of Governing Boards of Universities and Colleges, <u>Trusteeship</u>, Nov-Dec. 2000: 5. See also James Monks and Ronald G. Ehrenberg, "The Impact of U.S. News & World Report College Rankings on Admissions Outcomes and Pricing Policies at Selective Private Institutions," <u>National Bureau of Economic Research</u>, Working Paper No. 7227: JEL No. 12, July 1999: 9, 7 July 2000 http://papers.nber.org/papers/w7227.

- ¹⁶ Michele Tolela Myers, "A Student is Not an Input," New York Times 26 March 2001.
- 17 Gordon Winston describes the new competition as an "arms race" in "Is Princeton Acting Like a Church or a Car Dealer?," Chronicle

of Higher Education 23 Feb. 2001: B24.

- ¹⁸ Judith Eaton of the Council for Higher Education Accreditation also published a report that includes a good overview of the new providers in higher education. See Judith S. Eaton, <u>Distance</u> <u>Learning: Academic and Political Challenges for Higher Education Accreditation</u>, CHEA Monograph Series 2001, no. 1 (Washington, DC: Council for Higher Education Accreditation, 2001).
- ¹⁹ Tunde Brimah, Education Commission of the States, <u>Roster of For-Profit Educational Institutions</u> Dec. 1999, 10 Aug. 2000 www.ecs.org.
- The Futures Project: Policy for Higher Education in a Changing World created a database of institutions offering virtual courses. As of February 2001, there were almost 1,200 institutions listed in the database. After February 2001, we discontinued the database because other reliable estimates were appearing. See the Futures Project: Policy for Higher Education in a Changing World, "Report on Database of Institutions Offering Virtual Courses," Feb. 2001 www.futuresproject.org.

Bruce Chaloux of the Southern Regional Education Board's Electronic Campus estimates that only 10 to 15 percent of all US institutions have not created "significant online programs" (Dan Carnevale, "As Online Education Surges, Some Colleges Remain Untouched," Chronicle of Higher Education 23 Feb. 2001: A41). International Data Corporation reported that, "more than half of the 4,064 two- and four-year colleges and universities in the U.S. now offer some form of online instruction" (Michael Totty and Ann Grimes, "The Old College Try," Wall Street Journal Online 12 March 2001, 20 March 2001 http://interactive.wsj.com/public/ current/articles/SB984068180221773257.htm>). International Data Corporation also estimates that "the number of courses offered online doubled from 50,000 to 100,000 between 1998 and 1999" (Scott Berinato, "Coming After You. Hungryminds.com-It's Not Just an Internet Portal, It's a New Way to Think," University Business March 2000, <www.universitybusiness.com>).

Scott Wilson, senior analyst for Merrill Lynch & Co. says about elearning that, "The trends of investing in human capital, accountability in the K-12 and higher education sectors for students and teachers to produce demonstrated outcomes, and more efficiency over the Internet than in a classroom-based setting are driving the market." (Ann Grimes, "The Hope...and the Reality," Wall Street Journal Online 12 March 2001, 2 April, 2001 http://

interactive.wsj.com/public/current/articles/SB984067378945390493.htm).

According to the U.S. Department of Education, the percentage of higher education institutions offering distance education courses (note: this does not mean only online courses) grew from 33% in 1995 to 44% in 1998. Of the higher education institutions offering distance education in 1997-98, 60% employed asynchronous Internet-based technologies. This is up from 22% in 1995. Eighty-two percent say they plan to start or increase using asynchronous technologies. The percentage using synchronous computer technologies rose from 14% in 1995 to 19% in 1997-98. See U.S. Department of Education, National Center for Education Statistics, Distance Education at Post Secondary Education Institutions: 1997-98, NCES 2000-13, by Laurie Lewis, Kyle Snow, Elizabeth Farris, Douglas Levin, Bernie Greene (Washington, DC: U.S. Government Printing Press, 1999) 39, 50, 52, <www.nces.ed.gov>.

²¹ A flurry of activity in the form of spin-offs, consortia and even IPO's dominates the media coverage. An institution's competitors, no longer the friendly neighboring institutions that generally adhere to the same value system, now hail from across the country or across the globe. In describing the now-defunct joint venture between Universitas 21, an incorporated consortium of 18 universities from 10 countries, and Rupert Murdoch's News International PLC, to offer distance-learning courses and degrees, the words "to secure a substantial share of the global higher education market" were used ("News Corporation in Global Education Partnership Deal with Universitas 21," 16 May 2000, <u>Universitas 21</u>, Press Release 7 July 2000 <www.universitas.edu.au/ press_release.html>). The University of Maryland University College formed a for-profit arm, UMUC OnLine.com Inc., with the express intent of marketing online courses and raising money to compete globally with other virtual providers ("University of Maryland University College Announces Approval of New For-Profit Company," <u>UMUC News Page</u>, University of Maryland University College, 3 December 1999, 7 July 2000 http:// www.umuc.edu/events/press/newcompany.html>). Boston University's Business School has started a program linking its entrepreneurial students with venture capitalists, with the University taking a percentage of any profits made ("B.U. School of Management Announces the Michael Bronner E-Business Center and Hatchery," 23 Feb. 2000, Boston University News Release, 20 July 2000 http://www.bu.edu/news/releases/2000/2-23- bronner.html>).

Growth of the Virtual High School As Reported by the U.S. Department of Education

The Virtual High School (VHS)-supported by a federal Technology Innovation Challenge Grant-is a consortium of high schools that offers network-based courses (NetCourses) taught by consortium teachers for students in consortium schools. Teachers in the VHS pool, with the help of experienced facilitators, design and offer NetCourses over the Internet. Each VHS school also provides a part-time coordinator who acts as liaison among students, the VHS teachers, and the central VHS administrative staff.

The growth of Virtual High School is impressive. In September 1997, VHS offered Internet-based courses for the first time to about 500 students in 27 schools in ten states. By May 2000, after six semesters of operation, VHS offered 87 different courses to about 1,700 students in 112 schools located in 29 states. The number of students enrolled and the average number of students per NetCourse have been steadily increasing. The NetCourses, which are often quite challenging, include topics like economics, Shakespearean literature, nuclear physics, world conflict and peacemaking, and various languages of computer programming.

Source: Taken directly from U.S. Department of Education, e-Learning: Putting a World-Class Education at the Fingertips of All Children, the National Educational Technology Plan (Washington, DC: Office of Educational Technology, 2000) 10, 13 April 2001 http://glef.org/images/graphics/e-learning.pdf>.

Examples of Virtual Consortia

	l		
Consortium	Focus/ Degree	Partners	Source/URL
Cardean University	Business	Stanford University, University of Chicago, Carnegie Mellon, Columbia Business School, London School of Economics	http://www.cardean. edu
Great Plains Interactive Distance Education Alliance	Intercollegiate course offerings	North Dakota State University, South Dakota State University, University of Minnesota, University of Nebraska, Iowa State University, Kansas State University, University of Missouri, Oklahoma State University, Texas Tech University	http://www.okstate. edu/ hes/gpdc/
Colorado Community College Online	Associates Degree	Arapahoe Community College, Colorado Northwestern Community College, Community College of Aurora, Community College of Denver, Dawson Community College, Front Range Community College, Lamar Community College, Morgan Community College, Northeastern Junior College, Northwest Missouri State University, Otero Junior College, Pikes Peak Community College, Pueblo Community College, Red Rocks Community College, Trinidad State Junior College	http://www.ccconline .org/
Pennsylvania Virtual Community College	Intercollegiate course offerings	Bucks County Community College, Butler County Community College, Cambria County Area Community College, Community College of Allegheny County, Community, College of Beaver County, Community College of Philadelphia, Delaware County Community College, Harrisburg Area Community College, Lehigh Carbon Community College, Luzerne County Community College, Montgomery County Community College, Northampton Community College, Northwest Pennsylvania Technical Institute, Reading Area Community College, Westmoreland County Community College	http://www.pavcc.org
Southern Regional Electronic Campus	Intercollegiate course offerings and courses available internationally	This consortium includes upwards of one hundred participating institutions. Below several examples are listed; for a more complete listing go to the URL: Auburn University, University of Arkansas, Delaware Technical & Community College, Florida State University, Georgia Institute of Technology, Western Kentucky University, University of North Carolina at Chapel Hill, University of North Carolina at Wilmington	http://www.srec.sreb .org/
SUNY Learning Network	Courses available internationally	This consortium includes upwards of one hundred participating institutions. Below several examples are listed; for a more complete listing go to the URL: State University of New York, University at Buffalo, Binghamton University, SUNY Old Westbury, SUNY Brockport, SUNY Empire State College, University at Albany, SUNY Plattsburgh, Adirondack Community College, SUNY New Paltz, SUNY Purchase, SUNY Cortland, Clinton Community	http://sln.suny.edu/ admin/sln/ original.nsf
Western Governors University	Courses available internationally	Below several examples are listed of participating universities; for a more complete listing visit the URL: ComputerPREP, Magellan University, Northern Arizona University, Brigham Young University, Texas Tech University, University of Guam, University of Hawaii, Idaho State University	http://www.wqu.edu/ wgu/about/educators _institutions.html

Examples of Virtual Consortia, continued

	1		
Consortium	Focus/ Degree	Partners	Source/URL
Universitas 21	Courses available internationally	McGill University, University of British Columbia, University of Toronto, University of Michigan, University of Birmingham, University of Edinburgh, University of Glasgow, University of Nottingham, University of Swedan, Albert-Ludwigs University Freiburg, Fudan University, Peking University, The University of Hong Kong, National University of Singapore, The University of Melbourne, University of New South Wales, University of Queensland, University of Auckland	http://www.universita s.edu.au/members. html
Contact South Name change announced for Winter 2001: OntarioLearn.com	Courses offered globally	Algonquin College, Canadore College, Cambrian College, Centennial College, Conestoga College, Confederation College, Durham College, Fanshawe College, George Brown College, Georgian College, Humber College, Lambton College, Loyalist College, Mohawk College, Niagara College, Northern College, Sault College, Seneca College, Sheridan College, Sir Sandford Fleming College, St. Lawrence College	http://www. contactsouth. org/ New URL will be www.ontariolearn. com
African Virtual University	Offers course in Sub-Saharan Africa	Anglophone Universities: Addis Ababa University, University of Accra, University of Cape Coast, University of Science and Technology, Egerton University, Kenyatta University, University of Namibia, Technikon Southern Africa, University of Pretoria, The Open University of Tanzania, The University of Dar Es Salaam, Makerere University, Uganda Martyrs University, Uganda Polytechnic, National University of Science and Technology, University of Zimbabwe Francophone Universities: Université nationale du Bénin, Université d'Ouagadougou, UVA Notre Dame de Tendresse, Université de Nouakchott, Université de Niamey, Universite Nationale du Rwanda, University of Kigali, Université Gaston Berger, Université de Dakar	http://www.avu.org/
EuroPace	Virtual University for Europe	Below several examples are listed of participating universities; for a more complete listing visit the URL: University of Brussels, Helsinki University of Technology, University College of Dublin, University of Bologna, Warsaw University of Technology, Kazan State University, University of Castilla- La Mancha, Asian Institute of Technology, University of Ljubljana	http://www.europace _be/
American Distance Education Consortium	Consortium of state universities and land grant institutions	Below several examples are listed of participating universities; for a more complete listing visit the URL: University of Arizona, University of Arkansas, Clemson University, Cornell University, Texas A&M, Michigan State University, University of Minnesota, University of Florida, University of Georgia, Utah State University	http://www.adec.edu /about.html

Examples of Virtual Consortia, continued

Consortium	Focus/ Degree	Partners	Source/URL
Scottish Knowledge	Intercollegiate offerings between universities in Scotland, UK, Australia and the United States	Below several examples are listed of participating universities; for a more complete listing visit the URL: Fife College of Further & Higher Education, Glasgow Caledonian University, Heriot-Watt University, Napier University, Queen Margaret College, Royal Scottish Academy of Music & Drama, The Edinburgh College of Art	http://www.scottish- knowledge.co.uk/ home. cfm
National Technological University	Technology and Business	Below several examples are listed of participating universities: for a more complete listing visit the URL: Auburn University, Boston University, Clemson University, Colorado State University, Columbia University, Florida Gulf Coast University, George Washington University, The Georgia Institute of Technology, Illinois Institute of Technology, Iowa State University, Kansas State University	www.distancelearn. about. com
Fathom	Intercollegiate course offerings	Columbia University, London School of Economics and Political Science, Cambridge University Press, Cambridge University Press, The British Library, The New York Public Library, The University of Chicago, University of Michigan, American Film Institute, RAND, Woods Hole Oceanographic Inst., The Natural History Museum, Victoria and Albert Museum, Science Museum	Http://www.fathom. com/ index.jhtml
Jesuit Distance Education Network	Intercollegiate course offerings	Below several examples are listed of participating universities:Boston College, Canisius College, College of the Holy Cross, Creighton University, Fairfield University, Fordham University, Georgetown University, Loyola Marymount University, Rockhurst University, Saint Joseph's University, Saint Louis University,	http://virtual.wju.edu/ jnet/

- ²² Until recently, most information technology and computer training took place in traditional post-secondary institutions (e.g., community colleges, polytechnics, technical institutes, etc.). In the words of Clifford Adelman of the U.S. Department of Education, in the last decade information technology certification has developed alongside the higher education system as a "parallel postsecondary universe." The major software companies (e.g., Microsoft, IBM, Novell, and Cisco) have created programs to train the personnel needed to operate their systems, contracting with postsecondary institutions and other vendors—such as corporate universities, public agencies and IT vendors—to conduct the training. With nearly 300 certificate-granting institutions offering certificates in over 350 areas, Adelman estimates that 1.6 million people have been awarded close to 2.4 million certificates (some individuals hold more than one certificate), nearly half of these outside of the United States. See Clifford Adelman, U.S. Department of Education, Office of Educational Research and Improvement, A Parallel Postsecondary Universe: The Certification System in Information Technology (Washington, D.C.: U.S. Government Printing Office, 2000).
- ²³ In 1988, there were 400 corporate universities (Jeanne C. Meister, Corporate Universities: Lessons in Building a World-Class Work Force, Rev. and Updated ed. (New York: McGraw Hill, 1998) 268). That number has now increased to 2000, including 40% of Fortune 500 companies. By 2010, corporate universities may outnumber traditional universities (Jeanne C. Meister, "The Brave New World of Corporate Education," Chronicle of Higher Education 9 Feb. 2001: B10-11; James L. Morrison, "Corporate Universities: An Interview with Jeanne Meister," Vision July/August 2000, 11 Oct. 2000 https://horizon.unc.edu/TS/vision/2000-07.asp).

In Corporate-College Partnerships: A Best Practice Survey, the Corporate University Xchange reports that 92 percent of the corporations surveyed "outsource the delivery of education and training programs, and 60 percent outsource some aspects of course design" (Jeanne C. Meister, "The Brave New World of Corporate Education," Chronicle of Higher Education 9 Feb. 2001: B10). Banco Santander Central Hispano SA has created an in-house virtual campus, enrolling 5,200 students in 40 online courses. External education vendors have designed about 25 of these courses. "The tendency is clearly heading toward more outsourcing," said Antonio Penalver, BSCH's director of corporate training (Keith Johnson, "Spanish Lessons," Wall Street Journal Online 12 March 2001, 20 March 2001 http://interactive.wsj.com/public/current/articles/SB984071911161326745.htm). This outsourcing trend has led to an increase in the number of part-

nerships between corporations and universities or colleges. Some of the advantages to be gained by non-profit education providers from an affiliation with a business are the sharing of libraries and research, the expansion of courses and degree programs offered, and an increase in revenue; contracts held by Valencia Community College in Florida "bring in revenues of \$1.5 million to \$2.0 million for the institution each year" (Jeanne C. Meister, "The Brave New World of Corporate Education," Chronicle of Higher Education 9 Feb. 2001: B10).

- ²⁴ Pearson PLC, a "London-based media conglomerate...has spent a lot of time...developing a range of high-profile relationships and deals affecting colleges and universities and a lot of energy over the past few months seeking publicity for them." Pearson is also currently the "world's largest educational publisher," reflecting the role of higher education as a "hot commodity in business circles" now. Pearson is "the first publisher to lay out a game plan," using new spin-off companies and online ventures such as FT Knowledge and the Learning Network "to work with colleges to help them convert, deliver, and market courses." Pearson's internet strategy "is designed to increase sales of its traditional product: books" and use their online "reputation to sell the company's services to other institutions in the United States and around the world" (Goldie Blumenstyk, "How a Publishing Empire Is Changing Higher Education," Chronicle of Higher Education 8 Sept. 2000: A43).
- ²⁵ The competition is not just for the full time enrollment of students, but for their part time attention as well. More students are taking online courses from another institution even while enrolled full time at their home institution—for convenience, to take a course that is unavailable at their institution, or to substitute for a course seen as low quality. For more information on student mobility and transfer behavior, see Council for Higher Education Accreditation, A Statement to the Community: Transfer and the Public Interest, CHEA (Nov. 2000): 1,3.
- ²⁶ Colorado Community College Online, "Check Out Your Classmates," 31 July 2000 http://ccconline.org/classmates/Towns.cfm; and Southern Regional Electronic Campus, "Electronic Campus Adds Library, Policy Laboratory, Colleges, Courses," Southern Regional Education Board: 15 June 1999, 31 July 2000 http://www.srec.sreb.org/student/srecinfo/newsrelease/ ECaddslibrary.html; and University of Maryland University College, "Worldwide Online Enrollments FY1993-FY2000," 31 July 2000 http://www.umuc.edu/ip/wwp/onlineenrww.html.

The Corporate University Niche

In her book Corporate Universities, Jeanne Meister defines the corporate university as, "The strategic umbrella for developing and educating employees, customers, and suppliers in order to meet an organization's business strategies" (Jeanne C. Meister, Corporate Universities: Lessons in Building a World-Class Work Force, Rev. and Updated ed. (New York: McGraw Hill, 1998) 29). While training departments tend to be "reactionary, fragmented, and decentralized," the corporate university "pulls together all learning in an organization by managing education as a business project" (James L. Morrison, "Corporate Universities: An Interview with Jeanne Meister," Vision July/August 2000, 11 October 2000 http://horizon.unc.edu/ TS/vision/2000-07.asp>). Meister believes that the "obsolescence of knowledge" is one of the driving forces behind the development of corporate universities. With job skills rapidly changing, even the most highly educated are in need of training after being hired. When corporations need new skills and programs for their employees they often become "frustrated when universities cannot create these programs quickly" (James L. Morrison, "Corporate Universities: An Interview with Jeanne Meister," Vision July/August 2000, 11 October 2000 http://horizon.unc.edu/TS/ vision/2000-07.asp>).

- ²⁷ Scott Berinato, "Coming After You. Hungryminds.com-It's Not Just an Internet Portal, It's a New Way to Think," <u>University Business</u> March 2000 < www.universitybusiness.com>.
 - U.S. Department of Education, National Center for Education Statistics, <u>Distance Education at Postsecondary Education Institu-</u> <u>tions: 1997-98</u>, NCES 2000-013 (Washington DC: U.S. Government Printing Office, Dec. 1999) < www.nces.ed.gov>.
- ²⁸ U.S. Department of Education, National Center for Education Statistics, <u>Distance Education at Postsecondary Education Institu-</u> <u>tions: 1997-98</u>, NCES 2000-013 (Washington DC: U.S. Government Printing Office, Dec. 1999) < www.nces.ed.gov>.
- The National Center for Higher Education Management Systems (NCHEMS) was commissioned by the Education Commission of the States to study the impact of for-profits on accreditation. NCHEMS concluded that while only a small number of for-profits have sought accreditation, accreditors do not take a different philosophical approach to for-profits, and they typically do not have standards that are specific to for-profits. Moreover, accreditors are rethinking their approach to all higher education institutions, partly in response to the lessons they are learning from for-profits in areas such as responsiveness to students and interregional operations. NCHEMS also noted that increasing numbers of corporations are seeking accreditation for their training programs (Report from the Regions: Accreditors' Perceptions of the Role and Impact of For-Profit Institutions in Higher Education," 2000, 2 Aug. 2000 < www.ecs.org>).

DeVry Institutes recently gained accreditation for its virtual operations, and Harcourt Higher Education is seeking accreditation. See Goldie Blumenstyk, "DeVry Receives Accreditation to Offer Bachelor's Degrees Online," Chronicle of Higher Education 8 Sept.2000: A61; Goldie Blumenstyk, "Harcourt's Virtual College Readies Launch," Chronicle of Higher Education 8 Sept. 2000: A59.

The National Center for Postsecondary Improvement and the Community College Research Center conducted a study on the impact of for-profit institutions on community colleges. Preliminary conclusions included that, "the for-profits have internalized the concept that students prefer an accelerated and flexible schedule because they want to get on with their lives as quickly as possible. Faculty commitment and expertise at for-profit colleges are similar to those at public colleges, and so far we have not identified significant differences in the quality of instruction" (Community College Research Center, "Community Colleges and

the Growth of For-Profit Postsecondary Educational Institutions," <u>CCRC Currents</u> Feb. 2001: 5).

- ³⁰ Jared Bleak, "Structures and Values: The Governance of for Profit Subsidiaries of Non Profit Universities," unpublished diss. data, Harvard University Graduate School of Education, Feb. 2001.
- ³¹ For a thorough analysis of the impact of technology on higher education, see Frank Newman, "Higher Education in the Digital Rapids" 26 Jan. 2001, 23 Feb. 2001 www.futuresproject.org>.
- 32 Active learning excites students. Students see passive learning—i.e., the lecture-as the most common approach to classes now but the least attractive form of learning. See Linda J. Sax, Shannon K. Gilmartin, Jennifer R. Keup, Frank A. DiCrisi III, and Alyssa N. Bryant, Designing an Assessment of the First College Year: Results from the 1999-2000 YFCY Pilot Study (A Report for the Policy Center on the First Year of College, Brevard College, Prepared by the Higher Education Research Institute, Graduate School of Education & Information Studies, University of California, Los Angeles, Oct. 2000), 23 Feb. 2001 <www.gseis.ucla.edu/heri/yfcy/yfcy_report.pdf>.
- ³³ An added force accelerating this trend is the change in the students. The students who will be headed toward college in a few years are often already astute users of the new technologies and are often practitioners of the new modes of learning. For a deeper discussion of student expectations regarding technology, please see Frank Newman, "Higher Education in the Digital Rapids," 26 Jan. 2001, 23 Feb. 2001 < www.futuresproject.org>.

For a discussion of students' expectations of technology in the state of Pennsylvania, see James M. O'Neill, "An Exacting Education in Economic Realities," <u>Philadelphia Inquirer</u> 28 Jan. 2001-2 Feb. 2001, 6-part series.

- ³⁴ Students can more readily find information about institutions or courses on the web, expanding the opportunities available to them and better equipping them to make decisions. Lisa Guernsey, "The College Search Game, Spam Included," <u>New York Times</u> 28 September 2000: G1.
- ³⁵ One trend has become evident. Teaching and learning in certain high volume, low cost fields (e.g., education and business), broken off from related activities of research and service, can be profitable. Consequently, there is expanded competition, for example, at

Computer Access at Home and in the Schools

According to the National Center for Education Statistics, the percentage of public schools with Internet access has increased dramatically in recent years. While just 35% of American public schools had access in 1994, that number nearly tripled by 1999, with 95% of schools having access (94% access in elementary schools, 98% in secondary schools). NCES also reports that the percent of instructional rooms with Internet access in public schools has risen from 3% in 1994 to 63% in 1999. The number of students per instructional computer with Internet access has fallen from 12 % in 1998 to 9% in 1999, with the number continuing to drop. See U.S. Department of Education, National Center for Education Statistics, Internet Access in U.S. Public Schools and Classrooms: 1994-1999, NCES 2000-086 (Washington DC: U.S. Government Printing Office, Feb 2000), <www.nces.ed.gov>.

Computer access at home is another important indicator of computer literacy. According to NCES, the percentage of fourth-grade students who reported using a computer at home was higher in 1997 than in 1984. The number rose from 13 to 45 percent. See U.S. Department of Education, National Center for Education Statistics, "Student Computer Use," The Condition of Education, 1999, NCES 1999-022 (Washington, DC: U.S. Government Printing Office, 1999) 10, <www.nces.ed.gov>.

the MBA level-where employers often pay the tuition-but not at the Ph.D. level where teaching and learning are expensive and the universities themselves bear the burden. Refer to David Collis, When Industries Change Revisited: New Scenarios for Higher Education (New Haven: Yale University, September 1999) 6. See also Bob Heterick, "Dogma and Oxymorons," The Learning MarketSpace, Published by the Leadership Forum at the Center for Academic Transformation, www.center.rpi.edu, listserv owner-LFORUM-L@lists.rpi.edu, 1 March 2001.

- ³⁶ In the traditional mode of creating a course (the faculty member acting alone) there is low investment cost and the institution has, as a result, little incentive to grow. Institutions such as the British Open University, the University of Phoenix, Virginia Tech or Cardean University, are spending hundreds of thousands of dollars per course. If enrollment levels are high the resulting cost per student is low. The result is a strong push to expand.
- ³⁷ Some institutions (such as the British Open University, the University of Phoenix, RPI or Virginia Tech) are already appealing to certain groups of students based on their new skills in improving learning. This is focusing more attention on learner outcomes, less on prestige. For universities, this moves teaching from the periphery to the center of concern and attention, a change beginning to affect the faculty reward structure, which has long treated teaching as a secondary activity. For an interesting viewpoint on how new providers are competing, see Bob Heterick, "Paradigms, Points of Inflection and Paranoia," The Learning MarketSpace, Published by the Leadership Forum at the Center for Academic Transformation, www.center.rpi.edu, listserv owner-LFORUM-L@lists.rpi.edu, 1 Jan. 2001.
- ³⁸ Joseph Schumpeter, <u>Capitalism, Socialism and Democracy</u> (New York: Harper, 1942).
- ³⁹ Clayton M. Christensen, <u>The Innovator's Dilemma</u> (Cambridge: Harvard Business School Press, 1997).

See Lloyd Armstrong, "Distance Learning: An Academic Leader's Perspective On a Disruptive Product," <u>Change Nov-Dec. 2000: 20-27</u> for a further discussion about the "disruptive" qualities of distance learning; and Paul T. Hill, "The Innovator's Dilemma...And the Future of Public Education," <u>Education Week</u> 14 June, 2000: 52, 32-33 for an analysis of Christensen's theories in relation to public education.

- 40 "University of Maryland University College Announces Approval of New For-Profit Company," <u>UMUC News Page</u>, University of Maryland University College, 3 December 1999, 7 July 2000 http://www.umuc.edu/events/press/newcompany.html.
- ⁴¹ Danielle Sessa, "Business Plan," <u>Wall Street Journal Online</u>, 12 March, 2001, 2 April 2001 http://interactive.wsj.com/public/current/articles/SB9840675958771008.htm.
- ⁴² Jim Duderstadt describes the following impact on higher education:

This carefully regulated and controlled enterprise could be eroded by several factors. First, the growing demand for advanced education and training simply cannot be met by such a carefully rationed and controlled paradigm. Second, current cost structures for higher education are simply incapable of responding to the need for high-quality yet affordable education. Third, information technology is releasing higher education from the constraints of space and time (and possibly also reality with virtual universities). All of these factors are driving us toward an open learning environment, in which students will evolve into an active learner and consumer, unleashing strong market forces.... With the emergence of new competitive forces and the weakening influence of traditional constraints, higher education is evolving like other "deregulated" industries (for example, health care, communications, and energy). James Duderstadt, "Can Colleges and Universities Survive in the Information Age?" In Katz, R. and Associates Dancing with the Devil: Information Technology and the New Competition in Higher Education (San Francisco: Jossey-Bass, 1999) 10.

⁴³ According to the Department of Education, 42% of students in the nation's colleges and universities in Fall 2000 are 25+, up from 28% in 1980 (U.S. Department of Education, National Center for Education Statistics, <u>Digest of Education Statistics</u>, 1999, NCES 2000-031, May 2000(Washington, DC: U.S. Government Printing Office, 1999), 9 March 2001 http://nces.ed.gov/pubs2000/digest99/chapter3.html).

Older, working students bring a new set of expectations to the college campus. Often referred to as "demanding" and "consumers," these students seek to make informed choices that are often based on convenience, price, learning outcomes, and courses that are valued by employers. While not much hard research in the form of surveys has been completed on this point, much has been written. See Terry O'Banion, A Learning College for the 21st Century (Phoenix, AZ: Oryx Press, 1997) 37-38; Linda Thor, "Understanding the Appeal of For-Profit Colleges," Community College Week 12.12 (24 January 2000): 7.

The College Board did a study on the incentives for adults to

begin learning once again (Americans in Transition: Life Changes As Reasons For Adult Learning). According to the study adult students are motivated to learn by trigger events that mark larger transitions in their lives. Despite the wide variety of types of topics pursued or different approaches to learning adults may take the single largest motivating factor for an adult's education is the utility of the information that they learn. Transitions in careers account for fifty-six percent of the transitions that were cited by adults as reasons for deciding to learn more. In fact, transitions in careers (whether getting a new job, adapting to a changing job or advancing in their career) outnumbered all other reasons for learning combined.

One respondent to the College Board's survey wrote that he had begun taking a course in export administration. "I'm in the export business and my job has grown by leaps and bounds—more commodities and more countries to deal with. I need to improve my administrative skills so I can keep up with the expansion in my job." Another respondent described the financial management course they were taking in order to apply for their MBA. "I want an MBA to make me more marketable...I haven't gotten a decent raise in three years...The MBA will give me an edge if I shift jobs." (Carol B. Aslanian and Henry M. Brickell, Americans in Transition: Life Changes As Reasons For Adult Learning (New York: College Entrance Examination Board, 1980): 69,71.

John Sperling founded the University of Phoenix in reaction to what he perceived to be a glaring market gap. Noticing that adults outside of the traditional 18-24 year old bracket had poor access to higher education, Sperling conceived of a system with the following rationale:

At UOP, a student finds a system that has been designed specifically to eliminate these barriers and to deliver educational services to its working adult students in the most efficient way possible within the constraints imposed by accrediting commissions and state licensing agencies. The student is treated with the consideration and respect that a valuable customer deserves. The University is designed and operated to serve the students, not the faculty and the administration (John G. Sperling, <u>Against All Odds</u> (Phoenix, AZ: Apollo Press, 1989) 61).

James O'Neill reports on higher education in the State of Pennsylvania, including a discussion of the types of courses, as well as tailored experience, that is sought by employers for their employees (James M. O'Neill, "An Exacting Education in Economic Realities," Philadelphia Inquirer 28 Jan. 2001-2 Feb. 2001, 6-part series).

Andrew Mollison of the Cox Washington Bureau analyzed data on adult education from the National Center for Education Statistics. Mollison reports that students 25 and older distribute their courses in the following manner:

STUDENTS 25 OR OLDER TAKE VARIETY OF COURSES

Job-related courses 40.1 million
Personal development
courses 38.9 million
College or university
courses 6.4 million
Apprenticeships 2.2 million
Basic math or literacy
classes 1.6 million
English as a second
language 1.5 million

SOURCE: Digest of Education Statistics 1999, Tables 177 and 363. Details online at nces.ed.gov/ pubs2000/digest99/.

NOTE: Because some students took more than one kind of course, the categories overlap. More than 76 million students 25 or older took at least one course in 1999.

The above information was quoted directly from Andrew Mollison, "Who Adult Students Are, What They Study," Cox Washington Bureau 20 Aug. 2000, 12 March 2001 http://www.coxnews.com/washingtonbureau/staff/mollison/08-20-00ADULTSTUDENTSDATA0820COX.html

Linda J. Sax, Shannon K. Gilmartin, Jennifer R. Keup, Frank A. DiCrisi III, and Alyssa N. Bryant, <u>Designing an Assessment of the First College Year: Results from the 1999-2000 YFCY Pilot Study</u> (A Report for the Policy Center on the First Year of College, Brevard College, Prepared by the Higher Education Research Institute, Graduate School of Education & Information Studies, University of California, Los Angeles, Oct. 2000) 23 Feb. 2001 www.gseis.ucla.edu/heri/yfcy/yfcy_report.pdf.

Boston University's recent request that professors spend more time on campus and with students, an act that was in response to public concern about rising tuition costs, serves as an example of how traditional institutions will need to focus more on teaching and learning. See Elizabeth Greene, "Committee Urges Boston University to Demand More of Professors," Chronicle of Higher Education 27 Oct. 2000: A14.

The nature of for-profit institutions, focused as they are on serving the most profitable students, makes them formidable competitors. See David Collis, When Industries Change Revisited: New Scenarios for Higher Education (New Haven: Yale University, September 1999) 2. See also Goldie Blumenstyk, "How For-Profit Institutions Chase Community-College Students," Chronicle of Higher Education 8 Dec. 2000: A30-31.

For a viewpoint on the mission of Unext.com and Cardean University, see Geoffrey M. Cox, "Why I Left a University to Join an Internet Education Company," <u>Change Nov-Dec.2000</u>: 12-18.

- ⁴⁶ Research from the Williams College Project on the Economics of Higher Education suggests that small colleges typically need approximately 1800 students to break even (small colleges with large endowments are exceptions to this rule). The Project's research also found that there are 844 private colleges operating with less than 1800 students (Martin Van Der Werf, "More Colleges are Seeing the Virtues of Merging" <u>Chronicle of Higher Education</u> 23 March 2001: A27).
- ⁴⁷ Jeffrey Selingo, "Facing New Missions and Rivals, State Colleges Seek a Makeover," <u>Chronicle of Higher Education</u> 17 November 2000: A40+.
- ⁴⁸ Arthur Levine, President of Columbia University Teachers College, has written several articles about what he predicts for the future of higher education. See Arthur E. Levine, "The Future or Colleges: 9 Inevitable Changes," <u>Chronicle of Higher Education</u> 27 Oct. 2000, Chronicle Review: B10. Oblinger and Rush also wrote a

series of scenarios about how technology might impact higher education institutions (Diana G. Oblinger and Sean C. Rush, "The Learning Revolution," <u>The Learning Revolution: The Challenge of Information Technology in the Academy</u>, eds. Diana G. Oblinger and Sean C. Rush (Bolton, MA: Anker Publishing, 1997) 1-19).

- ⁴⁹ James M. O'Neill, "Small, Private Colleges Feel Financial Strain of Increased Competition," <u>Philadelphia Inquirer</u> 29 Jan. 2001, page 2 of a 6-part series, <www.philly.com>.
- 50 Michael Porter, <u>Competitive Strategy</u> (New York: The Free Press, 1980). See also Michael Porter, "What is Strategy?," <u>Harvard Business Review</u> November-December 1996: 61; James L. Bess, <u>Teaching Well and Liking It</u> (Baltimore: The Johns Hopkins University Press, 1997); Bob Phelps, "Special Issue on the Dynamics of Strategy," <u>Journal of Business Research</u> 51.3 (1998).

William Graves argues the need for a technology strategy that defines an institution's competitive advantage, and presents suggestions for strategy elements, in William H. Graves, "Framework for an Enterprise E-Learning Strategy," <u>Eduprise</u>, 21 Jan. 2001 <www.eduprise.com>.

One institution, MIT, has declared an online strategy that is designed to mitigate the impact of market forces. Worried about the drive for revenue that has pushed many institutions into offering virtual courses, MIT announced in April 2001 that it would create web sites for nearly all of its courses, thereby enabling free access to MIT course materials. See Carey Goldberg, "Auditing Classes at M.I.T., on the Web and Free," New York Times on the Web 4 April 2001, 4 April 2001 <www.nytimes.com/2001/04/04/technology/04MIT.html>.

- Michael Porter, <u>Competitive Strategy</u> (New York: The Free Press, 1980). See also Michael Porter, "What is Strategy?," <u>Harvard</u> Business Review November-December 1996: 61.
- ⁵² Ronald Heifetz, <u>Leadership Without Easy Answers</u> (Cambridge, MA: The Harvard University Press, 1994) 14.
- 53 Higher education institutions add to the functioning of a free society through research, scholarly publication, and perhaps most important, campus discussion and debate on important controversial issues. Colleges and universities need to make conscious choices to engage in such debates rather than unconscious choices to avoid them.

For an enlightening discussion on why the university should remain removed from the marketplace, please see William G. Bowen, At a Slight Angle to the Universe: The University in a Digitized, Commercialized Age, The Romanes Lecture for 2000 delivered before the University of Oxford, 17 Oct. 2000 (Princeton, NJ: Princeton University Press, 2001). See also David A. Longanecker, "The Public-Private Balance: Keeping Higher Education's Reason for Being in Perspective" AAHE Bulletin 53.9 May 2001: 10.

Much has been written about the conflicts of interest that arise when research mixes with industry. For a series of articles on this topic in the New England Journal of Medicine, see Jeffrey M.

Drazen and Greg Koski, "To Protect Those Who Serve," New England Journal of Medicine 343.22 (30 Nov. 2000): 1643-45; Joseph B. Martin and Dennis L. Kasper, "In Whose Best Interest? Breaching the Academic-Industrial Wall," New England Journal of Medicine 343.22 (30 Nov. 2000): 1646-49; Bernard Lo, Leslie E. Wolf, and Abiona Berkeley, "Conflict of Interest Policies for Investigators in Clinical Trials," New England Journal of Medicine 343.22 (30 Nov. 2000): 1616-20; S. Van McCrary, Cheryl B. Anderson, Jelena Jakovljevic, Tonya Khan, Laurence B. McCullough, Nelda P. Wray, and Baruch A. Brody, "A National Survey of Policies on Disclosure of Conflicts of Interest in Biomedical Research," New England Journal of Medicine 343.22 (30 Nov. 2000): 1621-26.

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