

Key Trends in Higher Education

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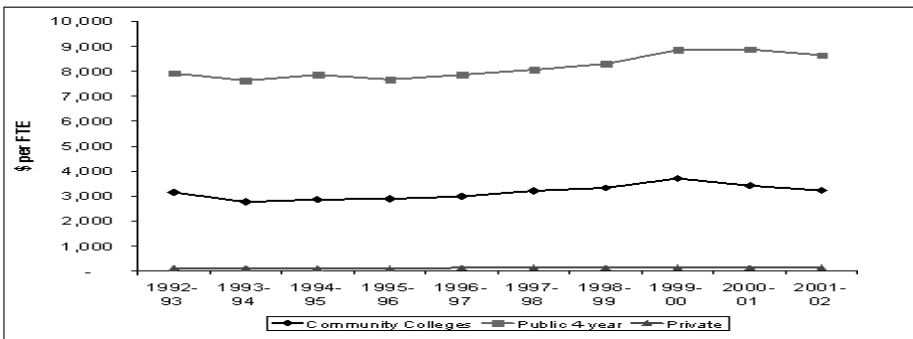
Enrollment in higher education is up, while state funding for public higher education decreases in bad times but tends to rebound in real dollars over the long term. Outside revenues are also up. At the same time, a number of key indicators suggest that state funding may become an unreliable source of support in the future. In response, public colleges and universities have been increasing tuition, aggressively pursuing corporate grants and commercial fund-raising, cutting the tenured academic workforce and privatizing services.

—Editors

The Good News

Today, over 15 million students attend over 4,000 colleges and universities. This represents a growth since 1980 of 3 million students and 1,000 degree-granting institutions. Close to 12 million of these students attend over 1,700 public colleges and universities. Public colleges and universities since 1980 have grown by 2 million students and 200 degree-granting institutions.¹ Demographic trends indicate that the number of people wanting to attend college will continue growing for some time to come.

FIGURE 1: State and local support for higher education per FTE enrollment in constant 2001-02 dollars: 1992-93 to 2001-02



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Finance Survey Data, various years.

On average, state and local support per full-time-equivalent student for public and private institutions remained about the same in real dollars between 1992 and 2002, with a slight increase at four-year public institutions (Figure 1).ⁱⁱ In addition, more federal grant monies are being awarded to institutions of higher education, primarily to research universities. Institutions are able to retain some of these funds and apply them to other college and university operations.

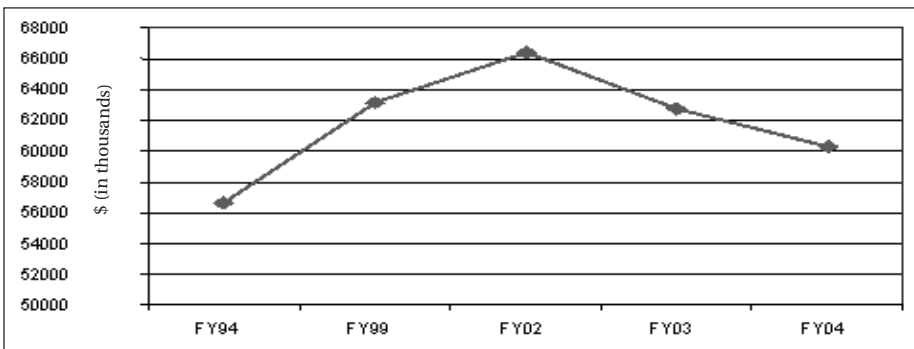
Troubling Trends

Taking all of this information into account, it seems as though public higher education is doing well, or at least holding its own. But wherever one goes in higher education, one encounters a broad disquiet among academic workers about the long-term prospects of their institutions. Either these people are determinedly pessimistic in the face of good news or something else is happening. That “something else”, we believe, can be found in a number of important trends to which we now devote our attention.

Precarious state support

Colleges and universities are at the mercy of cycles in state and local tax support. Census data shows that in 1970 states appropriated 7.3 percent of their funds for higher education, but the share dropped to 5.3 percent in 2000. As Harold Hovey reports “Over the past decade the percentage increases in state support for higher education have been smaller than the percentage increases in total state budgets. . . . In other words, higher education isn’t competing successfully with the attentions of other forms of state funding.”ⁱⁱⁱ

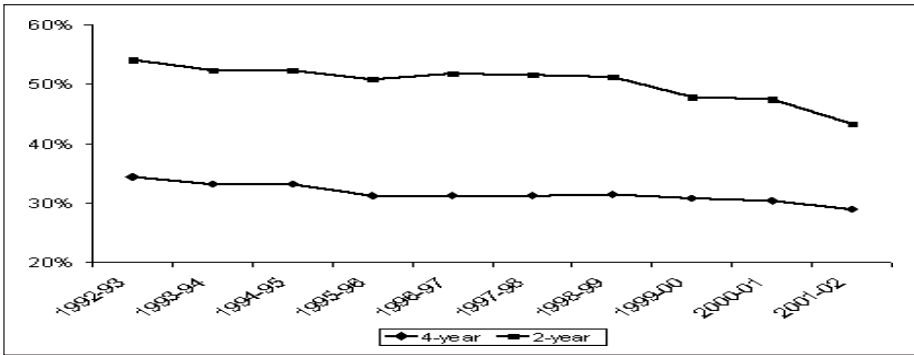
FIGURE 2: State support for higher education in constant dollars, 1994-2004



SOURCE: Grapvine, University of Southern Illinois.

Higher education's share of the overall state budget continues to shrink in most states. The growing competitors for state dollars include Medicare and state prisons and correctional functions. Since costs for these programs are expected to continue to escalate, the decline in percentage of state funds devoted to higher education is likely to continue as well. This decline is exacerbated by the fact that higher education is a discretionary state expenditure, and every public official knows that colleges and universities can raise tuition to compensate for state cutbacks. As a result, during difficult economic times, state cuts of higher education budgets often exceed those of other state programs. Figure 2 shows state support—including institutional appropriations, support for student aid and state boards—in constant dollars over the last few years.

FIGURE 3: State and local support as a percent of total revenue, public 2- and 4-year institutions: 1992-93 to 2001-02



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Finance Survey Data, various years.

It is easy to see that the recent recession, coupled with revenue shortfalls, has been devastating for higher education. Even though the economic picture is brightening, the Center on Budget and Policy Priorities does not think the fiscal crisis is over.^{iv} Some 30 states are projecting deficits in 2005. More budget cuts loom in the future.

Just as the percentage of the state budget devoted to higher education has declined, so has there been a decline in state support as a percentage of institutional revenue over the last ten years (Figure 3). Direct support from state and local sources is especially important in community colleges and shows the largest decline over the ten years.^v

Rising costs

At the same time state support becomes more precarious, the cost of basic services for colleges and universities generally increases at a faster rate than inflation. Over the last two decades (1980-2000), the price of goods and services purchased by colleges and universities has increased 154 percent. During this same 20-year period, inflation in the general economy measured by the Consumer Price Index (CPI) increased only 118 percent.^{vi}

One key factor is the increased cost of health benefits. Another factor is the cost of technology. Committing to new computer systems and software increases the need for training and support and future upgrades and replacement, all of which take money out of future budgets. In many cases, new systems do not operate as expected and require further investment before they work. A third cost factor is deferred maintenance. Every higher education institution has a long list of deferred maintenance projects lurking in the back of every budget request. Bringing facilities up to modern safety and fire code standards, making the campus available to handicapped students and retrofitting rooms to connect to the Web all make important claims on the budget.

Competition among institutions

Along with precarious state support and rising costs, colleges and universities are under pressure to expand services, competing in an increasingly diverse higher education system. Competing for student enrollment requires more emphasis on providing student amenities. When parents and potential students visit colleges, they ask about the dorms, recreation facilities, campus safety, social life and access to computers and the Web. In order to attract students, college administrators are investing in these amenities and improving the appearance of the grounds and facilities. These functions may not be directly related to the delivery of education, but they are claiming a larger slice of revenue.

In addition, public colleges and universities are spending more on institutionally provided student aid and student marketing. In 1992–93, 17 percent of undergraduates in public institutions received institutional aid, averaging about \$2,200 (after adjusting for inflation to 1999 dollars). By 1999–2000, 23 percent received such aid, averaging about \$2,700.^{vii}

In addition to competition among “traditional” institutions, public higher education must respond to competition from the growing sector of for-profit col-

leges and universities. In the 1980's, the growth of federal student aid funding corresponded with a significant increase in the number of for-profit proprietary schools, which generally offered one- or two-year vocationally oriented education and training programs. Later in the 1980s and into the 1990s, many stories circulated in the press and on Capitol Hill about fly-by-night trade schools who took advantage of the student aid system to offer sub-par training at high costs, primarily to economically disadvantaged students. Federal law was then amended to place strong fraud and abuse controls on these institutions. In the years since then, the size of the proprietary sector has decreased and the performance of remaining schools has improved.

Recently, however, we have seen significant growth in a new kind of private for-profit institution: one that offers four-year degrees and is often accredited by the same higher education agencies that approve public and private non-profit higher education institutions. One of these for-profit institutions, the University of Phoenix, advertises itself as the largest college in America and last year awarded its students over \$1 billion in federal student loans.

Table 1 documents the change in the proprietary sector as less-than-two-year schools closed and the proprietary institutions with programs of two years or longer more than doubled their enrollment. Even though enrollment in the short-term programs declined, enrollment in longer programs more than doubled the growth in any other sector.

TABLE 1: Enrollment in postsecondary institutions by institutional type: 1990 and 2000

	1990	2000	Percent change
Total	14,681,898	15,701,409	6.9
Proprietary	719,778	672,851	-6.5
Proprietary, less-than-2-year	506,269	185,877	-63.3
Proprietary, 2-year or more	213,509	486,974	128.1
Community colleges	5,258,236	5,836,052	11.0
All 4-year	8,703,884	9,192,506	5.6

SOURCE: U.S. Department of Education, National Center for Education Statistics. Digest of Education Statistics 2002, Table 170; Digest of Education Statistics 1992, Table 158.

Currently, there are twelve publicly traded higher education companies that deliver college-level classes around the world. More deals are pending. Large national chains depend on standardization of classes and centralization of administration that is made possible through technology. They forgo the trappings of a traditional campus and often deliver a narrowly defined set of classes designed to prepare students for particular jobs.

Some for-profit programs have created quality concerns while others—generally those with narrower job-related goals—appear to be doing a better job than they were originally in terms of quality. In any event, for-profit higher education represents an alternative model that may well prosper in an era of increasing student aid and shrinking institutional support for public institutions. It represents an emerging competitor for students who might otherwise have attended public colleges or universities.

The Response: Increase Revenues

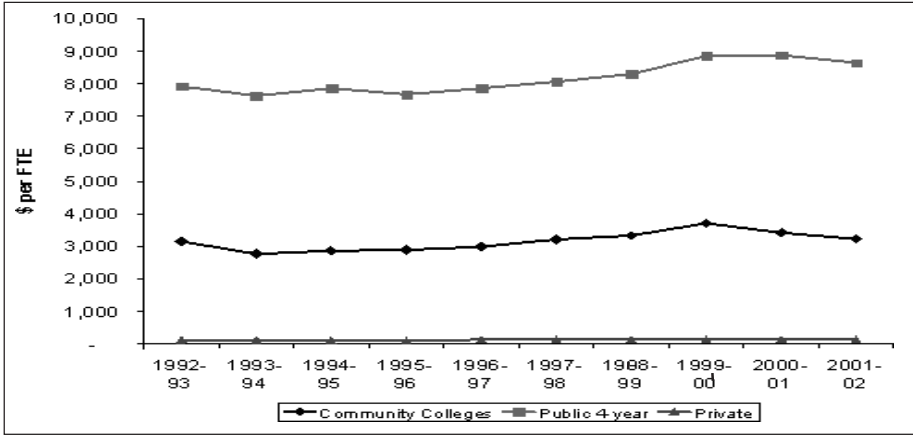
Perhaps inevitably, institutions of higher education are trying to compensate for the ups and downs of state support and increased competition in two classic ways: by raising revenues from non-state sources and by cutting personnel and service costs.

Student tuition

As public colleges and universities rely less on state government funding, more are moving toward direct student contributions to finance higher education. The percentage of public college and university revenues coming from student tuition increased between 1980 and 2000 from 13 percent to 19 percent, while state funding—including appropriations, grants and loans—decreased from 46 percent to 36 percent of total revenues during the same years. The percentage of federal funding remained relatively constant between 1980 and 2000.^{viii}

The following chart shows the change in the average tuition and fees, expressed in inflation-corrected dollars, charged by public four- and two-year colleges starting in 1976. The real price of attending a public four-year college has risen from \$1,900 in 1976 to \$4,700 in 2003. Community college tuition and fees more than doubled from \$900 in 1976 to \$1,900 in 2003. The increases mean that a greater share of educational costs is being shifted to the student. These increasing costs are offset, to some degree, by loans and grants.

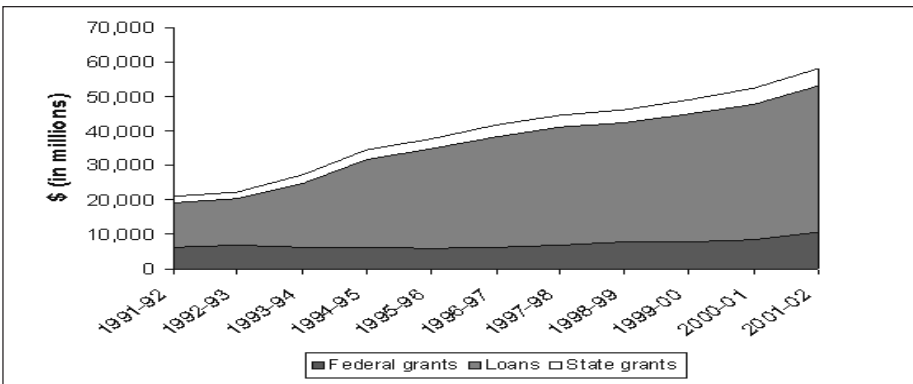
FIGURE 4: Average tuition and fee charges, 1976-77 to 2003-04 (in constant 2003-04 dollars and enrollment weighted)



SOURCE: College Board. *Trends in College Pricing 2003*.

To put the change in perspective, the lowest-income families in 1980 spent 6 percent of their income to pay tuition at public two-year colleges. By 2000, these families had to use 12 percent of their income to pay tuition at these colleges. Likewise, tuition at public four-year colleges and universities represented 13 percent of income for the lowest-income families in 1980. In 2000, tuition at these colleges and universities equaled 25 percent of their income.^{ix}

FIGURE 5: Grants and loans awarded to students: 1991-92 to 2001-02



SOURCE: The College Board. *Trends in Student Aid*. (New York: 2002).

Government has traditionally provided help in the form of financial aid to students. This comes in the form of federal and state grants, loans, and to a much lesser extent, work-study jobs. As you can see, there has been an overwhelm-

ing, and increasing, reliance on loans—money coming indirectly from students—as a form of aid (Figure 5).

The increases in student aid over the years have allowed many students to enter higher education. Nevertheless, aid has not kept pace with rising college costs. Neither federal or state grant aid nor family income have kept up with the increasing price of a college education. This widening cost gap has increased pressure on low and middle-income students to either work or borrow more to finance their education. In 2001-02 students borrowed \$54.3 billion from federal sources and another \$5.6 billion from private loans.^x Ten years earlier, students borrowed \$22 billion from federal programs; private loan programs were nearly non-existent. This total does not include credit cards and personal loans that students and their families may have used.

Other funding sources

In addition to relying on higher tuition, institutions have diversified their funding sources to help compensate for decreased state funding and to increase revenues. Colleges and universities have always had streams of income that result from active programs, such as holding patents, renting campus facilities to outside groups, providing educational services to employers, and branding school logos to sell. This stream of other revenue has been growing over the last decade. According to the Association of Governing Boards, 23 states have launched matching funds programs to boost private giving to public colleges and universities.

Colleges and universities also develop commercial sales to augment unpredictable revenue from more traditional sources. Accounting, however, changes have made it difficult to show the long-term trends. Examples of campus income-generating strategies include:

- ♦ Increased private fundraising
- ♦ Developing or expanding corporate, online and contract training
- ♦ Expanding or improving retailing on campus
- ♦ Introducing campus charge cards or e-cards
- ♦ Offering alumni programming
- ♦ Renting out campus facilities
- ♦ Claiming intellectual property rights for research done on campus

- ♦ Marketing instructional materials and claiming intellectual property rights for them.

According to a Rand report, more than \$21 billion is spent annually by the federal government on university research, primarily at research universities.^{xi} Of that amount, about three-fourths goes to direct costs and one-fourth to indirect costs. This overhead money is available to support general operations. The Department of Education makes an additional \$2.1 billion in grants to colleges and universities for programs such as TRIO and teacher quality enhancement. The overhead from these grants can also be used for administrative and general support, although how much really gets farmed back to general educational purposes is subject to dispute.

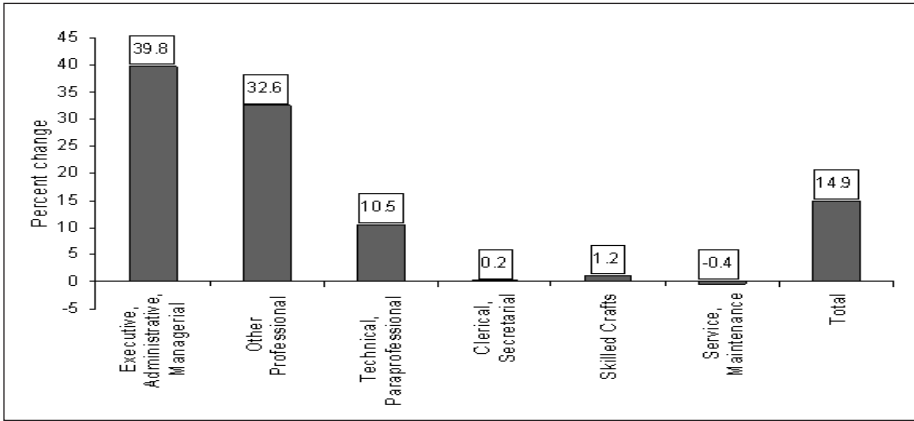
Growth in administrative, professional and classified staffing

Not surprisingly, an institution's success in receiving grants generates a push to receive more and more grants, and that effort requires additional staffing. Fundraising, managing external contracts, and increasing marketing and admissions efforts all lead to more employees outside the classroom.

In fact, higher education is witnessing an accelerating growth in the number of non-teaching administrative, professional and classified staff. In 2001, the federal government reported that colleges and universities employed slightly more than 1.4 million individuals in full-time non-teaching jobs, while another 277,468 worked part-time. Non-teaching employees now outnumber those in the classroom, and their numbers have been growing at a faster rate. The number of full-time non-teaching employees grew by 15 percent between 1993 and 2001, while full-time faculty members grew by 3.5 percent in the same time period.

Figure 6 shows that the rate of increase for different types of staff in colleges and universities varied significantly from 1993 to 2001. Administrators were the fastest growing class of employees at 40 percent. "Other professionals," the second fastest growing class of employees (33 percent), are employees in jobs that require a baccalaureate degree, but are outside teaching, including counselors, accountants, librarians, fund-raisers, etc. At the lower end of the salary scale, with very little growth (1 percent or less), are employees in service and maintenance, skilled crafts, and clerical and secretarial jobs. These jobs are most at risk of falling victim to outsourcing and automation.

FIGURE 6: Percentage change in staff: 1993 to 2001



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Staff Survey Data, 1993 and 2001.

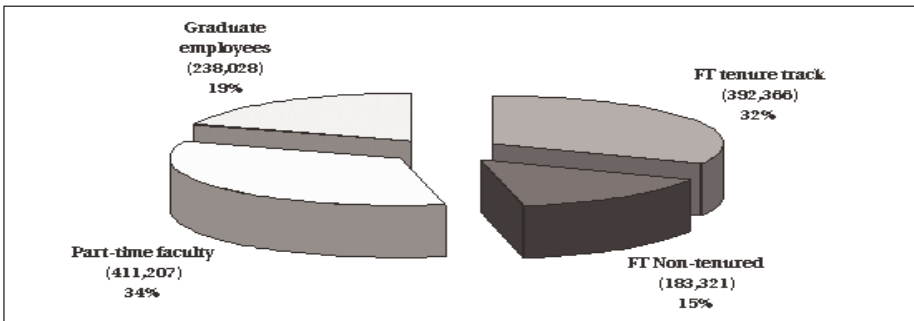
The Response: Decrease Costs

In addition to finding alternative sources for generating revenues, institutions are looking to reduce costs. This effort has taken two forms: one is the trend to reduce the number of full-time tenured faculty and the other is the trend towards privatization of services.

The shift in academic staffing

Instead of relying almost entirely on full-time tenured professors to provide the core of education, institutions are employing a new contingent workforce of part-time/adjunct faculty, full-time non-tenure-track faculty and graduate

CHART 1: Higher Education Instructional Workforce: Contingent Labor (1998)

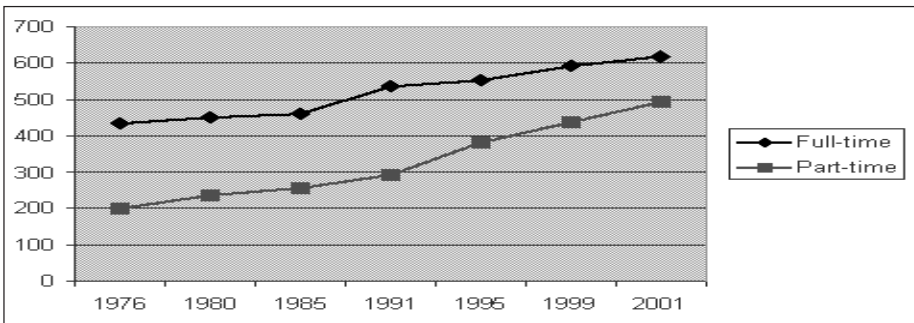


SOURCE: U.S. Department of Education, Digest of Education Statistics 2002.

employees to assume a growing share of the teaching burden. Contingent labor constituted nearly 70 percent of the Higher Education Instructional Workforce in 1998 (Chart 1). These faculty members, particularly part-time faculty and graduate employees, are paid relatively low wages, receive few if any benefits, and operate without the job security and academic freedom offered by tenure.

Figure 7 shows that the number of faculty members teaching full-time increased by 42 percent between 1976 and 2001. The number of part-time faculty members increased by 148 percent during the same period. Much of the growth in the higher education teaching force over this time period is accounted for by part-timers. Adding graduate assistants to the total pushes the number of part-timers in the academic teaching force above the number of faculty teaching full-time.

FIGURE 7: Number of faculty, by faculty employment status: 1976 to 2001



SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 2002, Table 223.

Martin Finkelstein points out that the majority of all new full-time faculty members have taken non-tenure eligible positions. Only about one-quarter of all new hires, both full-time and part-time/adjunct, were to full-time tenure-track positions. In terms of full-time newly hired faculty, only 45 percent had tenured or tenure-track positions, while 55 percent were appointed to non-tenure-eligible positions.^{xii}

Part-time/adjunct faculty

Clearly, the chief indicator of the expanding contingent work force is the dramatic growth in the use of part-time/adjunct faculty. Over 40 percent of college and university faculty members work part-time. That means that almost

half a million faculty members (not counting graduate teaching assistants) out of 1.1 million teach part-time. Nearly one-half (48 percent) of all part-time college faculty members teach in public community colleges.

The data show that part-time/adjunct faculty members are paid relatively little—an average of \$2,700 per class—and have few or no benefits.^{xiii} With a per-course average of \$2,700 a part-time/adjunct faculty member teaching ten sections a year would earn a salary of \$27,000, often with no benefits. In addition, part-time/adjunct faculty members generally do not have job security and can be laid off with no warning if sections do not fill or the college faces a severe budget problem.

Full-time non-tenure-track faculty

Another growing contingent in the higher education faculty ranks is the full-time professor hired off the tenure track, usually on a one-year contract (sometimes more). The AFT report “The Casualization of the United States Higher Education Instructional Workforce,” states that twenty-eight percent of full-time faculty members do not have tenure and are not on a tenure track.^{xiv} Eighteen percent of non-tenure-track faculty members were at institutions with a tenure system and 10 percent were at institutions without a tenure system (Table 2). The number of non-tenure-track faculty is up from 21 percent in 1987, when 12 percent were not on tenure track and 9 percent were at institutions without a tenure system.

TABLE 2: Number and percentage distribution of all full-time faculty by tenure status: Fall 1987 and Fall 1998

Year	Tenured	On tenure-track	Not on tenure-track	No tenure system	Total faculty
1987	298,700 58 %	108,150 21%	61,800 12%	46,350 9%	515,000
1998	296,800 53%	106,400 19%	100,800 18%	56,000 10%	560,000

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1999.

Graduate employees

Over the last ten years, there has also been an increase in the employment of graduate teaching and research assistants. The number of graduate employees

continues to grow. As Table 3 shows, the number in 1998 was 240,000, an 18 percent increase from 1993. More recent data show that number has now grown to 259,000, representing a 28 percent increase over the decade.

Graduate employees typically have multiple responsibilities, including positions as graders, discussion leaders, lab specialists, advisors, community outreach specialists, administrative assistants and many other roles necessary for the full functioning of today's university. Graduate employees typically do not earn enough from their assistantship to cover their basic living expenses and frequently do not receive adequate health coverage from the university.

TABLE 3: Total number of graduate employees: 1993, 1998 and 2001

Year	1993	1998	2001	Percent change
Graduate Employees	202,819	239,738	259,567	28%

SOURCE: U.S. Department of Education, Fall Staff Survey, various years.

Privatization of services

In the search for cost savings and greater efficiency, higher education has turned to outside vendors to provide services. The Center for the Study of Outsourcing and Commercialization in Higher Education, an industry lobby, conducted a survey in which they found the following evidence of outsourcing by colleges and universities:

- ◆ HMO's provide healthcare to one in every eight colleges
- ◆ Large bookstore chains such as Barnes & Noble operate more than 40 percent of college bookstores
- ◆ Corporations such as Marriott run more than 60 percent of college dining halls
- ◆ Nearly one-half of the colleges and universities contract out at least five services
- ◆ Only 5 percent of colleges and universities do not rely on outsourcing at all.^{xv}

According to the survey, vending and food service is the most commonly privatized function on campus. Other responsibilities that are contracted to outside vendors include, in descending order:

- ◆ Physical plant/facilities management (buildings and grounds, custodial, energy conservation, recycling)
- ◆ Law enforcement and safety, parking, mail, copiers, printing and publications
- ◆ Business services (payroll, auditing and accounting, tuition payment plans and real estate)
- ◆ Student services (housing, career counseling, health centers, student unions and financial aid), although rarely.

Thus, we are seeing a trend toward privatization in colleges and universities (as we do in many other organizations). This trend has not, however, extended to core services—at least not so far. This may be a hopeful sign for those who can see value in saving on ancillary services as long as a high level of investment in educational services is maintained.

Conclusion

What does this research tell us about higher education? First, it shows that using indicators such as the history of per capita state support, the amount of outside fund-raising, and demographic trends, public higher education is not in bad shape. On the other hand, recent state budget cutbacks, along with the declining *share* of state funding devoted to higher education, suggest that state colleges and universities have reason to be concerned about the reliability of government support.

With the unpredictability of state support, institutions are moving to increase revenues and cut costs as they face increased competition for tuition dollars and corporate support. This competition may well lead institutions to work harder to make their programming “relevant” to their customers and clients, but it may also lead institutions to abandon activities that are not commercially profitable, even if they may have high academic value.

Pressure to cut costs is also leading to dramatic changes in the higher education personnel structure. It can be argued, on the one hand, that employing part-time faculty, aside from cutting costs, permits colleges to allow for changes in enrollment and to find the best experts to teach individual courses. However, the loss of full-time tenured positions also raises serious concerns about maintaining a stable workforce, as well as about faculty control over cur-

riculum and teaching, which for many years have been considered essential elements of quality higher education.

In closing, it should be noted that some postsecondary institutions have greater protection from this financial pressure than others. The flagship state research universities may do better because of their size, multiple streams of revenue, increasing funding for research, and their prestige. The public non-research regional colleges and community colleges have less ability to escape the financial pressures. These institutions are more narrowly dependent on state support than are the universities and have less potential to attract private gifts and alumni giving. These colleges do not have as much latitude to raise tuition because they serve lower-income students who are less able to afford the higher prices. In addition, these institutions will experience greater competition for students from the growing proprietary sector.

ENDNOTES

ⁱ U.S. Department of Education, National Center for Educational Statistics. *Digest of Education Statistics 2000*. Washington, D.C.: NCES, 2001, Table 172.

ⁱⁱ NCES changed their data collection system starting in 1999, which accounts for some of the increase between 1998 and 1999.

ⁱⁱⁱ Hovey, H. *State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support*. , Boulder, CO: NCHEMS, 1999.

^{iv} Center on Budget and Policy Priorities. *State Budget Deficits Projected for Fiscal Year 2005*, Feb. 6, 2004.

^v NCES data collection standards for reporting financial revenue and expenditures changed for public colleges and universities beginning in 1999 making meaningful financial trends impossible.

^{vi} Research Associates of Washington.

^{vii} Horn, L., and K. Peter. *What Colleges Contribute: Institutional Aid to Full-Time Undergraduates Attending 4-Year Colleges and Universities*. Washington, D.C.: U.S. Department of Education, NCES 2003157. April 2003.

^{viii} U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics 2002*. Washington, D.C.: NCES, 2003, Table 330.

^{ix} Finney, J. *Losing Ground: A National Status Report on the Affordability of American Higher Education*. National Center for Public Policy and Higher Education, 2002.

^x College Board. *Trends in Student Aid, 2002*. NY: College Board, 2003.

^{xi} The American Institute of Physics Bulletin of Science Policy News (August 16, 2000) 98.

^{xii} Finkelstein, M. The morphing of the American academic profession, *Liberal Education*, 89. Fall 2003.

^{xiii} Based on U.S. Department of Education, National Center for Education Statistics. *National Survey of Postsecondary Faculty 1999*. Washington, D.C.: NCES, 1999.

^{xiv} Gold, L. *The Casualization of the United States Higher Education Instructional Workforce*. Washington, D.C.: American Federation of Teachers, 2003.

^{xv} Kirp, D. L. Higher Ed Inc.: Avoiding the perils of outsourcing. *Chronicle of Higher Education* (March 15, 2002).